Republic of the Philippines
DEPARTMENT OF HEALTH
PHILIPPINE CHILDREN'S MEDICAL CENTER
Bids and Awards Committee
Quezon Avenue, Quezon City 1100
website: www.pcmc.gov.ph email: pcmcbac@gmail.com
Trunkline: 8588-9900 local 361/355 Telefax No.: 8924-0870

SECTION I

Invitation to Bid

One (1) Lot
Construction of Cancer Center Building
(Fit Out of 3rd and 4th Floor)

IB-2022-077

Republic of the Philippines
DEPARTMENT OF HEALTH
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Quezon Avenue, Quezon City 1100
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Trunkline: 8588-9900 DirectLine: 8924-0836 Fax No: 8924-0840

INVITATION TO BID
IB-2022-077

1. The **Philippine Children's Medical Center (PCMC)** through the **DOH-HFEP CY 2022** intends to apply the sum of **Twenty Nine Million Pesos (Php29,000,000.00)** being the Approved Budget for the Contract (ABC) to payments under the following Invitation to Bid. Bids received in excess of the ABC shall be automatically rejected at bid opening.

ITEM DESCRIPTION	Approved Budget for the Contract	Cost of Bidding Documents
One (1) Lot Construction of Cancer Center Building (Fit Out of 3rd and 4th Floor)	29,000,000.00	25,000.00

2. The **Philippine Children's Medical Center (PCMC)** now invites bids for the above-mentioned projects. Delivery of the Goods is required **within Six (6) months** from receipt and signing of Notice to Proceed. Bidders should have completed a contract similar to the Project. The description of an eligible bidder is contained in the Bidding Documents, particularly, in Section II. (Instructions to Bidders).

3. Bidding will be conducted through open competitive bidding procedures using a non-discretionary "pass/fail" criterion as specified in the 2016 revised Implementing Rules and Regulations (IRR) of Republic Act (RA) 9184.

4. Prospective Bidders may obtain further information from PCMC and inspect the Bidding Documents at the address given below during office hours.

5. A complete set of Bidding Documents may be acquired by interested Bidders **starting April 19, 2022** upon payment of the applicable fee stated above. It may also be downloaded free of charge from the website of the Philippine Government Electronic Procurement System (PhilGEPS) and the website of PCMC, provided that Bidders shall pay the applicable fee for the Bidding Documents not later than the submission of their bids.

6. The Philippine Children's Medical Center will hold a Pre-Bid Conference on **May 4, 2022 at 10:00 A.M.** through video conferencing via *google meet* (**meet.google.com/eoc-nfpe-ziw**) which shall be open to prospective bidders.

7. Bids must be duly received through manual submission on or before **May 16, 2022 at 1:30 P.M., Guard-on-Duty, 3rd Floor, Procurement Division Area, PCMC Main Building.** Late bids shall not be accepted.

8. All Bids must be accompanied by a bid security in any of the acceptable forms and in the amount stated in **ITB** Clause 14.

9. Bid opening shall be on **May 16, 2022, 2:00 P.M. 3rd Floor, Procurement Division Area, PCMC Main Building**. Bids will be opened in the presence of the Bidders' representatives who choose to attend at the afore-mentioned venue. In compliance to social distancing and to support the

government's effort to mitigate, if not contain the transmission of COVID-19, we will strictly allow only one authorized representative per bidder company to enter the venue during opening of bids. Provided further, that said authorized representative shall follow PCMC's safety protocol by wearing face mask and face shield and shall pass the triage areas as required prior entering PCMC Premises.

10. The **Philippine Children's Medical Center (PCMC)** 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 IRR of RA No. 9184, without thereby incurring any liability to the affected bidder or bidders.

11. For further information, please refer to:

    Procurement Division
    3rd Floor, Procurement Division
    PCMC Main Building
    Quezon Avenue, cor. Agham Road Quezon City
    Trunkline: 8588-9900 Loc 361 / 355 / 224
    Fax Number: 924-0870
    Email: **pcmcbac@gmail.com**

12. You may visit the following websites:

    For downloading of Bidding Document: www.pcmc.gov.ph
    www.philgeps.gov.ph

April 18, 2022

EMMA A. MARIANO, CPA, MGM-ESP
Chairperson, Bids & Awards Committee

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SECTION II

Instructions to Bidders

One (1) Lot
Construction of Cancer Center Building
(Fit Out of 3rd and 4th Floor)

IB-2022-077

1. Scope of Bid

The Procuring Entity, **Philippine Children's Medical Center (PCMC)** invites Bids for the **One (1) Lot Construction of Cancer Center Building (Fit Out of 3rd and 4th Flor)**, with Project Identification Number **IB-2022-077**.

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

2. Funding Information

2.1. The GOP through the source of funding as indicated below for **DOH-HFEP 2022** in the amount of **Twenty-Nine Million Pesos (Php29,000,000.00)**.

2.2. The source of funding is:

b. GOCC and GFIs, the Corporate Operating Budget.

3. Bidding Requirements

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

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

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

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

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

5. Eligible Bidders

5.1. Only Bids of Bidders found to be legally, technically, and financially capable will be evaluated.

5.2. The Bidder must have an experience of having completed a Single Largest Completed Contract (SLCC) that is similar to this Project, equivalent to at least

fifty percent (50%) of the ABC adjusted, if necessary, by the Bidder to current prices using the PSA's CPI, except under conditions provided for in Section 23.4.2.4 of the 2016 revised IRR of RA No. 9184.

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

5.3. For Foreign-funded Procurement, the Procuring Entity and the foreign government/foreign or international financing institution may agree on another track record requirement, as specified in the Bidding Document prepared for this purpose.

5.4. The Bidders shall comply with the eligibility criteria under Section 23.4.2 of the 2016 IRR of RA No. 9184.

6. Origin of Associated Goods

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

7. Subcontracts

7.1. The Bidder may subcontract portions of the Project to the extent allowed by the Procuring Entity as stated herein, but in no case more than fifty percent (50%) of the Project.

The Procuring Entity has prescribed that:

a. Subcontracting is allowed. The portions of the Project and the maximum percentage allowed to be subcontracted are indicated in the **BDS,** which shall not exceed fifty percent (50%) of the contracted Works.

7.2 The Supplier may identify its subcontractor during the contract implementation stage. Subcontractors identified during the bidding may be changed during the implementation of this Contract. Subcontractors must submit the documentary requirements under Section 23.1 of the 2016 revised IRR of RA No. 9184 and comply with the eligibility criteria specified in **ITB** Clause 5 to the implementing or end-user unit.

7.3 Subcontracting of any portion of the Project does not relieve the Contractor of any liability or obligation under the Contract. The Supplier will be responsible for the acts, defaults, and negligence of any subcontractor, its agents, servants, or workmen as fully as if these were the Contractor's own acts, defaults, or negligence, or those of its agents, servants, or workmen.

8. Pre-Bid Conference

The Philippine Children's Medical Center will hold a Pre-Bid Conference on **May 4, 2021 at 10:00 A.M.** through video conferencing via google meet (*meet.google.com/eoc-nfpe-ziw)* which shall be open to prospective bidders, as indicated in paragraph 6 of the **IB.**

9. Clarification and Amendment of Bidding Documents

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

10. Documents Comprising the Bid: Eligibility and Technical Components

10.1. The first envelope shall contain the eligibility and technical documents of the Bid as specified in **Section IX. Checklist of Technical and Financial Documents**.

10.2. If the eligibility requirements or statements, the bids, and all other documents for submission to the BAC are in foreign language other than English, it must be accompanied by a translation in English, which shall be authenticated by the appropriate Philippine foreign service establishment, post, or the equivalent office having jurisdiction over the foreign bidder's affairs in the Philippines. For Contracting Parties to the Apostille Convention, only the translated documents shall be authenticated through an apostille pursuant to GPPB Resolution No. 13-2019 dated 23 May 2019. The English translation shall govern, for purposes of interpretation of the bid.

10.3. In joint ventures, a special PCAB License, and registration for the type and cost of the contract for this Project, shall be required. 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.

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.

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

Use of indelible ink color blue shall be used by the authorized signatory in signing the required forms. ***Strictly NO using of staple wire and thick materials for tab***

The **First (1st) Envelope**, shall contain the following Technical Documents accomplished in five (5) sets, **each set filed in a folder/ data binder**

The **Second (2nd) Envelope** shall contain the Financial Component accomplished in five (5) sets, **each set filed in a folder/ data binder**

All copies should be certified as true copy

COLOR CODING OF FOLDERS/ENVELOPES	**BROWN**

LABEL ON THE ENVELOPE/S:
Name of PROCURING ENTITY
Name of CONTRACT TO BE BID
IB Number
DATE of Bid Opening
Name of the Bidder Company
Address of the Bidder Company

IDENTIFY THE ENVELOPES:
as: > Technical Component Requirements
(original, copy 1, 2, 3 & 4)
> Financial Component Requirement
(original, copy 1, 2, 3 & 4)

17. Deadline for Submission of Bids

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

18. Opening and Preliminary Examination of Bids

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

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

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

19. Detailed Evaluation and Comparison of Bids

19.1. The Procuring Entity's BAC shall immediately conduct a detailed evaluation of all Bids rated "*passed*" using non-discretionary pass/fail criteria. The BAC shall consider the conditions in the evaluation of Bids under Section 32.2 of 2016 revised IRR of RA No. 9184.

19.2. If the Project allows partial bids, all Bids and combinations of Bids as indicated in the **BDS** shall be received by the same deadline and opened and evaluated simultaneously so as to determine the Bid or combination of Bids offering the lowest calculated cost to the Procuring Entity. Bid Security as required by **ITB** Clause 16 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**.

CONFORME:

_____	_____
Authorized Signatory Signature over printed name	Contact No:

_____	_____	_____
Name of Company/Firm Contact No.	Company's Official Email Address (where notices will be sent)	Company's Official

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SECTION III

Bid Data Sheet

One (1) Lot
Construction of Cancer Building
(Fit Out of 3rd and 4th)

IB-2022-077

Bid Data Sheet

<table>
<tr><th>ITB Clause</th><th></th></tr>
<tr><td>5.2</td><td>For this purpose, contracts similar to the Project refer to contracts which have the same major categories of work, which shall be:
SLCC of at least 14.5Million project cost for General Building construction completed within 5 years with satisfactory rating.</td></tr>
<tr><td>7.1</td><td>Subcontracting is allowed only for the following works:
1. Mechanical works

However, subcontracting of any portion shall not relieve the bidder from any liability or obligation that may arise from the contract from this project.</td></tr>
<tr><td>10.3</td><td>Valid Philippine Contractor's Accreditation Board (PCAB) License and registration:
• License Category B, Medium A, General Building
In case of Joint Venture, a Special PCAB License:
License Category B, Medium A, General Building</td></tr>
<tr><td>10.4</td><td>The key personnel must meet the required minimum years of experience set below:

<table>
<tr><th>Key Personnel</th><th>General Experience / Relevant Experience</th><th>No. of Personnel</th></tr>
<tr><td>Project Manager</td><td>At least 10 years and above of experience in construction management</td><td>1</td></tr>
<tr><td>Project Architect</td><td>At least 5 years of experience in construction management</td><td>1</td></tr>
<tr><td>Civil Engineer</td><td>At least 5 years (Civil) of experience in construction management</td><td>1</td></tr>
<tr><td>Materials Engineer</td><td>Licensed Engineer, DPWH Accredited Material Engineer II or 1 with experience in construction of health care facility</td><td>1</td></tr>
<tr><td>Construction Safety Engineer</td><td>Licensed Engineer/Architect, DOLE Accredited/Trained</td><td>1</td></tr>
<tr><td>Electrical Engineer</td><td>Licensed Electrical Engineer, With experience in construction of health care facility</td><td>1</td></tr>
<tr><td>Electronics and Communication Engineer</td><td>Licensed ECE, With experience in construction of health care facility</td><td>1</td></tr>
<tr><td>Mechanical Engineer</td><td>Licensed Mechanical Engineer, With experience in construction of health care facility</td><td>1</td></tr>
</table>
</td></tr>
</table>

<table>
<tr><td>10.5</td><td>The minimum major equipment requirements are the following:

<table><tr><th>Equipment</th><th>Capacity</th><th>Number of Units</th></tr><tr><td>Dump Truck</td><td>Min of 5 cu m</td><td>Min. of 1</td></tr></table></td></tr>
<tr><td>12</td><td>[Insert Value Engineering clause if allowed.]
“No further instructions.”</td></tr>
<tr><td>15.1</td><td>The bid security shall be in any of the following forms and amounts:

a. Bid Securing Declaration [use of Form No. DOBA-PCMC-BDF5 is required]

b. The amount of not less than <u>Php580,000.00 (2% of the ABC)</u> if bid security is in cash, cashier’s/manager’s check, bank draft/guarantee or irrevocable letter of credit issued by a Universal or Commercial Bank; or

c. The amount of not less than <u>Php1,450,000.00</u>(5% of the ABC), if bid security is in the form of Surety Bond callable upon demand issued by a surety or insurance company duly certified by Insurance Commission as authorized to issue such security.</td></tr>
<tr><td>19.2</td><td>Partial bid is not allowed. The infrastructure project is packaged in a single lot and the lot shall not be divided into sub-lots for the purpose of bidding, evaluation, and contract award.</td></tr>
<tr><td>20</td><td>The <u>Lowest Calculated Bidder</u> and <u>In case of a Joint Venture Agreement, each of its partner</u> shall submit the following documentary requirements within a non-extendible period of five (5) calendar days from receipt of the notification that contain the following:

1. Latest Income and Business Tax Returns filed and paid through the BIR Electronic Filing (EFPS).

2. Affidavit of Site Inspection (use of Form no. DOBA-PCMC-SIF22 is required)

3. Valid ISO Certificate

4. Duly accomplished Certificate of Undertaking

5. Certificate of Performance in letterhead of their clients indicating the contact numbers and email addresses signed by the authorized head of the Department from three (3) clients of the bidder issued within the last six (6) months prior to bid opening.

Note: Certification issued by PCMC – Procurement Section must be included if bidder had done business with us. Certification of which should be of same category (e.g. equipment/supplies) of project being bided.

Failure of the Bidder declared as LCB to duly submit the requirements stated above or a finding against the veracity of such shall be ground for forfeiture of the bid security and disqualify the Bidder for award.</td></tr>
</table>

21	Within ten (10) calendar days upon receipt of Notice of Award, Winning bidder shall submit five (5) copies of the following documents which shall form part of the contract: *1.* Manpower Utilization Schedule (*use of Form No.* ***DOBA-PCMC-MUF13*** *is required).* 2. Construction Schedule through Gantt Chart (for construction activities) and S-Curve (for financial requirements) *3.* Equipment Utilization Schedule (*use of Form No.* ***DOBA-PCMC-EUF21*** *is required).* *4.* PERT – CPM *5.* Construction Safety and Health Program ***Note: Must be in accordance with the rules and regulations and other orders and issuances by the DOLE*** 6. Signed *Conforme* on Section II. Instructions to Bidders on all pages 7. Signed *Conforme* on Section III. Bid Data Sheet on all pages 8. Signed *Conforme* on Section IV. General Conditions of the Contract on all pages 9. Signed *Conforme* on Section V. Special Conditions of the Contract on all pages 10. Signed *Conforme* on Section VI. Specifications on all pages

CONFORME:

_____ Authorized Signatory Signature over printed name	_____ Contact No:	
_____ Name of Company/Firm Contact No.	_____ Company's Official Email Address (where notices will be sent)	_____ Company's Official

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SECTION IV

General Conditions of Contract

One (1) Lot

Construction of Cancer Center Building (Fit Out of 3rd and 4th)

IB-2022-077

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

4.1. 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.

4.2. 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 Day works 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.

CONFORME:

_____	_____
Authorized Signatory Signature over printed name	Contact No:
_____	_____
Name of Company/Firm Contact No.	Company's Official Email Address (where notices will be sent)

_____
Company's Official

Republic of the Philippines
DEPARTMENT OF HEALTH
PHILIPPINE CHILDREN'S MEDICAL CENTER
Bids and Awards Committee
Quezon Avenue, Quezon City 1100
website: **www.pcmc.gov.ph** email: **bac@pcmc.gov.ph**
Trunkline: 588-9900 local 361/355 Telefax No.: 924-0870

SECTION V

Special Conditions of Contract

One (1) Lot
Construction of Cancer Center Building
(Fit Out of 3rd and 4th)

IB-2022-077

Special Conditions of Contract

GCC Clause	
2	The **Intended Completion Date** is **One Hundred Eighty (180) calendar days** *from the starting date; the starting date being seven (7) calendar days from the issuance of the Notice to Proceed.* **Note: The contract duration shall be reckoned from the start date and not from the contract effectivity date**
4.1	The site will be turned over to the contractor upon receipt of Notice to Proceed
6	The site investigation reports are: • None (Project is for Fit-out works only)
7.2	*[In case of other structures, such as bailey and wooden bridges, shallow wells, spring developments, and other similar structures:]* **Two (2) years.**
10	a. Dayworks are applicable at the rate shown in the Contractor's original Bid.
11.1	The Contractor shall submit the Program of Work to the Procuring Entity's Representative within *Ten (10) calendar days* of delivery of the Notice of Award.
11.2	The amount to be withheld for late submission of an updated Program of Work is *2% of the Total Contract Price* amounting to _____ *[amount in local currency]*
13	The amount of the advance payment is *Fifteen percent (15%) of the Total Contract Price* amounting to _____ _____ *[amount in local currency]*
14	Materials and equipment delivered on the site but not completely put in place shall be included for payment.
15.1	The date by which operating and maintenance manuals are required is *Upon Project Completion and this document is part of the requirements for final payment* The date by which "as-built" drawings are required is *Upon project completion*

15.2	The amount to be withheld for failing to produce "as built" drawings and/or operating and maintenance manuals by the date required is 2% of the total contract price _____ *[amount in local currency]*.

CONFORME:

_____	_____
Authorized Signatory Signature over printed name	Contact No:

_____	_____	_____
Name of Company/Firm Contact No.	Company's Official Email Address (where notices will be sent)	Company's Official

Republic of the Philippines
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Quezon Avenue, Quezon City 1100
588-9900 loc 361 Website: www.pcmc.gov.ph email: bac@pcmc.gov.ph

SECTION VI

Specifications

One (1) Lot

Construction of Cancer Center Building (Fit Out of 3rd and 4th)

IB-2022-077

TERMS OF REFERENCE

Terms of Reference

CONSTRUCTION OF CANCER CENTER BUILDING (FIT OUT OF 3RD AND 4TH FLOOR) FOR PHILIPPINE CHILDREN'S MEDICAL CENTER

I. BACKGROUND

The Philippine Children's Medical Center (PCMC) is one of the government-owned and controlled corporate National Centers for Specialized Health Care attached with the Department of Health and located at Quezon Ave., Quezon City. It is a 200-bed capacity tertiary hospital with a mandate to provide pediatric care, offer training programs for medical and allied health care providers, and be a center in clinical research. It offers a wide array of general and subspecialty services in pediatrics, surgery and allied medicine. It has training programs involving general pediatrics, adolescent medicine, ambulatory medicine, hematology and oncology, infectious disease, nephrology, pulmonology, intensive care, neonatology, neuro developmental pediatrics, psychiatry, neurology, perinatology, pediatric gynecology, pediatric surgery, pediatric and perinatal anesthesia, radiology, dentistry, physical therapy, occupational therapy, respiratory therapy, medical technology and nursing. And it has produced researches relevant to the day-to-day care of the well and sick child.

In 2010, the PCMC Pediatric Cancer and Hematology Center was designated by PCMC as the national end-referral center for children and adolescent with blood diseases and cancer. The Center is expected to deliver a comprehensive, multidisciplinary treatment to improve outcome in a cost effective manner. With the use of modern diagnostic and therapeutic approaches initiated expeditiously, this will translate to early detection, accurate diagnosis, appropriate management, and ultimately better chances of survival.

II. PROJECT COMPONENTS

A. The project calls for the fit-out works for 3rd and 4th floor of the Cancer Center Building.

B. The main scope of works are shown below:
All interior works for the 3rd and 4th floorPCMC Cancer Center Building.

1. Architectural Works
   a. All interior works including but not limited to Finishes inclusive of floors, walls, ceilings, fire rated doors and regular doors, toilets, way findings/signages and all items to complete the project.
2. All electrical works including but not limited to cables and panel boards for power and lighting.
3. All mechanical work such as FCU/ACCU installation with support and vibration pad, duct work with dampers, insulation, refrigerant piping, condensate piping, filters, remotes, vent cap, testing & commissioning and all other items to complete the system.
4. All fire protection work including pipe sleeving, threading, painting (2-coat), hangers and supports, wet and dry standpipe, FCV, FHC, FHV, Auxiliary drains (ITC), valves & ancillaries, sprinkler heads, extinguishers and all other items to complete the system.
5. All plumbing work including storm drain, vents, soil and waste collector pipes, water lines (Hot & Cold if applicable), Plumbing Fixtures, Valves & Ancillaries, Clean-outs, Floor drains, deck/gutter drains, Hydro and Gravity Testing and all other items to complete the system.
6. Auxiliary works such as FDAS, voice and data, CCTV, CATV, nurse call, PA/BGM and all other items to complete the system.
7. Medical Gas System including Main Feed, Distribution line, Isolation Valves & Outlets, Pressure Gauges, Pipe Sleeving & Supports, Painting & Tagging, Testing & Commissioning and all other items to complete the system.

C. The Contractor shall seek approval from the PCMC representative of all materials, and equipment needed for the fit-out works.

D. Construction Work

As a rule, contract implementation guidelines for procurement of infrastructure projects shall comply with annex "E" CONTRACT IMPLEMENTATION PROJECTS from RIRR of R.A. 9184. The following provisions shall supplement these procedures:

1. TheContractor shall commence work upon issuance of Notice to Proceed for the project by the Procuring Entity. The work execution shall be in accordance with reviewed and approved documents.

2. The Contractor and PCMC shall schedule a Kick-Off Meeting before the ConstructionDay 1 to set construction prerequisites, deliverables, clear and approved Master Schedule of the Project signed by all parties.

3. The Contractor shall submit a detailed program of works, S-Curve, PERT CPM or Master Schedule within fourteen (14) calendar days after the issuance of the Notice to Proceed for approval by the procuring entity that shall include, among others:

   a. The order in which it intends to carry out the work including anticipated timing for each stage ofdetailed planning and construction;

   b. Periods for review of specific outputs and any other submission and approvals;

   c. Sequence of timing for inspection and tests;

   d. General description of the design and construction methods to be adopted;

   e. Number and names of personnel to be assigned for each of the work;

   f. List of equipment required on site for each stage of the work; and

   g. Description of the quality control system to be utilized for the project.

4. Any errors, omissions, inconsistencies, inadequacies or failure submitted by the contractor that do not comply with the requirements shall be rectified, resubmitted and reviewed at the contractor's cost. If the contractor wishes to modify and design or document which has been previously submitted, reviewed and approved, the Contractor shall notify the PCMC within a reasonable period of time and shall shoulder the cost of such changes.

5.Annex "E" of RA 9184 guidelines shall govern approval of all variation orders.

E. Post Construction

1. Final Inspection (Punchlist Schedule and inspection report)
2. Submission of As-Built Plan in 5 copies (20"x30" paper size)
3. Submission of Manuals and Warranty Certificates
4. List of licenses and permits relevant to the project to be secured by the contractorbut not limited to the following:
   a. Mechanical Permit for Genset and Elevator
   b. Fire Safety Inspection Certificate (FSIC) at the BFP
   c. Certificate of Occupancy at the Office of the Building Official
   d. Certificate of Electrical Inspection (CEI) at the Office of the Building Official

e. Permit to operate elevator from Office of the Building Official

III. IMPLEMENTATION ARRANGEMENT

A. Reporting Protocol

a. PCMC InfrastructureCommittee

IV. ELIGIBILITY REQUIREMENTS

A. Key Personnel for the Project

1. The contractor shall provide the following key personnel during the construction phase, the Bidder must assign the project professionals as shown below:

1.1 Project Manager (1)
- i. Licensed Architect or Engineer
- ii. At least 10 years of experience in construction management
- iii. Good oral and written communication skills
- iv. Completed a health care facility project

1.2 Project Architect(1)
- i. Licensed Architect
- ii. At least5 years of experience in construction management
- iii. With experience in construction of health care facility

1.3 Civil Engineer(1)
- i. Licensed Structural/Civil Engineer
- ii. At least 5 years (Civil) of experience in construction management

1.4 MaterialsEngineer(1)
- i. Licensed Engineer
- ii. DPWH Accredited Material Engineer II or I
- iii. With experience in construction of health care facility

1.5 Construction SafetyEngineer(1)
- i. Licensed Engineer/Architect
- ii. DOLE Accredited/Trained

1.6 Quality Control/ Quality Assurance Officer (1)
- i. Licensed Architect/ Engineer with experience as QA/QC
- ii. With experience in construction of health care facility

1.7 ElectricalEngineer(1)
- i. Licensed Electrical Engineer
- ii. With experience in construction of health care facility

1.8 Electronics and Communication Engineer (1)
- i. Licensed ECE
- ii. With experience in construction of health care facility

1.9 Mechanical Engineer (1)
- i. Licensed Mechanical Engineer
- ii. With experience in construction of health care facility

V. APPROVED BUDGET COST

The total approved budget cost for the Projects is Twenty Nine Million Pesos (Php29,000,000.00). Proposals exceeding the ABC shall be automatically rejected.

VI. PROPOSED TERMS OF PAYMENTS

The contractor shall be entitled to advance payment subject to the provisions of Section 4 of Annex "E" of RA 9184.

Once a month, the contractor shall submit a statement of work accomplished (SWA) or progress billing and corresponding request for progress payment for work accomplished. The SWA should show the amounts which the contractor consider itself to be entitled to up to the end of the month, to cover (a) the cumulative value of the works it executed to date, based on the items in the Bill of Quantities, and (b) adjustments made for approved variation orders executed.

VII. TIME FRAME

The Contractor is required to complete the Project within an indicative period as shown below, to start upon the Contractor'sreceipt and signing of Notice to Proceed. The time frame to be followed for the project is as follows:

Construction Schedule:

ACTIVITY	MONTHS					
	1	2	3	4	5	6
THIRD FLOOR						
FOURTH FLOOR						

CONFORME:

Authorized Signatory Signature over printed name	Contact No:	
Name of Company/Firm Contact No.	Company's Official Email Address (where notices will be sent)	Company's Official

TECHNICAL SPECIFICATIONS

PROJECT : **CONSTRUCTION FIT-OUT OF 3RD AND 4TH FLR FOR CANCER CENTER BLDG.**
OWNER : **PHILIPPINE CHILDREN'S MEDICAL CENTER**
LOCATION : **Quezon Ave. Corner Agham Road,Quezon City, Phil.**

SPECIFICATIONS FOR GENERAL CONSTRUCTION
I. INTENT AND APPLICATION OF THE PROVISIONS OF THIS SECTION

A. The Scope of Work covered within these Specifications is the complete fit out construction of the ***THIRD FLOOR and FOURTH FLOOR OF CANCER BUILDING WITH LINAC BUNKER***inside PCMC campus located at the corner of *Quezon Ave., and Agham road, Quezon City, Philippines.*

B. This section is prepared in a concise manner, the intention of which is to save time and effort in locating important contents within these Specifications.

C. Execution of this Section shall be coordinated and correlated to each corresponding elaborated section of these same specifications.

D. **In case discrepancies exist between this Section and its corresponding elaborated sections, notify the PCMC's representative immediately for clarification; their decision shall be final.**

E. The **Fit-out Contractor** shall bear the responsibility of checking all the numbers and units as may be indicated on the Specifications. It is understood that the Contractor shall supply and install the actual required units as approved on the Plans.

F. Substitution of materials or equipment or makes other than those specified in the contract Documents will be approved by the **PCMC's representative** for the following reasons only:

1. That the materials or equipment proposed for substitution is equal or superior to the materials or equipment specified in construction efficiency and utility, provided that any and all costs relative thereof shall be shouldered by the Contractor.

2. Or that the materials or equipment specified cannot be delivered to the job site on time to complete the work of the other Contractors due to conditions beyond the control of the **Fit-Out Contractor**.

3. In case of a price difference, the Owner shall receive all benefits of the difference in cost involved in any substitution and the Contract shall be altered by Change Order to credit the Owner with any savings so obtained.

G. **To receive consideration, request(s) for substitution** shall be accompanied by documentary proof of equality or difference in price and delivery, if any, in the form of Certified quotations and guaranteed date of delivery from suppliers of either the proposed substituted materials or equipment.

II. GENERAL CONDITIONS OF PLANS AND SPECIFICATIONS

The execution of this Specification, Plans and other related Contract Documents shall be subjected to the rules and regulations as provided in the General Conditions of the Contract. **The Plans and specifications shall be interpreted/ translated by the PCMC's representative.** The **Fit-Out Contractor**is enjoined to confer with the Architect on items for clarification before submitting his bid. No excuses shall be entertained for misinterpretation of the Plans and specifications after the award of contract. All work as deemed provided by the Architect shall be carried out properly by the **Fit-Out Contractor**.

A. The Plans and Specifications are complimentary to each other. Whatever is not mentioned in one but mentioned in the other shall be considered as if mentioned on both and shall be carried out properly by the **Fit-Out Contractor**.

B. Any inconsistency or discrepancy existing between the Plans and Specifications shall be brought immediately to the attention of the **PCMC's representative**, who shall decide on the correct version of the two.

C. The **Fit-Out Contractor** shall consult **PCMC's representative** on portion of the work not mentioned in the Specification and not illustrated on the Plans. He shall not work without proper instruction or detailed plans from the **PCMC's representative**, otherwise he shall be responsible for the in acceptance of the work done without details. In such case, the Contractor shall make good the work at his own expense.

D. No alteration or addition shall be allowed without the consent and proper documentation approved by the **PCMC's representative**, even such change is ordered by the designingarchitect. The **Fit-Out Contractor** shall bring the case to the **PCMC's representative** Request for approval of such changes, alteration, deviation of work shall not be done without the consent of the **PCMC's representative**. Changes may be presented to the **PCMC's representative** in the form of shop drawings.

TWO (2) SETS of clean Plans and specification shall always be kept at the jobsite to be available to the **PCMC's representative** upon his/her request during the construction.

DIVISION 1: SCOPE OF WORK

A. The **Fit-Out Contractor**shall conduct thorough occular inspection of the existing job site conditions, review the plans and specifications prepared **by PCMC's representative.**

B. The scope of work shall include all additions necessary in order to implement the whole set of approved Plans, Working Drawings and Specifications.

C. The **Fit-Out Contractor** shall secure all the necessary pertinent Permitting and Approval requirements from various National and Local agencies prior to commence Mobilization and Construction Work activities and Owner's to occupy and use the building, (Fees shall be at the Contractor's Account).

D. The **Fit-Out Contractor** shall supply all necessary materials, equipments and labor in Architectural, Structural, Electrical, Sanitary/ Plumbing, Mechanical / Fire Protection works in accordance with the Plans and Specifications for the completion of the contract. All items shown on the Plans but not mentioned in the Specifications shall be included. Discrepancies shall be verified with the **PCMC's representative**.

E. The **Fit-Out Contractor** shall submit details and shop drawings, templates, and schedules required for the coordination of the work of the various trades. Drawings should include information on all working dimensions, arrangement and sectional views, connections and materials. (Refer to partial list of Shop Drawings to be submitted.)

F. The **Fit-Out Contractor** shall be responsible and compliance to the Safety, Security and Sanitary/ Health working practices and high standards of all respective sub contractors, workers, suppliers, visitors and agents.

G. The **PCMC's representative** may at anytime without invalidating the Contract make changes by altering, adding to or deducting from the work as covered by the drawings, specifications, and general scope in written instructions. Provisions under General Conditions of the contract cover such circumstances.

H. The **Fit-Out Contractor** shall observe proper construction attire and dress code.

I. The **Fit-Out Contractor**shall comply to all necessary labor code and laws for wages benefits and insurance.

J. The contractor**Fit-Out Contractor** shall maintain and observe the highest standard of quality workmanship. All defective workmanship shall be rejected by the PCMC's representative and will be rectified before acceptance.

K. The**Fit-Out Contractor** contractor shall deliver and install construction materials that satisfied and passed international and local standards.All defective materials found to be sub-standard shall be disapproved and rejected by **PCMC's representative.**

L. Lay-out of temporary facilities for the construction like storage, material stockpiling close and open spaces, housing, utilities and access road shall be approved by PCMC's representative.

M. The **Fit-Out Contractor** shall use efficient quality tools, equipment, machineries, and fuel to be used in the execution of work. Any defective and harmfull tools, machineries and fuel shall be outright rejected by the PCMC's representative.

K. Sockpilling of Construction Materials , Tools, Equipments and other supplies for the construction work shall be stored in organized proper places at the site as approved by the PCMC's representative.

L. The**Fit-Out Contractor** shall Install all necessary international and local standards graphic signages, way finding for Safety , Health and Security at the construction.

M.Final Cleaning As Pre-requisite To Final Acceptance: Final cleaning of the work by a reputable building maintenance company shall be employed by the **Fit-Out Contractor** prior to the Owner's/Architect's final inspection for certification of final acceptance. Final Cleaning shall be applied on each surface or unit of work and shall be of condition expected for a first class building cleaning and maintenance program.

DIVISION 2: <u>SITE WORK</u>

A. VISIT AND ACCEPT SITE, AS IS. The following works shall be included:

1. **Removal of existing improvements** (if any) necessary to permit construction and other work as indicated. **PCMC's representative** must be consulted prior to any demolition. Coordination with PCMC Maintenance / Facilities Group & proper investigation is to be conducted to avoid damage on existing underground utilities. Rubbish shall be legally and properly disposed of. Other items for relocation / demolition will be discussed in the Pre-Bid Conference.

B. SITE SAFETY, SANITATION, INFECTION CONTROL AND SECURITY REQUIREMENTS:

1. The**Fit-Out Contractor**shall observe the necessary safety, security and sanitation measures required by the Owner or his/her representative on the jobsite.

2. Board up: The **Fit-Out Contractor**shall, maintain a temporary perimeter fence at the construction site for the protection, security and for the proper execution of site up-keeping. Such Board up shall be built for its full length except for such openings as may be necessary for the proper execution of the work, in such case, openings shall be provided with doors which shall be kept closed at all times except in actual use. Board up shall be installed for site enclosure which shall be made of plywood on structurally stable wood frames (or as preferred by the **Fit-Out Contractor** but approved by the **PCMC's representative**.

3. Access Provision: The **Fit-Out Contractor** shall provide and maintain temporary access elements such as ramps, stairs, ladders, walkways and bridges as may be reasonably required within the site. Such elements shall be constructed and be made of sufficient strength and stability to ensure the safety of visiting **PCMC's representative**.

4. Temporary chute- The**Fit-Out Contractor**shall install Chutes for the necessary waste and debris disposal for infection control of the hospital.

5. Portable toilet facilities- The **Fit-Out Contractor** shall install portable toilet facilities for their staffs and workers at ground level.

6. Waste management- The**Fit-Out Contractor**shall observe waste management procedures for the construction by installing necessary collecting Bins and standby dumbster or a 20 footer container van open on top for various construction waste.

C. TEMPORARY FACILITIES REQUIREMENTS:

The **Fit-Out Contractor** shall provide the **PCMC's representative** temporary working facilities that include the following;

1. Field office with lights, power, telephone communication and wired Internet connection.

2. Toilet facilities.

3. Furnishings-
   1- 10 seater conference table/chairs
   7- Desk/ Chairs
   4-Filling cabinet

4. Office Equipments-
   1. 4- computers
   2. 1- printer
   3. Telephone
   4. Internet

5. Other Temporary Provisions:

- The **Fit-Out Contractor** shall provide all temporary lighting, power, water supply and all necessary facilities sufficient enough for the simultaneous use of all possible fields of work to complete the project.
- The **Fit-Out Contractors**hall provide the necessary number of security guards to ensure security of construction site.
- The**Fit-Out Contractor** shall provide at least ten (5) units of Fire extinguishers.
- The **Fit-Out Contractors**hall provide Billboards for precautions for Public Safety.
- The**Fit-Out Contractors**hall provide Billboard for Project Information. Data shown on billboard must at least include perspective, project name, architect, engineers and contractor.
- Other provisions as required by the National Building Code and BESC.
- All others required as discussed in the Pre-Bid Conference or as issued Bid Bulletins

D. MATERIALS RESOURCES

1. **Fit-Out Contractor** shall consider using reusable and rapidly renewable materials including steel, concrete products, and similar to non-finishing items.
2. **Fit-Out Contractor** shall use materials that are locally harvested and use local raw materials.
3. **Fit-Out Contractor** shall use materials readily available at a given time.

E. STORAGE AND FILING OF MATERIALS

1. **Delivery:** General Contractor shall ensure that materials are properly turned over and delivered on site in good quality and condition. A time and delivery record shall be available.
2. **Storage:** General Contractor shall designate and/or allot a space to sub-contractors for storage of their materials and for erection of their sheds and tool houses (if necessary). Materials shall be arranged properly and accordingly in terms of sizes, quality, quantity, category and time of use.
3. Warehouse shall be maintained properly by a designated person of the General Contractor.

4. All cement, lime and other materials affected by moisture shall be stored on platforms and protected from weather. Materials shall be stored as to insure the preservation of their quality and fitness for their work. Stored materials shall be located so as to facilitate prompt inspection.
5. Should it be necessary at any time to move materials, sheds or storage platforms, the Contractor shall do so at his own expense.

DIVISION 3: CONCRETE

1. **Gravel** : G-3/8 for topping
2. **Sand:** S-1, washed, clean and greenish in color.
3. **Cement:** Portland Cement Type 1, or approved equivalent.
4. **Mortar**: One part cement and two parts sand and water

DIVISION 4: METAL

A. STRUCTURAL STEEL AND FRAMING SYSTEM (05100-05160)

1. All structural steel sections shall conform to AISC Specifications for Design, Fabrication and Erection of Structural Steel for Buildings and meet the required structural design criteria.
2. Extent of structural steel work as shown on drawings. Contractor is required to submit a list of accredited fabricators or suppliers in addition to the one(s) listed below. Professional Shop drawings are to be presented to the **PCMC's representative** for the approval of the Structural Engineer. Refer to General Specifications for content of submittals.
3. All metals shall be true in size and schedule, refer to architectural drawings and details.
4. All metals shall be from re-used/recycled materials.
5. Tests shall be conducted on welded construction.
6. All Structural Steel shall be painted with two (2) coats of epoxy primer/ zinc chromate primer and final coating of intumescent paint or approved equal.
7. Contractor shall submit Fabrication drawings of Elevator Shaft and other steel framing details for Architect's / Engineer's approval before any fabrication shall be done.

B. Stainless Steel

1. Use 50 mm diameter stainless steel handrail in hairline finish and combination of 38 mm diameter and flat steel bar railing for Main Stairs and Fire Stairs. etc. or as indicated on plans. Use 50 mm diameter stainless steel handrail with 38 mm diameter stainless steel railing in hairline finish for disabled ramps.

C. LIGHT GALVANIZED STEEL FRAMING FOR GYPSUM DRYWALL, CEILING & FIBER CEMENT CEILING (05400)

Steel Framing Members shall be formed from cold-rolled steel with a minimum tensile strength of 50 ksi & a minimum yield point of 33 ksi. Steel Framing Members shall be formed from cold-rolled steel having a minimum galvanized coating of 180 g/sq.m both sides and shall be lock-forming quality. Should conform to the ASTM C645A Standard Specification for Nonstructural Steel Framing Members.

Pipe hangers: Galvanized steel angular bars, hot dipped. Refer to Sanitary / Electrical drawings for sizes and dimension.

All stainless steel members shall be 1.5 mm thk.

Submit shop drawings PRIOR to any fabrication and erection of miscellaneous metal works. All steel works except for stainless steel and galvanized shall be delivered to the site with standard rust-inhibitive epoxy primer.

DIVISION 5: WOOD

LUMBER AND ARCHITECTURAL WOODWORKS

A. Schedule of Lumber and Plywood Works120

1. **Plywood Backing for Glass Mirror**: 6-mm thick marine plywood anchored to wall with necessary anchoring. Areas to be covered by mirror on toilets should be provided with tiles.

DIVISION 6: THERMAL AND MOISTURE PROTECTION

All applications shall be strictly as per Manufacturer's Specifications. It shall strictly be performed by licensed or certified applicators / waterproofing contractor representing waterproofing manufacturer or insulation company specified herein. The Architect shall be furnished with pertinent literature and detailed drawings.

WATERPROOFING

Waterproofing: Furnish all labor, materials, equipment, plant and other facilities required to complete all waterproofing work as shown on the drawings and herein specified. All applications shall be strictly performed by an approved waterproofing Contractor representing waterproofing manufacturing brands approved by the Owner/Architect.

All materials shall be Environmental Protection Agency (EPA) certified and approved.
Testing: Test waterproofed area by seventy-two (72) hours and check for any seepages.

A. IF SHEET MEMBRANE WATERPROOFING IS TO BE USED: It shall be heavy-duty torch-applied modified bitumen system with non-woven polyester reinforcement and mineral chip surface coat or an approved equal material, in gauges appropriate for areas identified herein and in the Architectural Drawings or approved equal.

1. Suspended slab for Toilets
2. Elevator/ Dumbwaiter pits
3. AHU rooms
4. Roof Decks

Note: Areas not stated above but requiring waterproofing by Owner shall be included in the scope of work. Thickness should be as per Manufacturers Specifications and Installation depending on the Areas to be applied with.

B. 3.0 KG (3 ply membrane equivalent) Mineral Polybond waterproofing – use membrane waterproofing on Toilets/ Bath, AHU and other small and interior areas.

C. 4.5-KG (5 ply membrane equivalent) waterproofing –use Membrane waterproofing for roof deck, plant boxes, and other large exterior areas.

D. Swellable Water Stop – use as per manufacturer'sspecification standard.

E. Wet Area Sealant: For sealing plumbing / kitchen penetration around ceramic tiles at toilets, sealing around rims of under the counter lavatories, etc.

F. Elastomeric Wall Coating – on all Perimeter RC or CHB walls for exterior wall. Verify Architectural plans.

G. Capillary Waterproofing – use cementitious waterproofing.

ROOFING AND INSULATION

1. **Pre-painted GA 24 Long Span Rib Type or approve equivalent**

2. **Polyethylene Bubble Film 10 mm thick with single side aluminum**

SEALANTS, CAULKING AND SEALS (07920)

BUILDING SEALANT

1. Use sealling products or apporved equivalent for all pre-cast joints, construction, expansion and control joints which may experience movement except for joints below grade and those in continuous water immersion. Use Polyurethane Class 25 **Structural Silicone Building Sealant** applied as per Manufacturer's Specifications. Submit complete Product Catalogue, actual sample and color swatch for Architect's approval.All materials shall be Environmental Protection Agency (EPA) certified and approved.

   Apply silicone sealant or polyurethane sealant appropriate for the substrates, application and usage as required in the Architectural and Structural drawings and specifications including, but not limited to the following:

   1. Trafficable and non-trafficable structuralexpansion, construction and control joints
   2. Expansion joints between wall cladding panels (for exterior insulated finish system) or as specified.
   3. Curtain wall glazing and other glazing applications
   4. Perimeter joints around windows and/ordoors
   5. Toilet fixture and tile applications
   6. Metallic pipe or cables, plastic pipes, Insulated pipe
   7. Cable trays and large openings
   8. NSF Water tanks
   9. Acoustical seals, Interior walls, ceilings and floors
   10. Provide necessary backer rod, gasket or other accessories. Select transparent orappropriate colored sealant. Contractor is advised to consult the Manufacturer and is required to submit literature of sealants for sealing and weatherproofing to be used for theproject for evaluation of the Project Manager / Architect.

   Application: All joints of R.C. column and R.C. beams to CHB exterior wall / joints of pre-fabricated panels / all windowsills exposed to weather, and all areas requiring non-entry of water.

DIVISION 7: DOORS

Refer to Schedule of Doors

A. **FINISHING HARDWARE**

The following Hardware Sets are furnished for whatever assistance it may afford the Contractor. The Contractor shall verify Plans and Specifications for hardware quality. Should any particular item be omitted, Contractor shall provide similar or equivalent item or hardware same as required.

All door hardware must be ANSI A156.2 approved.

1. **Locksets** shall be Heavy duty lever type handles, (Grade AAA) Brand with locked keys and profile cylinders or approved equal in brushed stainless steel finish.
   a. *Asian hardware, all Home depots* ***or approved Equal***
   b. Submit keying schedule for approval. All locks shall have three (3) keys with the lock number stamped for identification. Verify number of duplicates.
   c. Schedule: Use extra heavy duty industrial / commercial series of door hardware. Refer to Schedule of Doors
      Entrance Lock: Main Entrance – Heavy Duty Glass Door Lock.
      Toilet Privacy Lock: Use Corridor or Passage Lock for unlockable lockset.
      Keyed Entrance Mortise Lock: Single cylinder with throw-deadbolt, standard full latch bolt with heavy duty anti-friction tongue. When locked, key outside or Knob inside retracts all bolts simultaneously. Outside Knob remains locked until thumb turn is restored to vertical position. Use Knob type.
      Indicator Lock: for Toilet Stalls with safety release lock.

2. **Door Hinges**
   a. Bearing hinges 4 ½" x 4" heavy duty, Stainless steel based or approved equal.Show sample for approval
      Schedule:
      - **Four Ball Bearing Hinges:** 4 ½ " x 4" for metal louver doors over 900 mm in width and/or over 44 mm thickness, **strictly SUS 304, Stainless Steel based**

- **Two Ball Bearing Hinges:** 4 ½" x 4" standard duty for metal doors less than 900mm in width and/or less than 44 mm in thickness, **strictly SUS 340 Stainless Steel based**
- **Floor Hinge:** standard duty floor hinge with closer on active and inactive leaf

b. Hinge finish shall match locusts of respective openings; stainless steel or other approved non-ferrous material

3. **Door Closer:** (Only on Specified Doors) grade 1 door closer with hold open function on active and inactive leaf. Can be surface mounted on hinge face or stop face for metal doors indicated in the schedule, with finish matching locust of the respective opening and a slim line look; concealed type for aluminum doors to provide by aluminum door fabricator. Door closer shall be incorporated in the door closer.

4. **Exit Device:** grade 1 fire exit device rim and rod type, as indicated on the schedule. Concealed vertical rod bar type touch bar for exit use only in stainless steel finish. Devices shall be listed for accident hazard and should be tested in accordance with ANSI A 156.3 Grade 1, UL listed for use on A, B, C, D or E fire labeled installations.
5. **Miscellaneous Hardware**
   a. **Door Plate and Pull Bar:** Ga 16. Stainless Steel plate with stainless steel 20 mm diameter x 200 mm length pull bar, both in hairline finish
   b. **Flush 6" and Head Bolt 12":** for two leaves of steel swing doors*or approved equal*
   c. **Push-Pull Bar**: approximately 30 mm diameter x 600 mm long stainless steel
   d. Push Plate: approximately 150 mm wide x 400 mm high stainless steel
   e. Stainless Steel handle bars
   f. Heavy Duty Flush Bolt

   All other necessary hardware such as latch bolts, catch locks, door chain fasteners, door stops, wall stops and holders, push plates, handles, etc. shall be of type, size and design suitable for the purpose or as approved by the Architect.

   See Schedule of Hardware. Submit catalogue and sample of all the above for approval.

DIVISION 8: FINISHES

Refer to Plans for location. Verify plans for other finishes not specified or omitted herein. Sample of all materials shall be submitted to the Owner / Architect for approval as to color and quality workmanship.

A. FLOOR FINISHES

1. **Flooring System:** Continuous Roll Type Homogenous 3mm thick anti Static, anti fungal Homogenous Vinyl Floor Covering (Conductive Tiles) – Roll Type. Submit sample for owner's approval.
2. **Non Skid Ceramic Tiles Finish:** for all walkway decks and all concrete slabs not otherwise indicated with finishes.
3. **Plain Cement with Resin-based Coat Finish**: use 4mm thick industrial epoxy floor coating system.
4. After work completion, vinyl tiles shall be cleaned, free from all cement, dirt, or other substances, with two coats of water emulsion wax, each coat polished to produce a well polished finish.
5. **FullyVitrified Tiles:** 600 mm x 600 mm or 800mm x 800mm unglazed tiles; Polished / unpolished / textured and colored: set on tile adhesive setting with 3 - 5 mm spacing between tile.
6. **Epoxy Floor Hardener: If** Concrete Slab is Straight to finish w/ Epoxy Floor HardenerCoating.
7. **Vitrified Unglazed Tiles**: 9 to 10 mm x 600 mm x 600 mm premium series. Refer to Schedule of finishes. Submit sample for Architect's approval.

B. WALL FINISHES

1. **Plain Cement Plaster Finish:** 10 mm. thk. on vertical concrete, on masonry and for all concrete hollow block surfaces, painted finish as indicated in the Drawings and for all areas not otherwise noted with other finishes.
2. **FullyVitrified Homogeneous Tiles:** 300 mm x 300 mm homogeneous tiles complete with all PVC trims; 20 - 30 mm thick mortar setting bed with tile grout spacing of 5 mm. Wall tiles for Toilet shall extend up to the ceiling or as indicated on plans. Submit samples for approval.
3. **Wall Base:**
   a. **Vinyl Cove Base:** 100 mm high vinyl straight profile.

Painted Strip : Provide 100 mm high epoxy paint base strip for areas finished with epoxy coat or plain cement plaster.

4. **Fiber Cement Board**: board, 6-mm thick for areas exposed to water and weather.
    a. Use standard metal furring channel at every 400-mm on center both ways. Provide standard suspension system complete with seismic bracing.
5. **Gypsum Board:** install Gypsum drywall complete with all accessories and sandwich fiber glass insulation as indicted on plans..
    a. **Fire-rated**: 12.5 mm x 1200 mm x 2400 mm, ASTM C37, on concealed galvanized light gauge steel framing, installed as per Manufacturer's Instructions; acrylic base paint finish. Submit catalogue, shop drawings and mock-up for Architect's approval.
    b. **Moisture resistant**: 12.5 mm x 1200 mm x 2400 mm, ASTM C630, on concealed galvanized light gauge steel studs, installed as per Manufacturer's Instructions; acrylic base paint finish or as indicated. Submit mock-up for architect's approval.

C. CEILING FINISHES

1. **Acoustic Mineral Ceiling Boards:** 15 mm x 600 mm x 1200 mm, with 5-year warranty to withstand humidity conditions up to at least 90°F/ 90% RH without visible sag; in white color.
2. **Ceiling Suspension System:** ASTM C 635 (Intermediate-duty) main beam and cross tee classification, commercial-quality dipped galvanized steel. All exposed surfaces to be chemically cleansed with capping in baked polyester and/or treated with powder coat white finish. Provide seismic bracing. Submit shop drawings for approval.
3. **Gypsum Board:** install Gypsum drywall complete with all accessories.

    a. **Moisture resistant**: 12.5 mm x 1200 mm x 2400 mm, ASTM C630, on concealed galvanized light gauge steel studs, installed as per Manufacturer's Instructions; acrylic base paint finish or as indicated. Submit mock-up for architect's approval.
4. **Fiber cement Board:** 6 mm thk for all interior ceilings and 12 mm thick x 1200 mm x 2400 mm. Compressed sheet for exterior ceiling, fiber cement board on galvanized light gauge steel ceiling suspension system complete with accessories, must be provided with seismic bracing for installation, semi-gloss painted finish.

D. PAINTING WORKS

All materials shall be Environmental protection Agency (EPA) certified and approved.

Painting Materials:

1. Use **approved painting brand**onlyfor all painted works.
2. Submit various painting materials specification data and sample to be used for approval.
3. All primers, thinners and putty, also waterproofing for internal and external application shall be the same brand as the specified material.

Application:

1. All sample paint shall be submit on at least 300-mm x 300-mm plywood panel, color and shade as per approval by the Architect.
2. Application shall be as per paint Manufacturer's specification and recommendation.
1. Provide all drop cloth and other covering requisite for protection of floors, walls, aluminum, glass, finishes and other works.

2. All applications and methods used shall strictly follow the Manufacturer's Instructions and Specifications. All surfaces including masonry wall shall be thoroughly cleaned, puttied, sandpapered, rubbed and polished; masonry wall shall be treated with Neutralizer.
   All exposed finish hardware, lighting fixtures and accessories, glass and the like shall be adequately protected so that these are not stained with paint and other painting materials prior to painting works. All other surfaces endangered by stains and paint marks should be taped and covered with craft paper or equal.

   EXTRA COATS shall be applied to achieve satisfactory finished work.

Painting Schedule:

1.<u>Interior</u>

a. **Interior Concrete or Masonry Painted** - Three (3) coats **water-based epoxy** masonry plain semi-gloss finish / flat or matte finish.
b. **Exposed Steel Framing, Metal Pipes and other metal works unless otherwise indicated:** Two (2) coats **of Epoxy Primer** and Two (2) coats **Automotive enamel** for exposed truss and all other metal works. All truss & steel works shall be applied with epoxy primer.
c. **Plain Flat Finish**: **Acrylic water-based Epoxy paint** on ceilings, three (3) coats.
d. **Plain Semi-gloss in Acrylic water-based Epoxy paint** on interior & exterior walls, columns, beams, slab, stairs, soffits, and on all other interior concrete surfaces for Main building and all other Ancillary structures (3) coats

2. Doors Jambs, Moulding, and other Finishing Carpentry Works by Architect's approved painting brand.
3. **Galvanized Iron Surfaces**: Hot Dipped Galvanized iron materials shall be as is, retouching if required shall be of suitable paint material preferably epoxy based.
4. **Epoxy Paint**: Moisture, heat and chemical resistantbyArchitect's approved painting brand.

DIVISION 9: SPECIALTIES
TOILET DOORS AND PARTITIONS

A. TOILET CUBICLES

1. **Partition System:** homogeneous, floor-anchored, high pressure compact OR Marine laminated partition and doors complete with stainless steel bracing and hinges, brass or molded plastic pedestals, and indicator lock with heavy duty stainless steel hardware. Submit catalogue & mock-up for architect's approval.

Accessories: All accessories should be stainless material. Submit samples for Architect's Approval.

a. **Grab Bars**: provide stainless steel grab bars for all toilets.
b. **Urinal Dividers**: wall-hung suspended type with stainless stiffener and stainless steel wall bracket; material same as toilet partition system

DIVISION 10: MECHANICAL& SANITARY
A. HVAC – REFER TO SEPARATE SPECIFICATION

Use Split type airconditioning with ceiling concealed ducted type fan coil unit
Refer to mechanical plan for details.

B.SPRINKLER SYSTEM –refer tothe fire protection plan
C. PLUMBING PIPES AND FITTINGS – refer to the plumbing plan

PLUMBING FIXTURES AND ACCESSORIES

All fixtures shall be installed complete with accessories, such as fittings, angle valve, shut-off valve and supply pipe assembly, p-traps flange and others to make it functional. Submit model and color samples for Architect's approval of all fixtures and accessories.

Plumbing Fixture Colors: White Verify with Architect

1. **Water closet: Siphon Vortex bottom inlet top flushelongated 6 liter.** Contractor shall submit brochure for approval on preferred model.
2. **Urinal:urinal flush valve self closing type.** Wall-hung type, wash-out urinal to match water closetcolor.
3. **Lavatory: see plan details**

4.a Under the counter type lavatory with single faucet hole on center w/ front overflow hole, to match water closet color

4.b Wall hung type

4. **Lavatory Faucets:** self-closing press-action tap model with timed flow and anti-blocking system for approval.
5. **Floor Drains:** Stainless steel 4"x4" – show sample for approval
6. **Slop Sink Bibb:** wall-mounted long gooseneck faucet

DIVISION 12 ELECTRICAL SPECIFICATION

1.0 GENERAL DESCRIPTION

1.1 The work to be done under this DIVISION of the Specifications consist of the fabrication, furnishing delivery and installation, complete in all details of the Electrical Work, at the subject premises and all work materials incidental to the proper completion of the installation, except those portions of the work which are expressly stated to be done by others. All work shall be done in

accordance with the governing Codes and Regulations and with the Specifications, except where same shall conflict with such codes etc., which latter shall then govern. The requirements with regards to materials and workmanship specify the required standard for the furnishing of all labor, materials and appliances necessary for the complete installation of the work specified herein and indicated on the drawings. The Specifications are intended to provide a broad outline of the requirement and are not intended to include all details of design and construction.

1.2 LAWS/CODES and REGULATIONS:

The work under this DIVISION shall be executed in accordance with the latest requirements of the following:

- Building Code of the Philippines
- Philippine Electrical Code
- Laws, ordinances, and regulations of the locality having jurisdiction over the project.
- Power and telephone utility companies
- UAP Doc. 301

The requirements of the above mentioned governing laws/codes and the requirements of the companies having involvement/participation are hereby made part of this Specifications and the is required to comply with the same.

This does not relieve the **Fit-Out Contractor** from complying with requirements of specifications or drawings in excess of above laws and ordinances, codes and requirements which are not prohibited by the same.

1.3 GUARANTEE

The **Fit-Out Contractor** shall guarantee that the electrical system is free from all grounds and defective materials and workmanship for a period of one (1) year from the date of acceptance of the work. All defects arising within the guarantee period shall be reminded by the at his own expense **Fit-Out Contractor.**

The **Fit-Out Contractor** shall indemnify and save harmless from and against allthe **PCMC's representative** claims, suits, actions, or liabilities for damages arising from injuries, disabilities or loss of life to persons or damage to public or private properties resulting from fault or any act of contractor or his representative in the execution of this work.

The partial acceptance of the work for the purpose of making partial payments, based on the estimated cost satisfactorily completed by the **Fit-Out Contractor**, shall not be considered as final acceptance of that portion of the work.

1.4 DRAWINGS & SPECIFICATIONS

1.4.1 The electrical plans, which constitute an integral part of these Specifications, shall serve as the working drawings. The plans indicate the general layout and arrangement of the complete electrical system and other works.

1.4.2 The drawings and specifications are meant specifically to be complementary to each other and where it is called for by one shall be binding as if called for by both. Anything which is basically required to complete the installation for proper operation but not expressly mentioned on the drawings and/or specifications shall be furnished and installed by **the Fit-Out Contractor** at no extra cost to the **Owner** as specifically stipulated or shown in both.

1.4.3 The **PCMC's representative** shall have the final decision on any apparent conflict between the drawings and specifications or on any under and controversial point in either or both.

1.4.4 All dimensions and locations shown on the plans are approximate and shall be verified in the field, as actual locations, distances, and levels are governed by actual conditions.

2.0 SCOPE OF WORK

2.1 Work Included

The work to be done under this DIVISION shall include the furnishing of all tools, labor, equipment, fixtures and materials, each complete and in proper working condition unless one or other is specifically excluded or stated otherwise in these Specifications but not limited to the following principal items of work:

2.1.1 Furnish and install a complete wiring and raceway system for the underground power and telephone distribution system including concrete pedestals, concrete hand holes and necessary wiring gutters and boxes.

2.1.2 Furnish and install a complete wiring, complete lighting fixtures as per required and raceway system for the street lighting system including necessary wiring gutters and boxes.

2.1.3 Furnish and install all street lighting panel board.

2.1.4 Furnish and install a complete grounding system.

2.1.5 Perform terminations for all electrical system.

2.1.6 Complete testing of all electrical systems.
2.1.7 Preparation of "As-built" drawings.
2.1.8 If any item of works or material has been omitted which are necessary for the completion of the Electrical Work as outlined herein before, then such items shall be and hereby included in this section of work.

3.0 PROCEDURE

3.1 Workmanship

The **Fit-Out Contractor** shall execute the work in the most thorough, prompt and workmanlike manner and in accordance with the plans and specifications. The installations shall be done thru standard methods and good engineering practices.

3.2 Materials

All materials to be installed shall be brand new except as otherwise noted on the plans or specifications. The materials shall be as specified. No substitution of materials is allowed. Should the **Fit-Out Contractor** find it necessary to use another type/brand of materials instead of the specified item, he shall first obtain approval from **PCMC's representative** prior to installation.

3.3 Coordination

It is the sole responsibility of the **Fit-Out Contractor** to conduct coordination of his activities with the following:

3.3.1 Other trades and suppliers
3.3.2 Architect/Owner/Engineer
3.3.3 MERALCO
3.3.4 Local Government Authority

3.4 Deviation From The Plans

No deviation from the **PCMC's representative** plans is to be made unless given notice for approval.

3.5 Record Drawings and 'As-Built" plan.

The **Fit-Out Contractor** is required to keep an active record of the actual installation during the progress of the job. This shall be the reference in the preparation of the 'As-Built' plans which shall include all pertinent information, complete in all aspect of the actual installation, and all new information not originally shown in the contract drawings. The 'As-Built' plans shall be prepared by the ELECTRICAL CONTRACTOR at his expense and shall be submitted to the for approval upon the completion of the work. The approval of the 'As-Built' drawings shall be a pre-requisite for the final acceptance of the electrical works.

Submit two (2) copies of the "As-Built" drawings signed and dry sealed by the**Fit-Out Contractor**. Registered Professional Electrical Engineer. Original tracing/reproduceable copy shall also be submitted to the **PCMC's representative.**

3.6 Samples & Shop Drawings

3.6.1 30 days prior to the installation or fabrication of materials the**Fit-Out Contractors**hall submit to the **PCMC's representative** the following for approval.
   a. Shop drawings of panel boards showing arrangements of circuit breakers, bus bar sizes, lugs, etc. Indicate all dimensions.
   b. Shop drawings or samples required as noted in the drawings.
   c. Samples and catalogs of materials intended to be installed.

3.6.2 The **Fit-Out Contractor** shall also submit to the **PCMC's representative** without delay shop drawings and other submittals which may be required by the **Owner's representative** during the progress of construction.

3.6.3 The above requirements shall be submitted to the at the earliest possible time to give **PCMC's representative** allowance for checking and verification. These shall be complete in all aspects.

3.6.4 Submit four (4) sets of each shop drawings.

3.7 Electric Power

The **Fit-Out Contractor** shall be responsible for his own electric power needed for the execution of the job.

3.8 TEST

Conduit tests on all electrical conductors installed in the presence of the**PCMC's representative**.

3.8.1 check for grounds
3.8.2 insulation resistance test
3.8.3 continuity test for all outlets
3.8.4 voltage level test

3.8.5 phase relationship

3.8.6 check circuit connections at panel boards, all single phase circuit shall be connected to phase as shown in the load schedule.

3.9 Submit Reports On Tests

All reports must be formal, typewritten and properly identified.

3.10 All defects found during the test shall be repaired immediately by the **Fit-Out Contractor**.

3.11 All tools, equipment and instruments needed to conduct tests shall be on the account of the **Fit-Out Contractor**.

4.0 METHODS & MATERIALS

4.1 Conduits

4.4.1 Rigid Steel Conduits (RSC) and Intermediate Metal Conduit (IMC):

a. Standard trade sizes, hot dipped galvanized with inside enamel or epoxy coating.

b. Joints-threaded coupling for joints.

c. Use for power & lighting.

4.4.3 Installation of Conduits

a. Installation is in accordance with PEC and of good engineering practice.

b. Use standard trade sizes locknut and bushing at each end terminating in boxes/panel boards. Ensure electrically continuous conduit system.

c. Provide independent conduits supports using hangers, supports or fastenings spaced in accordance with good engineering practice and PEC.

d. Use adjustable trapeze hangers for horizontal parallel runs. Submit shop drawings for approval.

e. Conduits bends shall not be more than the equivalent of three (3) 90 degree bends between pulling points.

f. Conduit threads cut on job shall have same effective lengths, thread dimensions, and taper as factory threads.

g. Cut ends of conduit square with hand or power saw and ream to remove burrs and sharp edges. Do not use wheel cutter.

h. Clamps shall be galvanized malleable iron one-hole straps, beam clamps or other approved device with necessary bolts and expansion shields.

i. Trapeze hangers shall be used for parallel runs of conduits. Install conduit clamps at end of each run and at each elbow. Paint hangers one prime coat of red lead or zinc chromate, and one finish coat of an approved color. Hangers are not detailed but must be adequate to support combined weight of conduit, conductors and hangers. Submit shop drawings for approval.

l. All underground conduits installed shall be provided with concrete encasement at least 8cm. thick outer face of conduit.

4.2 Wires

4.2.1 Wires shall be annealed copper, 98% or better conductivity, insulated, single, except as noted in the drawings.

4.2.2 600 volt class type as indicated in the plans.

4.2.3 Wires greater than no. 8 mm2 shall be strand.

4.2.4 Minimum size shall be #3.5 TW for power and lighting circuits.

4.2.5 Telephone wires shall be no. 22 AWG jacketed type, 4 wires.

4.2.6 Use standard methods in pulling wires.

4.2.7 Splices of wires/cables shall be done inside junction boxes or auxiliary gutters using standard connectors. No wires shall be spliced inside conduits.

4.3 Connectors

Use solderless mechanical pressure - type lugs, copper

4.4 Insulation

All splices shall be properly insulated using electrical tape. Application of insulation tape shall be equivalent to the insulation of the wire concerned. Use filler compound at sharp edges to provide smooth surface before taping.

Panel board & Circuit Breaker

NEMA type/enclosure unless noted, PEC rules and regulations, circuit breaker type shall be 230V, number of pole as required.

4.5.1 Panel boards shall contain a single brand of circuit breakers.

4.5.2 All circuit breakers used as main shall be "Bolt on" type molded case, thermal magnetic protective, quick make, quick break, trip free from handle, trip indicating, number and size as shown in the schedule. Internal common trip for 2 and 3 pole breakers.

4.5.4 Breaker minimum interrupting capacities shall be based on NEMA and UL test procedures.

a. 230 volt breakers - 10,000 rms. Symmetrical amperes at 240V A/C (minimum)

4.5.5 All circuit breakers used as branches rated at below 100 AT and specifically installed in lighting panel boards shall be 'plug-in' type; otherwise it shall be 'bolt-on'.

4.5.6 Word "space" indicated in the schedule shall mean that complete bus, insulators, etc. shall be included ready to accept future circuit breaker of the same frame size as the largest branch circuit breaker.

DIVISION 13PLUMBING / SANITARY WORKS

1.0 SCOPE OF WORKS

1.1 The work to be undertaken under this section shall consist of the furnishing of all materials, labor tools, equipment and other facilities and the satisfactory performance of all work necessary for the complete installation, testing and operation of the plumbing system accordance with the applicable drawing and this section of that specifications consisting of, but not necessarily limited to the following:

a. Roof drains and site storm drainage system and outlets to discharge at existing public drainage.
b. Soil, waste and vents pipe system, within the building up to sewer line.
c. Interior fire protection system consisting of combination standpipes, valves, fire hose cabinets, inlets, connectors and portable fire extinguishers.
d. Water service connection from main water distribution system.
e. Water distribution and supply piping to fixtures, equipment andhose bibbs.
i. Disinfection, pressure and leakage testing of building water of distribution system.
j. Leakage testing of all storm and sanitary drainage system.
k. Furnishing and installation of all plumbing fixtures, fittings, trims and accessories.
l. All work shall be performed in accordance with the requirements of all applicable laws of the Republic of the Philippines and all local codes and ordinances.

1.2 The **Fit-Out Contractor**is required to refer to all mechanical, electrical, structural and architectural plans and specifications all shall investigate all possible interference and conditions affecting his work in this section and that of the other sections.

1.3 All plumbing works to be done and sizes of pipe to be used shall be of the sizes, which are required and in accordance with the NATIONAL PLUMBING CODE OF THE PHILIPPINES.

2.0GENERAL

2.1 DRAWING AND SPECIFICATIONS:

a. The contract drawings and the specifications are complimentary to each other, and any labor or materials called for by both, if necessary for the successful operation of any other particular types of equipment shall be furnished and installed without additional cost of owner.

b. All dimensional locations of fixtures, equipment, floors and roof drains risers and pipe. Chases shall be verified on the architectural drawings and manufacturer's catalogs.

c. Upon completion of the work as described herein, the Contractor shall at his own expense furnish the original**PCMC's representative** s and three (3) sets of "AS BUILT" Plans for future reference and maintenance purposes.

2.2 APPROVAL OF MATERIALS:

The **Fit-Out Contractor** shall assume the cost of and the entire responsibility for any hanges in the work as shown on the contract drawings which may be accessioned by approval ofmaterials other than those specified

2.3 CROSS-CONNECTIONS:

No Plumbing fixtures device, or piping shall be installed which will provide a cross-connections or inter-connections between distribution supply for drinking or domestic

purposed and polluted supply such as drainage system or a soil or waste pipe so as to make possible the back flow of sewage, polluted water, or waste into the water supply system.

2.4 SPECIAL CONNECTION:

The contractor shall provide all necessary materials and labor to connect to the plumbing system all fixtures and equipment having plumbing connections and which are specified in other divisions of these specifications. When fixtures or equipment are not delivered prior to final acceptance, the plumbing service shall be capped or plugged at walls or floors and directions, and left ready for future connections.

2.5 PROTECTION:

The contractor shall protect all his work and materials loss, injury or defacement. Protection of fixtures and materials shall be provided by boards, papers and/or cloth as required and any loss, damaged or deface material shall be replaced by the Contractor at his own expense.

2.6 INSTALLATION AND WORKMANSHIP:

a. All labor shall be performed in a first-class, neat and workman like manner by mechanic skilled in their work shall be satisfactory to the Project Architect and PCMC represetative.

b. No piping in any location shall be closed up, furred in or covered before testing and the examination of same by the inspector,**PCMC representative**.

PSW 3.0 IDENTIFICATION OF MATERIALS:

a. Each length of pipe, fitting, traps, fixtures, and device used in the plumbing system shall have cast, stamped or indelibly marked on it the manufacturer's trade mark or name, the weight, the type, and classes of product when so required by the standards mention above.

b. All plumbing fixtures and fittings installed without the above trade marks shall be removed and replaced with probably marked fixtures and fittings without any extra cost to the Owner.

PSW 4.0 WATER SUPPLY

a. **Pipes and fittings for waterline** shall bePolypropyleneor approved equivalent

b. **Valves-**All valves, unless otherwise specified shall be gate valves of size as indicated in the drawings: for hot water supply, valves and fittings shall be insolated of a thickness equal to that of the insulation on the adjoining pipe, securely fastened in place.

4.1 SANITARY DRAINAGE

a. Soil and waste Pipes and Fittings:
Soil and waste pipes and fittings shall be PVC pipes (POLYVINYL CHLORIDE) series 1000

b. Vent Pipes and Fittings:
Vent pipes and fittings shall be PVC pipes (POLYVINYL CHLORIDE) series 1000 or approved equal.

c. Shower and Floor Drains:
Shower and floor drains shall be of high grade, strong, tough, andevengrainedmetals.

d. Cleanouts:
1.Ceiling cleanouts shall be of the same material as pipe with sealed screw type, raised head plug.
2.Floor cleanouts shall be cast-iron body with brass plug, colt-type or countersunkhead.
3.Yard cleanouts shall be cast-iron body encased in concrete with raised head plug.

d. Traps:
Traps shall be of the same material as the pipe complete with accessible trap screw of ample size, except those with integral with fixtures.

4.2 STORM DRAINAGE

A. Pipes and Fittings:
1. Pipes and fittings shall be PVC pipes series 1000.
Joint packing for PVC Pipes shall be solvent cement.
2. Concrete pipes shall be standard strength concrete pipes with bell and spigot ends conforming to AASHO M-86. Sizes shall be as indicated. Mortar for

concrete pipe jointing shall be a mixture of cement, sand and water mixed in the proportion of 1:2 per bag cement with oakum yarning.

B. Drains:
   1. Roof drains shall be dome type and shall have duco-cast iron body with strainer and shall be provided with suitable flashing collar to suit roof deck construction.
   2. Area drain and all other drains shall be of the size and kind indicated or best suited for the purpose intended and as approved by the Engineer.

C. Downspouts;
   1. Downspouts shall be PVC pipes series 1000, or approved equivalent.

D. Catch Basins:
   1. Catch basins and appurtenance structures shall be constructed as indicated in the drawings.

4.3 HANGERS, INSERTS AND PIPE SUPPORTS

A. Provide suitable and substantial hangers and supports for all piping.

B. Support horizontal piping in accordance with the following schedule Max. Hanger

Pipe Size	Spacing	Rod Size
65 and smaller	1000 mm	10 mm
75 to 150 mm	2000 mm	16 mm
200 mm & larger	3000 mm	20 mm

C. Support hangers from approve concrete inserts where concrete slabs exists. On inserts with space for nuts of all sizes. On inserts for pipe 75mm (3") to 150 mm (6") and 200 mm (8") and larger in sizes, insert a concrete reinforcing rod 13 mm (5/8) and 120mm (3/4") in diameter respectively through slot provided for this purpose, Place all insets in forms for all pipes which are to be hung, in ample time to allow the concrete work to be performed on schedule.

D. Support vertical risers from the building construction be means of pipe clamps, at very floor or as required. Provide channels of approved sizes where pipe clamps are too short to connect to the building construction.

4.4 SLEEVES

A. Provide sleeves for all pipes passing through floors, walls, and concrete pits or concrete fire proofed beams.
   1. Sleeves in concrete beams, through concrete walls, and where serving exposed pipes penetrating floors : Schedule 40 steel pipes.

B. Provide sleeved with an inside diameter at least 12mm (1/2") greater than the outside of the pipe served, including pipe insulation which must be continuous through the sleeves.
   1. Caulk the space between pipes and sleeves in interior walls, foundation walls, and membrane waterproofed floors with fire rated sealant.

C. Set sleeves as construction progresses and secure in place during pouring of concrete.

D. Do not support pipes by resting clamps on sleeves.

E. Flashing of floor drains in membrane waterproofed floors and of roof drains will be performed under specification of another trade. Provide drains with suitable flashing devices.
   1. Provide waterproof type sleeves, with flashing clamp, brass bolts where penetrate membrane waterproofed floors.

F. Pipes passing through roofs will be flashed; provide roof couplings, at suitable level above roof to terminate flashing.

G. Wherever pipes are exposed and pass through walls, floors, partitions, or ceilings, fit them with escutcheons snug over insulation, secure in place.

PSW 5.0 EXECUTION

5.1 GENERAL INSTALLATION OF PIPES

A. Install pipes approximately as shown on the drawings, as straight and direct aspossible forming right angles parallel lines with walls and other pipes, and neatly spaced unless otherwise indicated. Care shall be taken not to weaken the structural portions of the building.

B. Maintain minimum slope of 2% on all soil, waste and drain lines 100mm in diameter.

C. Do not install pipes or other apparatus in a manner which will interfere with full swing of the doors and windows.

D. The arrangement, position and connection of pipe fixtures, drains, valves and the like indicated on the drawings shall be followed as closely as possible, the right is reserved by the architect to change location and elevations to accommodate conditions which may arise during the progress of the work prior to installation, without additional cost of the PCMCfor such changes. The responsibility for accurately laying out of the work rests with this Contractor. Should be found that any work if laid out caused interference, the matter shall be reported to the Engineer before connecting the work.

E. Ream all screwed pipes smooth before installation. Do not bend, flatten, split or injure pipes in any way.

F. Use reducing fittings, in making reduction in size of pipe. Bushing will not be allowed unless specifically approved.

G. Where chrome plated piping is installed, cut and thread pipe. Bushing will not be allowed unless specifically approved.

H. Carry fixture connections, concealed in building constructions, to points above floor, break out close to underside of fixture and rise exposed to fixture.

I. No piping shall be installed which will provide a cross or interconnection between a distribution supply of drinking water of Domestic use and pollution or waster pipe, the water line shall beplaced above the waste pipe in ground installation.

J. All existing Vents on the floor of the Building shall be rerouted to the nearest wall and stretch beyond the finished ceiling of thefloor

5.2 INSTALLATION OF WATER SUPPLY PIPES AND FITTINGS

A. The piping shall be extended to all fixtures, outlets and equipment. Ends of pipes and outlets shall be capped or plugged and left ready for future connections.

B. Branch pipe from service line may take off of main, bottom of main, or side of main,using such cross over fittings as may be required by structural or installation conditions.

All service pipes, valves and fittings shall be kept at sufficient distance from other work to permit finished covering not less than 12.7mm (1/2") from such other work and not less than 12.7mm between finished coverings on the different services. No water piping shall be buried in floors until after they have been inspected and approved.

C. Where the branch serves more than one fixture, the branch shall be increased in size in proportion to sizes as shown on the drawings.

D. Cast bronze unions shall be installed at the connection to all equipment so that they may be conveniently disassembles. Unions shall no the concealed in walls, ceilings or partitions.

E. Upon completion of water system, flush out lines and all valve sets to clear system of particles and dirt.

F. Air chambers: All individual branches to fixtures and/or equipment shall be provided with air chambers shock absorbers as shown on the drawings or as required.

5.3 INSTALLATION OF SOIL, WASTE, VENT AND DRAINAGE PIPING

A. Horizontal Drainage Pipe and Vent Piping

Horizontal waste pipe 75mm (3") and smaller shall have minimum grade of 6mm (1/4") per foot, and for 100mm (4") and larger, 3mm (1/8") per foot. Vertical vent pipes may be connected to a vent lines carrying other fixtures, the connection to be at least 1.20m (4 feet) above floor on which the fixtures and located to prevent the use of any vent lines as waste lines. Horizontal waste lines receiving the discharge from two (2) or more fixtures shall be provided with vents, unless separate venting of fixtures noted.

B. Fittings - All changes in pipes sizes on soil waste line shall be made with reducing fittings or recessed reducers. All changes in direction shall be made with the appropriate use of 45 wyes, half wyes, long sweep quarter bends, or elbows may used in soil and waste lines where the change in direction of flow is from horizontal to vertical, and on the discharge from water closets. Where it become necessary to use

short radius fittings in any other location, the approval of the Engineer shall be obtained before they are installed.

C. **Traps** - Each fixture and place of equipment connection to the drainage system except fixture with continuous waste shall be equipped with a trap. Traps shall be placed as near to fixtures as possible.

5.4 JOINTS AND CONNECTIONS

A. Fixture Connections

1. Where space conditions will not permit the use of standard fittings in conjunction with cast - iron from flanges, special short - radius fittings shall be provided.
2. Connections between fixtures and flanges and soil pipes shall be made absolutely air and watertight with an approved setting compound. Rubber gaskets or putty will not be permitted for this connection.
3. Closet bolts shall no be less than 16mm (1/4") in diameter and shall be equipped with chrome plated nuts and washers.
4. Fixtures without outlet flanges shall be set at the proper distance from floor or wall to make a first class joint with use of close-setting compound or gasket.
5. No fixture shall be set in place until the Engineer or his representative has examined and approved such flange.

B. Threaded Pipe Joints

1. Threaded joints shall be standard tap screw threads in accordance with U.S. Federal Specification 66-P-351 with graphite and oil compound applied to the mail thread.
2. Connections between threaded pipes and soil pipes shall be caulked joints. The threaded pipe shall have a ring or half coupling screwed on to form a spigot end when caulked to the hub-end of soil pipe.

5.5 FIXTURES AND EQUIPMENT SUPPORTS AND FASTENINGS

All fixtures and equipment shall be supported and fattened in a satisfactory manner.

A. Where secured to concrete on hollow block, walls, they shall be fastened with 6mm (1/4") brass bolts with twenty threads to the inch and of sufficient length to extend at least 75mm (3") into solid concrete on hollow block work; fitted with loose tubing or sleeve inserts, shall be securely anchored and installed flushed with the finished wall and shall be completely concealed when the fixtures are installed.

B. Where though bolts are used, they shall be provided with name plates and washers at backsets so that head, nuts and washer will be concealed by plaster. Bolts and nuts shall be hexagonal and screw shall be provided chromium brass washers.

C. Upon completion of work, all fixtures, trimmings, and equipment shall be thoroughly cleaned, polished and left in first class condition for final acceptance.

5.6 CLEANING AND PAINTING

A. Prior to acceptance of the work, thoroughly clean all exposed metal surface and rid of grease, dirt or other foreign material. Chrome or nickel - plated piping's, fitting and trimming shall be polished.

B. Pipe hangers, supports and all other iron work in concealed spaces shall be thoroughly cleaned and painted with one coat of red lead and a finish coat of oil enamel paint.

C. All exposed soil, waste and vent piping or cast iron that are asphalt or tar-coated shall be given two (2) coats of shellac and two (2) coats of oil paint.

5.7 WATER SYSTEM TEST

A. Upon completion of the roughing-in and before fixtures, the entire water piping system shall be tested at a hydrostatic pressure of one and half (1-1/2) times the expected working pressure in the system when in operation, and proven tight at this pressure or not less than 150 psi gauge.

B. Where a portion of the water piping system is to be concealed before completion, this portion shall be tested separately in a manner to that described for the entire system, and in the presence of the Engineer.

5.8 DRAINAGE SYSTEM TEST

A. The entire drainage and venting system shall have necessary opening which can be plugged to permit the entire system to be filled with water to the level of the highest vent stack and/or vent above the roof.

B. The system shall hold this water for a full thirty (30) minutes during which time there shall be no drop more than four inches 100mm (4").

C. If and when the Engineer decides that an additional test is needed, such as an air or smoke test on the drainage system, the Contractor shall perform such test without additional cost to the PCMC.

DIVISION 13 FIRE PROTECTION

FP 1. General

1. General Description

The scope of work to be done this division of the specification consist of the fabrication, complete in all details, of fire protection works at the subject premises, the installation, except those portions shall be in accordance with governing Codes and Regulations and with the specifications, except where the same shall conflict with the codes, etc. which, later shall be govern. The requirements in regards to materials and workmanship specify the required standards for the furnishing of all labor, materials and appliances necessary for the complete installation of the work specified herein and indicated on the drawings.

2. Drawing and Specifications

2.1 The contract drawing and specifications are complimentary to each other and any labor or material for by either, whether or not called for both if necessary for the successful operation of any of the particular type of the equipment furnished and installed without additional cost of the **PCMC's representative.**

2.2 All dimensional locations of piping's, equipment, risers and pipes chase shall be verified on the architectural drawings and manufacturers catalogue

3. Intent

It is not intended that the drawings shall show every pipes, fittings, valve and equipment. All such items whether specifically mentioned or not, or indicated on the drawings, shall be furnished and installed if necessary to complete the system in accordance with the best practice of the fire protection trade and to the satisfaction of the**PCMC's representative.**

4. Site Investigation

The contractor required to visit the site and to ascertain himself as to the local conditions and facilities that may affect his work. He will be deemed to have done this before preparing his proposal and any subsequent claims on the ground of inadequate or inaccurate information will not be entertained

5. **Shop Drawings**.

The Contractor shall submit to the Architect and the Engineer, for approval, four (4) copies of all shop drawings of details and connections not shown on the drawings or details or deviations thereof but required for the work. The Contractor shall certifythat the drawings have been checked for dimensions, materials, erection details and conform to the intent of drawings and specifications.

6. Record Drawing

6.1 The **Fit-Out Contractor** shall during the progress of work, keep a record of the actual installation from that shown on the contract drawings.

6.2 Upon completion of the work, The Contractor shall submit four (4) copies of the as built drawings indicating the work as actually and finally installed.

7. Guarantee

The **Fit-Out Contractor** shall guarantee that the fire protection system is free from all defective workmanship and materials and will remain so for a period of one (1) year from date of acceptance of the work. Any defects, appearing within aforesaid period shall be remedied by the Contractor at his own expense.

8. Permits

The **Fit-Out Contractor** shall responsible for securing all the required construction and operation permits, together with the certificate of inspections shall be submitted to the Owner.

9. Codes and Standard

The work under this contract is to be installed with the reference to the latest requirements of the following.

9.1 Philippine National Building Code

9.2 Fire Code of the Philippines

9.3 American Society for Testing and Materials (ASTM)
9.4 American National Standards Institute (ANSI)
9.5 National Fire Protection Association (NFPA)
9.6 Underwriters' Laboratories' (UL)
9.7 Factory Mutual (FM)
9.8 National Electrical Manufacturers Association (NEMA)

10. Materials.

10.1.1 Quality Assurance – All materials to be used shall be new and shall be conform with the reference codes and standards. Use of materials shall further be governed by other requirements, imposed in other sections of these specifications'. Materials shall be subject to the test necessary their fitness if so requires.

10.1.2 Alternative Materials – Use of any materials, not specified in this specification any be allowed provided such alternative has been approved further by the and provided further th**PCMC's representative** at a test if required, shall be done by an approved agency in accordance with generally accepted standards.

10.1.3 Identification of Materials – Each length of pipe, fittings, equipment, and device used in the fire protection system shall have cast, stamped or indelibly marked on it the manufacturer's trademarks or name, the weight, type and classes or product when so required by the standards mentioned above.

10.2 CPVC Piping –

10.2.1. Minimum Wall Thickness – Schedule 4010.5.2 Pressure Rating – 1200 – Kpa

10.2.2. Pipe Hanger and Support

10.2.3. Pipe hanger and sway braces shall be fabricated with flat bar and angular bar of appropriate size.

10.2.4. Anchorage of pipe hanger and sway braces on concrete slab or beam shall be expansion shields or directly fasten to structural steel member as shown on details as required.

10.3. Equipment Foundation

10.3.1. Equipment foundation shall basically consist of a steel angles, channels, reinforced concrete pads and foundations required by the equipment manufacturer's standards

10.4. Electrical Wiring

10.4.1. Power wirings of all equipment shall be approved by the contractor from the circuit breaker or junction box installed by the electrical contractor to the equipment.

10.4.2. All control wirings shall be the sole responsibility of the contractor

10.4.3. Conduit shall be rigid steel, unless otherwise noted and must be size in accordance with the equipment load and manufacturers standard.

10.4.4. Wire shall be THW, unless otherwise noted and must be size in accordance with the equipment load and standards

11. Equipment

11.1.1 Quality Assurance – All equipment to be used shall be new and shall conform with the reference codes and standards. The manufacturers shall provide representatives for start-up supervision

11.1.2 Operation and Maintenance Manual – The manufacturers shall provide four (4) copies of operation and maintenance manual, including spare parts list to the**PCMC's representative**

11.2 Sprinkler Head

11.2.1 Type –Solder Type

11.2.2 Size -12mm orifice dia.with k=5.6 minimum

11.2.3 Temperature rating – 74 c general area 100 c for high temperature area

11.2.4 Model-Pendent –resecced type, chrome finish
Upright –standard brush finish
Sidewall – horizontal brush finish

11.3 Alarm Check Valve

11.3.1 Alarm check valve shall be constructed that it shall be used as a check valve and such that anti-flow of water from the sprinkler system equal to or greater than that from a single sprinkler head will result in continuous flow of water to the water motor gong thus sounding an audible alarm

11.3.2 Alarm check valve shall be variable pressure type consist of retarding chamber, alarm test valve, alarm shut – off valve, pressure gauges and pressure switch. Valve shall be UL listed

11.3.3 Water motor gong shall be 300mm diameter weatherproof with impeller and striker assembly which is actuated flow of water. Gong shall be provided with strainer

11.4 Water Flow Detector

11.4.1 Water flow detector shall be vane operated with pneumatically retarded switch assembly mounted on a aluminum base plate. The retard element shall be adjusted from 0 to 70 seconds

11.4.2 Water flow detector shall have two SPDT switch that will close instantaneously at the flow of water. Switches shall have a minimum rated capacity of 0.25 amps. 24 VDC

11.5 Monitor Switch

11.5.1 Monitor switch shall consists of a SPDT Switch, a roller type switch actuator and a spring loaded plunger

11.5.2 Monitor switch shall be installed on floor control valve or sectionalizing valves such that turning off the valve will cause the closing of switch thus sending a trouble signal

11.6 Sight Flow Connector

11.6.1 Sight flow connector shall be 25mm diameter connected at the drain valves of the floor control valve. The glass plate shall withstand 1200 Kpa pressured

11.7 Fire Hose Cabinet

11.7.1 Unit shall consist of the following

One (1) – 40mm x 30mm single jacket hose with brass coupling
One (1) – 40mm combination fog and solid stream nozzle, brass
One (1) - semi-automatic rack, brass finish and hose nipples
One (1) – 40mm angle valve, brass finish
One (1) spanner wrench
One (1) 4.5 kg. Dry chemical fire extinguisher, Class ABC, UL/FM

11.7.2 Fire Hose Cabinet shall be subject to the approval of the **PCMC's representative**

11.8 Fire Department Connections

11.8.1 type – Threaded type, to match the local fire department requirement

11.8.2 Pressure Rating –Kpa

11.8.3 Finish – Rough Brass

11.8.4 Uses and Sizes

Siamese Twin – 150x63x63mm Female connector
Roof Manifold -150 x63 x 63 Male connector Fire Hose Valve- 63mm Male Connector
Sprinkler – 150 x 63 x63mm Female connector street inlet

11.8.5 All fire department signs shall be provided with caps, chains and signs

11.9 SIGNS

11.9.1 Identification signs shall be provided as required by NFPA codes or as shown on the drawing

11.9.2 Identification signs shall have red background and white letter sizes that are easily readable

12.0 Installation

12.1 Workmanship

12.1.1 The work throughout shall be executed in the best and most thorough manner in accordance with NFPA standard and to the satisfaction of the **Owner's representative**, who will jointly interpret the meaning of the drawings and specifications and shall have power to reject ant work and materials which in their judgment are not in full accordance therewith

12.1.2 This **Fit-Out Contractor** shall assume unit responsibility and shall provide the service of the qualified Engineer to supervise the complete installation of equipment and systems and who shall be available for conducting the final acceptance test.

12.1.3 All equipment shall be installed in accordance with NFPA standard and in accordance with the manufacturer's standard Certificate of Compliance by the manufacturers representative shall be submitted to the Owner.

12.2 Piping's Installation

12.2.1 Install pipe hanger parallel to the building line or as shown on the drawing

12.2.2 Install essentially as shown on the drawing. Modify as required to clear the building structure and openings, lights, ducts, and other services

12.2.3 Install valves where it can be conveniently operated from the floor. Valve system shall be installed upright or horizontal only.

12.2.4 Provide adequate spacing between walls and other piping's permit servicing of valves and other devices.

12.2.5 Provide pipes sleeves for all piping's passing through building structures

12.2.6 Install piping to permit natural drainage by gravity towards to control valve.

12.3 Pipe, Hanger, and Support Installation

12.3.1 All supports shall be independent of the ceiling suspension and other system such as duct works and other piping.

12.3.2 Sway braces shall be installed on feed mains and cross main to avoid piping oscillations.

12.3.3 Risers shall be supported by attachment directly to the risers or by hanger located on the horizontal connection close to the riser.

12.3.4 Hangers or Branch lines – There shall be at least 1 hanger for each sprinkler installed on the branch lines.

12.3.5 Hangers or Cross mains – There should be at least 1 hanger between 2 branch line.

12.3.6 Hanger for Risers – There should be at least 1 hanger for every floor.

12.4 Painting

12.4.1 All above ground piping shall be painted with 2 coats of primer (anti-rust) paints and one coat of red enamel finishing paint

12.5 Cleaning and Protection

12.5.1 Before erection, remove all foreign materials from the pipes

12.5.2 During construction, cap or otherwise protect all expose finished pipe ends. Remove all temporary preservatives coatings from valves and accessories

12.6 Testing

12.6.1 Simulation Testing –of sprinkler system (including pumps)by burning of one or more sprinkler heads shall be performed in the presence of the Owner, Architects' and the Engineers

12.7 Alarm Interconnection

12.7.1 The **Fit-Out Contractor** shall coordinate with the Alarm Contractor for the interconnection of the Sprinkler alarm to the building fire alarm system. Conduits and wires shall be provided by this Contractor

DIVISION 14. ECE

1. E.C.E.

General Notes:

All electronics works herein shall be in accordance with the National Building code, provision of the lates approved edition of the Philippine Electronics code, the laws and ordinances of the local code enforcing authorities and requirements of the local power, telephone company and building administration requirements.

1. Contractor shall secure all wiring permit and all fees required for the works and furnishe the owner the final certificate of all electrical inspection.
2. Contractor to conduct earth ground test, wire insulation and load test shall be conducted upon completion of works.

3. In case of any discrepancy between plans and site condition, specification and revisions/changes, the contractor should immediately verify and consult to/with electronics engineer.
4. All loocation and mounting heights are subject to approval of electronics engineer.
5. Contractors shall be responsible in the preparation of electronics as-built plans duly signed and sealed by professional electronics engineer and electronics autocad files.
6. Final total number of electrical auxiliary units and equiptments and wiring devices related to electronics shall be approved by owner representative/engineer.
7. Contractor's shall be responsible for preparation of shop or construction drawing required by owner/architect/engineers drawing shall be prepared by contractor qualified engineer. This includes all electrical auxiliary and electronics devices include in the project.
8. Contractor's to visit site condition and include all cost necessary to complete the system at no cost to owner. Including cost of coring services and expenses for the restoration any damaged/affected civil/architectural finishes or relocation of existing facilities on the building.
9. Contractor's to locate all splicing boxes to accessible place or with access panels.
10. Nominated contractor to verify all equiptments to be installed or place or within the store, and make adjustment with owner's/ architect consent.
11. This drawing are diagrammatic layout only any materials and fitting not shown on this plans but needed to complete the system and operation shall be included with the contractor scope of work.

CONFORME:

Authorized Signatory Signature over printed name	Contact No:	
Name of Company/Firm Contact No.	Company's Official Email Address (where notices will be sent)	Company's Official

Republic of the Philippines
PHILIPPINE CHILDREN'S MEDICAL CENTER
Bids and Awards Committee
Quezon Avenue, Quezon City 1100
924-6601 to 25 Website: www.pcmc.gov.ph email: hiss@pcmc.gov.ph

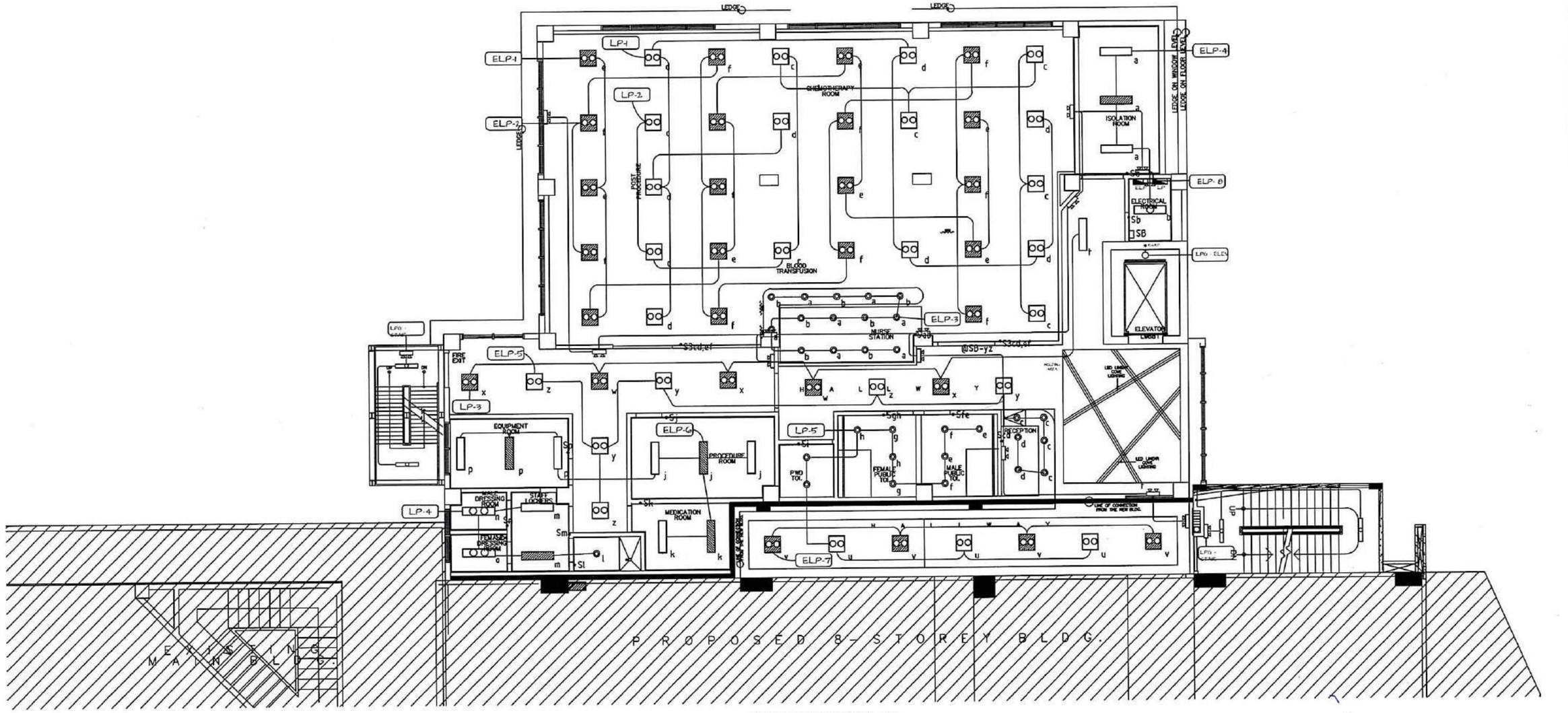
SECTION VII

Drawings

One (1) Lot

Construction of Cancer Center Building (Fit Out of 3rd and 4th)

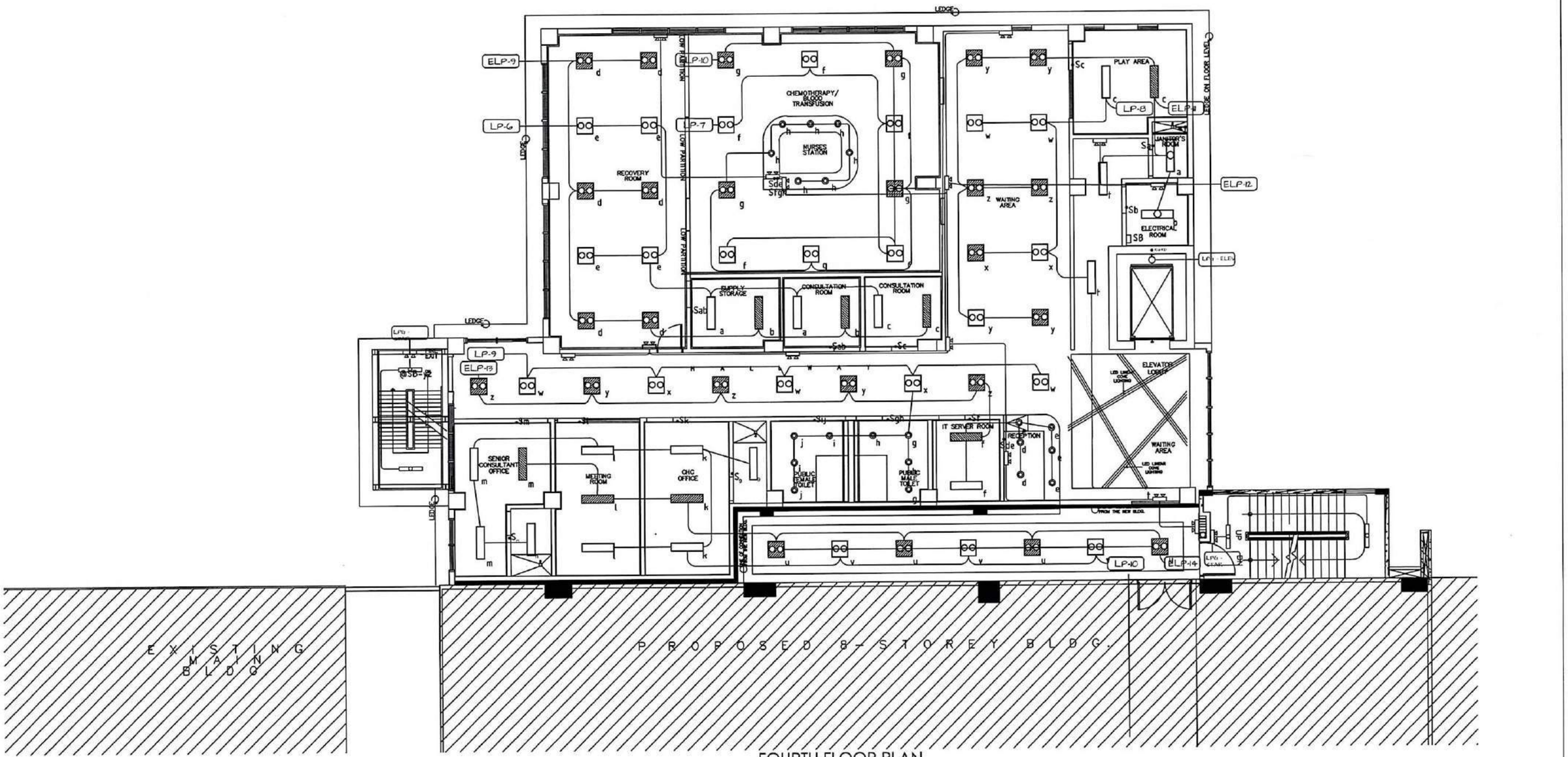
IB-2022-077



THIRD FLOOR PLAN

1 LIGHTING SYSTEM LAYOUT

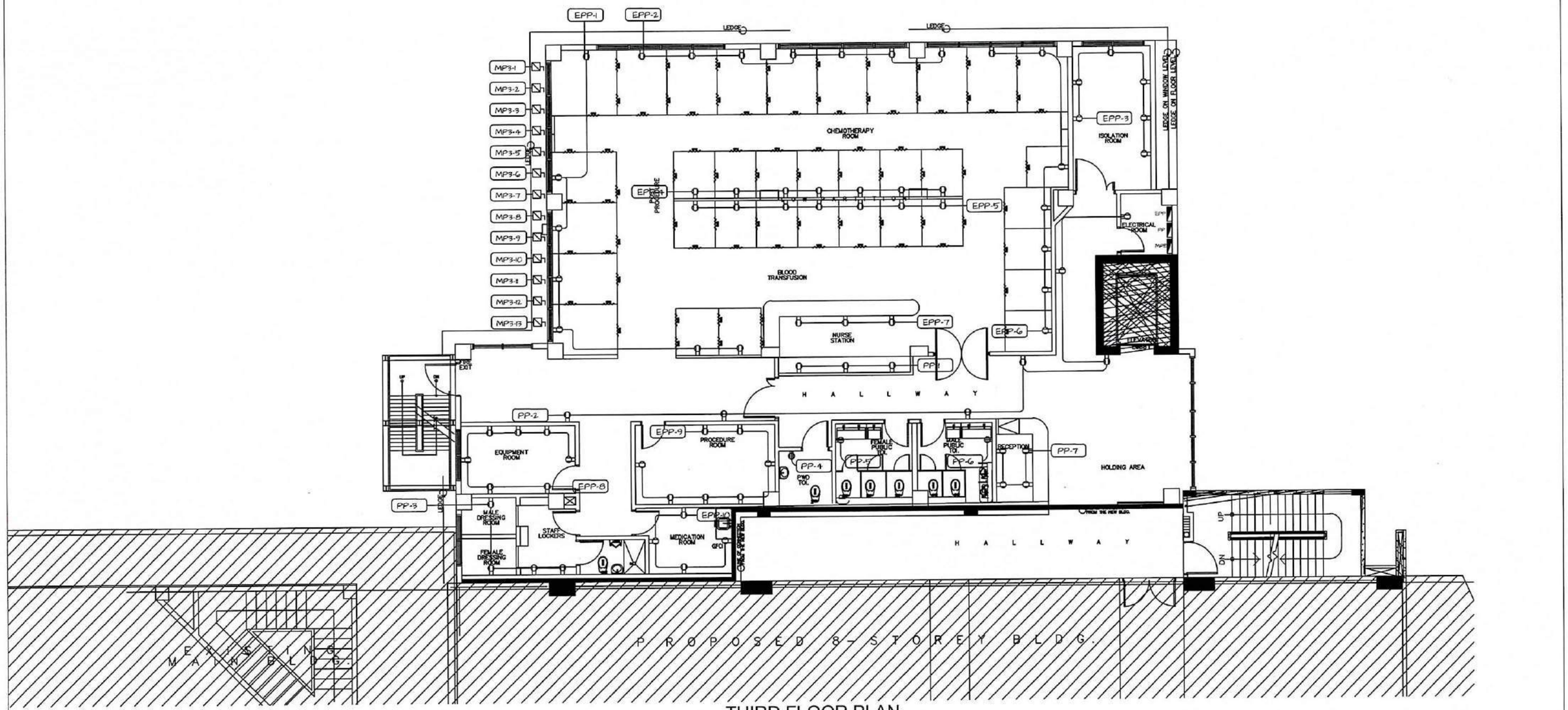
Republic of the Philippines DEPARTMENT OF HEALTH PHILIPPINE CHILDREN'S MEDICAL CENTER Quezon Avenue, corner Agham Road	PROJECT TITLE: Construction of 3rd floor and 4th floor Cancer Building (FIT-OUT of 3rd floor and 4th floor) LOCATION Quezon Ave., cor Agham Rd., Quezon City	PREPARED AND CHECKED BY: ENGR. ALFREDO T. FRONDA JR. Electrical Engineer	REVIEWED BY: ENGR. DANIEL E. DAVID OIC, ENGINEERING	CONFORMED BY: END-USER	RECOMMENDING APPROVAL: ZENAIDA V. TALAGTAG, MGM - ESP OIC, GSD	ENDORSING APPROVAL: CECILIA O. GAN, MD, MNSA DEPUTY EXECUTIVE DIRECTOR - HSS Executive Member,Infrastructure Committee	APPROVED BY: SONIA B. GONZALEZ, MD, MSchSM, MPM OIC - EXECUTIVE DIRECTOR Chairman - Infrastructure Committee	SHEET CONTENT / NO: E-1 ELECTRICAL PLAN SCALE: 1:150



FOURTH FLOOR PLAN

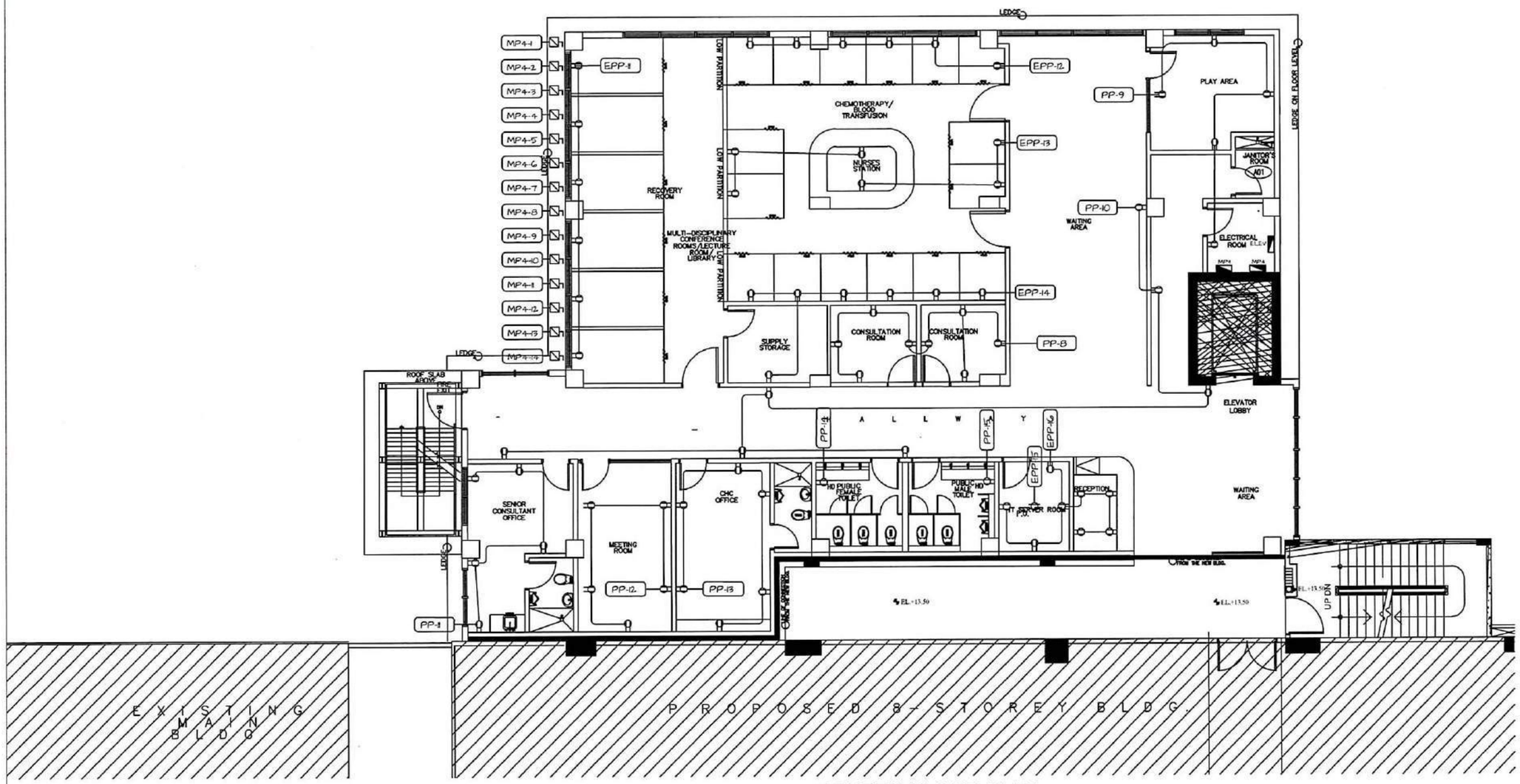
1 LIGHTING SYSTEM LAYOUT

Republic of the Philippines DEPARTMENT OF HEALTH PHILIPPINE CHILDREN'S MEDICAL CENTER Quezon Avenue, corner Agham Road	PROJECT TITLE: Construction of 3rd floor and 4th floor Cancer Building (FIT-OUT of 3rd floor and 4th floor) LOCATION Quezon Ave., cor Agham Rd., Quezon City	PREPARED AND CHECKED BY: ENGR. ALFREDO T. FRONDA JR. Electrical Engineer	REVIEWED BY: ENGR. DANIEL E. DAVID OIC, ENGINEERING	CONFORMED BY: END-USER	RECOMMENDING APPROVAL: ZENAIDA V. TALAGTAG, MGM - ESP OIC, GSD	ENDORSING APPROVAL: CECILIA O. GAN, MD, MNSA DEPUTY EXECUTIVE DIRECTOR - HSS Executive Member, Infrastructure Committee	APPROVED BY: SONIA B. GONZALEZ, MD, MScHSM, MPM OIC - EXECUTIVE DIRECTOR Chairman - Infrastructure Committee	SHEET CONTENT / NO: E-2 ELECTRICAL PLAN SCALE: 1:150



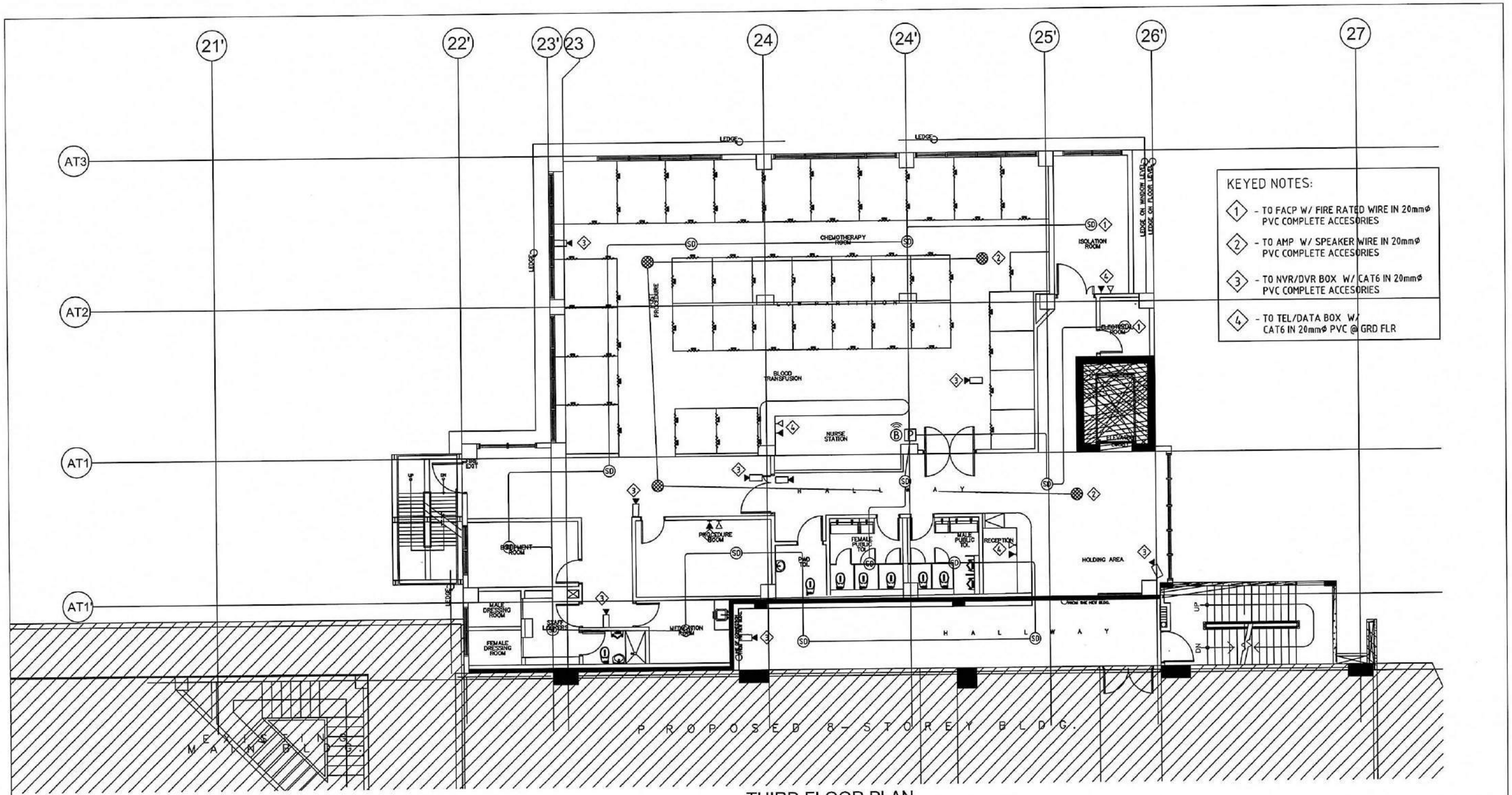
1 THIRD FLOOR PLAN
POWER SYSTEM LAYOUT

Republic of the Philippines DEPARTMENT OF HEALTH PHILIPPINE CHILDREN'S MEDICAL CENTER Quezon Avenue, corner Agham Road	PROJECT TITLE: Construction of 3rd floor and 4th floor Cancer Building (FIT-OUT of 3rd floor and 4th floor) LOCATION Quezon Ave., cor Agham Rd., Quezon City	PREPARED AND CHECKED BY: ENGR. ALFREDO T. FRONDA JR. Electrical Engineer	REVIEWED BY: ENGR. DANIEL E. DAVID OIC, ENGINEERING	CONFORMED BY: END-USER MARILOU CABRERA, MD Lic. No. 056930	RECOMMENDING APPROVAL: ZENAIDA V. TALAGTAG, MGM - ESP OIC, GSD	ENDORSING APPROVAL: CECILIA O. GAN, MD, MNSA DEPUTY EXECUTIVE DIRECTOR - HSS Executive Member,Infrastructure Committee	APPROVED BY: SONIA B. GONZALEZ, MD, MScHSM, MPM OIC - EXECUTIVE DIRECTOR Chairman - Infrastructure Committee	SHEET CONTENT / NO: E-3 ELECTRICAL PLAN SCALE: 1:150



1 FOURTH FLOOR PLAN
POWER SYSTEM LAYOUT

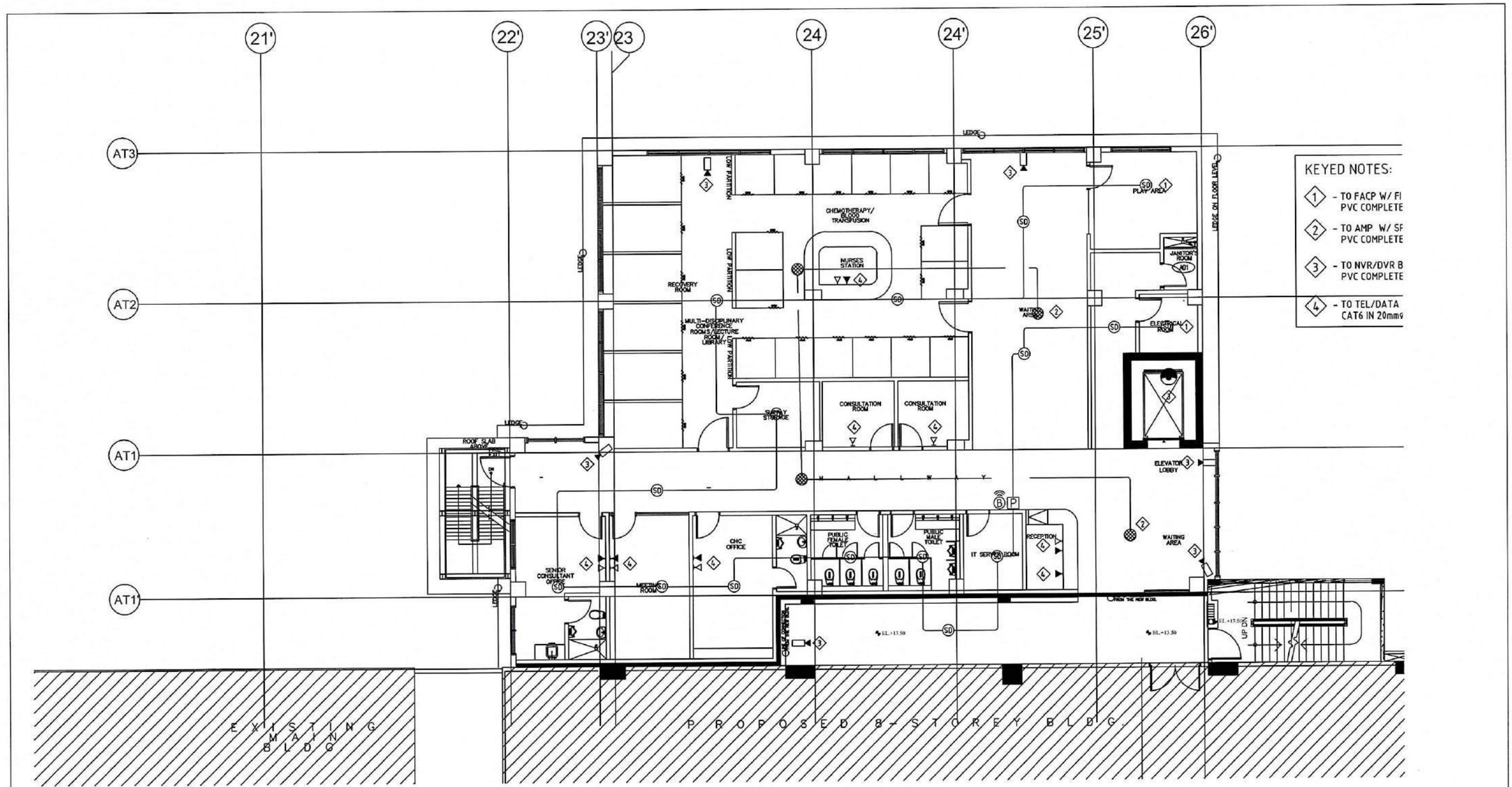
Republic of the Philippines DEPARTMENT OF HEALTH PHILIPPINE CHILDREN'S MEDICAL CENTER Quezon Avenue, corner Agham Road	PROJECT TITLE: Construction of 3rd floor and 4th floor Cancer Building (FIT-OUT of 3rd floor and 4th floor) LOCATION Quezon Ave., cor Agham Rd., Quezon City	PREPARED AND CHECKED BY: ENGR. ALFREDO T. FRONDA JR. Electrical Engineer	REVIEWED BY: ENGR. DANIEL E. DAVID OIC, ENGINEERING	CONFORMED BY: END-USER MARIONILA ABIERA, M.D. Lic. No. 056930	RECOMMENDING APPROVAL: ZENAIDA V. TALAGTAG, MGM - ESP OIC, GSD	ENDORSING APPROVAL: CECILIA O. GAN, MD, MNSA DEPUTY EXECUTIVE DIRECTOR - HSS Executive Member,Infrastructure Committee	APPROVED BY: SONIA B. GONZALEZ, MD, MScHSM, MPM OIC - EXECUTIVE DIRECTOR Chairman - Infrastructure Committee	SHEET CONTENT / NO: E-4 ELECTRICAL PLAN SCALE: 1:150



THIRD FLOOR PLAN

1 AUXILLARY SYSTEM LAYOUT

Republic of the Philippines DEPARTMENT OF HEALTH PHILIPPINE CHILDREN'S MEDICAL CENTER Quezon Avenue, corner Agham Road	PROJECT TITLE: Construction of 3rd floor and 4th floor Cancer Building (FIT-OUT of 3rd floor and 4th floor) LOCATION Quezon Ave., cor Agham Rd., Quezon City	PREPARED AND CHECKED BY: ENGR. ALFREDO T. FRONDA JR. Electrical Engineer	REVIEWED BY: ENGR. DANIEL E. DAVID OIC, ENGINEERING	CONFORMED BY: END-USER MARILOILA ARIERA, MD Lic. No. 036930	RECOMMENDING APPROVAL: ZENAIDA V. TALAGTAG, MGM - ESP OIC, GSD	ENDORSING APPROVAL: CECILIA O. GAN, MD, MNSA DEPUTY EXECUTIVE DIRECTOR - HSS Executive Member,Infrastructure Committee	APPROVED BY: SONIA B. GONZALEZ, MD, MScHSM, MPM OIC - EXECUTIVE DIRECTOR Chairman - Infrastructure Committee	SHEET CONTENT / NO: E-5 ELECTRICAL PLAN SCALE: 1:150



FOURTH FLOOR PLAN

1 AUXILLARY SYSTEM LAYOUT

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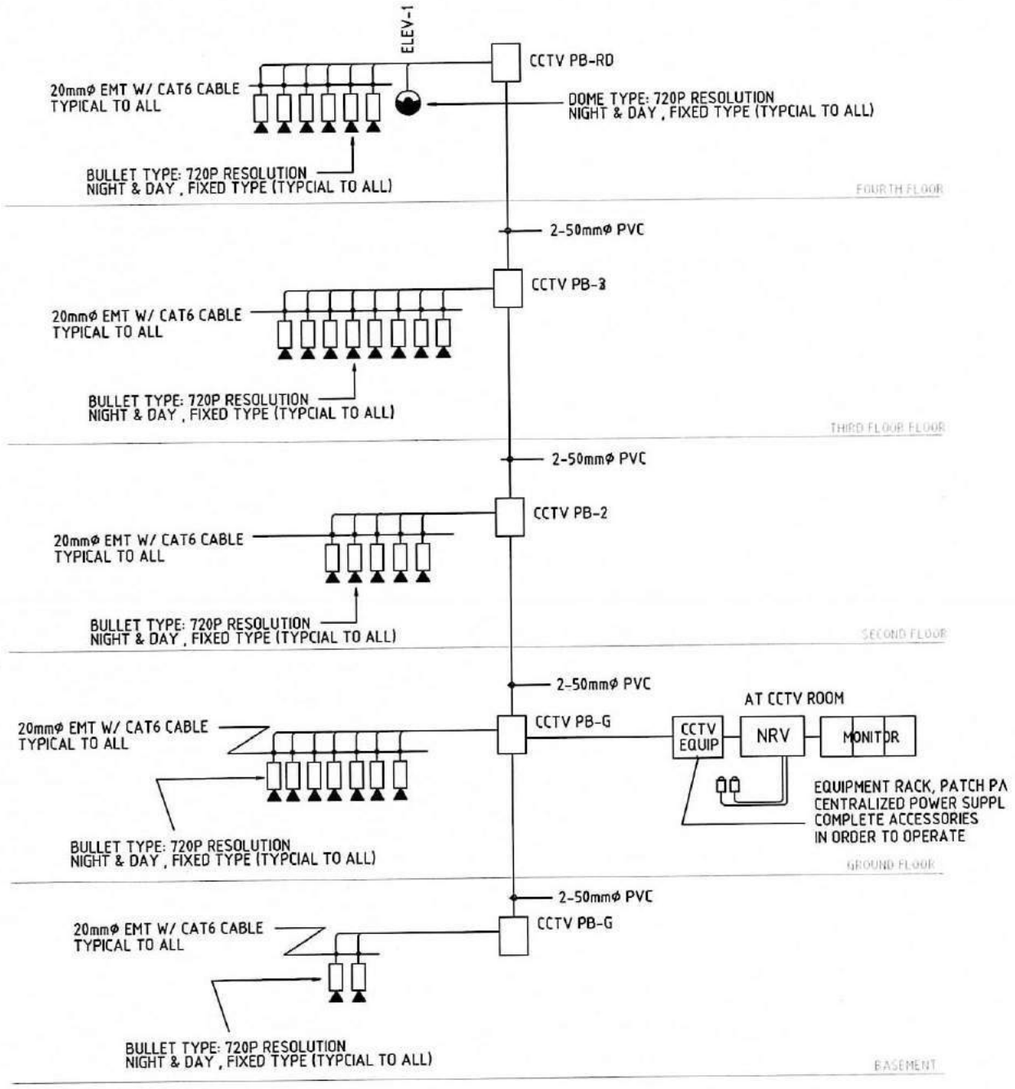
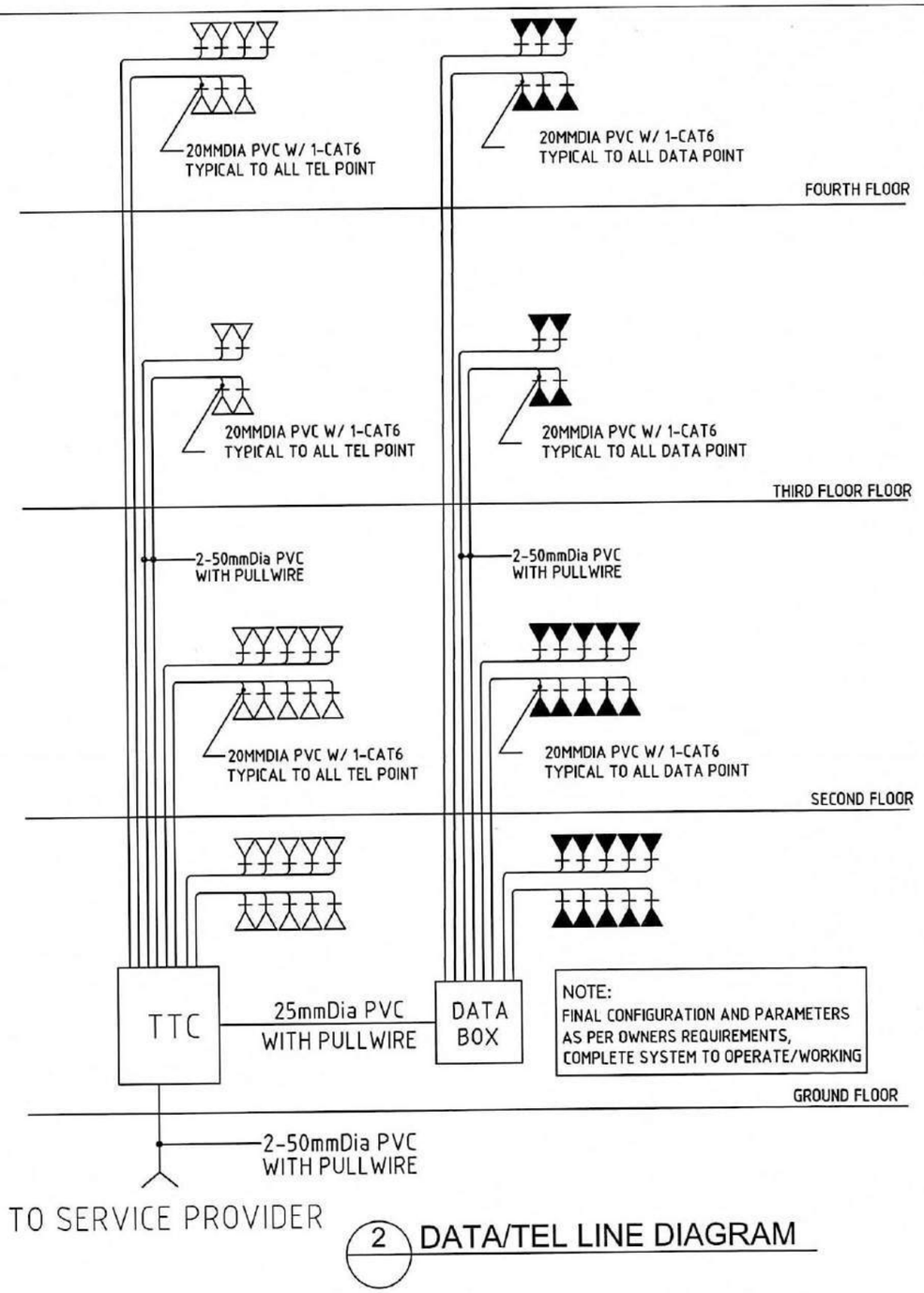
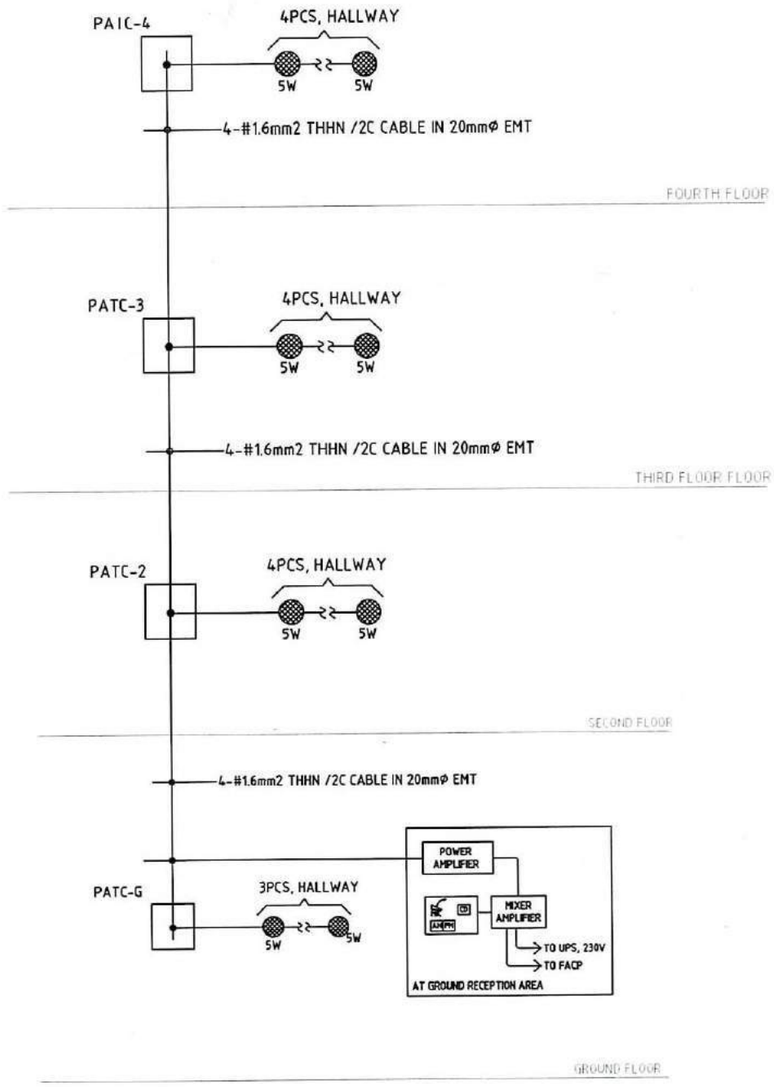


1 **CCTV SINGLE - LINE DIAGRAM**

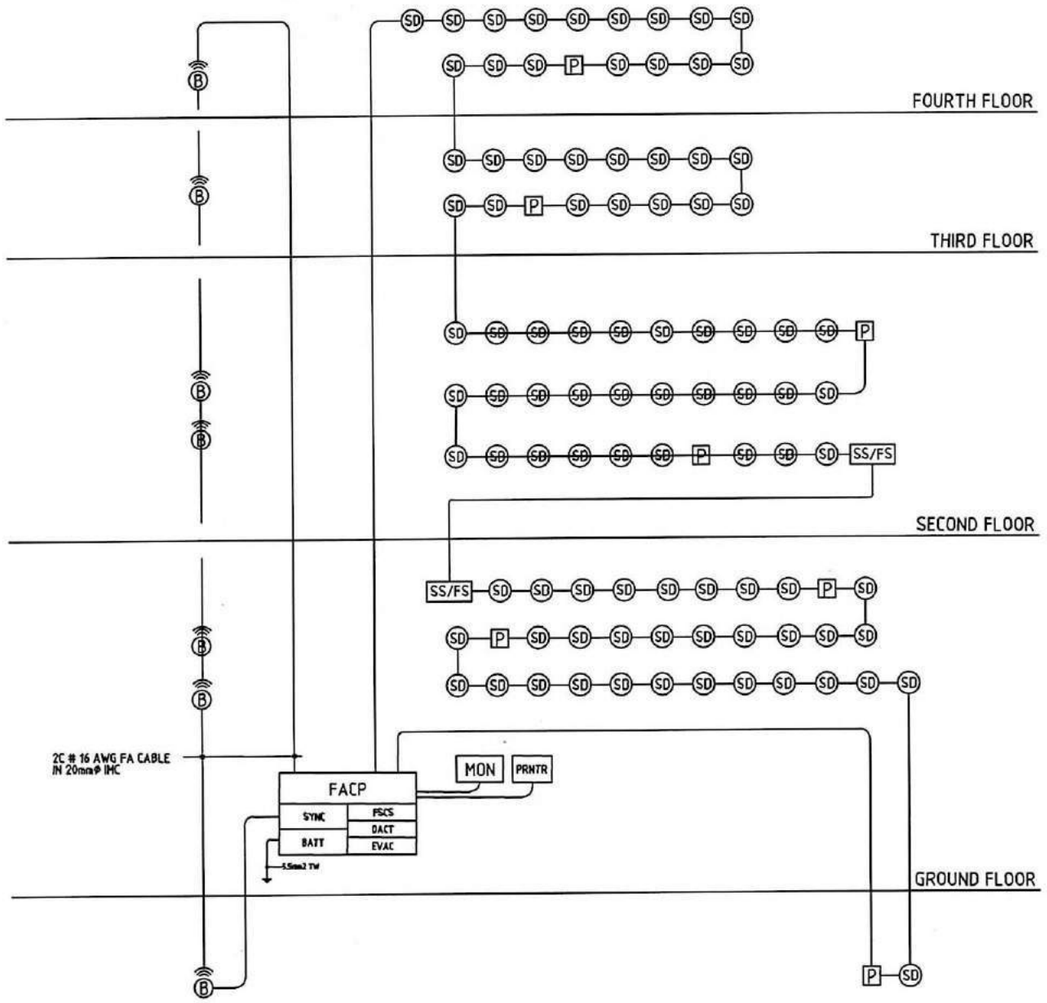


2 **DATA/TEL LINE DIAGRAM**

Republic of the Philippines DEPARTMENT OF HEALTH **PHILIPPINE CHILDREN'S MEDICAL CENTER** Quezon Avenue, corner Agham Road	PROJECT TITLE: Construction of 3rd floor and 4th floor Cancer Building (FIT-OUT of 3rd floor and 4th floor) LOCATION Quezon Ave., cor Agham Rd., Quezon City	PREPARED AND CHECKED BY: ENGR. ALFREDO T. FRONDA JR. Electrical Engineer	REVIEWED BY: ENGR. DANIEL E. DAVID OIC, ENGINEERING	CONFORMED BY: MARILOU A. ARIERA, MD Lic. No. 0053930 END-USER	RECOMMENDING APPROVAL: ZENAIDA V. TALAGTAG, MGM - ESP OIC, GSD	ENDORSING APPROVAL: CECILIA O. GAN, MD, MNSA DEPUTY EXECUTIVE DIRECTOR - HSS Executive Member,Infrastructure Committee	APPROVED BY: SONIA B. GONZALEZ, MD, MScHSM, MPM OIC - EXECUTIVE DIRECTOR Chairman - Infrastructure Committee	SHEET CONTENT / NO: E-7 ELECTRICAL PLAN SCALE: NTS

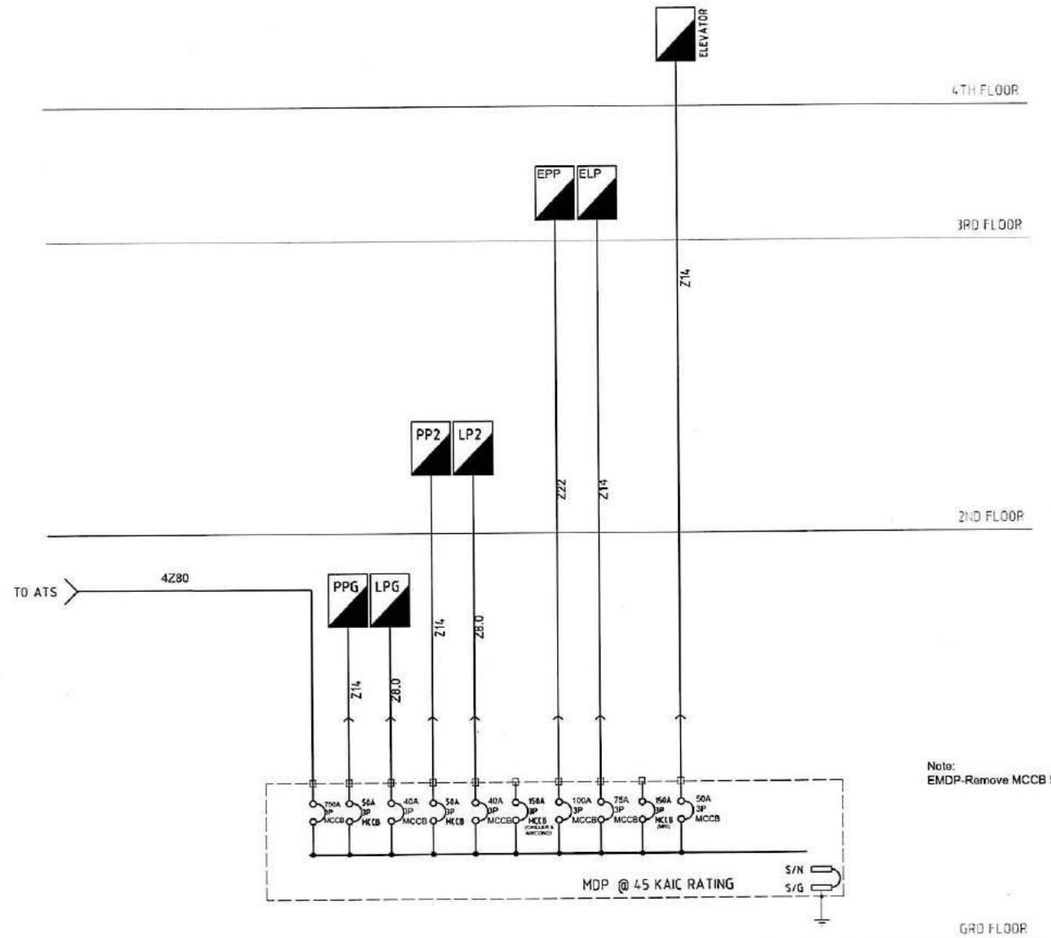


1 **P.A. SYSTEM SINGLE - LINE DIAGRAM**



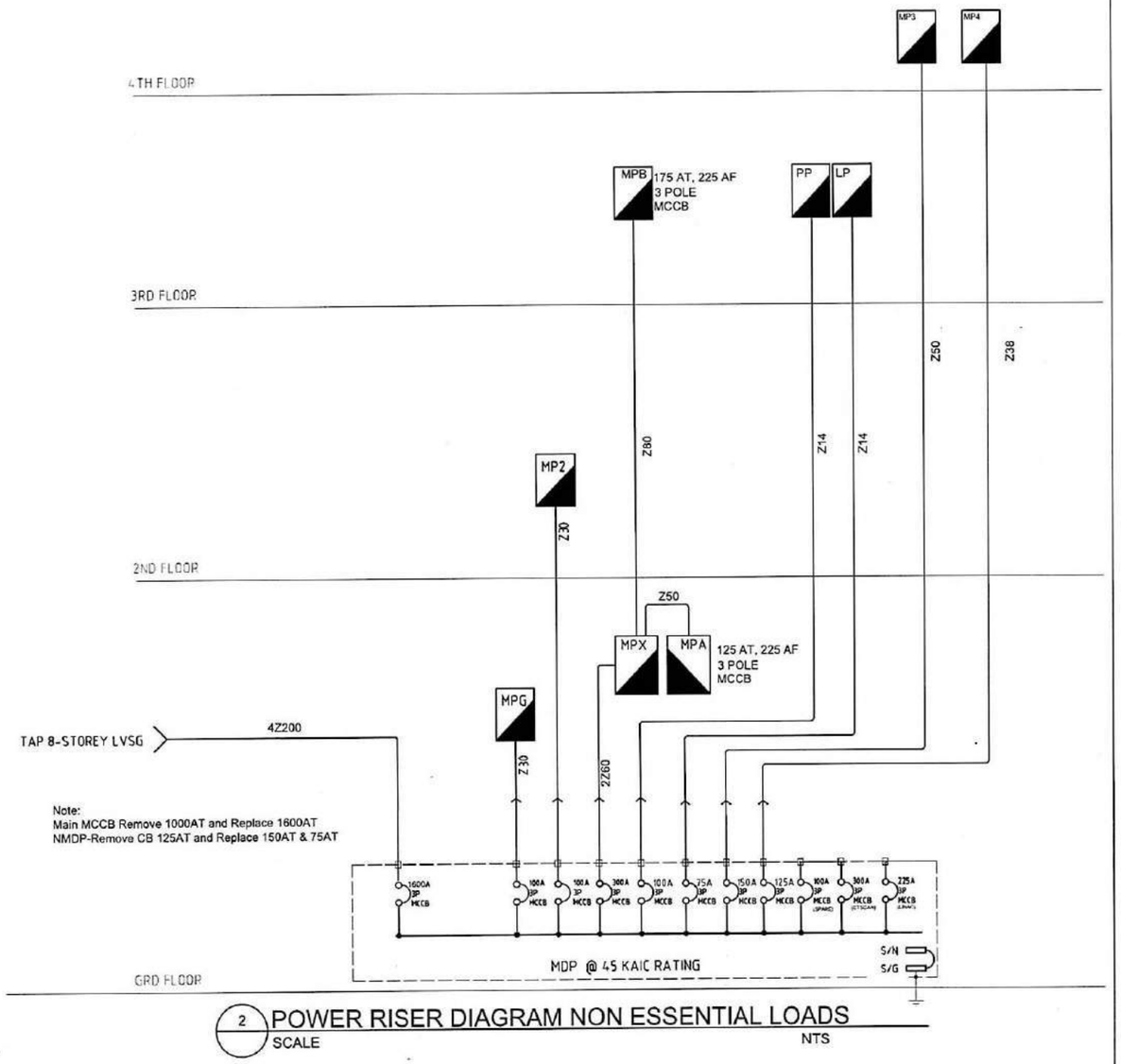
2 FDAS SINGLE LINE DIAGRAM

Republic of the Philippines DEPARTMENT OF HEALTH PHILIPPINE CHILDREN'S MEDICAL CENTER Quezon Avenue, corner Agham Road	PROJECT TITLE: Construction of 3rd floor and 4th floor Cancer Building (FIT-OUT of 3rd floor and 4th floor) LOCATION Quezon Ave., cor Agham Rd., Quezon City	PREPARED AND CHECKED BY: ENGR. ALFREDO T. FRONDA JR. Electrical Engineer	REVIEWED BY: ENGR. DANIEL E. DAVID OIC, ENGINEERING	CONFORMED BY: END-USER	RECOMMENDING APPROVAL: ZENAIDA V. TALAGTAG, MGM - ESP Head, GSD	ENDORSING APPROVAL: CECILIA O. GAN, MD, MNSA DEPUTY EXECUTIVE DIRECTOR - HSS Executive Member,Infrastructure Committee	APPROVED BY: SONIA B. GONZALEZ, MD, MScHSM, MPM OIC - EXECUTIVE DIRECTOR Chairman - Infrastructure Committee	SHEET CONTENT / NO.: E-8 ELECTRICAL PLAN SCALE: NTS



Note:
EMDP-Remove MCCB 50AT and Replace 75A

1 POWER RISER DIAGRAM ESSENTIAL LOADS
SCALE NTS



Note:
Main MCCB Remove 1000AT and Replace 1600AT
NMDP-Remove CB 125AT and Replace 150AT & 75AT

2 POWER RISER DIAGRAM NON ESSENTIAL LOADS
SCALE NTS

Republic of the Philippines DEPARTMENT OF HEALTH PHILIPPINE CHILDREN'S MEDICAL CENTER Quezon Avenue, corner Agham Road	PROJECT TITLE: Construction of 3rd floor and 4th floor Cancer Building (FIT-OUT of 3rd floor and 4th floor) LOCATION Quezon Ave., cor Agham Rd., Quezon City	PREPARED AND CHECKED BY: ENGR. ALFREDO T. FRONDA JR. Electrical Engineer	REVIEWED BY: ENGR. DANIEL E. DAVID OIC, ENGINEERING	CONFORMED BY: END-USER	RECOMMENDING APPROVAL: ZENAIDA V. TALAGTAG, MGM - ESP Head, GSD	ENDORSING APPROVAL: CECILIA O. GAN, MD, MNSA DEPUTY EXECUTIVE DIRECTOR - HSS Executive Member,Infrastructure Committee	APPROVED BY: SONIA B. GONZALEZ, MD, MScHSM, MPM OIC - EXECUTIVE DIRECTOR Chairman - Infrastructure Committee	SHEET CONTENT / NO: E-9 ELECTRICAL PLAN SCALE: NTS

PANEL: MDP NON-ESSENTIAL LOADS

GROUND FLOOR/ EE ROOM

CKT. NO.	DESCRIPTION	LOAD (KVA)	AMPS PER PHASE ØAN	ØBN	ØCN	3Ø	CKT. BREAKER P	A.F.	A.T.	KAIC	VOLTS	WIRE
1	MPG	26.80	37.1	39.9	39.9		3	225	100	25	400	Z30
2	MP2	33.15	53.0	44.1	47.0		3	225	100	25	400	Z30
3	MPX	113.4	173	173	173		3	400	300	35	400	2Z60
4	MP3	74.72	43.78	43.78	39.9		3	250	150	25	400	Z22
5	MP4	24.60	37.28	35.67	37.29		3	250	125	25	400	Z22
6	LP	9.68	15.39	18.43	9.72		3	100	75	25	400	Z14
7	PP	16.14	30.42	27.03	23.03		3	100	75	25	400	Z14
8	LINAC	125				180.42	3	225	225	35	400	2Z50
9	CT SCAN	180				259.81	3	400	300	35	400	2Z60
10	SPACE	—				—	3	100	—	—	400	—
	TOTAL	603.49	389.97	381.91	369.84	440.23						

Computation:
TOTAL LOAD = [illegible] KVA
DEMAND FACTOR = [illegible]
Conductor size
Protection Rating

PANEL: MDP ESSENTIAL LOADS

GROUND FLOOR/ EE ROOM

CKT. NO.	DESCRIPTION	LOAD (KVA)	AMPS PER PHASE ØAN	ØBN	ØCN	3Ø	CKT. BREAKER P	A.F.	A.T.	KAIC	VOLTS	WIRE
1	PPG	17.1	24.8	24.6	24.4		3	100	50	22	400	Z14
2	LPG	7.01	11.7	10.9	7.8		3	50	40	18	400	Z8.0
3	PP2	19.08	28.1	26.5	25		3	400	300	22	400	Z14
4	LP2	7.65	10.0	11.5	11.7		3	50	40	18	400	Z14
5	ELP	14.62	28.56	23.54	25.68		3	100	75	25	400	Z14
6	EPP	18.36	33.14	34.1	26.68		3	100	100	25	400	Z22
7	CHILLER AND AIRCONS	90.00				129.9	3	225	150	25	400	Z60
8	ELEVATOR	10.50				15.16	3	100	50	22	400	Z14
9	MRI	100.00				144.34	3	225	150	25	400	Z60
10	SPACE	—				—	3	100	—	—	400	—
	TOTAL	284.32	136.3	131.14	121.26	289.4						

Computation:
TOTAL LOAD = [illegible] KVA
DEMAND FACTOR = [illegible]
Conductor size
Protection Rating

MPB

THIRD FLOOR EE ROOM

ITEM NO	LOAD DESCRIPTION	LOAD IN VA	PHASE LOADING AMPS AN	BN	CN	3ø AMPS	PROTECTION AT	AF	POLE	KAIC	VOLTS	WIRE
1	ACCU STR HALLWAY GROUND	7950	34.6				50	100	1	18	230	Y14
2	ACCU STR HALLWAY GROUND	7950		34.6			50	100	1	18	230	Y14
3	ACCU STR HALLWAY GROUND	7950			34.6		50	100	1	18	230	Y14
4	ACCU STR HALLWAY SECOND	7950	34.6				50	100	1	18	230	Y14
5	ACCU STR HALLWAY SECOND	7950		34.6			50	100	1	18	230	Y14
6	ACCU STR HALLWAY SECOND	7950			34.6		50	100	1	18	230	Y14
7	ACCU STR HALLWAY SECOND	7950	34.6				50	100	1	18	230	Y14
8	ACCU STR HALLWAY SECOND	7950		34.6			50	100	1	18	230	Y14
9	ACCU STR HALLWAY SECOND	7950			34.6		50	100	1	18	230	Y14
10	SPARE											
	TOTAL	71500	103.8	103.8	103.8							
							175	225	3	25	400	Z80
							MAIN PANEL PROTECTION					WIRE

DF = 100
IFL = 112.5 AMPS
ICD = 112.5 AMPS
ISP = 134.9 AMPS
ICB = 168.7 AMPS

PANEL: EPP

THIRD FLOOR/ EE ROOM

CKT. NO.	DESCRIPTION	LOAD (KVA)	AMPS PER PHASE ØAN	ØBN	ØCN	3Ø	CKT. BREAKER P	A.F.	A.T.	KAIC	WIRE
1	3-CONVENIENCE OUTLET	0.72	2.73				1	60	30	10	Y3.5C-C
2	7-CONVENIENCE OUTLET	1.26	6.45				1	60	30	10	Y3.5C-C
3	6-CONVENIENCE OUTLET	1.08		5.53			1	60	30	10	Y3.5C-C
4	7-CONVENIENCE OUTLET	1.26		6.45			1	60	30	10	Y3.5C-C
5	7-CONVENIENCE OUTLET	1.26			6.45		1	60	30	10	Y3.5C-C
6	7-CONVENIENCE OUTLET	1.26			6.45		1	60	30	10	Y3.5C-C
7	7-CONVENIENCE OUTLET	1.26	6.45				1	60	30	10	Y3.5C-C
8	7-CONVENIENCE OUTLET	1.26	6.45				1	60	30	10	Y3.5C-C
9	7-CONVENIENCE OUTLET	1.26		6.45			1	60	30	10	Y3.5C-C
10	4-GFCI CONVENIENCE OUTLET	0.72		3.69			1	60	30	10	Y3.5C-C
11	7-CONVENIENCE OUTLET	1.26			6.45		1	60	30	10	Y3.5C-C
12	8-CONVENIENCE OUTLET	1.44			7.33		1	60	30	10	Y3.5C-C
13	6-CONVENIENCE OUTLET	1.08	5.53				1	60	30	10	Y3.5C-C
14	6-CONVENIENCE OUTLET	1.08	5.53				1	60	30	10	Y3.5C-C
15	1-FLOOR OUTLET	1.26		6.45			1	60	30	10	Y3.5C-C
16	6-CONVENIENCE OUTLET	1.08		5.53			1	60	30	10	Y3.5C-C
17	SPARE	—			—		1	60	30	10	Y3.5C-C
18	SPARE	—			—		1	60	30	10	Y3.5C-C
	TOTAL	18.36	33.14	34.1	26.68						

Computation:
TOTAL LOAD = [illegible] KVA
DEMAND FACTOR = [illegible]
Conductor size
Protection Rating

PANEL: ELP

THIRD FLOOR/ EE ROOM

CKT. NO.	DESCRIPTION	LOAD (KVA)	AMPS PER PHASE ØAN	ØBN	ØCN	3Ø	CKT. BREAKER P	A.F.	A.T.	KAIC	WIRE
1	9-FLOURESCENT LAMP	0.90	4.61				1	60	20	10	Y3.5C-C
2	4-FLOURESCENT LAMP	0.40	1.74				1	60	20	10	Y3.5C-C
3	14-PINLIGHT	1.40		7.17			1	60	20	10	Y3.5C-C
4	10-FLOURESCENT LAMP	1.00		5.12			1	60	20	10	Y3.5C-C
5	6-FLOURESCENT LAMP, 6-PINLIGHT	1.20			6.13		1	60	20	10	Y3.5C-C
6	4-FLOURESCENT LAMP	0.40			2.05		1	60	20	10	Y3.5C-C
7	8-FLOURESCENT LAMP	0.80	4.1				1	60	20	10	Y3.5C-C
8	10-EMERGENCY LIGHTS	1.80	9.21				1	60	20	10	Y3.5C-C
9	10-FLOURESCENT LAMP	1.00		5.12			1	60	20	10	Y3.5C-C
10	5-FLOURESCENT LAMP, 7-PINLIGHT	1.20		6.13			1	60	20	10	Y3.5C-C
11	9-FLOURESCENT LAMP	0.90			4.61		1	60	20	10	Y3.5C-C
12	14-EMERGENCY LIGHTS	2.52			12.89		1	60	20	10	Y3.5C-C
13	7-FLOURESCENT LAMP	0.70	3.58				1	60	20	10	Y3.5C-C
14	7-FLOURESCENT LAMP	0.70	3.58				1	60	20	10	Y3.5C-C
15	SPARE	—		—			1	60	20	10	Y3.5C-C
16	SPACE	—		—			—	60	—	10	—
	TOTAL	14.62	28.56	23.54	25.68						

Computation:
TOTAL LOAD = [illegible] KVA
DEMAND FACTOR = [illegible]
Conductor size
Protection Rating

PANEL: PP

THIRD FLOOR/ EE ROOM

CKT. NO.	DESCRIPTION	LOAD (KVA)	AMPS PER PHASE ØAN	ØBN	ØCN	3Ø	CKT. BREAKER P	A.F.	A.T.	KAIC	WIRE
1	3-CONVENIENCE OUTLET	0.54	2.77				1	60	30	10	Y3.5C-C
2	7-CONVENIENCE OUTLET	1.26	6.45				1	60	30	10	Y3.5C-C
3	4-CONVENIENCE OUTLET	0.72		3.69			1	60	30	10	Y3.5C-C
4	1-HAND DRYER	1.20		6.14			1	60	30	10	Y3.5C-C
5	1-HAND DRYER	1.20			6.14		1	60	30	10	Y3.5C-C
6	1-HAND DRYER	1.20			6.14		1	60	30	10	Y3.5C-C
7	4-CONVENIENCE OUTLET	0.72	3.69				1	60	30	10	Y3.5C-C
8	8-CONVENIENCE OUTLET	1.44	7.37				1	60	30	10	Y3.5C-C
9	5-CONVENIENCE OUTLET	0.9		4.61			1	60	30	10	Y3.5C-C
10	7-CONVENIENCE OUTLET	1.26		6.45			1	60	30	10	Y3.5C-C
11	5-CONVENIENCE OUTLET	0.9			4.61		1	60	30	10	Y3.5C-C
12	1-HAND DRYER	1.20			6.14		1	60	30	10	Y3.5C-C
13	6-CONVENIENCE OUTLET	1.08	5.53				1	60	30	10	Y3.5C-C
14	5-CONVENIENCE OUTLET	0.9	4.61				1	60	30	10	Y3.5C-C
15	1-HAND DRYER	1.20		6.14			1	60	30	10	Y3.5C-C
16	SPARE	—		—			1	60	30	10	Y3.5C-C
17	SPARE	—			—		1	60	30	10	Y3.5C-C
18	SPARE	—			—		1	60	30	10	Y3.5C-C
	TOTAL	16.14	30.42	27.03	23.03						

Computation:
TOTAL LOAD = [illegible] KVA
DEMAND FACTOR = [illegible]
Conductor size
Protection Rating

PANEL: LP

THIRD FLOOR/ EE ROOM

CKT. NO.	DESCRIPTION	LOAD (KVA)	AMPS PER PHASE ØAN	ØBN	ØCN	3Ø	CKT. BREAKER P	A.F.	A.T.	KAIC	WIRE
1	8-FLOURESCENT LAMP	0.80	4.09				1	60	20	10	Y3.5C-C
2	8-FLOURESCENT LAMP	0.80	4.09				1	60	20	10	Y3.5C-C
3	6-FLOURESCENT LAMP, 60M-STRIP LIGHT	1.44		7.36			1	60	20	10	Y3.5C-C
4	4-FLOURESCENT LAMP, 1-PINLIGHT	0.50		2.56			1	60	20	10	Y3.5C-C
5	3-FLOURESCENT LAMP, 10-PINLIGHT	1.30			6.65		1	60	20	10	Y3.5C-C
6	6-FLOURESCENT LAMP	0.60			3.07		1	60	20	10	Y3.5C-C
7	5-FLOURESCENT LAMP	0.50	2.56				1	60	20	10	Y3.5C-C
8	6-FLOURESCENT LAMP, 60M-STRIP LIGHT	1.44	7.36				1	60	20	10	Y3.5C-C
9	5-FLOURESCENT LAMP, 8-PINLIGHT	1.30		6.65			1	60	20	10	Y3.5C-C
10	10-FLOURESCENT LAMP	1.00		5.12			1	60	20	10	Y3.5C-C
11	SPARE	—			—		1	60	20	10	Y3.5C-C
12	SPARE	—			—		1	60	20	10	Y3.5C-C
	TOTAL	9.68	15.39	18.43	9.72						

Computation:
TOTAL LOAD = [illegible] KVA
DEMAND FACTOR = [illegible]
Conductor size
Protection Rating

PANEL: MP3

FOURTH FLOOR/ EE ROOM

CKT. NO.	DESCRIPTION	LOAD (KVA)	AMPS PER PHASE ØAN	ØBN	ØCN	3Ø	CKT. BREAKER P	A.F.	A.T.	KAIC	WIRE
1	ACCU-1 3.0HP	2.24	9.73				1	60	30	10	Y3.5C-C
2	ACCU-2 2.5HP	1.86	8.11				1	60	45	10	Y5.5C-C
3	ACCU-3 5.0HP	3.73		16.21			1	60	45	10	Y5.5C-C
4	ACCU-4 2.5HP	1.86		8.11			1	60	30	10	Y3.5C-C
5	ACCU-5 5.0HP	3.73			16.21		1	60	30	10	Y3.5C-C
6	ACCU-6 2.5HP	1.86			8.11		1	60	30	10	Y3.5C-C
7	ACCU-7 2.5HP	1.86	8.11				1	60	30	10	Y3.5C-C
8	ACCU-8 1.5HP	1.12	4.86				1	60	30	10	Y3.5C-C
9	ACCU-9 1.5HP	1.12		4.86			1	60	30	10	Y3.5C-C
10	ACCU-10 1.5HP	1.12		4.86			1	60	30	10	Y3.5C-C
11	ACCU-11 2.5HP	1.86			8.11		1	60	30	10	Y3.5C-C
12	ACCU-12 1.0HP	0.75			3.24		1	60	30	10	Y3.5C-C
13	ACCU-13 1.0HP	0.75	3.24				1	60	30	10	Y3.5C-C
14	SPARE	2.24	9.73				1	60	30	10	Y3.5C-C
15	SPARE	2.24		9.73			1	60	30	10	Y3.5C-C
16	SPACE	—		—			—	60	—	10	—
	TOTAL	74.72	43.78	43.78	35.67						

Computation:
[illegible]

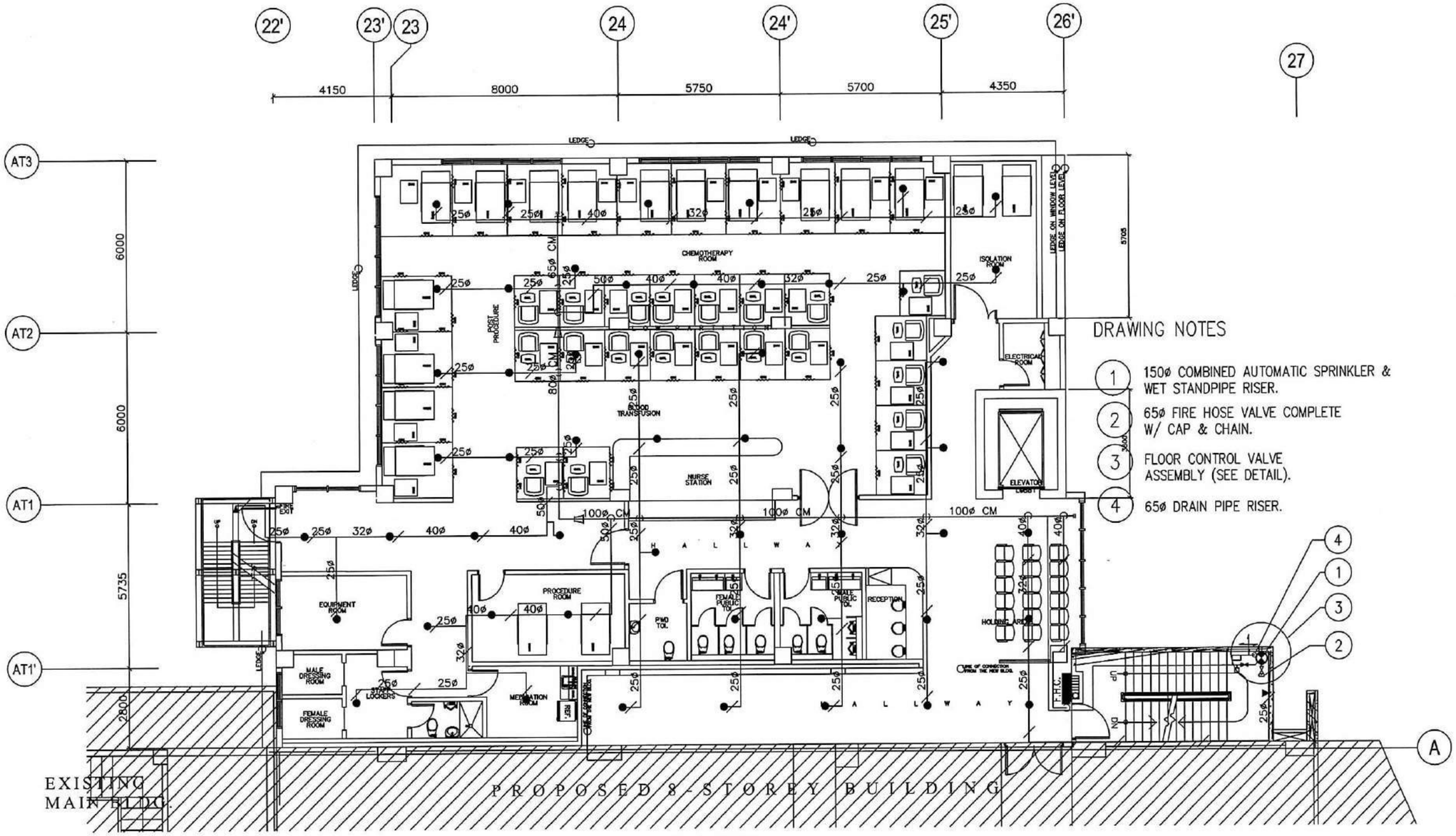
PANEL: MP4

FOURTH FLOOR/ EE ROOM

CKT. NO.	DESCRIPTION	LOAD (KVA)	AMPS PER PHASE ØAN	ØBN	ØCN	3Ø	CKT. BREAKER P	A.F.	A.T.	KAIC	WIRE/CABLE
1	ACCU-1 4.0HP	2.98	12.97				1	60	40	10	Y5.5C-C
2	ACCU-2 2.5HP	2.98	8.11				1	60	40	10	Y3.5C-C
3	ACCU-3 4.0HP	2.98		12.97			1	60	40	10	Y5.5C-C
4	ACCU-4 3.0HP	2.24		9.73			1	60	40	10	Y3.5C-C
5	ACCU-5 4.0HP	2.98			12.97		1	60	30	10	Y5.5C-C
6	ACCU-6 4.0HP	1.86			12.97		1	60	30	10	Y5.5C-C
7	ACCU-7 1.5HP	1.12	4.86				1	60	30	10	Y3.5C-C
8	ACCU-8 1.0HP	0.75	3.24				1	60	30	10	Y3.5C-C
9	ACCU-9 2.5HP	1.86		8.11			1	60	30	10	Y3.5C-C
10	ACCU-10 1.5HP	1.12		4.86			1	60	30	10	Y3.5C-C
11	ACCU-11 2.5HP	1.86			8.11		1	60	30	10	Y3.5C-C
12	ACCU-12 1.0HP	1.12			3.24		1	60	30	10	Y3.5C-C
13	ACCU-13 1.0HP	0.75	3.24				1	60	30	10	Y3.5C-C
14	ACCU-14 1.5HP	0.75	4.86				1	60	30	10	Y3.5C-C
15	SPARE	—		—			1	60	30	10	Y3.5C-C
16	SPARE	—		—			1	60	30	10	Y3.5C-C
17	SPARE	—			—		1	60	30	10	Y3.5C-C
18	SPARE	—			—		1	60	30	10	Y3.5C-C
	TOTAL	24.6	37.28	35.67	37.29						

Computation:
[illegible]

Republic of the Philippines DEPARTMENT OF HEALTH PHILIPPINE CHILDREN'S MEDICAL CENTER Quezon Avenue, corner Agham Road	PROJECT TITLE: Construction of 3rd floor and 4th floor Cancer Building (FIT-OUT of 3rd floor and 4th floor) LOCATION Quezon Ave., cor Agham Rd., Quezon City	PREPARED AND CHECKED BY: ENGR. ALFREDO T. FRONDA JR. Electrical Engineer	REVIEWED BY: ENGR. DANIEL E. DAVID OIC, ENGINEERING	CONFORMED BY: END-USER	RECOMMENDING APPROVAL: ZENAIDA V. TALAGTAG, MGM - ESP Head, GSD	ENDORSING APPROVAL: CECILIA O. GAN, MD, MNSA DEPUTY EXECUTIVE DIRECTOR - HSS Executive Member, Infrastructure Committee	APPROVED BY: SONIA B. GONZALEZ, MD, MScHSM, MPM OIC - EXECUTIVE DIRECTOR Chairman - Infrastructure Committee	SHEET CONTENT / NO: E-10 ELECTRICAL PLAN SCALE: NTS



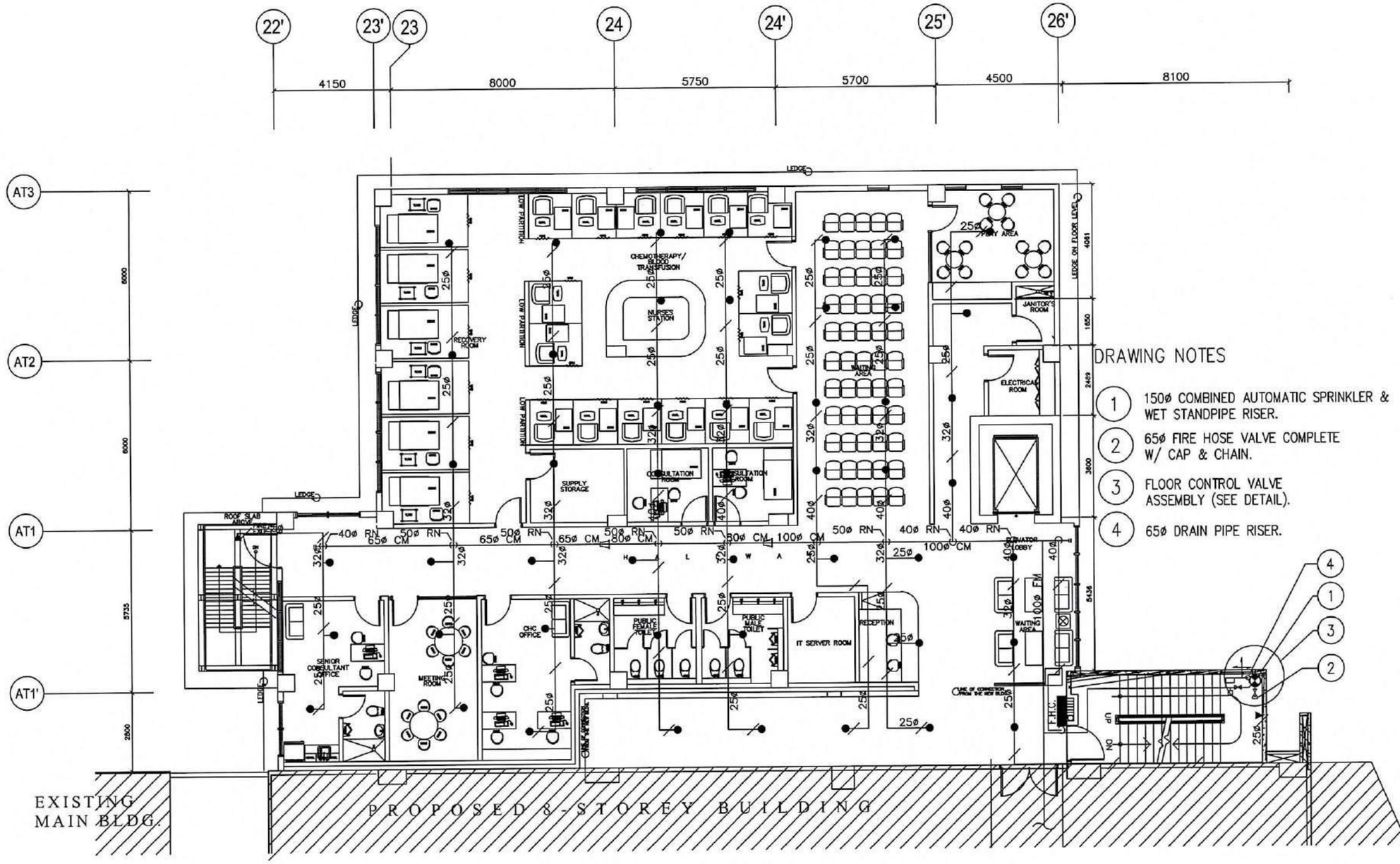
DRAWING NOTES

1. 150ø COMBINED AUTOMATIC SPRINKLER & WET STANDPIPE RISER.
2. 65ø FIRE HOSE VALVE COMPLETE W/ CAP & CHAIN.
3. FLOOR CONTROL VALVE ASSEMBLY (SEE DETAIL).
4. 65ø DRAIN PIPE RISER.

THIRD FLOOR PLAN

A FIRE PROTECTION LAYOUT

Republic of the Philippines DEPARTMENT OF HEALTH PHILIPPINE CHILDREN'S MEDICAL CENTER Quezon Avenue, corner Agham Road	PROJECT TITLE: Construction of 3rd floor and 4th floor Cancer Building (FIT-OUT of 3rd floor and 4th floor) LOCATION Quezon Ave., cor Agham Rd., Quezon City	PREPARED BY: ENGR. CEDRICK P. GACUSAN Mechanical Engineer (Engr II)	NOTED BY: ENGR. DANIEL E. DAVID OIC, ENGINEERING	CONFORMED BY: END-USER	RECOMMENDING APPROVAL: ZENAIDA V. TALAGTAG, MGM - ESP OIC, GSD	ENDORSING APPROVAL: CECILIA O. GAN, MD, MNSA DEPUTY EXECUTIVE DIRECTOR - HSS Executive Member,Infrastructure Committee	APPROVED BY: SONIA B. GONZALEZ, MD, MScHSM, MPM OIC - EXECUTIVE DIRECTOR Chairman - Infrastructure Committee	SHEET CONTENT / NO: FP-1 FIRE PROTECTION PLAN SCALE: 1:150



DRAWING NOTES

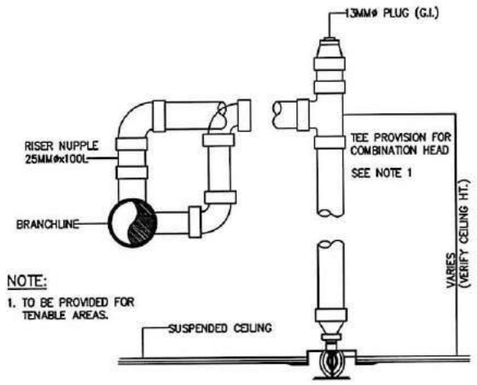
1. 150ø COMBINED AUTOMATIC SPRINKLER & WET STANDPIPE RISER.
2. 65ø FIRE HOSE VALVE COMPLETE W/ CAP & CHAIN.
3. FLOOR CONTROL VALVE ASSEMBLY (SEE DETAIL).
4. 65ø DRAIN PIPE RISER.

150ø FEED MAIN TAPPED TO EXISTING LINE (CONTRACTOR TO VERIFY ON ACTUAL SITE).

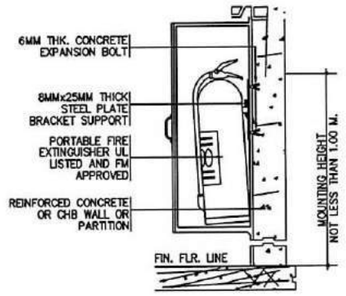
FOURTH FLOOR PLAN

A FIRE PROTECTION LAYOUT

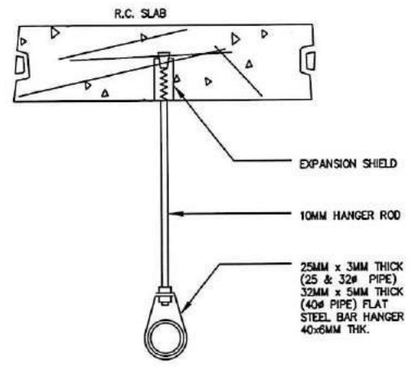
Republic of the Philippines DEPARTMENT OF HEALTH PHILIPPINE CHILDREN'S MEDICAL CENTER Quezon Avenue, corner Agham Road	PROJECT TITLE: Construction of 3rd floor and 4th floor Cancer Building (FIT-OUT of 3rd floor and 4th floor) LOCATION Quazon Ave., cor Agham Rd., Quezon City	PREPARED BY: ENGR. CEDRICK P. GACUSAN Mechanical Engineer (Engr II)	NOTED BY: ENGR. DANIEL E. DAVID OIC, ENGINEERING	CONFORMED BY: END-USER	RECOMMENDING APPROVAL: ZENAIDA V. TALAGTAG, MGM - ESP OIC, GSD	ENDORSING APPROVAL: CECILIA O. GAN, MD, MNSA DEPUTY EXECUTIVE DIRECTOR - HSS Executive Member,Infrastructure Committee	APPROVED BY: SONIA B. GONZALEZ, MD, MScHSM, MPM OIC - EXECUTIVE DIRECTOR Chairman - Infrastructure Committee	SHEET CONTENT / NO: FP-2 FIRE PROTECTION PLAN SCALE: 1:150



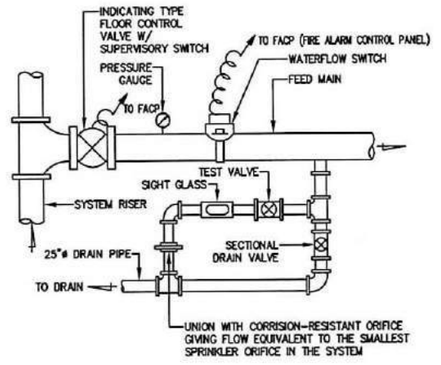
A **TYPICAL DROP PIPE ASSEMBLY**
SCALE NTS



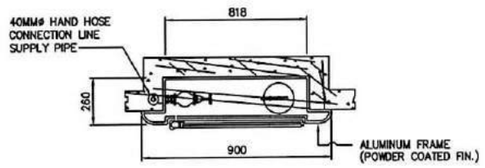
B **DETAIL OF PORTABLE FIRE EXTINGUISHER MOUNTING**
SCALE NTS



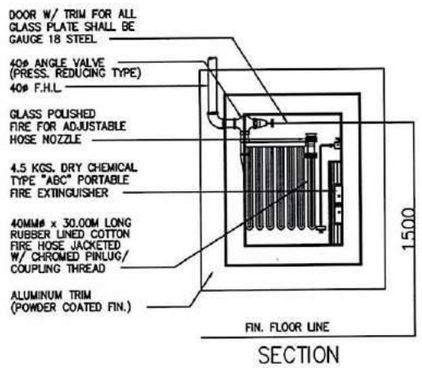
C **PIPE HANGER DETAIL (FOR BRANCHLINE)**
SCALE NTS



D **FLOOR CONTROL VALVE DETAIL**
SCALE NTS

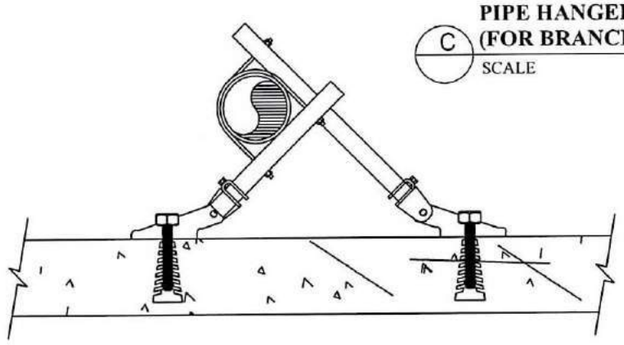


PLAN (RECESSED TYPE)

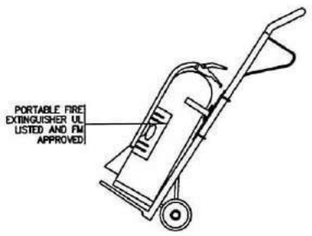


SECTION

F **DETAIL OF FIRE HOSE CABINET**
SCALE NTS



E SEISMIC BRACE 4-WAY
FP-10 SCALE NTS



G **DETAIL OF PORTABLE FIRE EXTINGUISHER (WHEELED TYPE)**
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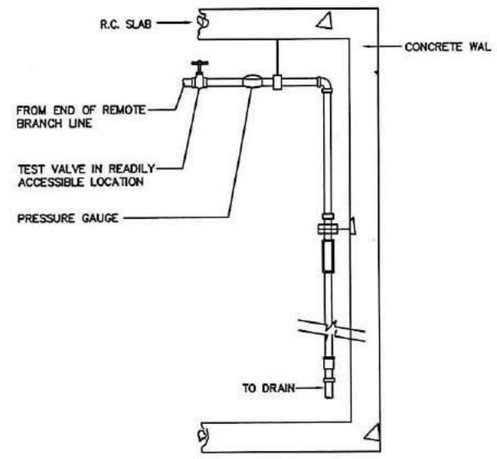
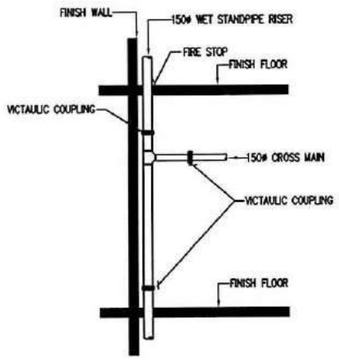
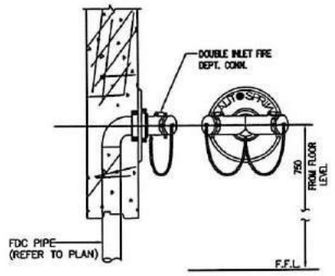


H **INSPECTOR TEST CONNECTION**
SCALE NTS

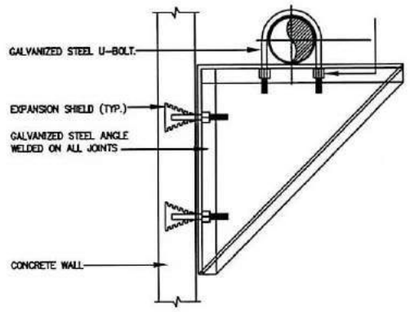
Republic of the Philippines DEPARTMENT OF HEALTH PHILIPPINE CHILDREN'S MEDICAL CENTER Quezon Avenue, corner Agham Road	PROJECT TITLE: Construction of 3rd floor and 4th floor Cancer Building (FIT-OUT of 3rd floor and 4th floor) LOCATION Quezon Ave., cor Agham Rd., Quezon City	PREPARED BY: ENGR. CEDRICK P. GACUSAN Mechanical Engineer (Engr II)	NOTED BY: ENGR. DANIEL E. DAVID OIC, ENGINEERING	CONFORMED BY: END-USER	RECOMMENDING APPROVAL: ZENAIDA V. TALAGTAG, MGM - ESP OIC, GSD	ENDORSING APPROVAL: CECILIA O. GAN, MD, MNSA DEPUTY EXECUTIVE DIRECTOR - MSS Executive Member,Infrastructure Committee	APPROVED BY: SONIA B. GONZALEZ, MD, MScHSM, MPM OIC - EXECUTIVE DIRECTOR Chairman - Infrastructure Committee	SHEET CONTENT / NO: FP-3 FIRE PROTECTION PLAN SCALE: NTS



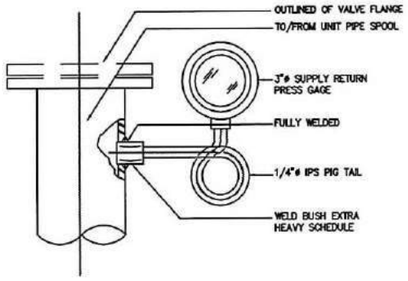
A **WET STAND PIPE SECTION DETAIL**
SCALE NTS



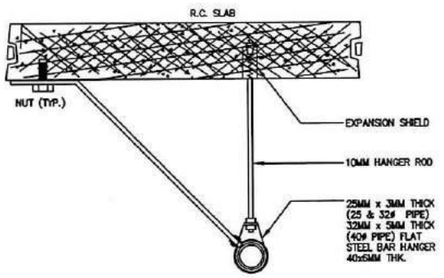
B **FIRE DEPT. CONNECTION DETAIL**
SCALE NTS



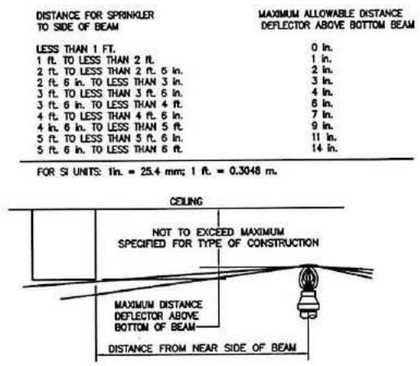
C **WALL PIPE SUPPORT**
SCALE NTS



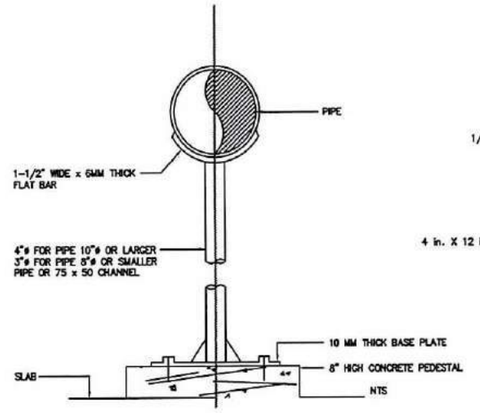
D **PRESSURE GAUGE MTG. DETAIL**
SCALE NTS



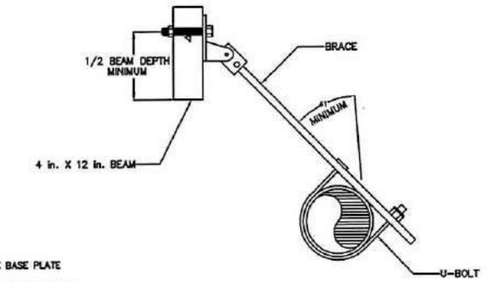
E **SWAY BRACE SUPPORT ON A PIPE HANGER**
SCALE NTS



F **POSITIONOF DEFLECTOR WHEN LOCATED ABOVE BOTTOM OF BEAM**
SCALE NTS

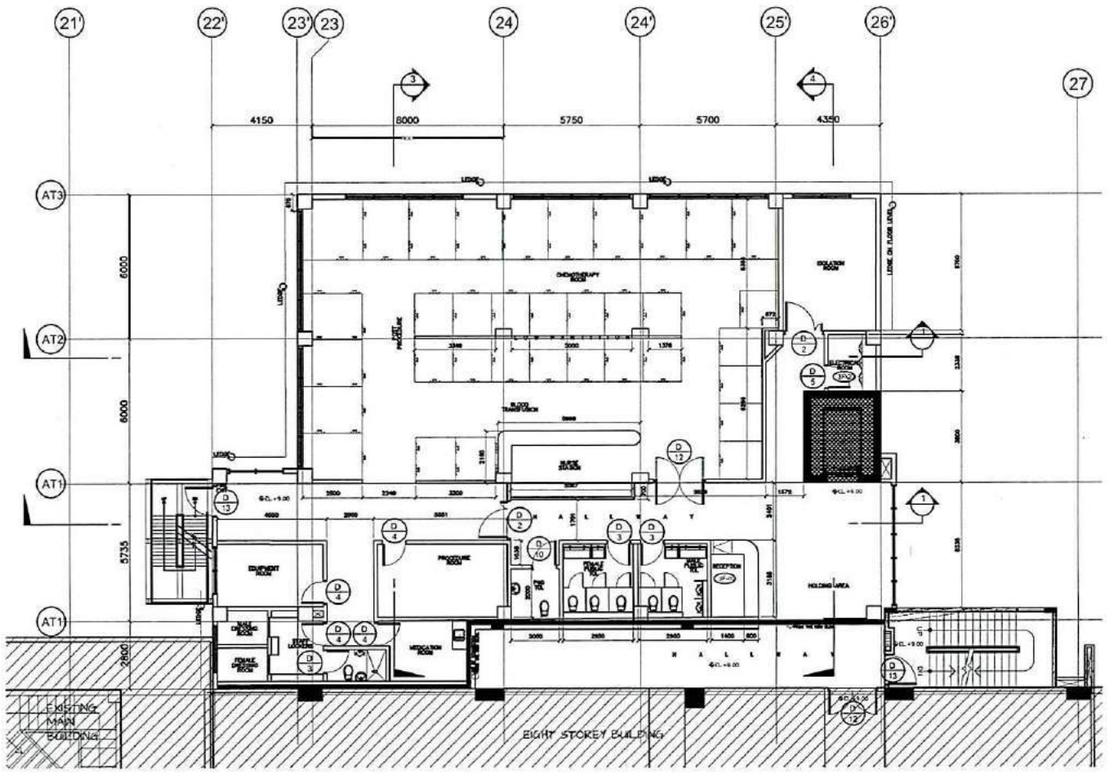


G **PIPE SUPPORT DETAIL FIRE SPRINKLER SUPPLY (PUMP ROOM)**
SCALE NTS

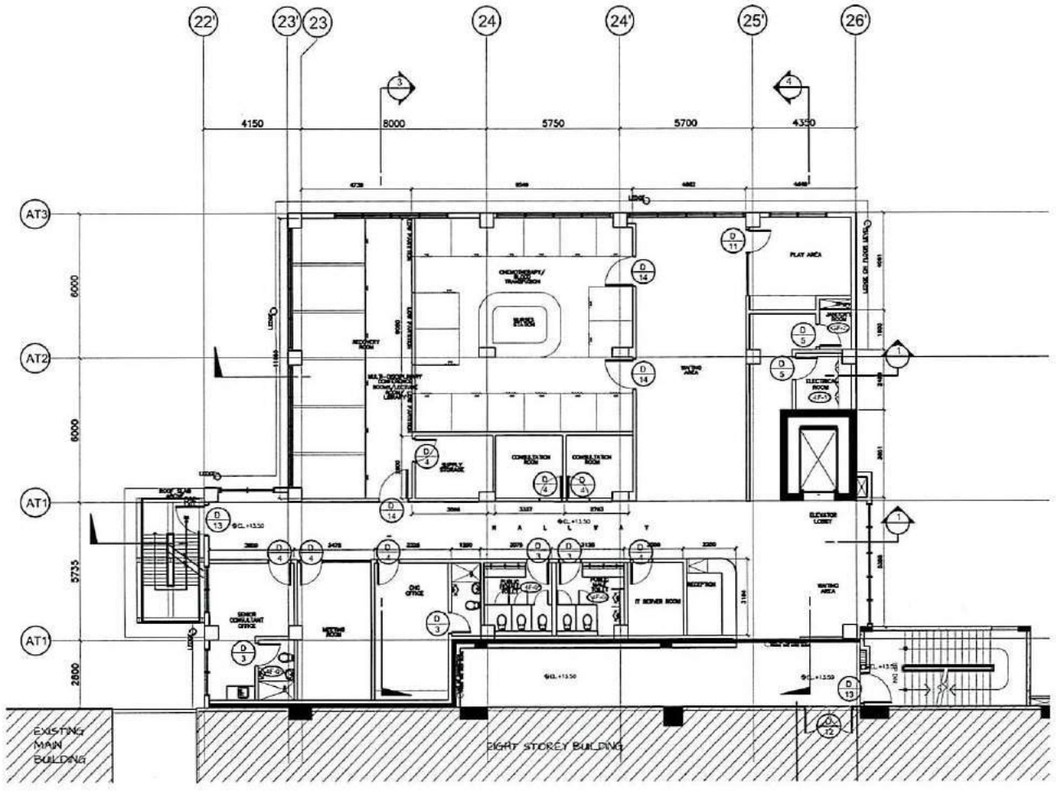


H **SEISMIC BRACE 2-WAY**
SCALE NTS

Republic of the Philippines DEPARTMENT OF HEALTH PHILIPPINE CHILDREN'S MEDICAL CENTER Quezon Avenue, corner Agham Road	PROJECT TITLE: Construction of 3rd floor and 4th floor Cancer Building (FIT-OUT of 3rd floor and 4th floor) LOCATION Quezon Ave., cor Agham Rd., Quezon City	PREPARED BY: ENGR. CEDRICK P. GACUSAN Mechanical Engineer (Engr II)	NOTED BY: ENGR. DANIEL E. DAVID OIC, ENGINEERING	CONFORMED BY: END-USER	RECOMMENDING APPROVAL: ZENAIDA V. TALAGTAG, MGM - ESP OIC, GSD	ENDORSING APPROVAL: CECILIA O. GAN, MD, MNSA DEPUTY EXECUTIVE DIRECTOR - HSS Executive Member, Infrastructure Committee	APPROVED BY: SONIA B. GONZALEZ, MD, MScHSM, MPM OIC - EXECUTIVE DIRECTOR Chairman - Infrastructure Committee	SHEET CONTENT / NO: FP-4 FIRE PROTECTION PLAN SCALE: NTS

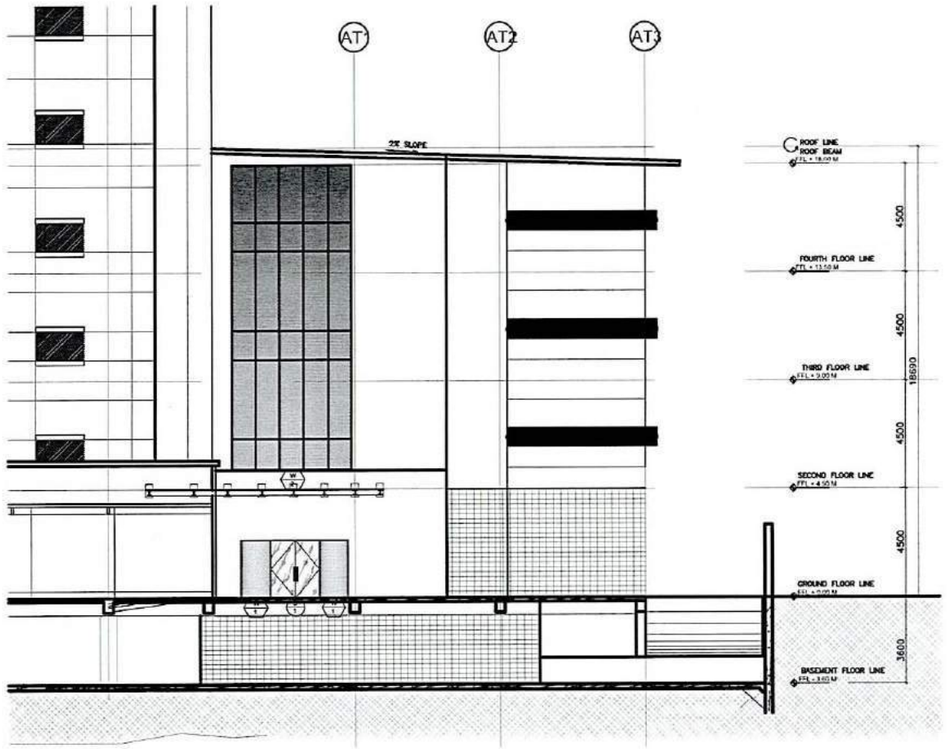


1 **THIRD FLOOR**

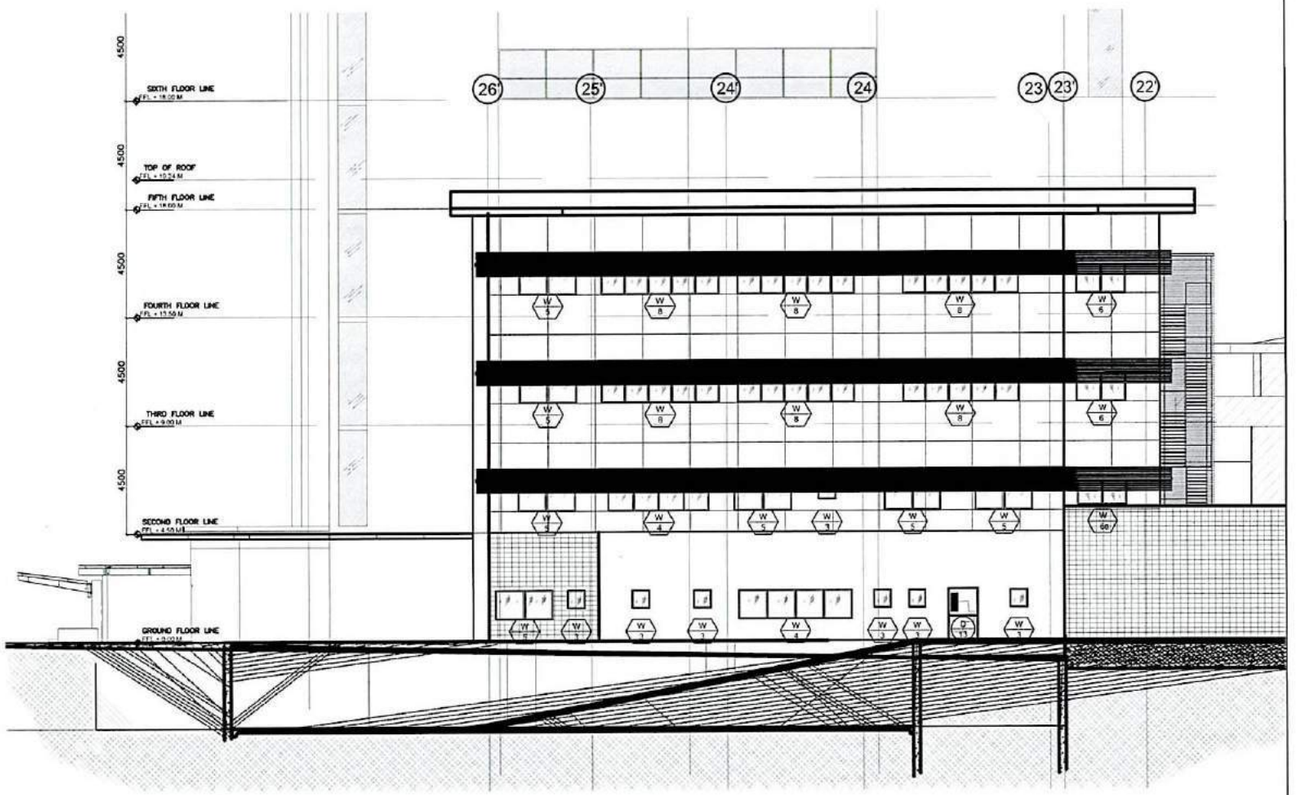


2 **FOURTH FLOOR**

Republic of the Philippines DEPARTMENT OF HEALTH **PHILIPPINE CHILDREN'S MEDICAL CENTER** Quezon Avenue, corner Agham Road	PROJECT TITLE: Construction of 3rd floor and 4th floor Cancer Building (FIT-OUT of 3rd floor and 4th floor) LOCATION Quezon Ave., cor Agham Rd., Quezon City	PREPARED BY: ENGR. RONNIE M. AURELIO Civil Engineer (Engr II)	NOTED BY: ENGR. DANIEL E. DAVID OIC, ENGINEERING	CONFORMED BY: END-USER	RECOMMENDING APPROVAL: ZENAIDA V. TALAGTAG, MGM - ESP OIC, GSD	ENDORSING APPROVAL: CECILIA O. GAN, MD, MNSA DEPUTY EXECUTIVE DIRECTOR - HSS Executive Member,Infrastructure Committee	APPROVED BY: SONIA B. GONZALEZ, MD, MScHSM, MPM OIC - EXECUTIVE DIRECTOR Chairman - Infrastructure Committee	SHEET CONTENT / NO: A-1 FLOOR PLAN SCALE: 1:250

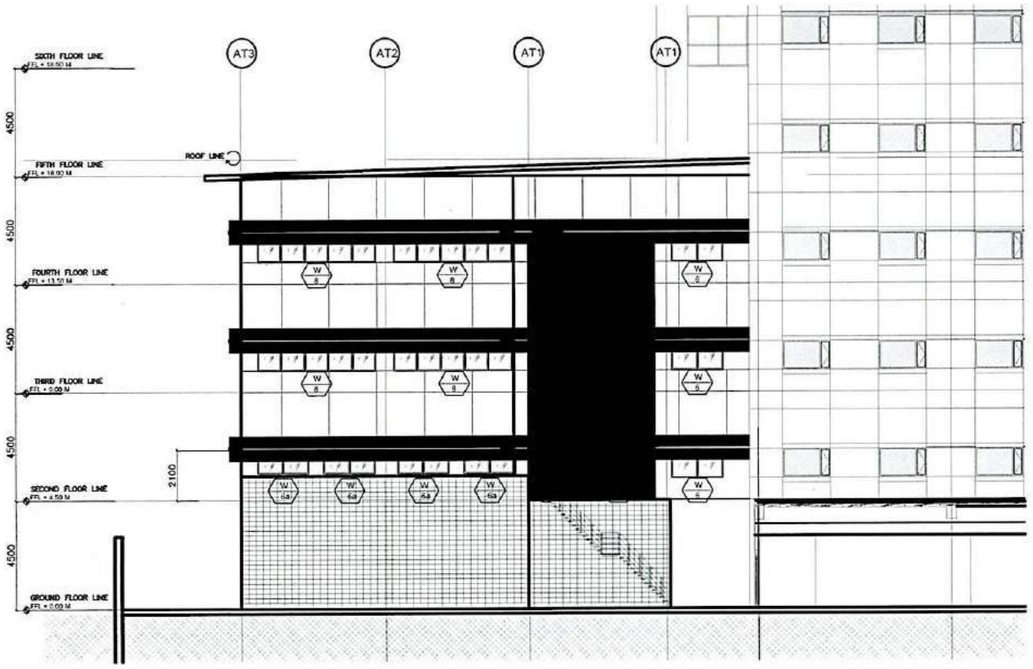


1 FRONT ELEVATION

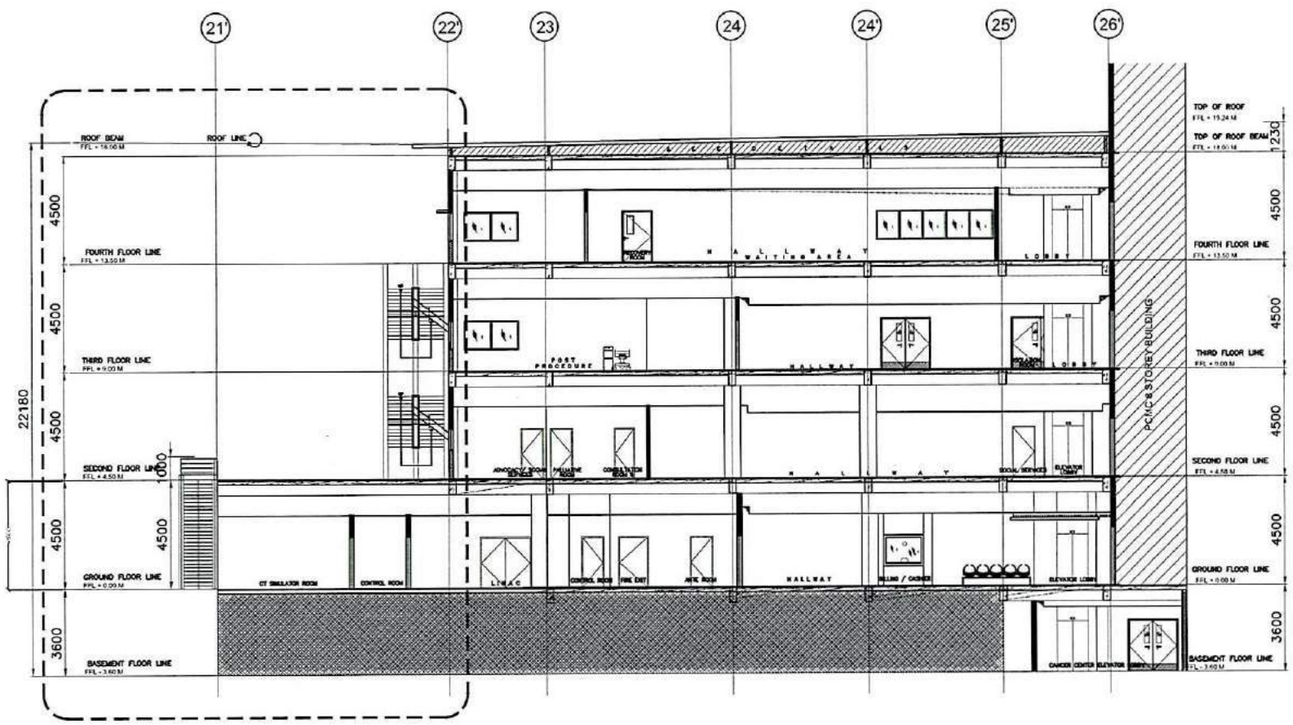


2 RIGHT SIDE ELEVATION

Republic of the Philippines DEPARTMENT OF HEALTH PHILIPPINE CHILDREN'S MEDICAL CENTER Quezon Avenue, corner Agham Road	PROJECT TITLE: Construction of 3rd floor and 4th floor Cancer Building (FIT-OUT of 3rd floor and 4th floor) LOCATION Quezon Ave., cor Agham Rd., Quezon City	PREPARED BY: ENGR. RONNIE M. AURELIO Civil Engineer (Engr II)	NOTED BY: ENGR. DANIEL E. DAVID OIC, ENGINEERING	CONFORMED BY: END-USER	RECOMMENDING APPROVAL: ZENAIDA V. TALAGTAG, MGM - ESP OIC, GSD	ENDORSING APPROVAL: CECILIA O. GAN, MD, MNSA DEPUTY EXECUTIVE DIRECTOR - HSS Executive Member, Infrastructure Committee	APPROVED BY: SONIA B. GONZALEZ, MD, MScHSM, MPM OIC - EXECUTIVE DIRECTOR Chairman - Infrastructure Committee	SHEET CONTENT / NO: A-2 ELEVATION SCALE: 1:250

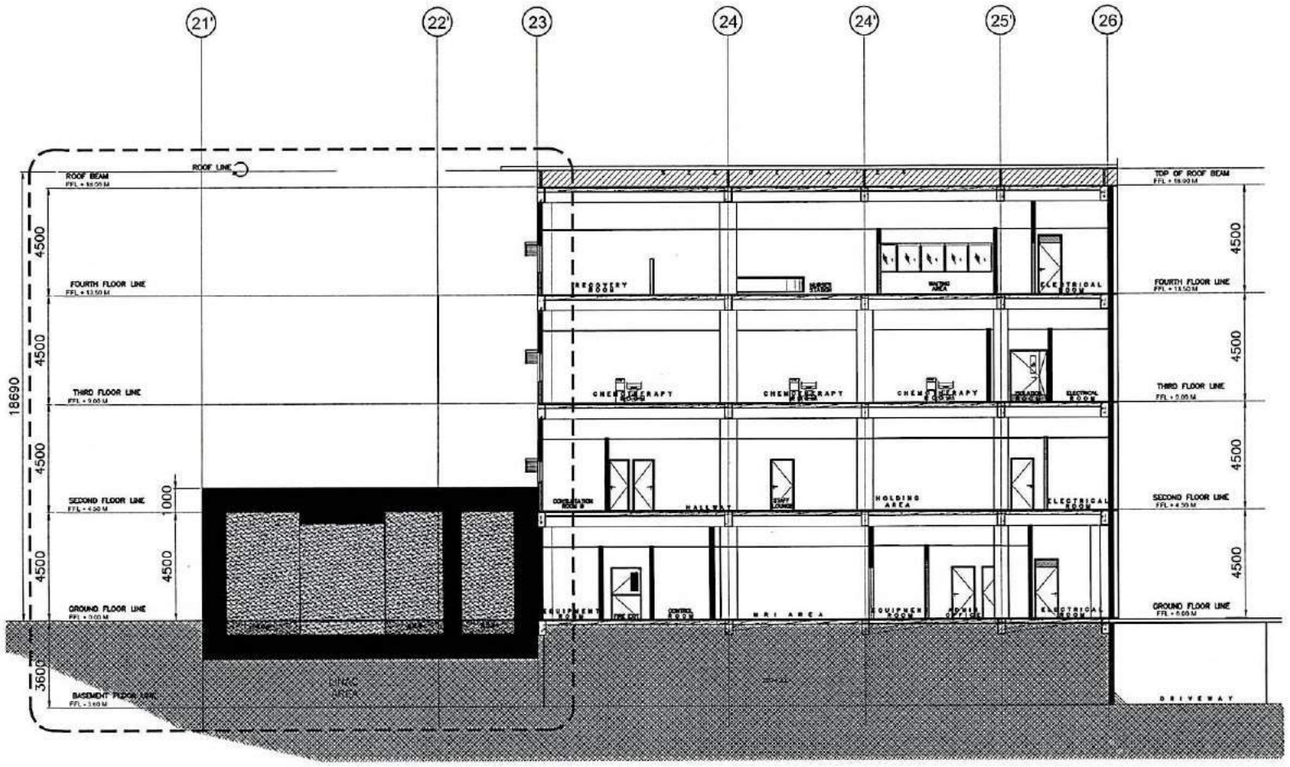


1 REAR ELEVATION

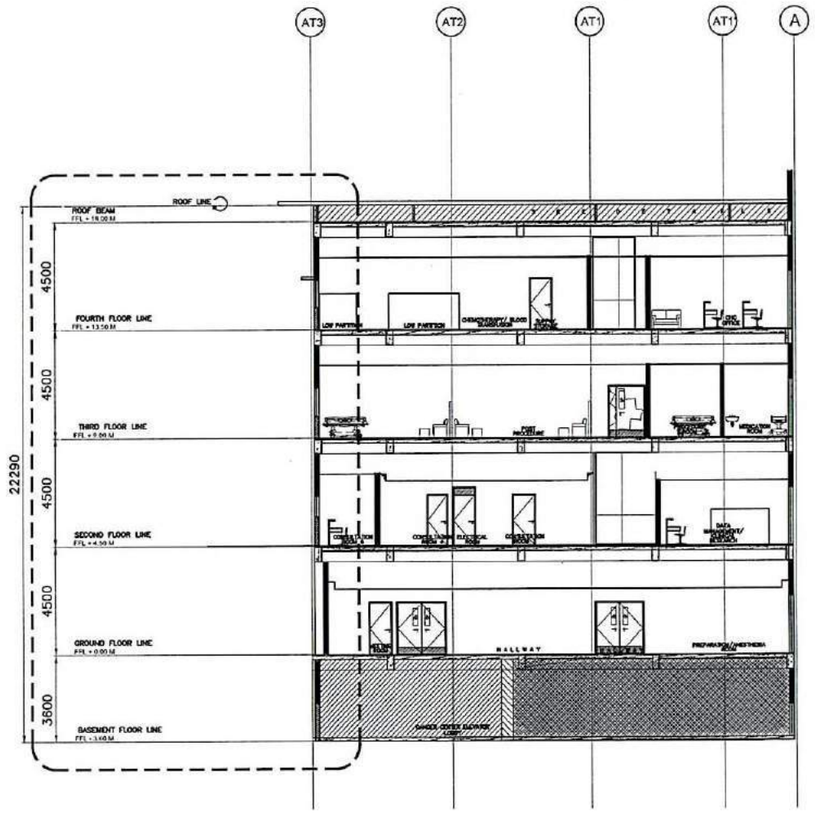


2 LONGITUDINAL SECTION

Republic of the Philippines DEPARTMENT OF HEALTH PHILIPPINE CHILDREN'S MEDICAL CENTER Quezon Avenue, corner Agham Road	PROJECT TITLE: Construction of 3rd floor and 4th floor Cancer Building (FIT-OUT of 3rd floor and 4th floor) LOCATION Quezon Ave., cor Agham Rd., Quezon City	PREPARED BY: ENGR. RONNIE M. AURELIO Civil Engineer (Engr II)	NOTED BY: ENGR. DANIEL E. DAVID OIC, ENGINEERING	CONFORMED BY: END-USER	RECOMMENDING APPROVAL: ZENAIDA V. TALAGTAG, MGM - ESP OIC, GSD	ENDORSING APPROVAL: CECILIA O. GAN, MD, MNSA DEPUTY EXECUTIVE DIRECTOR - HSS Executive Member, Infrastructure Committee	APPROVED BY: SONIA B. GONZALEZ, MD, MScHSM, MPM OIC - EXECUTIVE DIRECTOR Chairman - Infrastructure Committee	SHEET CONTENT / NO: A-3 ELEVATION SCALE: 1:250

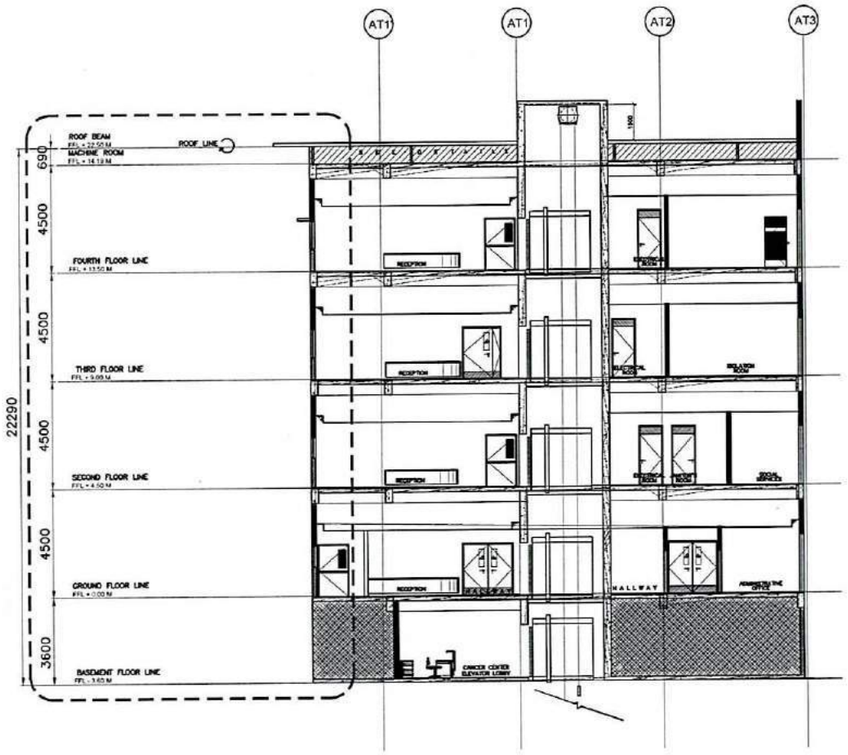


1 LONGITUDINAL SECTION

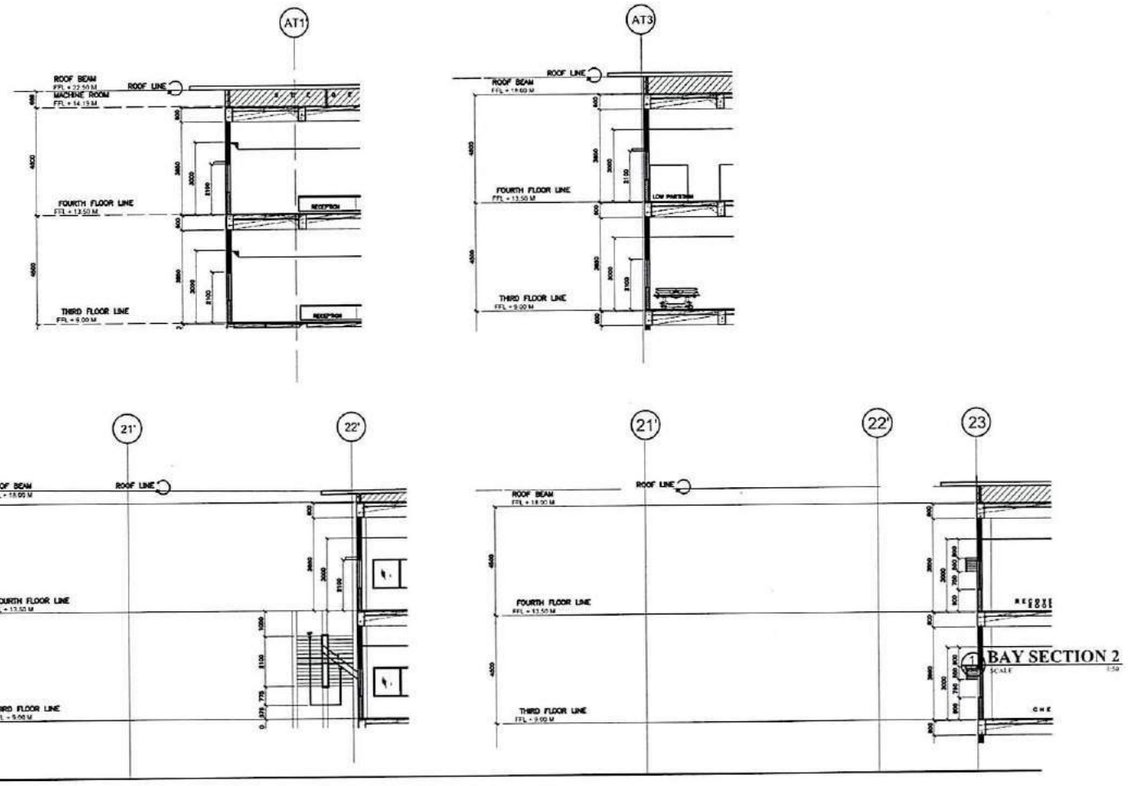


2 CROSS SECTION

Republic of the Philippines DEPARTMENT OF HEALTH PHILIPPINE CHILDREN'S MEDICAL CENTER Quezon Avenue, corner Agham Road	PROJECT TITLE: Construction of 3rd floor and 4th floor Cancer Building (FIT-OUT of 3rd floor and 4th floor) LOCATION Quezon Ave., cor Agham Rd., Quezon City	PREPARED BY: ENGR. RONNIE M. AURELIO Civil Engineer (Engr II)	NOTED BY: ENGR. DANIEL E. DAVID OIC, ENGINEERING	CONFORMED BY: END-USER	RECOMMENDING APPROVAL: ZENAIDA V. TALAGTAG, MGM - ESP OIC, GSD	ENDORSING APPROVAL: CECILIA O. GAN, MD, MNSA DEPUTY EXECUTIVE DIRECTOR - HSS Executive Member, Infrastructure Committee	APPROVED BY: SONIA B. GONZALEZ, MD, MScHSM, MPM OIC - EXECUTIVE DIRECTOR Chairman - Infrastructure Committee	SHEET CONTENT / NO: A-4 ELEVATION SCALE: 1:250

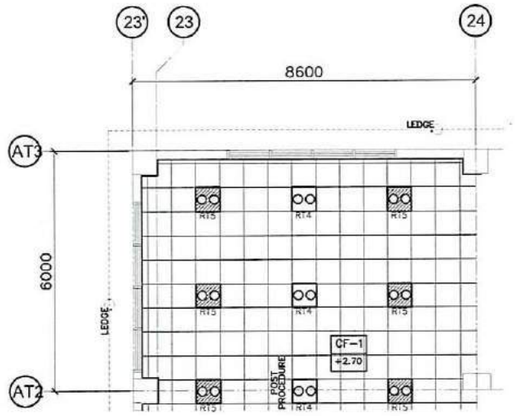


1 **CROSS SECTION**

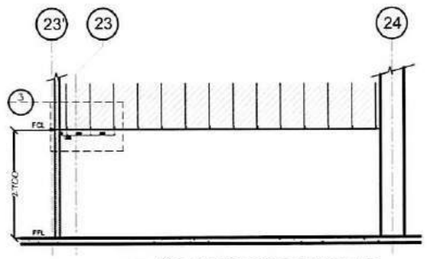


2 **BAY SECTION**

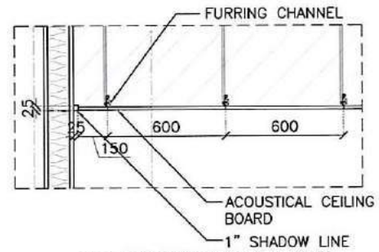
Republic of the Philippines DEPARTMENT OF HEALTH PHILIPPINE CHILDREN'S MEDICAL CENTER Quezon Avenue, corner Agham Road	PROJECT TITLE: Construction of 3rd floor and 4th floor Cancer Building (FIT-OUT of 3rd floor and 4th floor) LOCATION Quezon Ave., cor Agham Rd., Quezon City	PREPARED BY: ENGR. RONNIE M. AURELIO Civil Engineer (Engr II)	NOTED BY: ENGR. DANIEL E. DAVID OIC, ENGINEERING	CONFORMED BY: END-USER	RECOMMENDING APPROVAL: ZENAIDA V. TALAGTAG, MGM - ESP OIC, GSD	ENDORSING APPROVAL: CECILIA O. GAN, MD, MNSA DEPUTY EXECUTIVE DIRECTOR - HSS Executive Member,Infrastructure Committee	APPROVED BY: SONIA B. GONZALEZ, MD, MScHSM, MPM OIC - EXECUTIVE DIRECTOR Chairman - Infrastructure Committee	SHEET CONTENT / NO: A-5 ELEVATION SCALE: 1:250



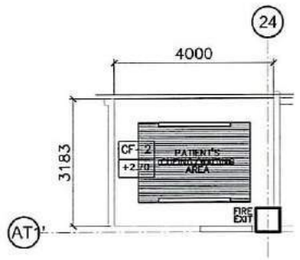
1 **REFLECTED CEILING PLAN**
SCALE 1:150



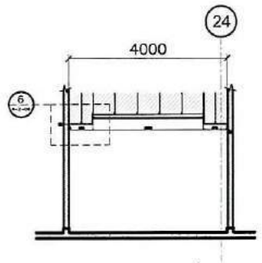
2 **SECTION DETAIL**
SCALE 1:150



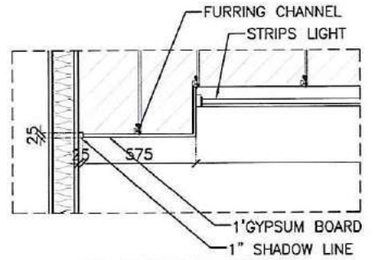
3 **BLOW-UP DETAIL**
SCALE NTS



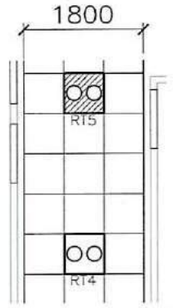
4 **REFLECTED CEILING PLAN**
SCALE 1:150



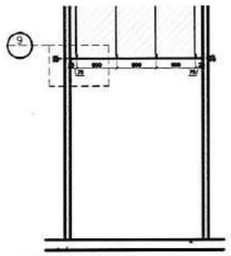
5 **SECTION DETAIL**
SCALE 1:150



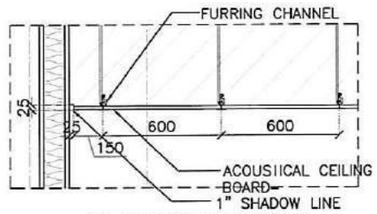
6 **BLOW-UP DETAIL**
SCALE NTS



7 **REFLECTED CEILING PLAN**
SCALE 1:150

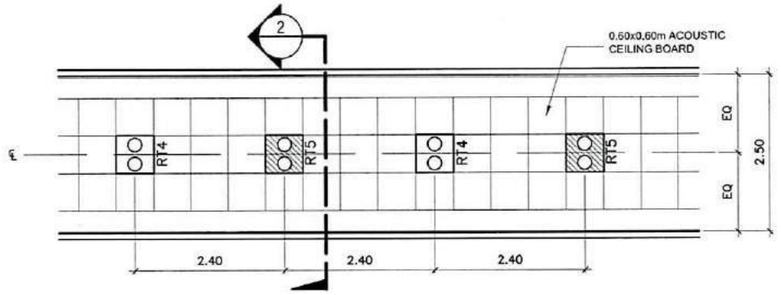


8 **SECTION DETAIL**
SCALE 1:150

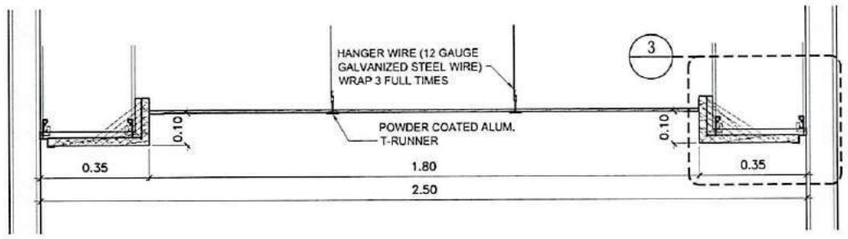


9 **BLOW-UP DETAIL**
SCALE NTS

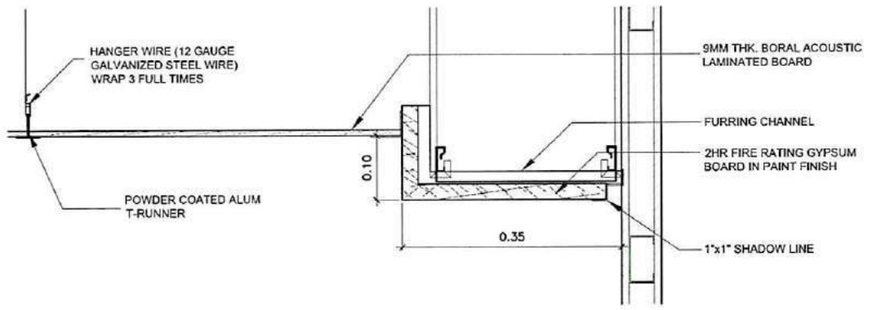
Republic of the Philippines DEPARTMENT OF HEALTH PHILIPPINE CHILDREN'S MEDICAL CENTER Quezon Avenue, corner Agham Road	PROJECT TITLE: Construction of 3rd floor and 4th floor Cancer Building (FIT-OUT of 3rd floor and 4th floor) LOCATION Quezon Ave., cor Agham Rd., Quezon City	PREPARED BY: ENGR. RONNIE M. AURELIO Civil Engineer (Engr II)	NOTED BY: ENGR. DANIEL E. DAVID OIC, ENGINEERING	CONFORMED BY: END-USER	RECOMMENDING APPROVAL: ZENAIDA V. TALAGTAG, MGM - ESP OIC, GSD	ENDORSING APPROVAL: CECILIA O. GAN, MD, MNSA DEPUTY EXECUTIVE DIRECTOR - HSS Executive Member, Infrastructure Committee	APPROVED BY: SONIA B. GONZALEZ, MD, MScHSM, MPM OIC - EXECUTIVE DIRECTOR Chairman - Infrastructure Committee	SHEET CONTENT / NO: A-6 CEILING DETAILS SCALE: 1:150



1 TYP. 2.50m HALLWAY DETAIL
SCALE NTS



2 SECTION A
SCALE 1:10



3 SPOT DETAIL 1
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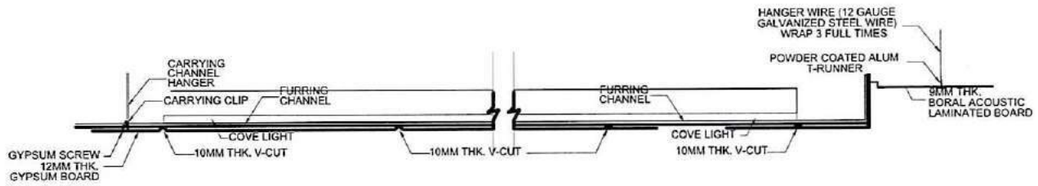
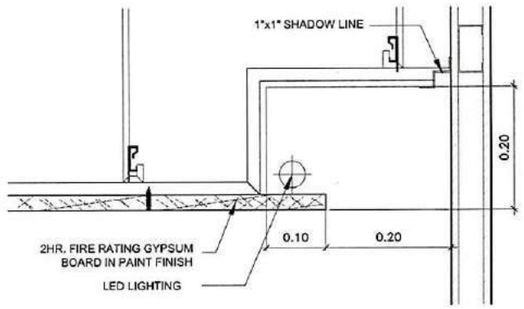
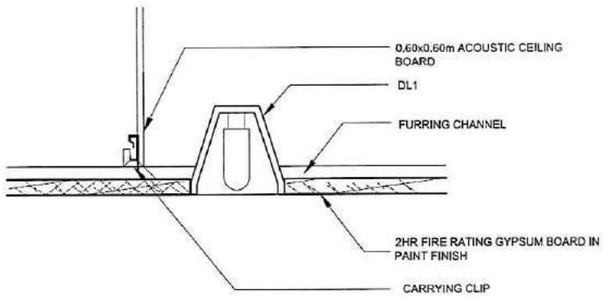


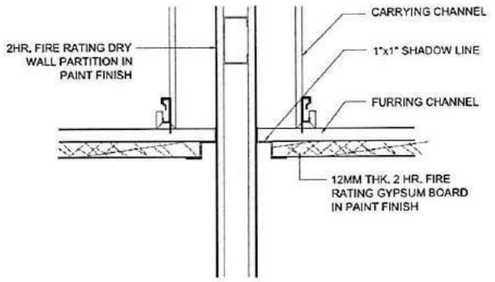
5 CEILING CONNECTION DETAIL
SCALE NTS



4 TYP. COVE LIGHT DETAIL
SCALE NTS

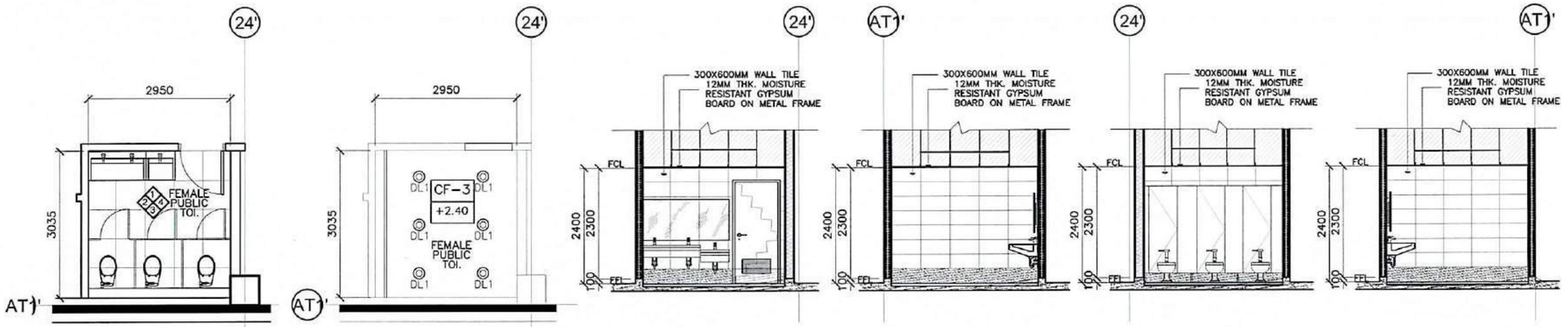


6 SPOT DETAIL 2
SCALE NTS



7 DETAIL 3
A-4-01 SCALE NTS

Republic of the Philippines DEPARTMENT OF HEALTH PHILIPPINE CHILDREN'S MEDICAL CENTER Quezon Avenue, corner Agham Road	PROJECT TITLE: Construction of 3rd floor and 4th floor Cancer Building (FIT-OUT of 3rd floor and 4th floor) LOCATION Quezon Ave., cor Agham Rd., Quezon City	PREPARED BY: ENGR. RONNIE M. AURELIO Civil Engineer (Engr II)	NOTED BY: ENGR. DANIEL E. DAVID OIC, ENGINEERING	CONFORMED BY: END-USER	RECOMMENDING APPROVAL: ZENAIDA V. TALAGTAG, MGM - ESP OIC, GSD	ENDORSING APPROVAL: CECILIA O. GAN, MD, MNSA DEPUTY EXECUTIVE DIRECTOR - HSS Executive Member, Infrastructure Committee	APPROVED BY: SONIA B. GONZALEZ, MD, MScHSM, MPM OIC - EXECUTIVE DIRECTOR Chairman - Infrastructure Committee	SHEET CONTENT / NO: A-7 CEILING DETAILS SCALE: NTS



1 **DETAILED PLAN** SCALE 1:100

2 **REFLECTED CEILING PLAN** SCALE 1:100

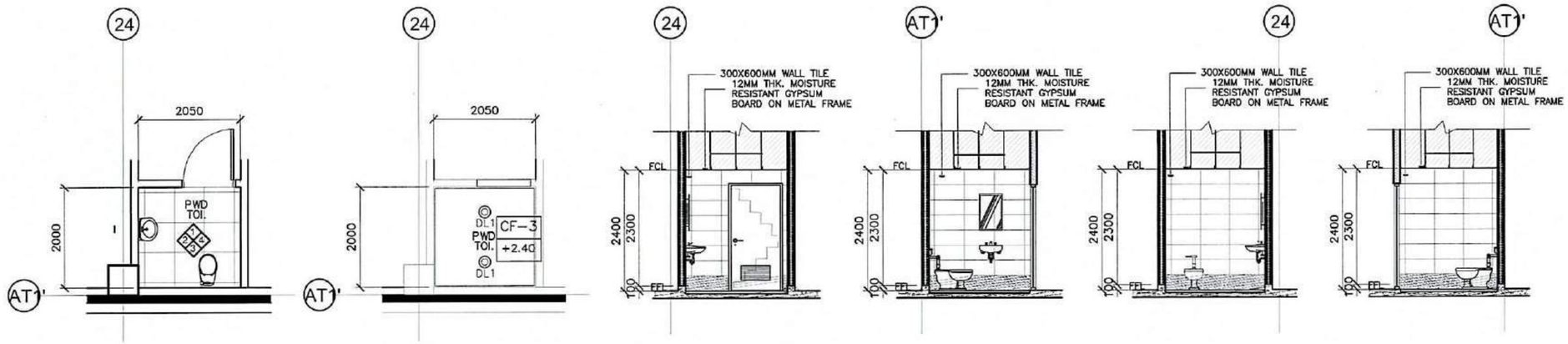
3 **DET. ELEVATION A** SCALE 1:100

4 **DET. ELEVATION B** SCALE 1:100

5 **DET. ELEVATION C** SCALE 1:100

6 **DET. ELEVATION D** SCALE 1:100

THIRD FLOOR FEMALE PUBLIC TOILET



1 **DETAILED PLAN** SCALE 1:100

2 **REFLECTED CEILING PLAN** SCALE 1:100

3 **DET. ELEVATION A** 1:100

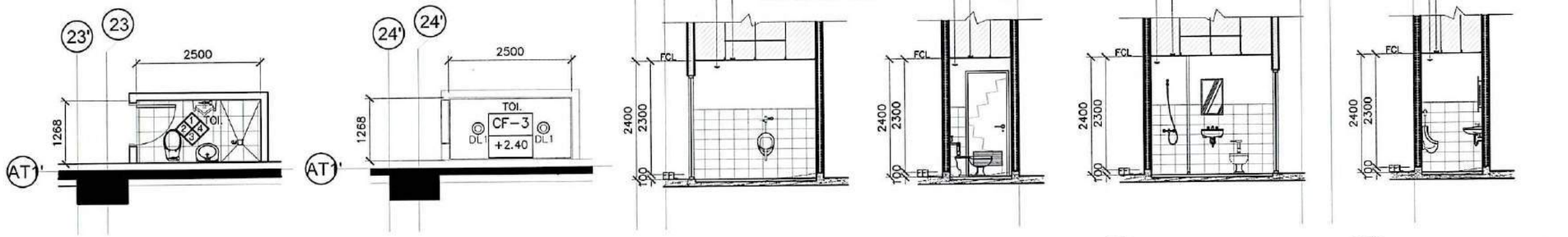
4 **DET. ELEVATION B** SCALE 1:100

5 **DET. ELEVATION C** SCALE 1:100

6 **DET. ELEVATION D** SCALE 1:100

THIRD FLOOR PWD TOILET

Republic of the Philippines DEPARTMENT OF HEALTH PHILIPPINE CHILDREN'S MEDICAL CENTER Quezon Avenue, corner Agham Road	PROJECT TITLE: Construction of 3rd floor and 4th floor Cancer Building (FIT-OUT of 3rd floor and 4th floor) LOCATION Quezon Ave., cor Agham Rd., Quezon City	PREPARED BY: ENGR. RONNIE M. AURELIO Civil Engineer (Engr II)	NOTED BY: ENGR. DANIEL E. DAVID OIC, ENGINEERING	CONFORMED BY: END-USER	RECOMMENDING APPROVAL: ZENAIDA V. TALAGTAG, MGM - ESP OIC, GSD	ENDORSING APPROVAL: CECILIA O. GAN, MD, MNSA DEPUTY EXECUTIVE DIRECTOR - HSS Executive Member, Infrastructure Committee	APPROVED BY: SONIA B. GONZALEZ, MD, MScHSM, MPM OIC - EXECUTIVE DIRECTOR Chairman - Infrastructure Committee	SHEET CONTENT / NO: A-8 TOILET DETAILS SCALE: 1:100



1 **DETAILED PLAN** SCALE 1:100

2 **REFLECTED CEILING PLAN** SCALE 1:100

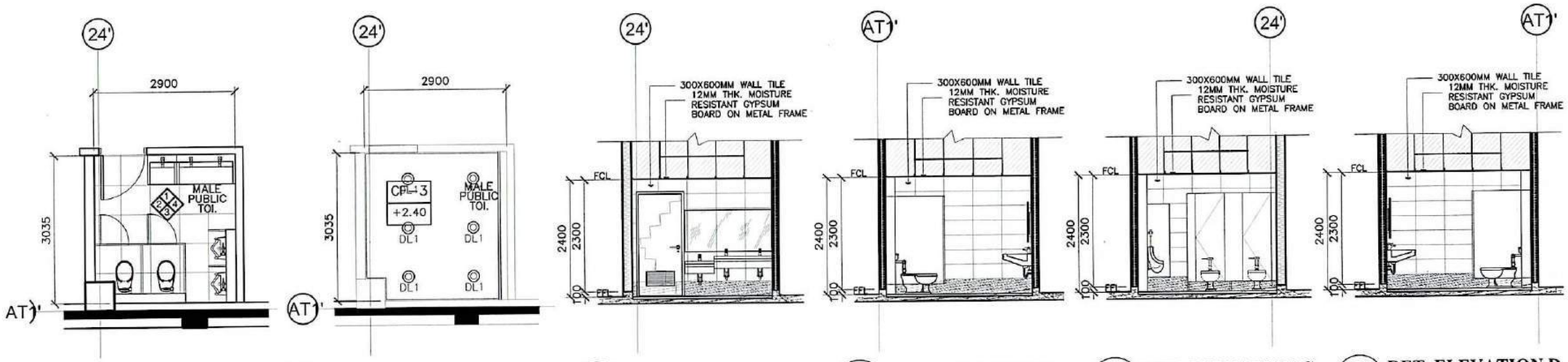
3 **DET. ELEVATION A** SCALE 1:100

4 **DET. ELEVATION B** SCALE 1:100

5 **DET. ELEVATION C** SCALE 1:100

6 **DET. ELEVATION D** SCALE 1:100

THIRD FLOOR OFFICE TOILET



1 **DETAILED PLAN** SCALE 1:100

2 **REFLECTED CEILING PLAN** SCALE 1:100

3 **DET. ELEVATION A** SCALE 1:100

4 **DET. ELEVATION B** SCALE 1:100

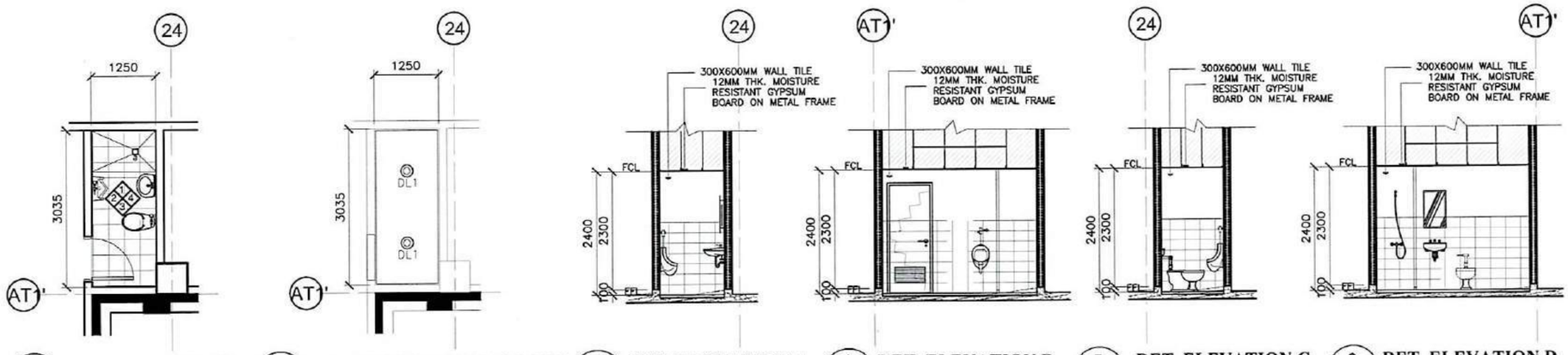
5 **DET. ELEVATION C** SCALE 1:100

6 **DET. ELEVATION D** SCALE 1:100

THIRD FLOOR MALE PUBLIC TOILET

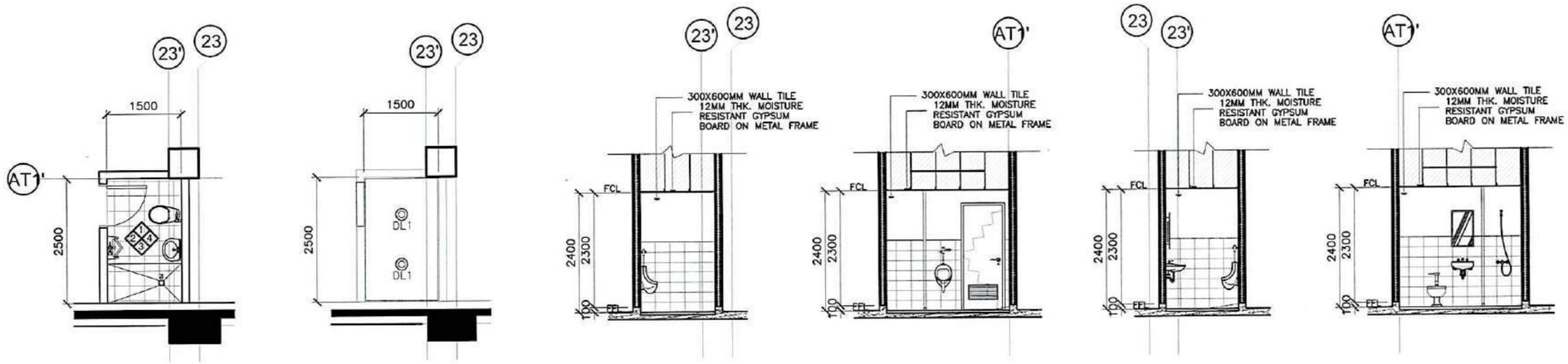
Republic of the Philippines
DEPARTMENT OF HEALTH
PHILIPPINE CHILDREN'S MEDICAL CENTER
Quezon Avenue, corner Agham Road

PROJECT TITLE: Construction of 3rd floor and 4th floor Cancer Building (FIT-OUT of 3rd floor and 4th floor)	PREPARED BY: ENGR. RONNIE M. AURELIO, Civil Engineer (Engr II)	NOTED BY: ENGR. DANIEL E. DAVID, OIC, ENGINEERING	CONFORMED BY: END-USER	RECOMMENDING APPROVAL: ZENAIDA V. TALAGTAG, MGM - ESP, OIC, GSD	ENDORSING APPROVAL: CECILIA O. GAN, MD, MNSA, DEPUTY EXECUTIVE DIRECTOR - HSS / Executive Member, Infrastructure Committee	APPROVED BY: SONIA B. GONZALEZ, MD, MScHSM, MPM, OIC - EXECUTIVE DIRECTOR, Chairman - Infrastructure Committee	SHEET CONTENT / NO: A-9
LOCATION: Quezon Ave., cor Agham Rd., Quezon City							TOILET DETAILS
							SCALE: 1:100



1 DETAILED PLAN SCALE 1:100 | 2 REFLECTED CEILING PLAN SCALE 1:100 | 3 DET. ELEVATION A SCALE 1:100 | 4 DET. ELEVATION B SCALE 1:100 | 5 DET. ELEVATION C SCALE 1:100 | 6 DET. ELEVATION D SCALE 1:100

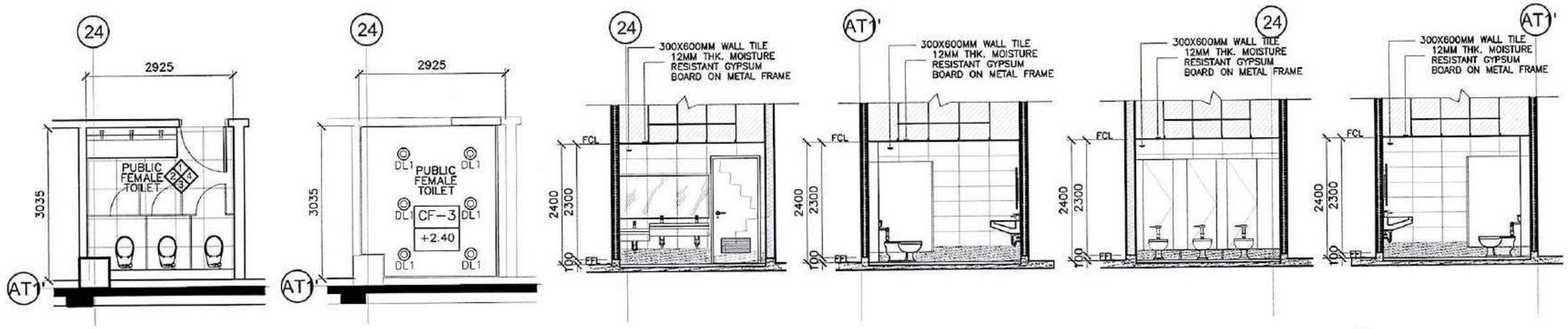
FOURTH FLOOR OFFICE TOILET



1 DETAILED PLAN SCALE 1:100 | 2 REFLECTED CEILING PLAN SCALE 1:100 | 3 DET. ELEVATION A SCALE 1:100 | 4 DET. ELEVATION B SCALE 1:100 | 5 DET. ELEVATION C SCALE 1:100 | 6 DET. ELEVATION D SCALE 1:100

FOURTH FLOOR OFFICE TOILET

Republic of the Philippines DEPARTMENT OF HEALTH PHILIPPINE CHILDREN'S MEDICAL CENTER Quezon Avenue, corner Agham Road	PROJECT TITLE: Construction of 3rd floor and 4th floor Cancer Building (FIT-OUT of 3rd floor and 4th floor) LOCATION Quezon Ave., cor Agham Rd., Quezon City	PREPARED BY: ENGR. RONNIE M. AURELIO Civil Engineer (Engr II)	NOTED BY: ENGR. DANIEL E. DAVID OIC, ENGINEERING	CONFORMED BY: END-USER	RECOMMENDING APPROVAL: ZENAIDA V. TALAGTAG, MGM - ESP OIC, GSD	ENDORSING APPROVAL: CECILIA O. GAN, MD, MNSA DEPUTY EXECUTIVE DIRECTOR - HSS Executive Member, Infrastructure Committee	APPROVED BY: SONIA B. GONZALEZ, MD, MScHSM, MPM OIC - EXECUTIVE DIRECTOR Chairman - Infrastructure Committee	SHEET CONTENT / NO: A-10 TOILET DETAILS SCALE: 1:100



1 **DETAILED PLAN** SCALE 1:100

2 **REFLECTED CEILING PLAN** SCALE 1:100

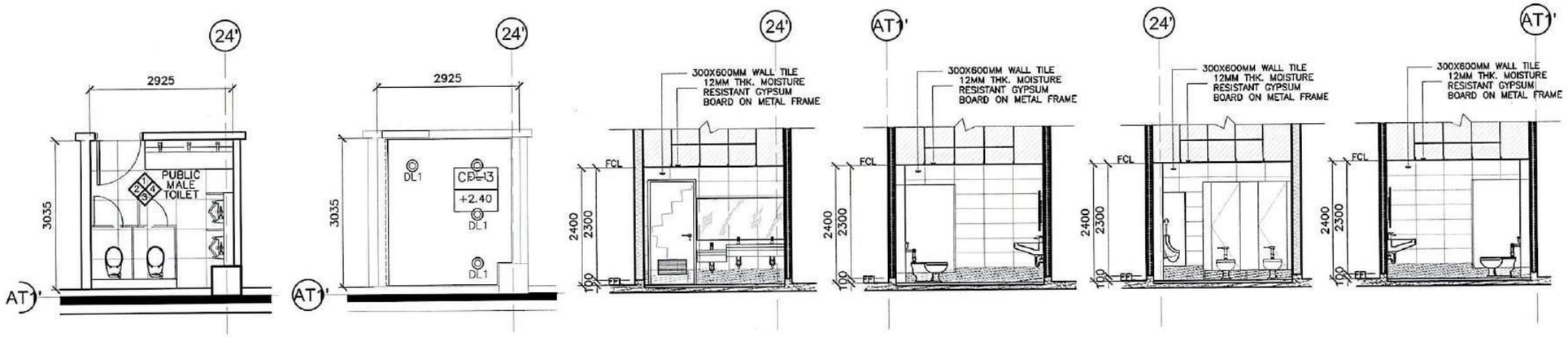
3 **DET. ELEVATION A** SCALE 1:100

4 **DET. ELEVATION B** SCALE 1:100

5 **DET. ELEVATION C** SCALE 1:100

6 **DET. ELEVATION D** SCALE 1:100

FOURTH FLOOR FEMALE PUBLIC TOILET



1 **DETAILED PLAN** SCALE 1:100

2 **REFLECTED CEILING PLAN** SCALE 1:100

3 **DET. ELEVATION A** SCALE 1:100

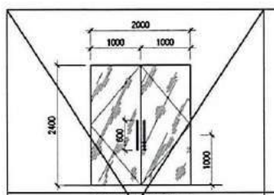
4 **DET. ELEVATION B** SCALE 1:100

5 **DET. ELEVATION C** SCALE 1:100

6 **DET. ELEVATION D** SCALE 1:100

FOURTH FLOOR MALE PUBLIC TOILET

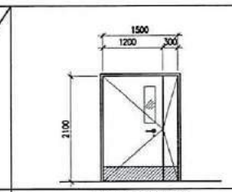
Republic of the Philippines DEPARTMENT OF HEALTH PHILIPPINE CHILDREN'S MEDICAL CENTER Quezon Avenue, corner Agham Road	PROJECT TITLE: Construction of 3rd floor and 4th floor Cancer Building (FIT-OUT of 3rd floor and 4th floor) LOCATION Quezon Ave., cor Agham Rd., Quezon City	PREPARED BY: ENGR. RONNIE M. AURELIO Civil Engineer (Engr II)	NOTED BY: ENGR. DANIEL E. DAVID OIC, ENGINEERING	CONFORMED BY: END-USER	RECOMMENDING APPROVAL: ZENAIDA V. TALAGTAG, MGM - ESP OIC, GSD	ENDORSING APPROVAL: CECILIA O. GAN, MD, MNSA DEPUTY EXECUTIVE DIRECTOR - HSS Executive Member,Infrastructure Committee	APPROVED BY: SONIA B. GONZALEZ, MD, MScHSM, MPM OIC - EXECUTIVE DIRECTOR Chairman - Infrastructure Committee	SHEET CONTENT / NO: A-11 TOILET DETAILS SCALE: 1:100



DOOR TYPE 1

DOUBLE FRAMELESS GLASS DOOR

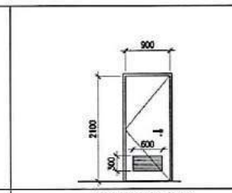
FLOOR LEVEL	D 1	DOOR TAG / WIDTH (W) / HEIGHT (H)
BASEMENT		-
GROUND FLOOR	1 SET	
SECOND FLOOR	-	
THIRD FLOOR	-	
FOURTH FLOOR	-	
TOTAL NO. OF DOORS	1 SET	



DOOR TYPE 2

DOUBLE-LEAF FIRE RATED METAL DOOR WITH PANIC HARDWARE AND DOOR CLOSER

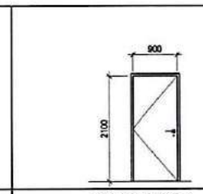
FLOOR LEVEL	D 2	DOOR TAG / WIDTH (W) / HEIGHT (H)
BASEMENT		-
GROUND FLOOR		-
SECOND FLOOR		-
THIRD FLOOR		2 SETS
FOURTH FLOOR		-
TOTAL NO. OF DOORS		2 SETS



DOOR TYPE 3

SINGLE-LEAF HOLLOW CORE FLUSH TYPE DOOR WITH 3/4" THK. LAMINATED SURFACE ON OUTSIDE FACE & MARINE PLYWOOD INSIDE FACE

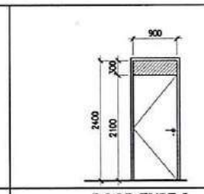
FLOOR LEVEL	D 3	DOOR TAG / WIDTH (W) / HEIGHT (H)
BASEMENT		-
GROUND FLOOR		2 SETS
SECOND FLOOR		3 SETS
THIRD FLOOR		3 SETS
FOURTH FLOOR		4 SETS
TOTAL NO. OF DOORS		12 SETS



DOOR TYPE 4

SINGLE-LEAF HOLLOW CORE FLUSH TYPE DOOR WITH 3/4" THK. LAMINATED SURFACE ON OUTSIDE FACE & MARINE PLYWOOD INSIDE FACE

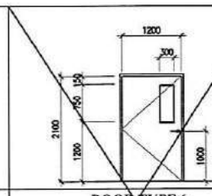
FLOOR LEVEL	D 4	DOOR TAG / WIDTH (W) / HEIGHT (H)
BASEMENT		-
GROUND FLOOR		16 SETS
SECOND FLOOR		16 SETS
THIRD FLOOR		4 SETS
FOURTH FLOOR		7 SETS
TOTAL NO. OF DOORS		45 SETS



DOOR TYPE 5

SINGLE-LEAF HOLLOW CORE FLUSH TYPE DOOR WITH 3/4" THK. LAMINATED SURFACE ON OUTSIDE FACE & MARINE PLYWOOD INSIDE FACE W/ TRANSOM ABOVE THE DOOR

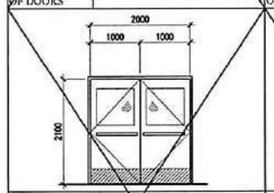
FLOOR LEVEL	D 5	DOOR TAG / WIDTH (W) / HEIGHT (H)
BASEMENT		-
GROUND FLOOR		4 SETS
SECOND FLOOR		2 SETS
THIRD FLOOR		1 SET
FOURTH FLOOR		2 SETS
TOTAL NO. OF DOORS		9 SETS



DOOR TYPE 6

SINGLE LEAF METAL TYPE DOOR IN LAMINATED SURFACE WITH LEAD SHIELDING, (SUPPLIED BY THE SUPPLIER)

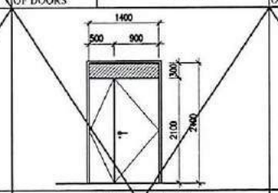
FLOOR LEVEL	D 6	DOOR TAG / WIDTH (W) / HEIGHT (H)
BASEMENT		-
GROUND FLOOR		2 SETS
SECOND FLOOR		-
THIRD FLOOR		-
FOURTH FLOOR		-
TOTAL NO. OF DOORS		2 SETS



DOOR TYPE 7

DOUBLE SWING METAL TYPE DOOR WITH LEAD SHIELDING LAMINATED SURFACE AND GLASS VIEW PANEL (SUPPLIED BY THE SUPPLIER)

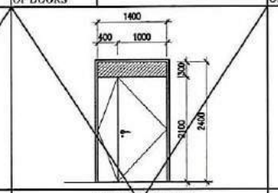
FLOOR LEVEL	D 7	DOOR TAG / WIDTH (W) / HEIGHT (H)
BASEMENT	-	
GROUND FLOOR	1 SET	
SECOND FLOOR	-	
THIRD FLOOR	-	
FOURTH FLOOR	-	
TOTAL NO. OF DOORS	1 SET	



DOOR TYPE 8

DOUBLE LEAF METAL TYPE DOOR IN LAMINATED SURFACE WITH LEAD SHIELDING (SUPPLIED BY THE SUPPLIER)

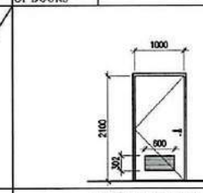
FLOOR LEVEL	D 8	DOOR TAG / WIDTH (W) / HEIGHT (H)
BASEMENT	-	
GROUND FLOOR	2 SETS	
SECOND FLOOR	-	
THIRD FLOOR	-	
FOURTH FLOOR	-	
TOTAL NO. OF DOORS	2 SETS	



DOOR TYPE 9

DOUBLE HOLLOW CORE FLUSH TYPE DOOR WITH LAMINATED SURFACE

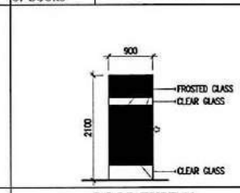
FLOOR LEVEL	D 9	DOOR TAG / WIDTH (W) / HEIGHT (H)
BASEMENT	-	
GROUND FLOOR	1 SET	
SECOND FLOOR	-	
THIRD FLOOR	-	
FOURTH FLOOR	-	
TOTAL NO. OF DOORS	1 SET	



DOOR TYPE 10

SINGLE-LEAF HOLLOW CORE FLUSH TYPE DOOR WITH 3/4" THK. LAMINATED SURFACE ON OUTSIDE FACE & MARINE PLYWOOD INSIDE FACE

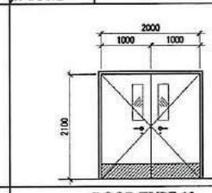
FLOOR LEVEL	D 10	DOOR TAG / WIDTH (W) / HEIGHT (H)
BASEMENT	-	
GROUND FLOOR	1 SET	
SECOND FLOOR	-	
THIRD FLOOR	1 SET	
FOURTH FLOOR	-	
TOTAL NO. OF DOORS	2 SETS	



DOOR TYPE 11

FRAME LESS SINGLE-LEAF DOOR, TEMPERED GLASS-FROSTED

FLOOR LEVEL	D 11	DOOR TAG / WIDTH (W) / HEIGHT (H)
BASEMENT	-	
GROUND FLOOR	-	
SECOND FLOOR	-	
THIRD FLOOR	-	
FOURTH FLOOR	1 SET	
TOTAL NO. OF DOORS	1 SET	

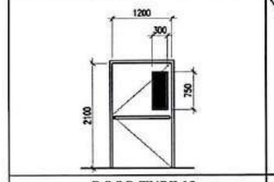


DOOR TYPE 12

DOUBLE-LEAF FIRE RATED METAL DOOR WITH PANIC HARDWARE AND DOOR CLOSER

FLOOR LEVEL	D 12	DOOR TAG / WIDTH (W) / HEIGHT (H)
BASEMENT	-	
GROUND FLOOR	5 SETS	
SECOND FLOOR	1 SET	
THIRD FLOOR	2 SETS	
FOURTH FLOOR	1 SET	
TOTAL NO. OF DOORS	7 SETS	

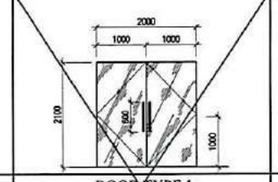
1 SCHEDULE OF DOORS
A-8-01



DOOR TYPE 13

SINGLE-LEAF FIRE RATED METAL DOOR W/ INSULATION, VIEW WINDOW, PANIC HARDWARE AND DOOR CLOSER

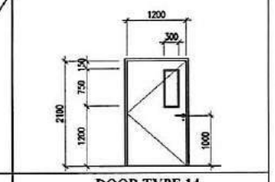
FLOOR LEVEL	D 13	DOOR TAG / WIDTH (W) / HEIGHT (H)
BASEMENT	-	
GROUND FLOOR	2 SETS	
SECOND FLOOR	3 SETS	
THIRD FLOOR	2 SETS	
FOURTH FLOOR	2 SETS	
TOTAL NO. OF DOORS	11 SETS	



DOOR TYPE 1a

DOUBLE FRAMELESS GLASS DOOR

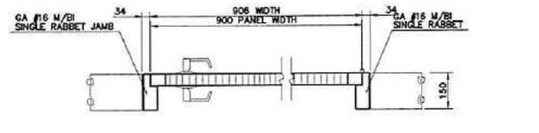
FLOOR LEVEL	D 1a	DOOR TAG / WIDTH (W) / HEIGHT (H)
BASEMENT		1 SET
GROUND FLOOR		-
SECOND FLOOR		-
THIRD FLOOR		-
FOURTH FLOOR		-
TOTAL NO. OF DOORS		1 SET



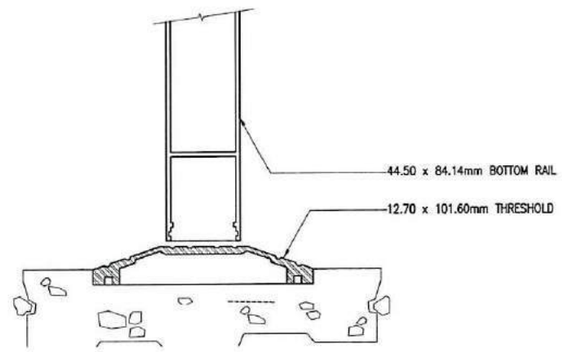
DOOR TYPE 14

SINGLE-LEAF FIRE RATED METAL DOOR WITH PANIC HARDWARE, VIEW WINDOW AND DOOR CLOSER

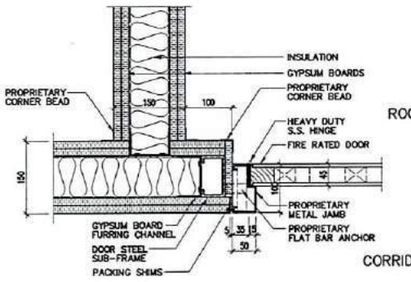
FLOOR LEVEL	D 14	DOOR TAG / WIDTH (W) / HEIGHT (H)
BASEMENT		-
GROUND FLOOR		-
SECOND FLOOR		-
THIRD FLOOR		-
FOURTH FLOOR		3 SETS
TOTAL NO. OF DOORS		3 SETS



1 DOOR DETAIL
SCALE NTS



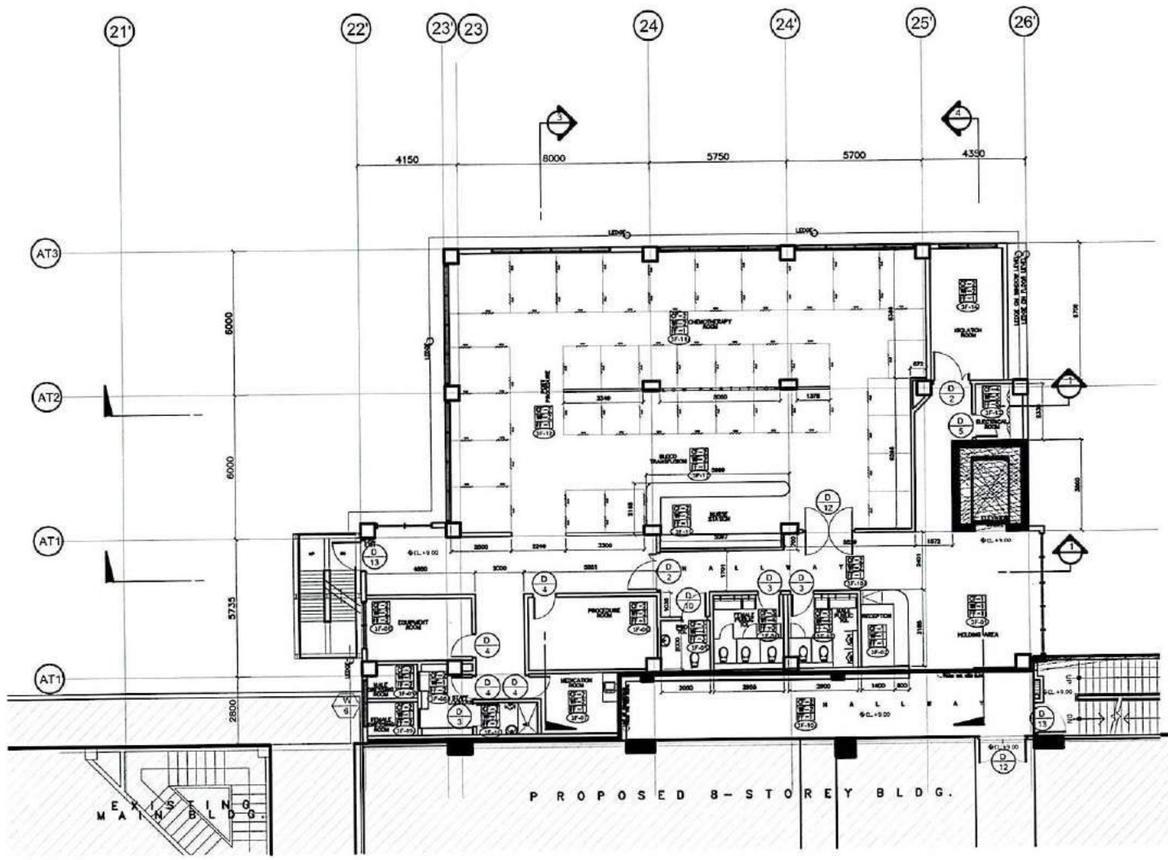
2 THRESHOLD DETAIL
SCALE NTS



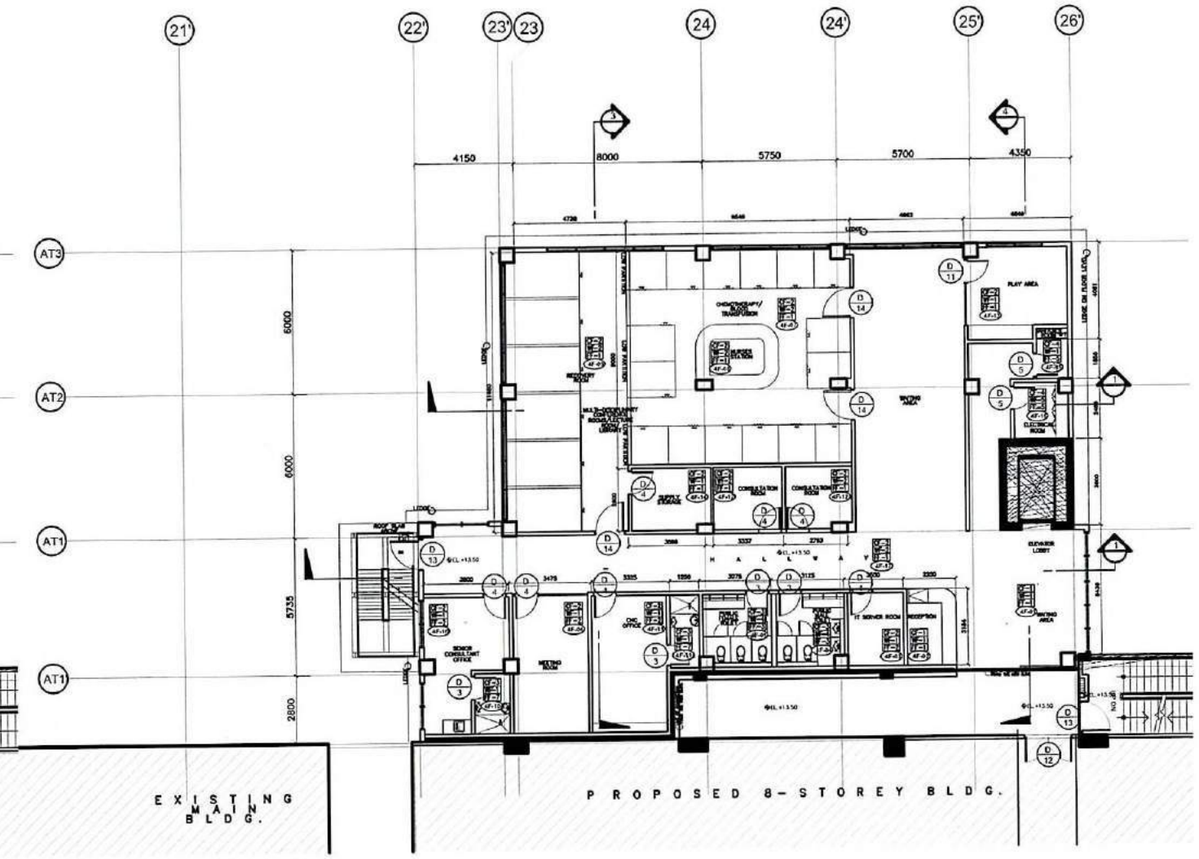
3 METAL DOOR JAMB DETAIL
SCALE NTS

Republic of the Philippines
DEPARTMENT OF HEALTH
PHILIPPINE CHILDREN'S MEDICAL CENTER
Quezon Avenue, corner Agham Road

PROJECT TITLE:	PREPARED BY:	NOTED BY:	CONFORMED BY:	RECOMMENDING APPROVAL:	ENDORSING APPROVAL:	APPROVED BY:	SHEET CONTENT / NO:
Construction of 3rd floor and 4th floor Cancer Building (FIT-OUT of 3rd floor and 4th floor)	ENGR. RONNIE M. AURELIO Civil Engineer (Engr II)	ENGR. DANIEL E. DAVID OIC, ENGINEERING	END-USER	ZENAIDA V. TALAGTAG, MGM - ESP OIC, GSD	CECILIA O. GAN, MD, MNSA DEPUTY EXECUTIVE DIRECTOR - HSS Executive Member,Infrastructure Committee	SONIA B. GONZALEZ, MD, MScHSM, MPM OIC - EXECUTIVE DIRECTOR Chairman - Infrastructure Committee	A-12
LOCATION: Quezon Ave., cor Agham Rd., Quezon City							DOORS DETAILS
							SCALE: NTS



1 THIRD FLOOR FINISHES LAYOUT



2 FOURTH FLOOR FINISHES LAYOUT

Republic of the Philippines DEPARTMENT OF HEALTH **PHILIPPINE CHILDREN'S MEDICAL CENTER** Quezon Avenue, corner Agham Road	PROJECT TITLE: Construction of 3rd floor and 4th floor Cancer Building (FIT-OUT of 3rd floor and 4th floor) LOCATION Quezon Ave., cor Agham Rd., Quezon City	PREPARED BY: ENGR. RONNIE M. AURELIO Civil Engineer (Engr II)	NOTED BY: ENGR. DANIEL E. DAVID OIC, ENGINEERING	CONFORMED BY: END-USER	RECOMMENDING APPROVAL: ZENAIDA V. TALAGTAG, MGM - ESP OIC, GSD	ENDORSING APPROVAL: CECILIA O. GAN, MD, MNSA DEPUTY EXECUTIVE DIRECTOR - HSS Executive Member,Infrastructure Committee	APPROVED BY: SONIA B. GONZALEZ, MD, MScHSM, MPM OIC - EXECUTIVE DIRECTOR Chairman - Infrastructure Committee	SHEET CONTENT / NO: A-13 FLOOR FINISHES SCALE: 1:250

SCHEDULE OF FINISHES

RM NO.	ROOM (AREA) NAME / FINISH	FLOOR						CEILING				WALL								REMARKS
		FT-1 ROLL-FORM VINYL, ANTI-STATIC & ANTI-BACTERIAL	FT-2 600 X 600 MM HOMOGENEOUS PORCELAIN GRANITE TILES (UNPOLISHED)	FT-3 600 X 600 MM HOMOGENEOUS PORCELAIN GRANITE TILES (POLISHED)	FT-4 300 X 600 MM HOMOGENEOUS PORCELAIN GRANITE TILES (POLISHED)	FT-5 PLAIN CEMENT PLASTER FIN. WITH EPOXY PAINT	FT-6 NATURAL COMFORT FINISH	FT-7 300 X 300 MM HOMOGENEOUS PORCELAIN GRANITE TILES (POLISHED)	CF-1 600 X 600MM ACOUSTIC TILES ON POWDER COATED ALUMINUM T-RUNNER (DUAL BRAND)	CF-2 12MM THK BORAL GYPSUM BOARD (REGULAR)	CF-3 12MM THK MOISTURE RESISTANT BORAL GYPSUM BOARD	CF-4 UNDER SLAB	WF-1 SEMI-GLOSS LATEX PAINT FINISH	WF-2 ANTI-BACTERIAL & ODOR -ABSORBENT PAINT FINISH	WF-3 PLAIN CEMENT PAINTED PLASTER FINISH	WF-4 300 X 600 MM POLISHED VITRIFIED CERAMIC TILES @ 2250 MM HEIGHT	WF-5 200 MM THK. CHB WALL PAINTED FINISH	WF-6 300 MM THK. RC WALL WITH LAMINATED WOOD PANEL FINISH	WF-7 150 MM THK. CHB WALL IN NATURAL STONE FINISH	WF-8 200 X 300 MM POLISHED VITRIFIED CERAMIC TILES @ 2250 MM HEIGHT	WF-9 SPECIAL FINISH	
THIRD FLOOR LEVEL																				
3F-01	HOLDING AREA	●						●				●								
3F-02	RECEPTION	●						●				●								
3F-03	MALE PUBLIC TOILET			●					●							●				
3F-04	FEMALE PUBLIC TOILET			●					●							●				
3F-05	PWD TOILET			●					●							●				
3F-06	PROCEDURE ROOM	●							●							●				
3F-07	MEDICATION ROOM	●							●							●				
3F-08	EQUIPMENT ROOM		●						●							●				
3F-08a	STAFF LOCKER ROOM		●						●							●				
3F-09	MALE DRESSING ROOM		●						●							●				
3F-09a	FEMALE DRESSING ROOM		●						●							●				
3F-10	STAFF T&B							●				●								
3F-10a	HALLWAYS	●							●							●				
3F-11	NURSES' STATION	●							●							●				
3F-11a	CHEMOTHERAPY	●							●							●				
3F-12	BLOOD TRANSFUSION	●							●							●				
3F-12a	POST PROCEDURE	●							●							●				
3F-13	ELECTRICAL ROOM					●						●								
3F-14	ISOLATION ROOM					●						●								

SCHEDULE OF FINISHES

RM NO.	ROOM (AREA) NAME / FINISH	FLOOR						CEILING				WALL								REMARKS
		FT-1 ROLL-FORM VINYL, ANTI-STATIC & ANTI-BACTERIAL	FT-2 600 X 600 MM HOMOGENEOUS PORCELAIN GRANITE TILES (UNPOLISHED)	FT-3 600 X 600 MM HOMOGENEOUS PORCELAIN GRANITE TILES (POLISHED)	FT-4 300 X 600 MM HOMOGENEOUS PORCELAIN GRANITE TILES (POLISHED)	FT-5 PLAIN CEMENT PLASTER FIN. WITH EPOXY PAINT	FT-6 NATURAL COMFORT FINISH	FT-7 300 X 300 MM HOMOGENEOUS PORCELAIN GRANITE TILES (POLISHED)	CF-1 600 X 600MM ACOUSTIC TILES ON POWDER COATED ALUMINUM T-RUNNER (DUAL BRAND)	CF-2 12MM THK BORAL GYPSUM BOARD (REGULAR)	CF-3 12MM THK MOISTURE RESISTANT BORAL GYPSUM BOARD	CF-4 UNDER SLAB	WF-1 SEMI-GLOSS LATEX PAINT FINISH	WF-2 ANTI-BACTERIAL & ODOR -ABSORBENT PAINT FINISH	WF-3 PLAIN CEMENT PAINTED PLASTER FINISH	WF-4 300 X 600 MM POLISHED VITRIFIED CERAMIC TILES @ 2250 MM HEIGHT	WF-5 200 MM THK. CHB WALL PAINTED FINISH	WF-6 300 MM THK. RC WALL WITH LAMINATED WOOD PANEL FINISH	WF-7 150 MM THK. CHB WALL IN NATURAL STONE FINISH	WF-8 200 X 300 MM POLISHED VITRIFIED CERAMIC TILES @ 2250 MM HEIGHT	WF-9 SPECIAL FINISH	
FOURTH FLOOR LEVEL																				
4F-01	WAITING AREA	●						●				●								
4F-02	RECEPTION	●						●				●								
4F-03	IT SERVER ROOM		●						●							●				
4F-04	PUBLIC MALE TOILET			●					●							●				
4F-05	PUBLIC FEMALE TOILET			●					●							●				
4F-06	MEETING ROOM		●						●							●				
4F-07	CHEMOTHERAPY/BLOOD TRANSFUSION	●							●							●				
4F-08	NURSES' STATION	●							●							●				
4F-09	RECOVERY AREA	●							●							●				
4F-10	SENIOR CONSULTANT'S OFFICE		●						●							●				
4F-10a	TOILET (SCO)			●					●							●				
4F-11	CHC OFFICE		●						●							●				
4F-11a	TOILET (CHC)			●					●							●				
4F-12	CONSULTATION ROOM 1		●						●							●				
4F-12a	CONSULTATION ROOM 2		●						●							●				
4F-13	PLAY AREA		●						●							●				
4F-14	SUPPLY STORAGE ROOM		●						●							●				
4F-15	JANITOR'S ROOM				●							●								
4F-16	ELECTRICAL ROOM				●							●								
4F-17	HALLWAYS	●							●							●				

EXTERIOR FINISH SCHEDULE

ITEM	MATERIAL	FINISH	REMARKS
ROOF	GA 24 LONG SPAN PRE PAINTED SHEETS WITH INSULATION	PRE-PAINTED	
FLASHING	GA 24 LONG SPAN PRE PAINTED SHEETS	PRE-PAINTED	
PARAPET	CHB WALL	PLASTERED WITH PLAIN CEMENT PAINTED FINISH	
COLUMNS	CEMENT PLASTER, SMOOTH FINISH	PAINTED	
BEAMS	CEMENT PLASTER, SMOOTH FINISH	PAINTED	
EXTERIOR WALLS	PRECAST WALL	PAINTED FINISH	
	THERMAL & MOISTURE CONTROL WALL PANEL	PAINTED FINISH	
	CHB WALL	PAINTED FINISH	
		NATURAL STONE FINISH	
		ALUMINUM CLADDING	
INTERIOR WALLS	GYPSUM BOARD ON METAL FURRING	PAINTED FINISH	
WALLS AT TOILET	CHB WALL	PLASTERED WITH PLAIN CEMENT PAINTED FINISH AND WITH 1800 MM HEIGHT WALL TILES	
DOORS / FRAMES	GLASS DOOR		
	HCF DOOR		
	HCF DOOR (WITH VIEWING GLASS PANEL)		
	MARINE PLYWOOD DOOR		
	METAL DOOR		
WINDOWS / FRAMES	ALUMINUM	POWDER COATED	

NOTE:

1. PARTITION TYPES SHALL BE AS FOLLOWS:

WF-1 GYPSUM BOARD ON METAL FURRING IN SEMI GLOSS LATEX FINISH (INTERIOR WALLS)

WF-2 GYPSUM BOARD ON METAL FURRING IN ANTI-BACTERIAL & ODOR-ABSORBENT PAINT FINISH (INTERIOR WALLS)

WF-3 PLAIN CEMENT PAINTED PLASTER FINISH

WF-4 150 MM THK. CHB WALL IN 300X600MM UNPOLISHED VITRIFIED CERAMIC TILES @ 2250 MM HEIGHT (TOILETS)

WF-5 200 MM THK. CHB WALL PAINTED FINISH (EXTERIOR WALL)

WF-6 300 MM THK. RC WALL WITH LAMINATED WOOD PANEL FINISH (ELEVATOR LOBBY)

WF-7 150 MM THK. CHB WALL IN NATURAL STONE FINISH (EXTERIOR WALL)

WF-8 SPECIAL FINISH

GENERAL NOTES:

1. DIMENSIONS SHALL TAKE PRECEDENCE OVER SCALE.
2. LETTERS IN FINISH SCHEDULE MARK INDICATE MANUFACTURER'S STANDARD COLOR AND FIELD APPLIED FINISH. COLOR TO BE SELECTED BY THE ARCHITECT/OWNER.
3. IN CASE OF DISCREPANCY IN THE DRAWING OR BETWEEN THE DRAWING AND SPECIFICATIONS, VERIFY WITH THE DESIGNER.
4. COLORS IN COLOR CODE ARE SUBJECT TO CHANGE DEPENDING ON APPROVED SWATCHES.
5. FURNITURE WORKS ARE NOT INCLUDED IN CONSTRUCTION PHASE.

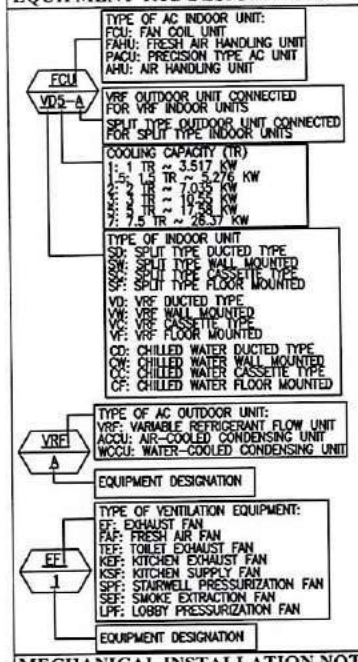
Republic of the Philippines
DEPARTMENT OF HEALTH
PHILIPPINE CHILDREN'S MEDICAL CENTER
Quezon Avenue, corner Agham Road

PROJECT TITLE: Construction of 3rd floor and 4th floor Cancer Building (FIT-OUT of 3rd floor and 4th floor)
LOCATION: Quezon Ave., cor Agham Rd., Quezon City

PREPARED BY: ENGR. RONNIE M. AURELIO, Civil Engineer (Engr II)
NOTED BY: ENGR. DANIEL E. DAVID, OIC, ENGINEERING
CONFORMED BY: END-USER
RECOMMENDING APPROVAL: ZENAIDA V. TALAGTAG, MGM - ESP, OIC, GSD
ENDORSING APPROVAL: CECILIA O. GAN, MD, MNSA, DEPUTY EXECUTIVE DIRECTOR - HSS, Executive Member,Infrastructure Committee
APPROVED BY: SONIA B. GONZALEZ, MD, MScHSM, MPM, OIC - EXECUTIVE DIRECTOR, Chairman - Infrastructure Committee

SHEET CONTENT / NO: A-14
FLOOR FINISHES
SCALE: NTS

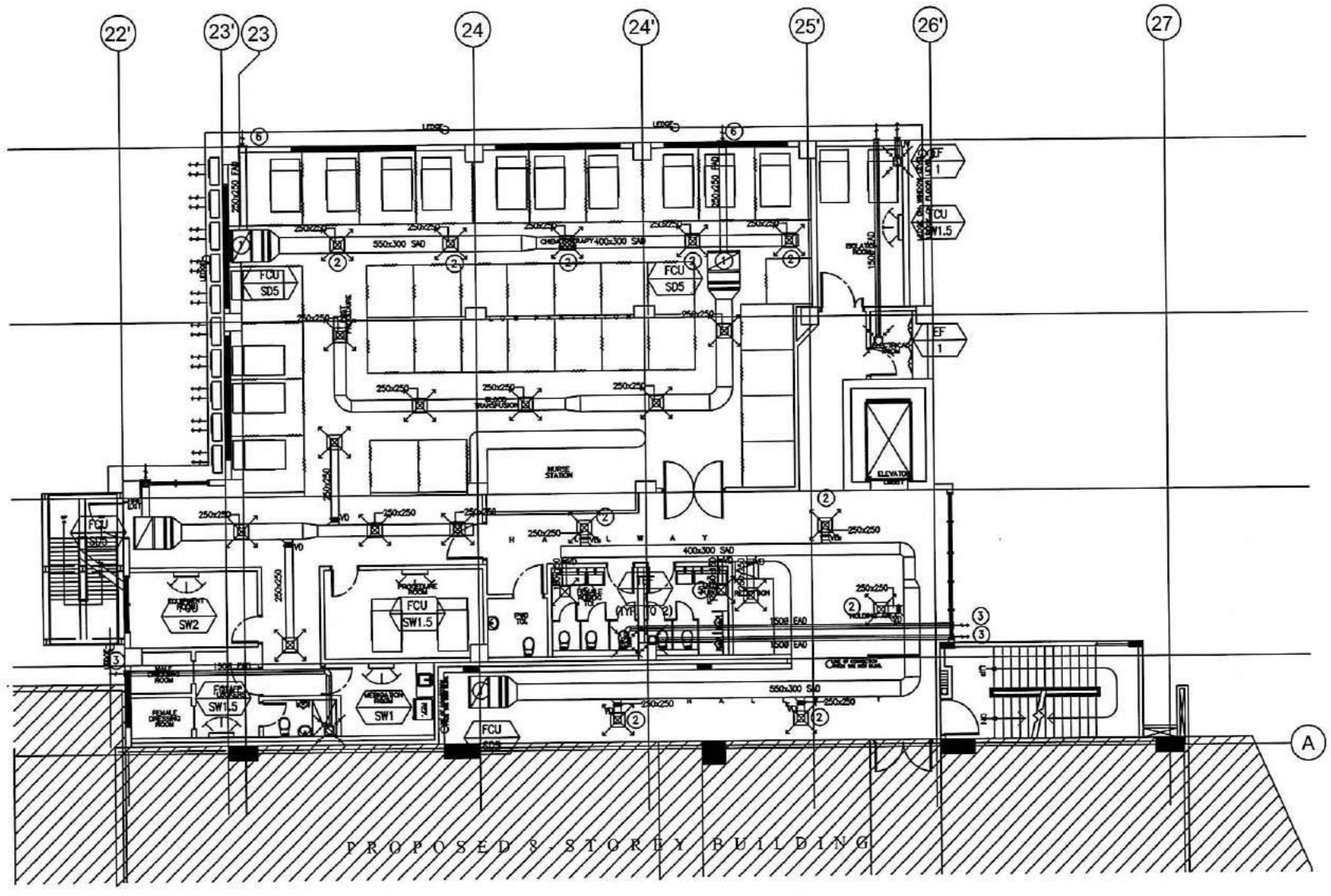
EQUIPMENT TAG DESIGNATION:



MECHANICAL INSTALLATION NOTES:

1. PROVIDE SEISMIC RESTRAINTS FOR ALL RIGIDLY AND RESILIENTLY SUPPORTED EQUIPMENT PER APPLICABLE CODE AND AS SPECIFIED DESIGN AND PROVIDE RESTRAINTS FOR ALL PIPING AND DUCTWORK IN MECHANICAL ROOMS AND FAN ROOMS. RESTRAINTS SHALL BE DESIGNED TO PREVENT PERMANENT DISPLACEMENT IN ANY DIRECTION CAUSED BY LATERAL MOTION.
2. ALL FLOOR SLAB MOUNTED VIBRATING EQUIPMENT SHALL BE PROVIDED WITH VIBRATION ISOLATORS (SPRING TYPE) TO PREVENT VIBRATION AND NOISE TRANSMISSION.
3. ALL FANS SHALL BE PROVIDED WITH SUITABLE FLEXIBLE CONNECTIONS TO THE INTAKE AND DISCHARGE DUCTWORK.
4. VERIFY LOCATION OF CONTROLLERS AND SWITCHES IN THE ELECTRICAL PLANS.
5. PROVIDE GUIDES, HANGERS AND SUPPLEMENTAL SUPPORT STEEL FOR ALL PIPING. PIPE HANGERS AND SUPPORTS SHALL BE SPACED AND CONSTRUCTED IN ACCORDANCE WITH SMACNA AND ASHRAE STANDARDS
6. PROVIDE TEST HOLES IN DUCTS AND PLENUMS AT FILTERS, COILS AND OTHER EQUIPMENT TO MEASURE STATIC PRESSURES AND AIR FLOW.
7. PROVIDE MANUAL VOLUME DAMPERS IN EACH BRANCH DUCT AND TO EACH AIR OUTLET
8. INSTALL AIR DUCTS AS CLOSE TO THE BEAMS AS POSSIBLE OTHERWISE INDICATED. PROVIDE CLEARANCE BETWEEN DUCT AND CEILING LINE.
9. DIFFUSER AND GRILLE DIMENSIONS INDICATED REPRESENT NECK SIZE UNLESS OTHERWISE NOTED.
10. ALL SUPPPLY DUCTWORK SHALL BE SEALED TO LESS THAT 1% LEAKAGE BY VOLUME AT 127mm W.G. (5 S.P.W.G) USE ELASTOMETRIC RUBBER BASE MASTIC TO FILLER SUITABLE FOR SEALING OVERLAP SEAM. ASPHALT BASE PLASTIC SEALANT IS NOT ACCEPTABLE.
11. SUPPLY AND EXHAUST FANS SHALL BE AMCA-RATED, MANUFACTURER TO SUBMIT BROCHURE AND TECHNICAL DATA SHOWING AMCA-CERTIFIED RATINGS.
12. REFRIGERANT SENSOR MUST BE INSTALLED IN AHU ROOM.
13. PROVIDE PIPE CLADDING (PVC) FOR ALL OUTDOOR REFRIGERANT PIPING OF ACCU'S.
14. PROVIDE ELBOW PIPE SUPPORT ON REFRIGERANT PIPE AND CLADDING.
15. CONTRACTOR SHOULD VERIFY AT SITE IF THERE ARE ANY OBSTRUCTIONS TO REFRIGERANT PIPE RUN AND MAY SUGGEST OR PROPOSE POSSIBLE PIPE RISER LOCATION BASED ON THE PROPOSED LOCATION SHOWN ON THE PLANS AND DRAWINGS.
16. ALL OUTDOOR CLADDING MUST BE PAINTED WITH CORROSION PROTECTION PAINT.
17. ALL DEVIATION FROM PLANS. MUST BE ADVISED TO BUILDING CONSULTANT OTHERWISE CONSULTANT SHALL NOT BE HELD LIABLE FOR ANY CONFLICTS THAT WILL OCCUR.
18. PROVIDE ALL SUPPLY/RETURN/EXHAUST/FRESH AIR DIFFUSERS, GRILLES AND REGISTERS WITH VOLUME DAMPER.

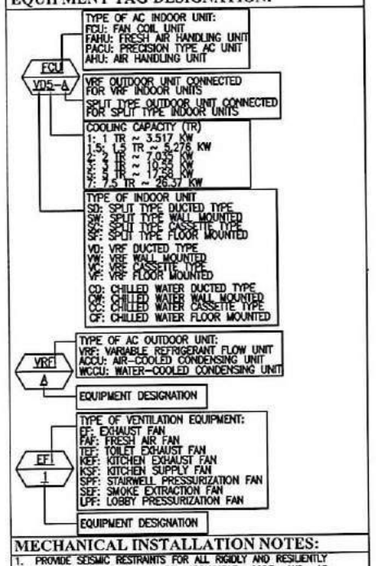
TAG	QTY	DESCRIPTION	FLOWRATE	UNIT SERVED
①	3	1000x400 RETURN AIR REGISTER WITH MERV FILTER AND UV-LIGHT (DUAL LAYER)	(-) 2000 CFM	LOBBY/HALLWAY
②	14	500x500 SUPPLY CEILING DIFFUSER 4-WAY TYPE	(+) 400 CFM	LOBBY/HALLWAY
③	7	200ø EXHAUST AIR LOUVER (VENT CAP)	(-) 100 CFM	TOILETS
④	1	200ø EXHAUST AIR LOUVER (VENT CAP)	(-) 200 CFM	EE ROOM/STORAGE
⑤	2	350x350 SUPPLY GRILLE SINGLE DEFLECTION TYPE	(+) 200 CFM	TOILETS
⑥	2	350x350 FRESH AIR LOUVER	(+) 400 CFM	LOBBY/HALLWAYS



1 THIRD FLOOR AIR-CONDITIONING AND VENTILATION LAYOUT

Republic of the Philippines DEPARTMENT OF HEALTH PHILIPPINE CHILDREN'S MEDICAL CENTER Quezon Avenue, corner Agham Road	PROJECT TITLE: Construction of 3rd floor and 4th floor Cancer Building (FIT-OUT of 3rd floor and 4th floor) LOCATION Quezon Ave., cor Agham Rd., Quezon City	PREPARED BY: ENGR. CEDRICK P. GACUSAN Mechanical Engineer (Engr II)	NOTED BY: ENGR. DANIEL E. DAVID OIC, ENGINEERING	CONFORMED BY: END-USER	RECOMMENDING APPROVAL: ZENAIDA V. TALAGTAG, MGM - ESP Head, GSD	ENDORSING APPROVAL: CECILIA O. GAN, MD, MNSA DEPUTY EXECUTIVE DIRECTOR - HSS Executive Member,Infrastructure Committee	APPROVED BY: SONIA B. GONZALEZ, MD, MScHSM, MPM OIC - EXECUTIVE DIRECTOR Chairman - Infrastructure Committee	SHEET CONTENT / NO: M-1 MECHANICAL PLAN SCALE: 1:200

EQUIPMENT TAG DESIGNATION:



MECHANICAL INSTALLATION NOTES:

1. PROVIDE SEISMIC RESTRAINTS FOR ALL RIGIDLY AND RESILIENTLY SUPPORTED EQUIPMENT PER APPLICABLE CODE AND AS SPECIFIED. DESIGN AND PROVIDE RESTRAINTS FOR ALL PIPING AND DUCTWORK IN MECHANICAL ROOMS AND FAN ROOMS. RETRAINTS SHALL BE DESIGNED TO PREVENT PERMANENT DISPLACEMENT IN ANY DIRECTION CAUSED BY LATERAL MOTION.
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4. VERIFY LOCATION OF CONTROLLERS AND SWITCHES IN THE ELECTRICAL PLANS.
5. PROVIDE GUIDES, HANGERS AND SUPPLEMENTAL SUPPORT STEEL FOR ALL PIPING. PIPE HANGERS AND SUPPORTS SHALL BE SPACED AND CONSTRUCTED IN ACCORDANCE WITH SMACNA AND ASHRAE STANDARDS
6. PROVIDE TEST HOLES IN DUCTS AND PLENUMS AT FILTERS, COILS AND OTHER EQUIPMENT TO MEASURE STATIC PRESSURES AND AIR FLOW.
7. PROVIDE MANUAL VOLUME DAMPERS IN EACH BRANCH DUCT AND TO EACH AIR OUTLET
8. INSTALL AIR DUCTS AS CLOSE TO THE BEAMS AS POSSIBLE OTHERWISE INDICATED. PROVIDE CLEARANCE BETWEEN DUCT AND CEILING LINE.
9. DIFFUSER AND GRILLE DIMENSIONS INDICATED REPRESENT NECK SIZE UNLESS OTHERWISE NOTED.
10. ALL SUPPPLY DUCTWORK SHALL BE SEALED TO LESS THAT 1% LEAKAGE BY VOLUME AT 127mm W.G. (5 S.P.W.G) USE ELASTOMETRIC RUBBER BASE MASTIC TO FILLER SUITABLE FOR SEALING OVERLAP SEAM. ASPHALT BASE PLASTIC SEALANT IS NOT ACCEPTABLE.
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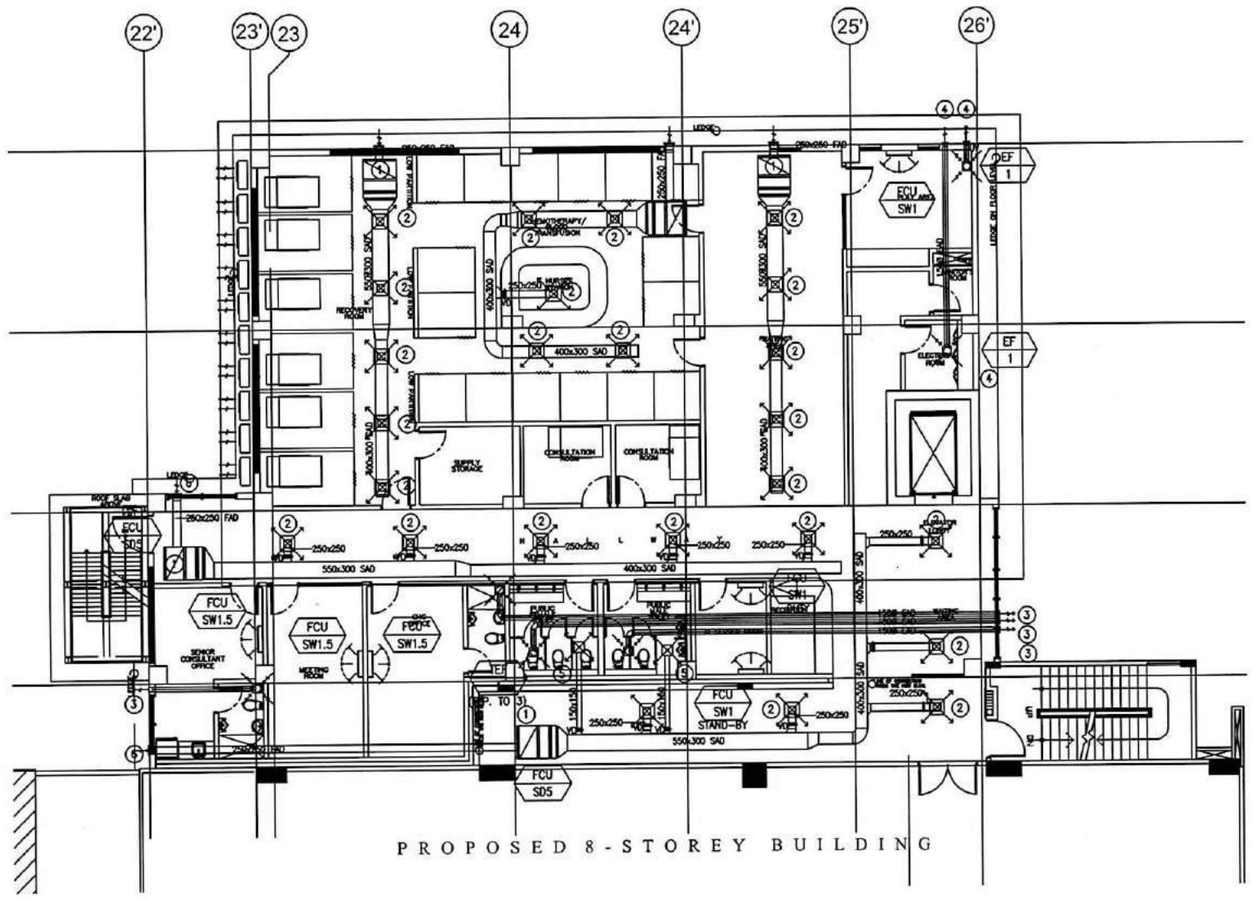
②	25	500x500 SUPPLY CEILING DIFFUSER 4-WAY TYPE	(+) 400 CFM	LOBBY/HALLWAY
③	5	200ø EXHAUST AIR LOUVER (VENT CAP)	(-) 100 CFM	TOILETS
④	2	200ø EXHAUST AIR LOUVER (VENT CAP)	(-) 200 CFM	EE ROOM/STORAGE
⑤	2	350x350 SUPPLY GRILLE SINGLE DEFLECTION TYPE	(+) 200 CFM	TOILETS
⑥	3	350x350 FRESH AIR LOUVER	(+) 400 CFM	LOBBY/HALLWAYS

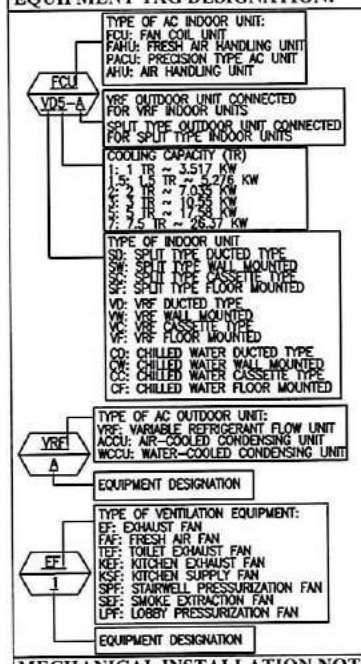


2 FOURTH FLOOR AIR-CONDITIONING AND VENTILATION LAYOUT

Republic of the Philippines
DEPARTMENT OF HEALTH
PHILIPPINE CHILDREN'S MEDICAL CENTER
Quezon Avenue, corner Agham Road

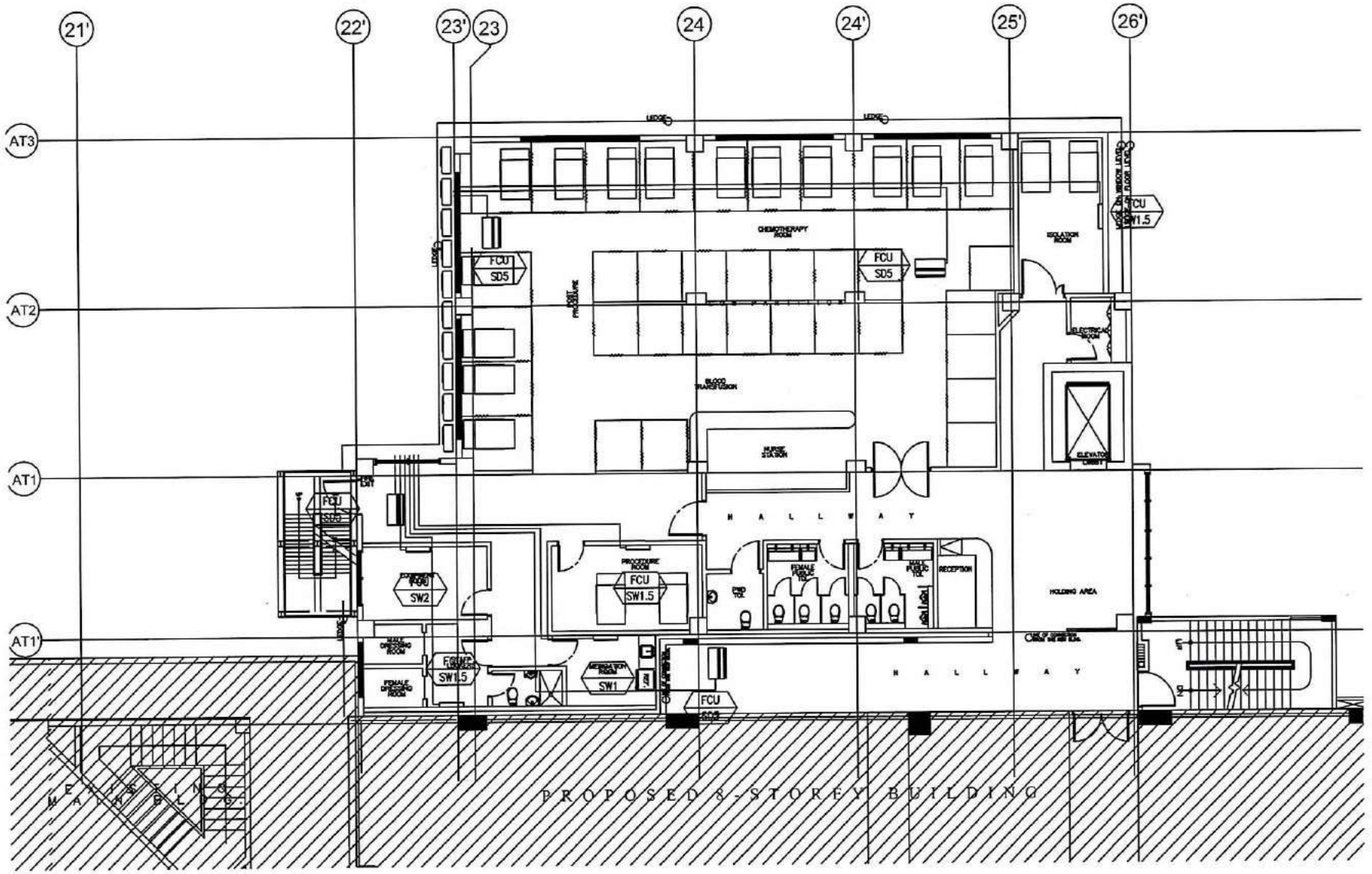
PROJECT TITLE:	PREPARED BY:	NOTED BY:	CONFORMED BY:	RECOMMENDING APPROVAL:	ENDORSING APPROVAL:	APPROVED BY:	SHEET CONTENT / NO:
Construction of 3rd floor and 4th floor Cancer Building (FIT-OUT of 3rd floor and 4th floor)	ENGR. CEDRICK P. GACUSAN Mechanical Engineer (Engr II)	ENGR. DANIEL E. DAVID OIC, ENGINEERING	END-USER	ZENAIDA V. TALAGTAG, MGM - ESP Head, GSD	CECILIA O. GAN, MD, MNSA DEPUTY EXECUTIVE DIRECTOR - HSS Executive Member,Infrastructure Committee	SONIA B. GONZALEZ, MD, MScHSM, MPM OIC - EXECUTIVE DIRECTOR Chairman - Infrastructure Committee	M-2
LOCATION: Quezon Ave., cor Agham Rd., Quezon City							MECHANICAL PLAN
							SCALE: 1:200

EQUIPMENT TAG DESIGNATION:



MECHANICAL INSTALLATION NOTES:

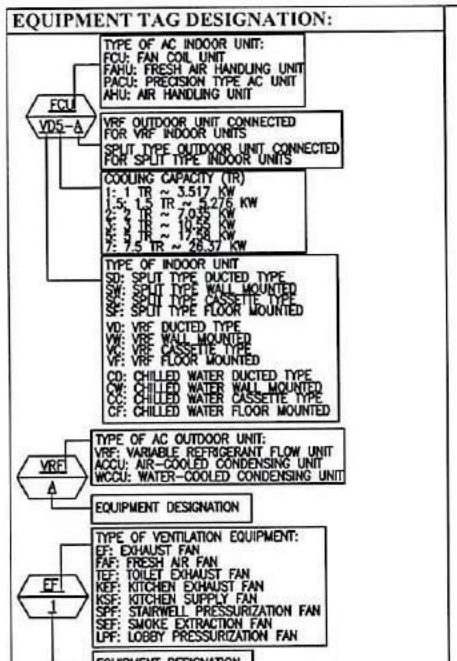
1. PROVIDE SEISMIC RESTRAINTS FOR ALL RIGIDLY AND RESILIENTLY SUPPORTED EQUIPMENT PER APPLICABLE CODE AND AS SPECIFIED. DESIGN AND PROVIDE RESTRAINTS FOR ALL PIPING AND DUCTWORK IN MECHANICAL ROOMS AND FAN ROOMS. RETRAINTS SHALL BE DESIGNED TO PREVENT PERMANENT DISPLACEMENT IN ANY DIRECTION CAUSED BY LATERAL MOTION.
2. ALL FLOOR SLAB MOUNTED VIBRATING EQUIPMENT SHALL BE PROVIDED WITH VIBRATION ISOLATORS (SPRING TYPE) TO PREVENT VIBRATION AND NOISE TRANSMISSION.
3. ALL FANS SHALL BE PROVIDED WITH SUITABLE FLEXIBLE CONNECTIONS TO THE INTAKE AND DISCHARGE DUCTWORK.
4. VERIFY LOCATION OF CONTROLLERS AND SWITCHES IN THE ELECTRICAL PLANS.
5. PROVIDE GUIDES, HANGERS AND SUPPLEMENTAL SUPPORT STEEL FOR ALL PIPING. PIPE HANGERS AND SUPPORTS SHALL BE SPACED AND CONSTRUCTED IN ACCORDANCE WITH SMACNA AND ASHRAE STANDARDS
6. PROVIDE TEST HOLES IN DUCTS AND PLENUMS AT FILTERS, COILS AND OTHER EQUIPMENT TO MEASURE STATIC PRESSURES AND AIR FLOW.
7. PROVIDE MANUAL VOLUME DAMPERS IN EACH BRANCH DUCT AND TO EACH AIR OUTLET
8. INSTALL AIR DUCTS AS CLOSE TO THE BEAMS AS POSSIBLE OTHERWISE INDICATED. PROVIDE CLEARANCE BETWEEN DUCT AND CEILING LINE.
9. DIFFUSER AND GRILLE DIMENSIONS INDICATED REPRESENT NECK SIZE UNLESS OTHERWISE NOTED.
10. ALL SUPPPLY DUCTWORK SHALL BE SEALED TO LESS THAT 1% LEAKAGE BY VOLUME AT 127mm W.G. (5 S.P.W.G) USE ELASTOMETRIC RUBBER BASE MASTIC TO FILLER SUITABLE FOR SEALING OVERLAP SEAM. ASPHALT BASE PLASTIC SEALANT IS NOT ACCEPTABLE.
11. SUPPLY AND EXHAUST FANS SHALL BE AMCA-RATED. MANUFACTURER TO SUBMIT BROCHURE AND TECHNICAL DATA SHOWING AMCA-CERTIFIED RATINGS.
12. REFRIGERANT SENSOR MUST BE INSTALLED IN AHU ROOM.
13. PROVIDE PIPE CLADDING (PVC) FOR ALL OUTDOOR REFRIGERANT PIPING OF ACCU'S.
14. PROVIDE ELBOW PIPE SUPPORT ON REFRIGERANT PIPE AND CLADDING.
15. CONTRACTOR SHOULD VERIFY AT SITE IF THERE ARE ANY OBSTRUCTIONS TO REFRIGERANT PIPE RUN AND MAY SUGGEST OR PROPOSE POSSIBLE PIPE RISER LOCATION BASED ON THE PROPOSED LOCATION SHOWN ON THE PLANS AND DRAWINGS.
16. ALL OUTDOOR CLADDING MUST BE PAINTED WITH CORROSION PROTECTION PAINT.
17. ALL DEVIATION FROM PLANS. MUST BE ADVISED TO BUILDING CONSULTANT OTHERWISE CONSULTANT SHALL NOT BE HELD LIABLE FOR ANY CONFLICTS THAT WILL OCCUR.
18. PROVIDE ALL SUPPLY/RETURN/EXHAUST/FRESH AIR DIFFUSERS, GRILLES AND REGISTERS WITH VOLUME DAMPER.



3 **THIRD FLOOR EQUIPMENT AND REFRIGERANT PIPING LAYOUT**

Republic of the Philippines DEPARTMENT OF HEALTH PHILIPPINE CHILDREN'S MEDICAL CENTER Quezon Avenue, corner Agham Road	PROJECT TITLE: Construction of 3rd floor and 4th floor Cancer Building (FIT-OUT of 3rd floor and 4th floor) LOCATION Quezon Ave., cor Agham Rd., Quezon City	PREPARED BY: ENGR. CEDRICK P. GACUSAN Mechanical Engineer (Engr II)	NOTED BY: ENGR. DANIEL E. DAVID OIC, ENGINEERING	CONFORMED BY: END-USER	RECOMMENDING APPROVAL: ZENAIDA V. TALAGTAG, MGM - ESP Head, GSD	ENDORSING APPROVAL: CECILIA O. GAN, MD, MNSA DEPUTY EXECUTIVE DIRECTOR - HSS Executive Member, Infrastructure Committee	APPROVED BY: SONIA B. GONZALEZ, MD, MScHSM, MPM OIC - EXECUTIVE DIRECTOR Chairman - Infrastructure Committee	SHEET CONTENT / NO: M-3 MECHANICAL PLAN SCALE: 1:200

EQUIPMENT TAG DESIGNATION:



MECHANICAL INSTALLATION NOTES:

1. PROVIDE SEISMIC RESTRAINTS FOR ALL RIGIDLY AND RESILIENTLY SUPPORTED EQUIPMENT PER APPLICABLE CODE AND AS SPECIFIED DESIGN AND PROVIDE RESTRAINTS FOR ALL PIPING AND DUCTWORK IN MECHANICAL ROOMS AND FAN ROOMS. RESTRAINTS SHALL BE DESIGNED TO PREVENT PERMANENT DISPLACEMENT IN ANY DIRECTION CAUSED BY LATERAL MOTION.
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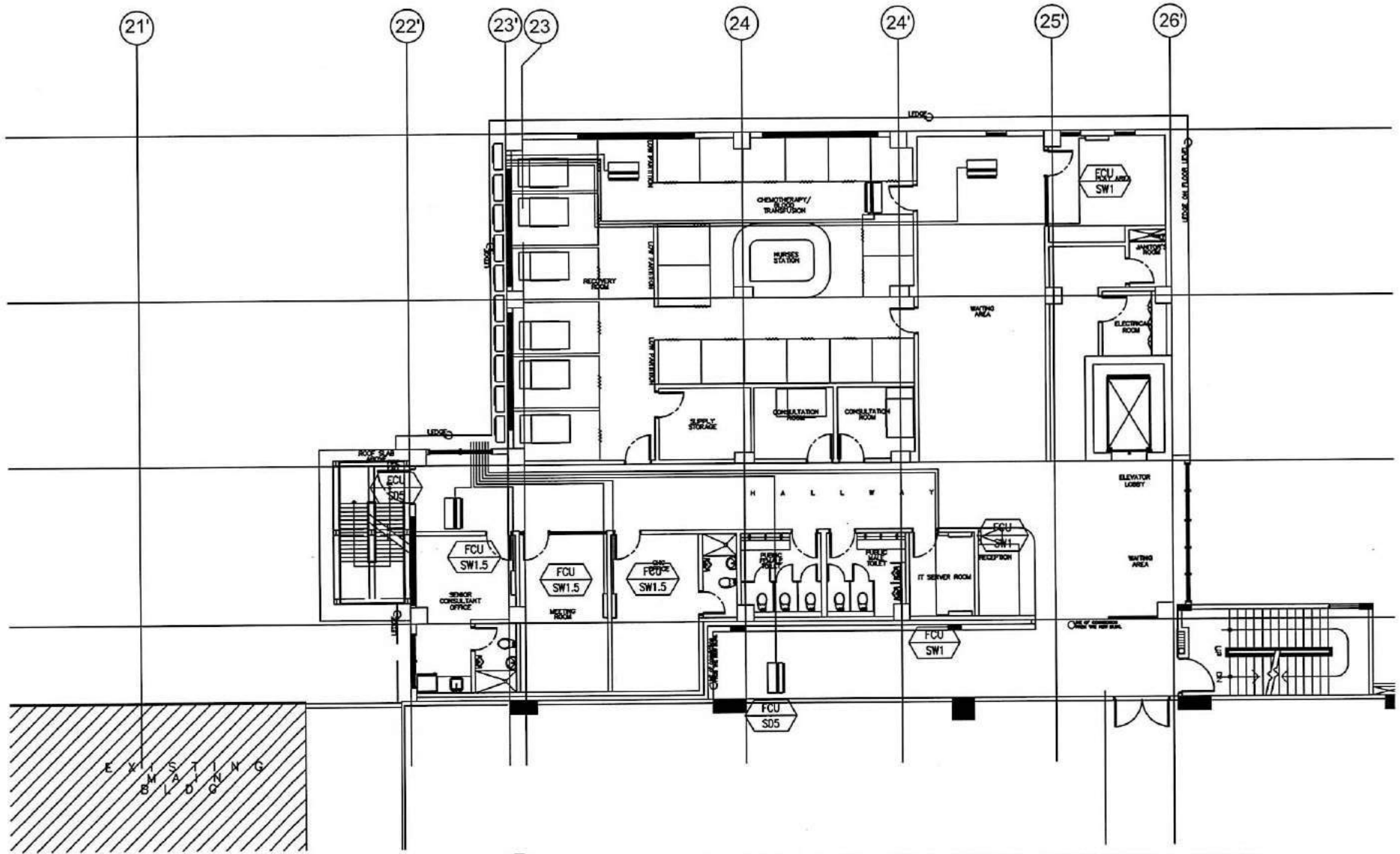
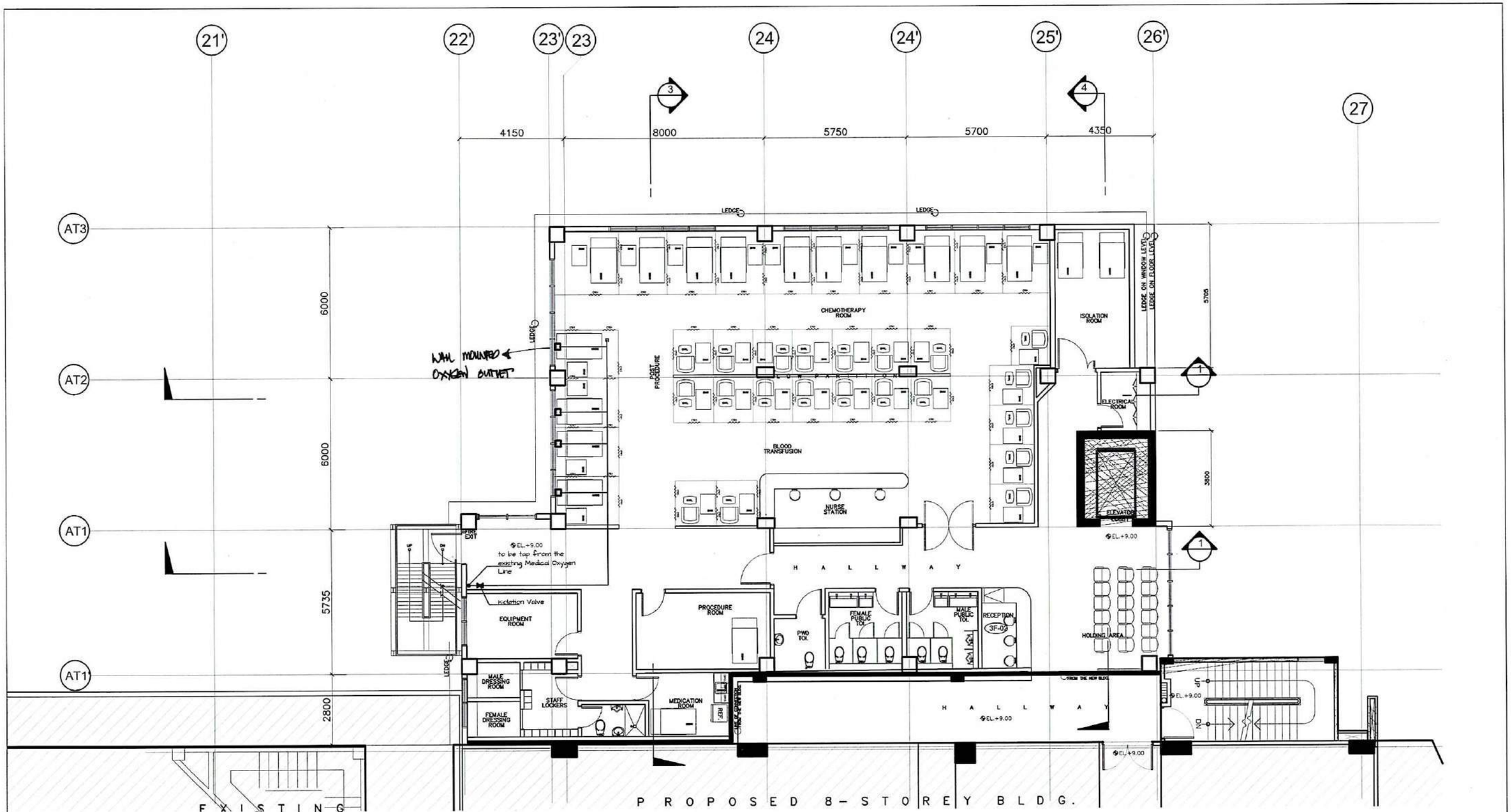
18. PROVIDE ALL SUPPLY/RETURN/EXHAUST/FRESH AIR DIFFUSERS, GRILLES AND REGISTERS WITH VOLUME DAMPER.



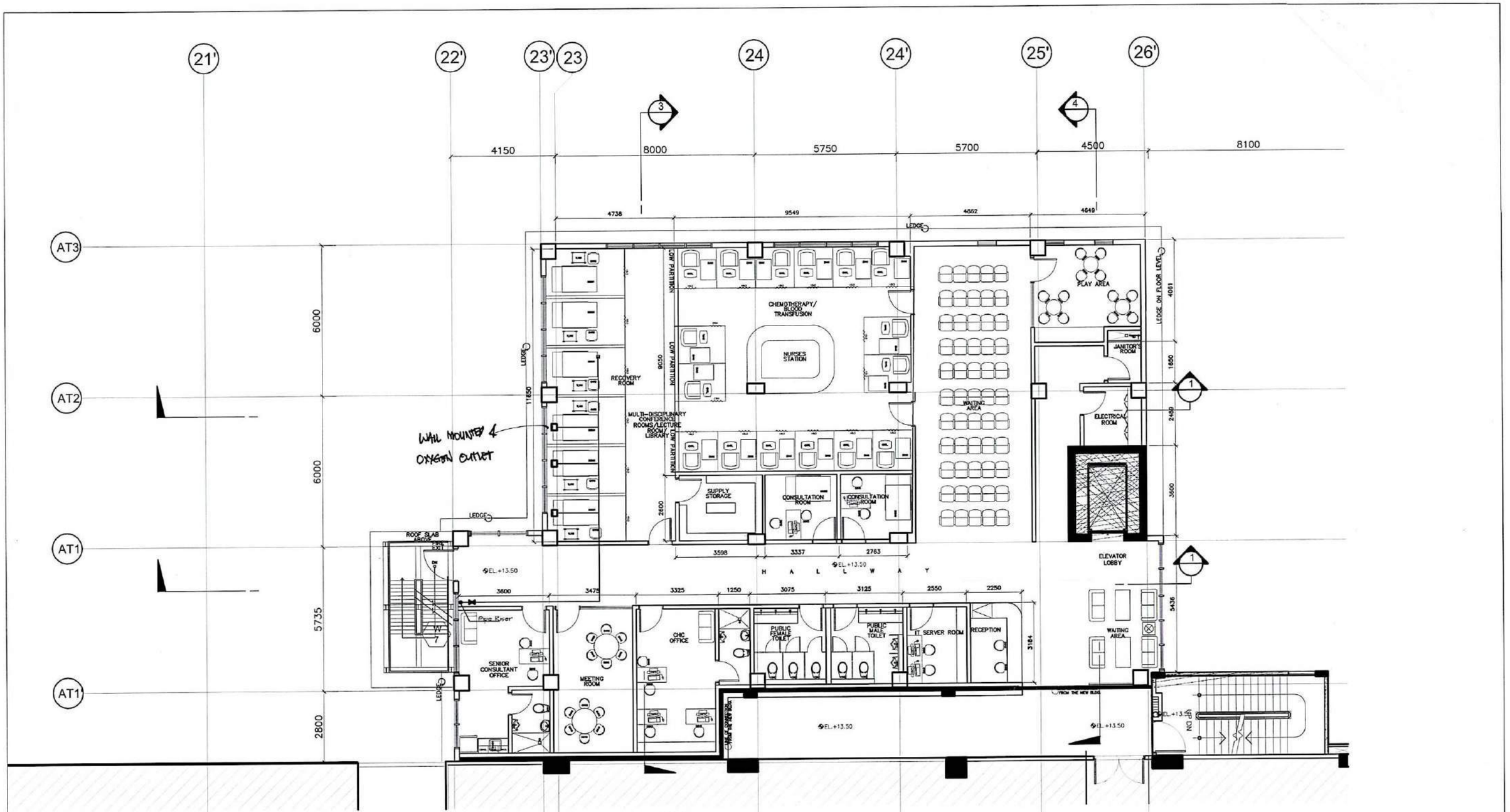
4 **FOURTH FLOOR EQUIPMENT AND REFRIGERANT PIPING LAYOUT**

Republic of the Philippines DEPARTMENT OF HEALTH PHILIPPINE CHILDREN'S MEDICAL CENTER Quezon Avenue, corner Agham Road	PROJECT TITLE: Construction of 3rd floor and 4th floor Cancer Building (FIT-OUT of 3rd floor and 4th floor) LOCATION Quezon Ave., cor Agham Rd., Quezon City	PREPARED BY: ENGR. CEDRICK P. GACUSAN Mechanical Engineer (Engr II)	NOTED BY: ENGR. DANIEL E. DAVID OIC, ENGINEERING	CONFORMED BY: END-USER	RECOMMENDING APPROVAL: ZENAIDA V. TALAGTAG, MGM - ESP OIC, GSD	ENDORSING APPROVAL: CECILIA O. GAN, MD, MNSA DEPUTY EXECUTIVE DIRECTOR - HSS Executive Member,Infrastructure Committee	APPROVED BY: SONIA B. GONZALEZ, MD, MScHSM, MPM OIC - EXECUTIVE DIRECTOR Chairman - Infrastructure Committee	SHEET CONTENT / NO: M-4 MECHANICAL PLAN SCALE: 1:200



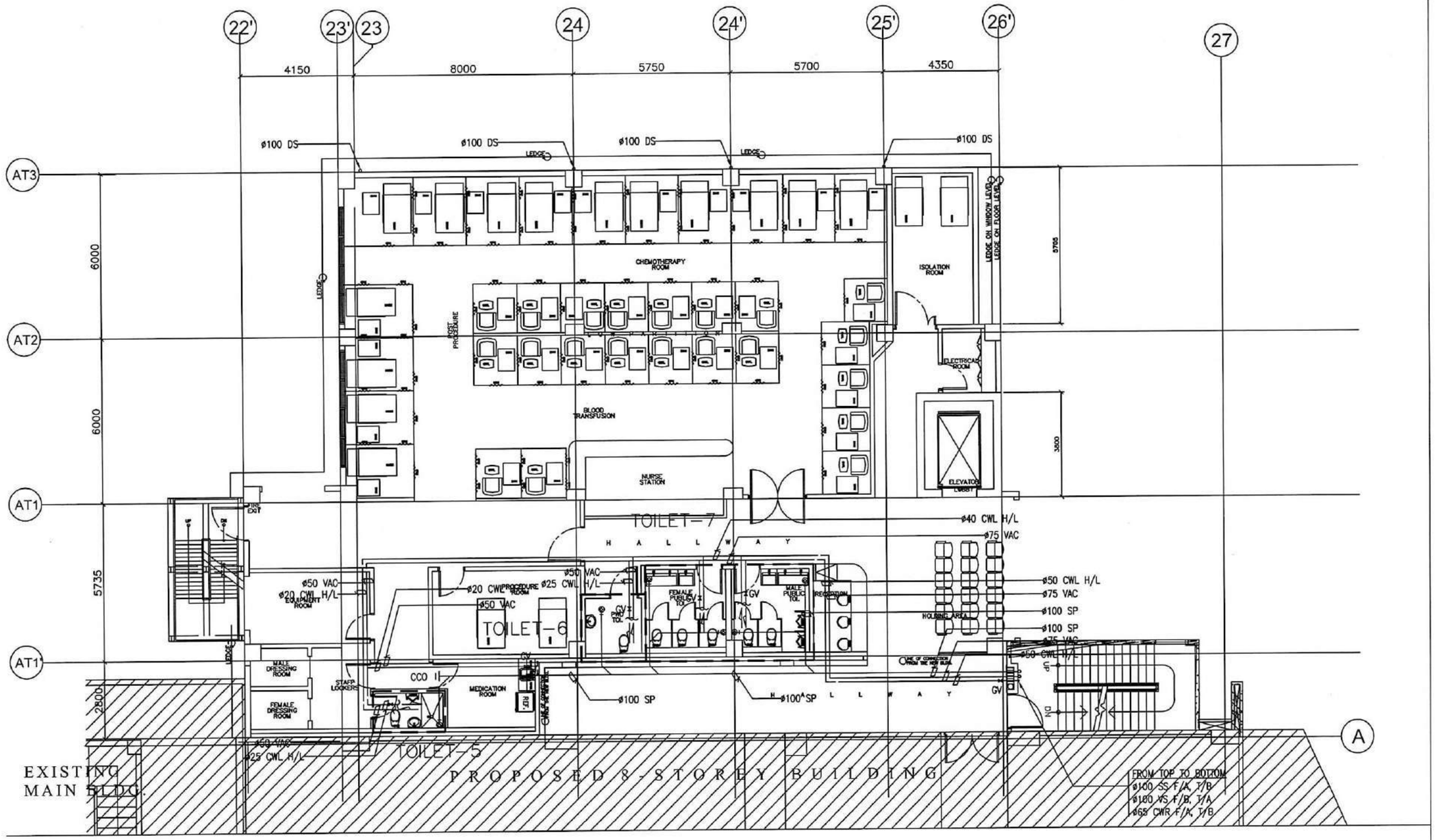
1 THIRD FLOOR MEDICAL GAS LAYOUT

Republic of the Philippines DEPARTMENT OF HEALTH PHILIPPINE CHILDREN'S MEDICAL CENTER Quezon Avenue, corner Agham Road	PROJECT TITLE: Construction of 3rd floor and 4th floor Cancer Building (FIT-OUT of 3rd floor and 4th floor) LOCATION Quezon Ave., cor Agham Rd., Quezon City	PREPARED BY: ENGR. CEDRICK P. GACUSAN Mechanical Engineer (Engr II)	NOTED BY: ENGR. DANIEL E. DAVID OIC, ENGINEERING	CONFORMED BY: END-USER	RECOMMENDING APPROVAL: ZENAIDA V. TALAGTAG, MGM - ESP OIC, GSD	ENDORSING APPROVAL: CECILIA O. GAN, MD, MNSA DEPUTY EXECUTIVE DIRECTOR - HSS Executive Member,Infrastructure Committee	APPROVED BY: SONIA B. GONZALEZ, MD, MScHSM, MPM OIC - EXECUTIVE DIRECTOR Chairman - Infrastructure Committee	SHEET CONTENT / NO: MG-1 MEDICAL GAS PLAN SCALE: 1:150



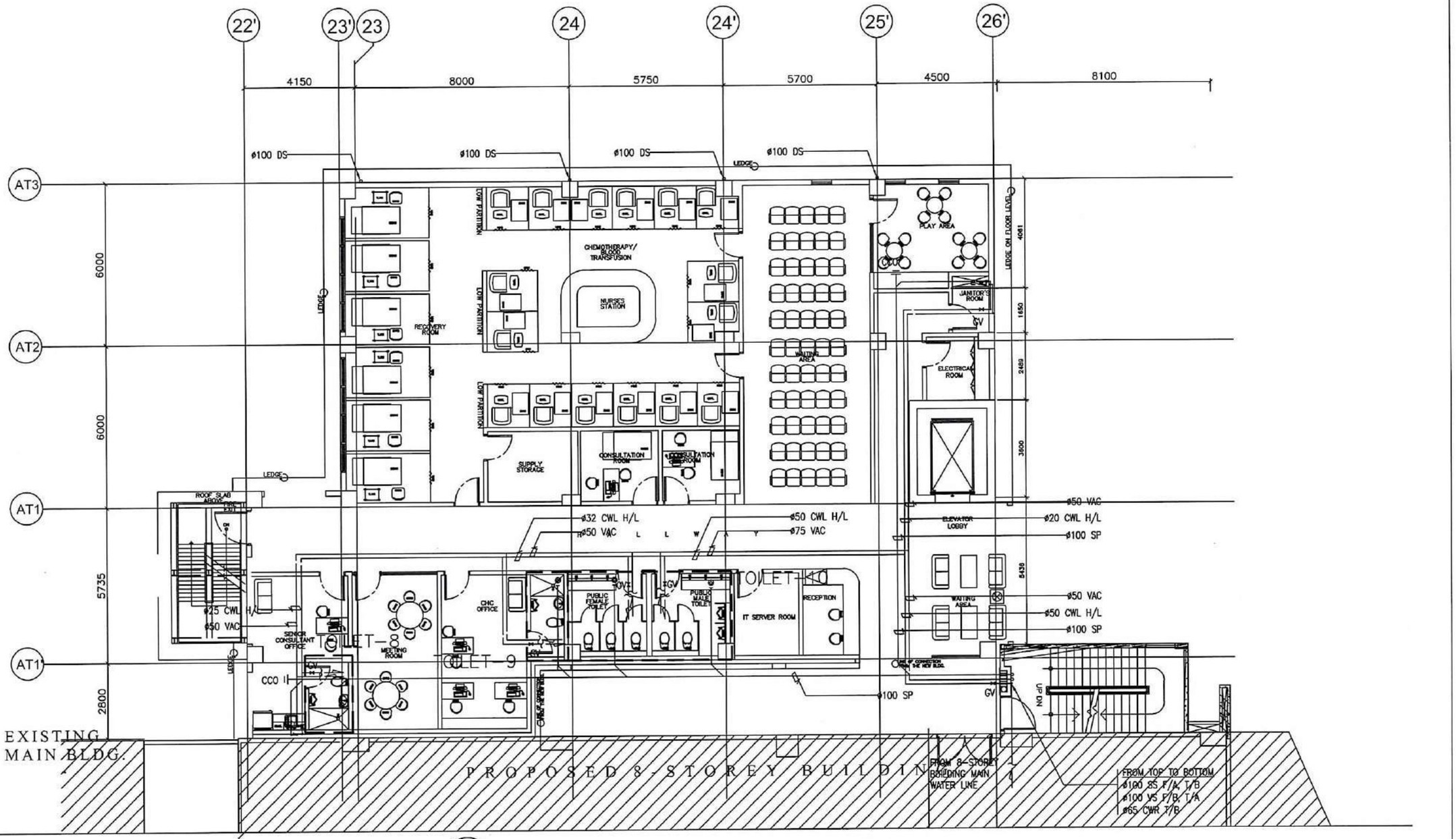
1 **FOURTH FLOOR MEDICAL GAS LAYOUT**

Republic of the Philippines DEPARTMENT OF HEALTH PHILIPPINE CHILDREN'S MEDICAL CENTER Quezon Avenue, corner Agham Road	PROJECT TITLE: Construction of 3rd floor and 4th floor Cancer Building (FIT-OUT of 3rd floor and 4th floor) LOCATION Quezon Ave., cor Agham Rd., Quezon City	PREPARED BY: ENGR. CEDRICK P. GACUSAN Mechanical Engineer (Engr II)	NOTED BY: ENGR. DANIEL E. DAVID OIC, ENGINEERING	CONFORMED BY: END-USER	RECOMMENDING APPROVAL: ZENAIDA V. TALAGTAG, MGM - ESP OIC, GSD	ENDORSING APPROVAL: CECILIA O. GAN, MD, MNSA DEPUTY EXECUTIVE DIRECTOR - HSS Executive Member,Infrastructure Committee	APPROVED BY: SONIA B. GONZALEZ, MD, MScHSM, MPM OIC - EXECUTIVE DIRECTOR Chairman - Infrastructure Committee	SHEET CONTENT / NO: MG-2 MEDICAL GAS PLAN SCALE: 1:150



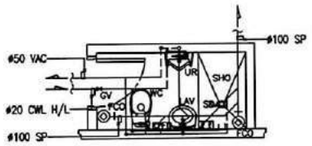
1 THIRD FLOOR PLUMBING LAYOUT

Republic of the Philippines DEPARTMENT OF HEALTH PHILIPPINE CHILDREN'S MEDICAL CENTER Quezon Avenue, corner Agham Road	PROJECT TITLE: Construction of 3rd floor and 4th floor Cancer Building (FIT-OUT of 3rd floor and 4th floor) LOCATION Quezon Ave., cor Agham Rd., Quezon City	PREPARED BY: ENGR. CEDRICK P. GACUSAN Mechanical Engineer (Engr II)	NOTED BY: ENGR. DANIEL E. DAVID OIC, ENGINEERING	CONFORMED BY: END-USER	RECOMMENDING APPROVAL: ZENAIDA V. TALAGTAG, MGM - ESP OIC, GSD	ENDORSING APPROVAL: CECILIA O. GAN, MD, MNSA DEPUTY EXECUTIVE DIRECTOR - HSS Executive Member,Infrastructure Committee	APPROVED BY: SONIA B. GONZALEZ, MD, MScHSM, MPM OIC - EXECUTIVE DIRECTOR Chairman - Infrastructure Committee	SHEET CONTENT / NO: P-1 PLUMBING PLAN SCALE: 1:150

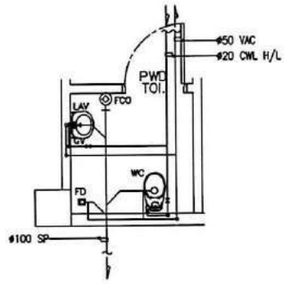


1 FOURTH FLOOR PLUMBING LAYOUT

Republic of the Philippines DEPARTMENT OF HEALTH PHILIPPINE CHILDREN'S MEDICAL CENTER Quezon Avenue, corner Agham Road	PROJECT TITLE: Construction of 3rd floor and 4th floor Cancer Building (FIT-OUT of 3rd floor and 4th floor) LOCATION Quezon Ave., cor Agham Rd., Quezon City	PREPARED BY: ENGR. CEDRICK P. GACUSAN Mechanical Engineer (Engr II)	NOTED BY: ENGR. DANIEL E. DAVID OIC, ENGINEERING	CONFORMED BY: END-USER	RECOMMENDING APPROVAL: ZENAIDA V. TALAGTAG, MGM - ESP OIC, GSD	ENDORSING APPROVAL: CECILIA O. GAN, MD, MNSA DEPUTY EXECUTIVE DIRECTOR - HSS Executive Member,Infrastructure Committee	APPROVED BY: SONIA B. GONZALEZ, MD, MScHSM, MPM OIC - EXECUTIVE DIRECTOR Chairman - Infrastructure Committee	SHEET CONTENT / NO: P-2 PLUMBING PLAN SCALE: 1:150



PLAN



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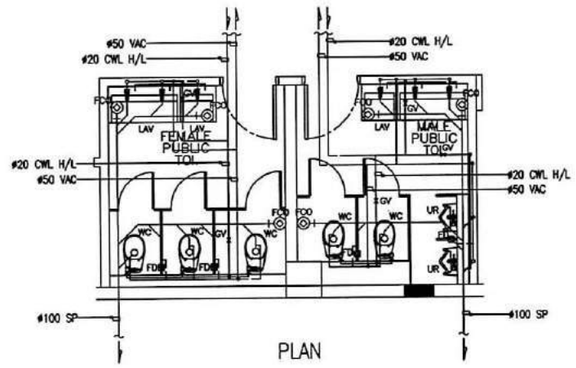
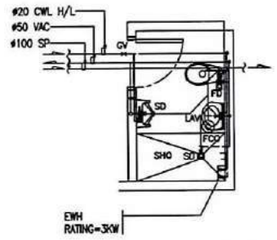


PLAN



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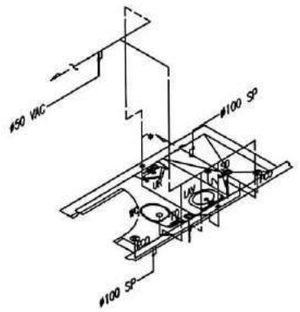
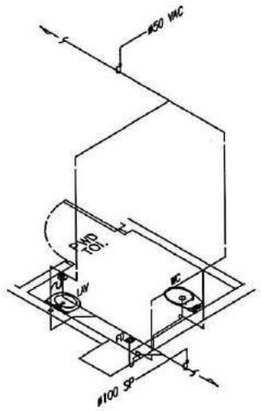


DRAINAGE ISOMETRY



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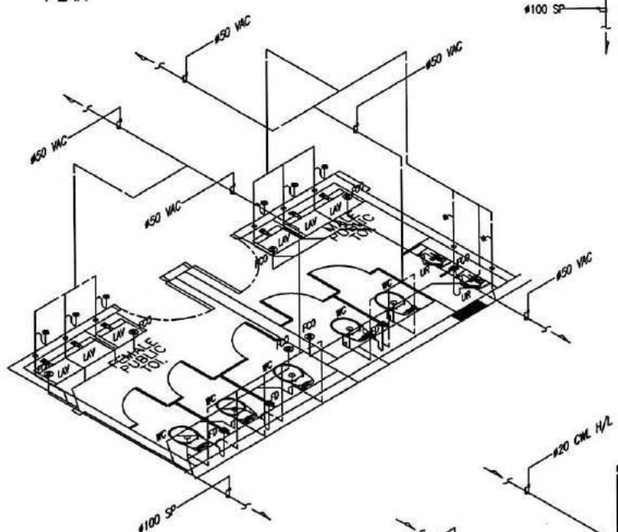

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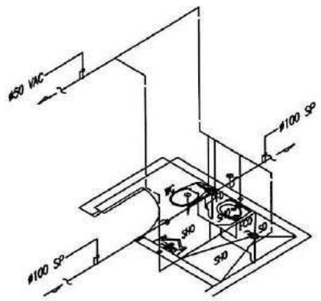

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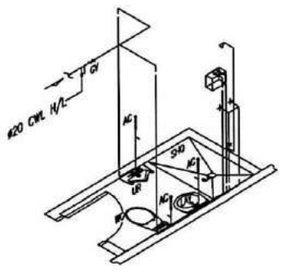
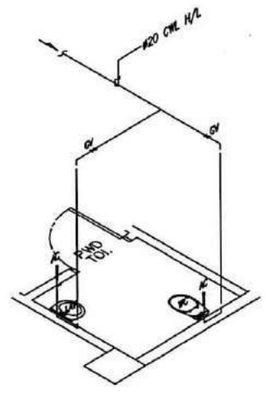


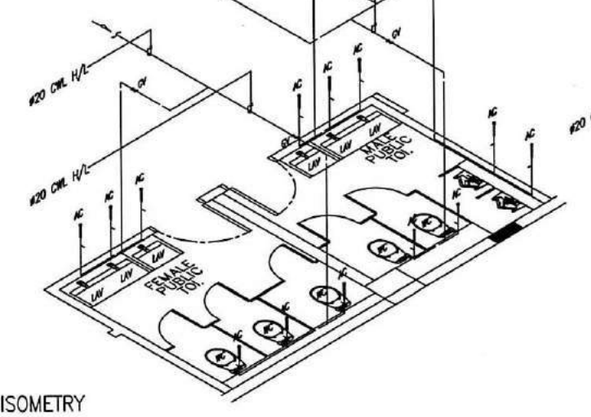
WATER SUPPLY ISOMETRY

1 **TOILET-5**



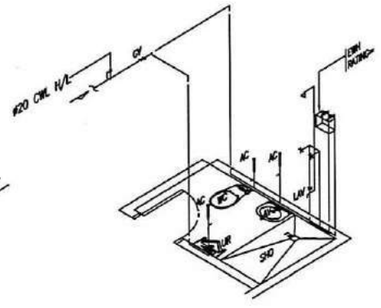
WATER SUPPLY ISOMETRY

2 **TOILET-6**



WATER SUPPLY ISOMETRY

3 **TOILET-7**



WATER SUPPLY ISOMETRY

4 **TOILET-8**

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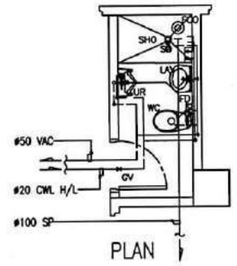
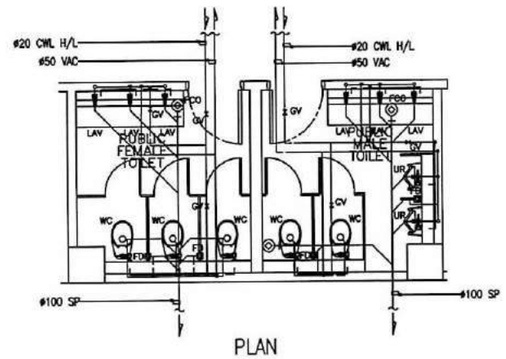


PLAN



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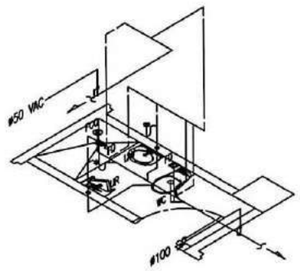

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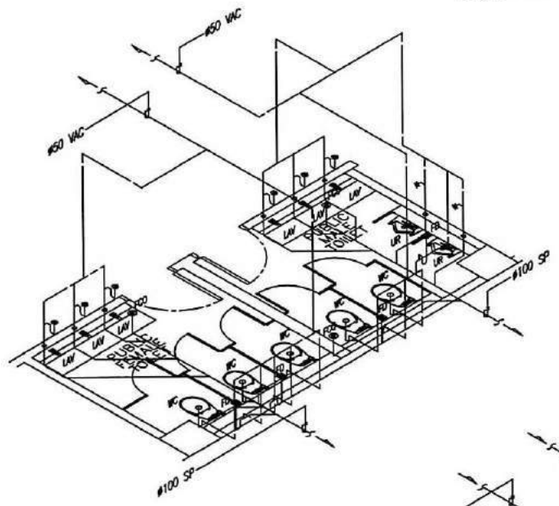
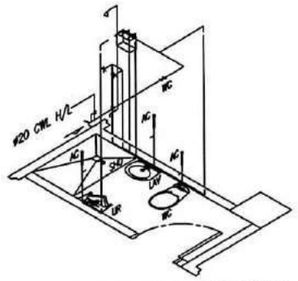
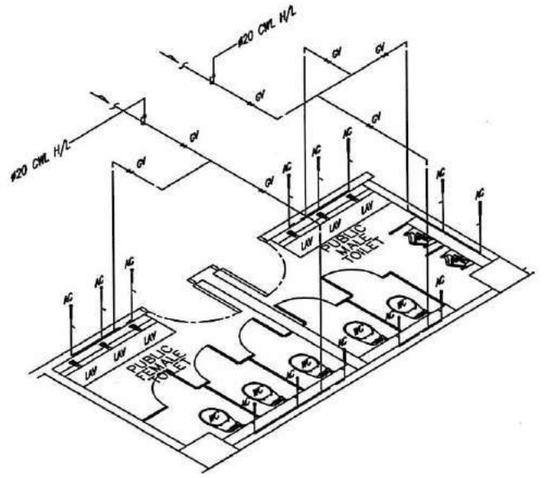


DRAINAGE ISOMETRY



WATER SUPPLY ISOMETRY

1 **TOILET-9**



WATER SUPPLY ISOMETRY

2 **TOILET-10**

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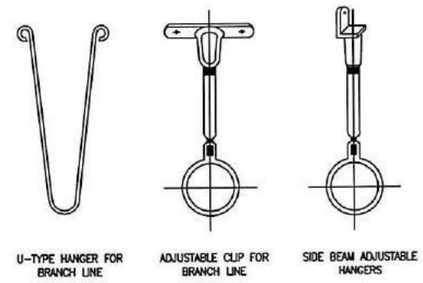
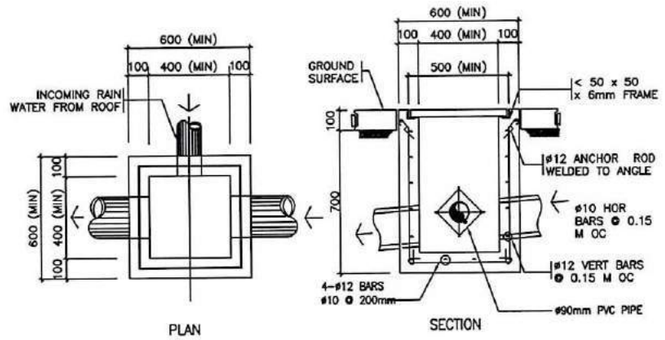
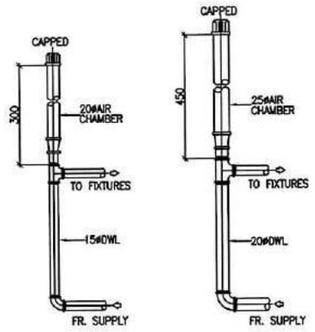


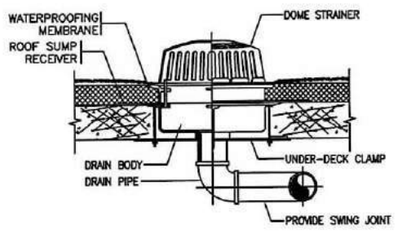
1 **ACCEPTABLE TYPE OF HANGERS DETAIL**
SCALE NTS



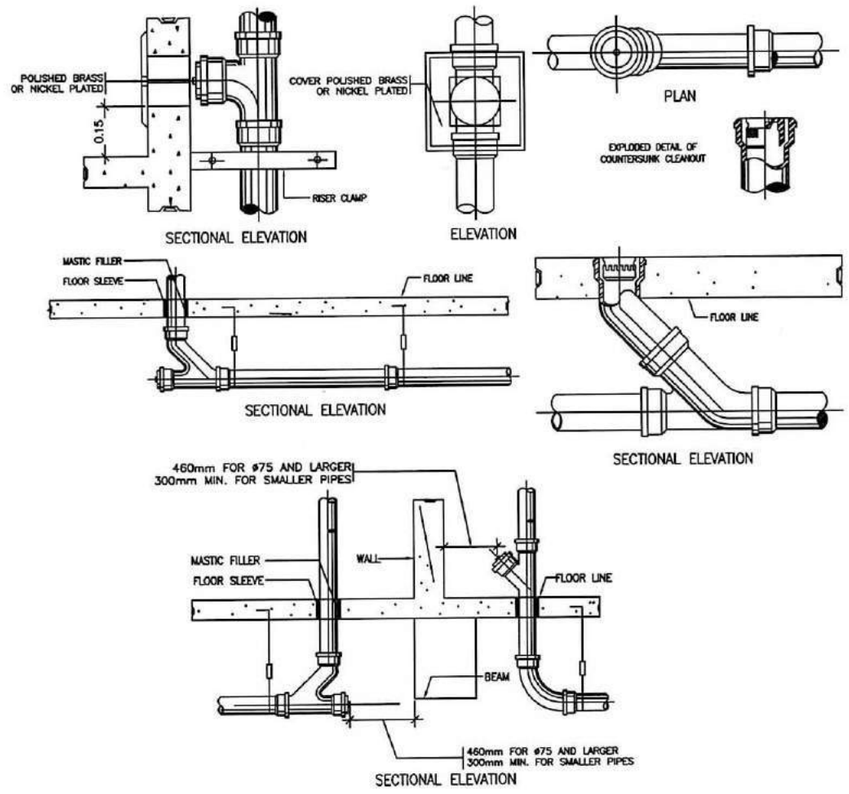
2 **CATCH BASIN DETAIL**
SCALE NTS



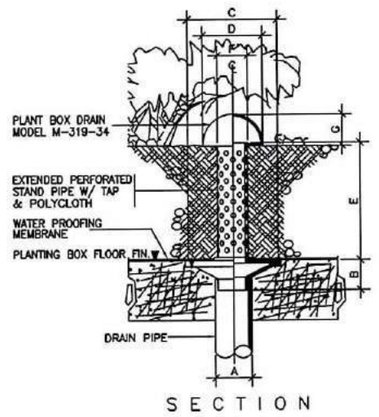
3 **AIR CHAMBER DETAIL**
SCALE NTS



4 **GUTTER DRAIN DETAIL**
SCALE NTS



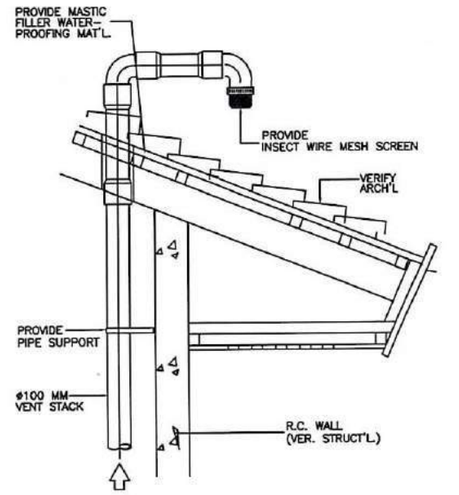
5 **FLOOR, WALL & CEILING CLEANOUT**
SCALE NTS



SCHEDULE OF DIMENSIONS

PIPE SIZE IN 'A'	DIMENSIONS IN MM.					
	B	C	D	E	F	G
50	41.2	100	121	4–6	44	60
75	41.2	127	121	4–6	44	60
100	45	133	121	4–6	44	60

6 **PLANTER'S DRAIN DETAIL**
SCALE NTS



7 **VENT STACK THRU ROOF DETAIL**
SCALE NTS

Republic of the Philippines DEPARTMENT OF HEALTH PHILIPPINE CHILDREN'S MEDICAL CENTER Quezon Avenue, corner Agham Road	PROJECT TITLE: Construction of 3rd floor and 4th floor Cancer Building (FIT-OUT of 3rd floor and 4th floor) LOCATION Quazon Ave., cor Agham Rd., Quezon City	PREPARED BY: ENGR. CEDRICK P. GACUSAN Mechanical Engineer (Engr II)	NOTED BY: ENGR. DANIEL E. DAVID OIC, ENGINEERING	CONFORMED BY: END-USER	RECOMMENDING APPROVAL: ZENAIDA V. TALAGTAG, MGM - ESP OIC, GSD	ENDORSING APPROVAL: CECILIA O. GAN, MD, MNSA DEPUTY EXECUTIVE DIRECTOR - HSS Executive Member, Infrastructure Committee	APPROVED BY: SONIA B. GONZALEZ, MD, MScHSM, MPM OIC - EXECUTIVE DIRECTOR Chairman - Infrastructure Committee	SHEET CONTENT / NO: P-5 PLUMBING PLAN SCALE: NTS

COST ESTIMATE FORM

Project :One (1) Lot Construction of Cancer Building (Fit Out of 3rd and 4th)

Location : Philippine Children's Medical Center, Agham Road corner Quezon Avenue Quezon City
Owner : Philippine Children's Medical Center
Bidder :
Date :

Item No.		Description	Qty	Unit	Materials		Labor		Total Direct Cost	Mark-Up		VAT	Total Indirect Cost	Total Cost	Unit Cost
					Unit Cost	Total Amount	Unit Cost	Total Amount		OCM	Profit				
I		**GENERAL REQUIREMENTS**													
	a.	Mobilization / Demobilization	1.00	lot											
	b.	Permits (all necessary permits)	1.00	lot											
	c.	Temporary Facilities	1.00	lot											
	d.	Site Operating Expenses	1.00	lot											
	e.	Construction, Safety, Health and Security	1.00	lot											
	f.	Site Management and Supervision Staff	1.00	lot											
	g.	Materials and quality assurance test	1.00	lot											
	h.	Housekeeping/disposal of debris	1.00	lot											
	i.	Temporary support equipment	1.00	lot											
		SUB-TOTAL (GENERAL REQUIREMENTS)													
II		**ARCHITECTURAL WORKS**													
		THIRD FLOOR													
	A.1	**Masonry Works**													
		Walls (Interior)													
		W - 6" CHB	252.73	sq.m.											
		Drywall (12mm Thick)	83.60	sq.m.											
		Drywall (16mm Thick)	232.80	sq.m.											
		Others													
	B.1	**Finishes**													
		- Floor Finishes													
		FF-1													
		Roll-Form Vinyl, Anti Static & Anti Bacterial	435.90	sq.m.											
		FF-2													
		600 x 600 mm Homogeneous porcelain Granite Tiles (Unpolished)	23.50	sq.m.											
		FF-3													
		600 x 600 mm Homogeneous porcelain Granite Tiles (Polished)	22.10	sq.m.											
		FF-5													
		Plain Cement Plaster fin. With Epoxy Paint	4.70	sq.m.											
		FF-7													
		300 X 300 mm Homogenous Porcelain Granite Tiles (Polished)	3.45	sq.m.											
		- Wall Finishes (WF)													
		Plastering	744.87	sq.m.											
		WF-4 300mm x 600mm polished verified Ceramic Tiles	70.20	sq.m.											
		WF-8 200mm x 300mm polished verified Ceramic Tiles	9.45	sq.m.											
		- Ceiling Finishes (CF)													
		CF-1													
		600 x 600mm Acoustic Tiles on Powder Coated Aluminum T-	318.70	sq.m.											
		CF-2													
		12mm thk Boral Gypsum Board (Regular)	81.10	sq.m.											
		CF-3													
		12mm thk Moisture Resistant Boral Gypsum Board	30.03	sq.m.											
		Ceiling Finish - 04													
		Under Slab	14.70	sq.m.											
		Exterior Ceiling	-	sq.m.											
	C.1	**OPENINGS (DOORS AND WINDOWS)**													
		Doors including jambs, Door Hardware and Finishes													
		D - 2 1500mm x 2100mm													

_____
Signature over printed name
Authorized Representative
Position : _____
Name of Bidder : _____

Item No.		Description	Qty	Unit	Materials		Labor		Total Direct Cost	Mark-Up		VAT	Total Indirect Cost	Total Cost	Unit Cost
					Unit Cost	Total Amount	Unit Cost	Total Amount		OCM	Profit				
		Double-Leaf Fire Rated Metal Door with Panic Hardware and Door	2.00	set											
		D - 3 900mm x 2100mm													
		Single-Leaf Hollow Core Flush door with 3/4" thk. Laminated surface	3.00	set											
		D - 4 900mm x 2100mm													
		Single-Leaf Hollow core Flush type Door with 3/4" thk. Laminated	4.00	set											
		D - 5 900mm x 2400mm													
		Single-Leaf Hollow core Flush type Door with 3/4" thk. Laminated	1.00	set											
		D-10 1000mm x 2100mm													
		Single-Leaf Hollow Core Flush door with 3/4" thk. Laminated surface	1.00	set											
		D-12 2000mm x 2100mm													
		Double-Leaf Fire Rated Metal Door with Panic Hardware and Door	2.00	set											
		D-13 1200mm x 2100mm													
		Single-Leaf Fire Rated Metal Door w/ Insulation, View Window,	2.00	set											
		Windows													
		W-5 2425mm x 750mm													
		Aluminum Fixed Window with Tempered Clear Glass on Aluminum	1.00	set											
		W-6 2150mm x 1200mm													
		Aluminum Fixed Window with Tempered Clear Glass on Aluminum	3.00	set											
		W-8 4950mm x 1200mm													
		Aluminum Fixed Window with Tempered Clear Glass on Aluminum	5.00	set											
	D.1	**Painting Works**													
		- Exterior Wall													
		Semi Gloss Latex Paint	712.88	sq.m.											
		- Interior Wall													
		WF-1 Semi Gloss Latex Paint	113.85	sq.m.											
		WF-2 Anti-Bacterial & Odor-Absorbent Paint	585.43	sq.m.											
		WF-5 200mm thk CHB wall painted (Paint)	23.94	sq.m.											
		- Ceiling Painting	439.30	sq.m.											
		- Others													
	E.1	**Waterproofing**													
		Capillary type and Integral waterproofing for Toilets and slop sink	26.88	sq.m.											
	F.1	**Way Finding/ Signages**	1.00	lot											
		SUB-TOTAL THIRD FLOOR (ARCHITECTURAL WORKS)													
		FOURTH FLOOR													
	A.1	**Masonry Works**													
		Walls (Interior)													
		W - 6" CHB	356.44	sq.m.											
		Drywall (12mm Thick)	34.80	sq.m.											
		Drywall (16mm Thick)	322.40	sq.m.											
		Others													
	B.1	**Finishes**													
		- Floor Finishes													
		FF-1													
		Roll-Form Vinyl, Anti Static & Anti Bacterial	392.70	sq.m.											
		FF-2													
		600 x 600 mm Homogeneous porcelain Granite Tiles (Unpolished)	59.50	sq.m.											
		FF-3													
		600 x 600 mm Homogeneous porcelain Granite Tiles (Polished)	17.70	sq.m.											
		FF-5													
		Plain Cement Plaster fin. With Epoxy Paint	8.40	sq.m.											
		FF-7													
		300mm x 300mm Homogeneous Porcelain Granite Tiles (Polished)	7.80	sq.m.											
		- Wall Finishes (WF)													
		Plastering	870.14	sq.m.											
		WF-4 300mm x 600mm polished verified Ceramic Tiles	52.19	sq.m.											
		WF-8 200mm x 300mm polished verified Ceramic Tiles	21.01	sq.m.											
		- Ceiling Finishes (CF)													

Item No.		Description	Qty	Unit	Materials		Labor		Total Direct Cost	Mark-Up		VAT	Total Indirect Cost	Total Cost	Unit Cost
					Unit Cost	Total Amount	Unit Cost	Total Amount		OCM	Profit				
		CF-1													
		600 x 600mm Acoustic Tiles on Powder Coated Aluminum T-	142.30	sq.m.											
		CF-2													
		12mm thk Boral Gypsum Board (Regular)	244.30	sq.m.											
		CF-3													
		12mm thk Moisture Resistant Boral Gypsum Board	24.00	sq.m.											
		Ceiling Finish - 04													
		Under Slab	21.30	sq.m.											
		Exterior Ceiling (Eaves)	-	sq.m.											
	C.1	**OPENINGS (DOORS AND WINDOWS)**													
		Doors including jambs, Door Hardware and Finishes													
		D - 3 900mm x 2100mm													
		Single-Leaf Hollow Core Flush door with 3/4" thk. Laminated surface	4.00	set											
		D - 4 900mm x 2100mm													
		Single-Leaf Hollow core Flush type Door with 3/4" thk. Laminated	7.00	set											
		D - 5 900mm x 2400mm													
		Single-Leaf Hollow core Flush type Door with 3/4" thk. Laminated	2.00	set											
		D-11 900mm x 2100mm													
		Frameless Single-Leaf Door, Tempered Glass Frosted	1.00	set											
		D-12 2000mm x 2100mm													
		Double-Leaf Fire Rated Metal Door with Panic Hardware and Door	1.00	set											
		D-13 1200mm x 2100mm													
		Single-Leaf Fire Rated Metal Door w/ Insulation, View Window,	2.00	set											
		D-14 1200mm x 2100mm													
		Single-Leaf Fire Rated Metal Door w/ Insulation, View Window,	3.00	set											
		Windows													
		W-5 2425mm x 750mm													
		Aluminum Fixed Window with Tempered Clear Glass on Aluminum	1.00	set											
		W-6 2150mm x 1200mm													
		Aluminum Fixed Window with Tempered Clear Glass on Aluminum	3.00	set											
		W-8 4950mm x 1200mm													
		Aluminum Fixed Window with Tempered Clear Glass on Aluminum	5.00	set											
	D.1	**Painting Works**													
		- Exterior Wall													
		Semi Gloss Latex Paint	712.88	sq.m.											
		- Interior Wall													
		WF-1 Semi Gloss Latex Paint	458.98	sq.m.											
		WF-2 Anti-Bacterial & Odor-Absorbent Paint	345.57	sq.m.											
		WF-5 200mm thk CHB wall painted (Paint)	26.04	sq.m.											
		- Ceiling Painting	432.40	sq.m.											
		- Others													
	E.1	**Waterproofing**													
		Capillary type and Integral waterproofing for Toilets and slop sink	28.43	sq.m.											
	F.1	**Roofing**													
		Longspan Gauge 24	601.25	sq.m.											
	F.1	**Way Finding/ Signages**	1.00	lot											
		SUB-TOTAL FOURTH FLOOR (ARCHITECTURAL WORKS)													
		SUB-TOTAL (ARCHITECTURAL WORKS)													
III		**MECHANICAL WORKS**													
	1.00	**AC UNITS**													
		Third Floor	14.00	Unit/s											
		FCU Split Type Wall Mounted Inverter 1 TR	1.00	Unit/s											
		FCU Split Type Wall Mounted Inverter 1.5 TR	3.00	Unit/s											
		FCU Split Type Wall Mounted Inverter 2 TR	1.00	Unit/s											
		FCU Split Type Ducted Type Inverter 5 TR	4.00	Unit/s											
		Toilet Exhaust Fan 100CFM	3.00	Unit/s											
		Exhaust Fan 200CFM	2.00	Unit/s											

Item No.		Description	Qty	Unit	Materials		Labor		Total Direct Cost	Mark-Up		VAT	Total Indirect Cost	Total Cost	Unit Cost
					Unit Cost	Total Amount	Unit Cost	Total Amount		OCM	Profit				
		Fourth Floor	17.00	Unit/s											
		FCU Split Type Wall Mounted Inverter 1 TR	3.00	Unit/s											
		FCU Split Type Wall Mounted Inverter 1.5 TR	3.00	Unit/s											
		FCU Split Type Ducted Type Inverter 5 TR	5.00	Unit/s											
		Toilet Exhaust Fan 100CFM	4.00	Unit/s											
		Exhaust Fan 200CFM	2.00	Unit/s											
	2.00	**REFRIGERANT PIPING WORKS WITH INSULATION**													
		Third Floor	751.00	ft											
		FCU Split Type Wall Mounted Inverter 1 TR	125.00	ft											
		FCU Split Type Wall Mounted Inverter 1.5 TR	120.00	ft											
		FCU Split Type Wall Mounted Inverter 2 TR	60.00	ft											
		FCU Split Type Ducted Type Inverter 5 TR	446.00	ft											
		Fourth Floor	1,450.00	ft											
		FCU Split Type Wall Mounted Inverter 1 TR	556.00	ft											
		FCU Split Type Wall Mounted Inverter 1.5 TR	298.00	ft											
		FCU Split Type Ducted Type Inverter 5 TR	596.00	ft											
	3.00	**Fabricated Bracket**													
		Third Floor	9.00	Unit/s											
		FCU Split Type Wall Mounted Inverter 1 TR	1.00	Unit/s											
		FCU Split Type Wall Mounted Inverter 1.5 TR	3.00	Unit/s											
		FCU Split Type Wall Mounted Inverter 2 TR	1.00	Unit/s											
		FCU Split Type Ducted Type Inverter 5 TR	4.00	Unit/s											
		Fourth Floor	1.00	lot											
		FCU Split Type Wall Mounted Inverter 1 TR	3.00	Unit/s											
		FCU Split Type Wall Mounted Inverter 1.5 TR	3.00	Unit/s											
		FCU Split Type Ducted Type Inverter 5 TR	5.00	Unit/s											
		SECONDARY CONTROL WIRING	1.00	lot											
		CONDENSATE DRAIN LINE	1.00	lot											
	4.00	**Ducting Works**													
		A/C Ductworks	1.00	lot											
		KDK													
		20mm thk Pre-Installed rigid duct w/ P.E. Foam, aluminum foil facing	382.00	sqm											
		EXHAUST AIR DUCT 150mm dia.	64.00	m											
		Vent Cap 200 dia	11.00	pcs											
		FRESH AIR LOUVER 350 X 350 mm	9.00	pcs											
		500x500 Supply Ceiling Diffuser 4 way type	46.00	pcs											
		350x350 Supply Grille Single Deflection Type	4.00	pcs											
		Volume damper 250x250	46.00	lm											
		Volume damper 150x150	4.00	pcs											
		Flexible Connector	57.00	lm											
		Return Air Register W/ MERV Filter And UV Light, 1000 x 400	14.00	pcs											
		Merv 7	14.00	pcs											
		UV light , DUV 2 x 300	28.00	pcs											
		Consumables													
		Vulcaseal	6.00	gal											
		Duct gasket	45.00	rolls											
		Red Oxide	2.00	gal											
		Paint Thinner	1.00	gal											
		Paint Brush	1.00	pc											
		Drill Bit 3/8 (Masonry)	1.00	pc											
		Drill Bit 3/8 (Metal)	1.00	pc											
		Drill Bit 9/64 (Metal)	5.00	pcs											
		Blint revits 1/8	2.00	boxes											
		Canvass Cloth (neoprene)	12.00	lm											
		Corner Angle	300.00	pcs.											
		Nuts and washer 3/8	310.00	each											

Item No.		Description	Qty	Unit	Materials		Labor		Total Direct Cost	Mark-Up		VAT	Total Indirect Cost	Total Cost	Unit Cost
					Unit Cost	Total Amount	Unit Cost	Total Amount		OCM	Profit				
		Duct tape	25.00	rolls											
		Refrigerant	5.00	tanks											
		Nitrogen	7.00	tanks											
		Oxyacetylene	5.00	sets											
		Silver Rod	20.00	pcs											
		P.U Tape	10.00	rolls											
		Elec Tape	10.00	rolls											
		Rugby	1.00	gal											
		Welding Rod	10.00	kg											
		Aerotape	20.00	rolls											
		PVC Solvent	10.00	cans											
	5.00	**MEDICAL GAS PIPING**													
		Third Floor	1.00	lot											
		Degreased HD Cu. Tube, 1-5/8" OD x 20', Type L		pcs											
		Degreased HD Cu. Tube, 1-3/8" OD x 20', Type L		pcs											
		Degreased HD Cu. Tube, 1-1/8" OD x 20', Type L		pcs											
		Degreased HD Cu. Tube, 7/8" OD x 20', Type L		pcs											
		Degreased HD Cu. Tube, 3/4" OD x 20', Type L	4.00	pcs											
		Degreased HD Cu. Tube, 5/8" OD x 20', Type L	4.00	pcs											
		Degreased HD Cu. Tube, 1/2" OD x 20', Type L	10.00	pcs											
		Copper Fittings (Elbow, Tee, Coupling & Reducer)	1.00	lot											
		Service Valves with necessary fittings	1.00	lot											
		Surface Mount Wall Type 1-Gas Zone Valve Box c/w valve and	1.00	pcs											
		Surface Mount Wall Type 1-Gas Area Alarm c/w Pressure Switch	1.00	pcs											
		Oxygen Surface Mount Wall Type DISS Outlet, c/w rough-in & latch	4.00	sets											
		Bracketing Materials including threat sealant, silver brazing rod,	1.00	lot											
		Consumable Materials including threat sealant, silver brazing rod	1.00	lot											
		Electrical Wiring Materials for Cylinder Manifold and area alarm	1.00	lot											
		Oxygen Flowmeter 0-15 liter per minute Flow range with Flowmeter	4.00	pcs											
		Fourth Floor	1.00	lot											
		Degreased HD Cu. Tube, 1-5/8" OD x 20', Type L		pcs											
		Degreased HD Cu. Tube, 1-3/8" OD x 20', Type L		pcs											
		Degreased HD Cu. Tube, 1-1/8" OD x 20', Type L		pcs											
		Degreased HD Cu. Tube, 7/8" OD x 20', Type L		pcs											
		Degreased HD Cu. Tube, 3/4" OD x 20', Type L	4.00	pcs											
		Degreased HD Cu. Tube, 5/8" OD x 20', Type L	4.00	pcs											
		Degreased HD Cu. Tube, 1/2" OD x 20', Type L	10.00	pcs											
		Copper Fittings (Elbow, Tee, Coupling & Reducer)	1.00	lot											
		Service Valves with necessary fittings	1.00	lot											
		Surface Mount Wall Type 1-Gas Zone Valve Box c/w valve and	1.00	pc											
		Surface Mount Wall Type 1-Gas Area Alarm c/w Pressure Switch	1.00	pc											
		Oxygen Surface Mount Wall Type DISS Outlet, c/w rough-in & latch	4.00	sets											
		Bracketing Materials including threat sealant, silver brazing rod,	1.00	lot											
		Consumable Materials including threat sealant, silver brazing rod	1.00	lot											
		Electrical Wiring Materials for Cylinder Manifold and area alarm	1.00	lot											
		Oxygen Flowmeter 0-15 liter per minute Flow range with Flowmeter	4.00	pcs											
		SUB-TOTAL (MECHANICAL WORKS)													
IV		**ELECTRICAL WORKS**													
		THIRD FLOOR													
	A.1	**Lighting System**													
		ROUGH-INS, SLABING, RECTIFICATION, GUIDE WIRING	1.00	lot											
		1/2 IMC Pipe	285.00	lgt											
		1/2 IMC Connector	295.00	pcs											
		1/2 IMC Coupling	57.00	pcs											
		Utility Box	70.00	pcs											
		Junction box	185.00	pcs											
		Junction box Cover	185.00	pcs											

Item No.		Description	Qty	Unit	Materials		Labor		Total Direct Cost	Mark-Up		VAT	Total Indirect Cost	Total Cost	Unit Cost
					Unit Cost	Total Amount	Unit Cost	Total Amount		OCM	Profit				
		1/2 Straight Connector	115.00	pcs											
		1/2 Flexible metallic tube	12.00	roll											
		1/2 Mica tube	5.00	roll											
		3/8 Threaded Round Bar 3m	40.00	lgt											
		1" x 1" Angle Bar 3m	14.00	lgt											
		U-Bolt 1/2 w/ nut and washer	45.00	pcs											
		3/8 Expansion Bolt	310.00	pcs											
		CABLE PULLING / WIRING	1.00	lot											
		3.5 mm2 THHN Wire (Red)	600.00	m											
		3.5 mm2 THHN Wire (Yellow)	600.00	m											
		3.5 mm2 THHN Wire (Blue)	600.00	m											
		3.5 mm2 THHN Wire (White)	1800.00	m											
		3.5 mm2 THHN Wire (Green)	1800.00	m											
		LIGHTING FIXTURES AND WIRING DEVICES	1.00	lot											
		Flourescent Lamp 0.3 x 1.2, s-36 watts	1.00	pcs											
		Recessed troffer flourescent lamp w/ acrylic diffuser 0.3 x 1.2 , 2-	15.00	pcs											
		Recessed troffer flourescent lamp w/ louver diffuser 0.3 x 1.2 , 2-	2.00	pcs											
		Recessed troffer flourescent lamp w/ louver diffuser 0.3 x 1.2 , 1-	4.00	pcs											
		Recessed Troffer 600x600mm, 2-20w Flourescent lamp w/ Louver	53.00	pcs											
		Recessed Downlight 6" dia. w/ Glass Diffuser, S-PL 18W Lamp for	31.00	pcs											
		LED strip linear cove lights	12.00	roll											
		Twin Emergency Lamps, 2 - 10W w/ 2Hr. Duration UL listed	14.00	pcs											
		1 - Gang Outlet(Universal)	18.00	pcs											
		1 - Gang Switch	9.00	pcs											
		2 - Gang Switch	14.00	pcs											
		2- Gang 3 way switch	7.00	pcs											
		3 - Gang Switch	3.00	pcs											
		LED Exit light	2.00	pcs											
		Consumables	1.00	lot											
		Electrical Tape/ Rubber Tape	30.00	pcs											
		Masking Tape	15.00	pcs											
		Newspaper/any Paper	5.00	kgs											
		G.I. Wires	25.00	kgs											
		Cutting Grinding Disk	35.00	pcs											
		Common Nail	5.00	kgs											
		Concrete Nail	5.00	kgs											
		Tox Screw	125.00	pcs											
		Metal Screw	125.00	pcs											
		1/2 IMC Locknut and Bushing	150.00	pcs											
		Cable Lube	7.00	pcs											
	B.1	**Power System**													
		ROUGH-INS, SLABING, RECTIFICATION, GUIDE WIRING	1.00	lot											
		1/2 IMC Pipe	423.00	lgt											
		1/2 IMC Connector	265.00	pcs											
		1/2 IMC Coupling	160.00	pcs											
		3/4 IMC Pipe	51.00	lgt											
		3/4 IMC Connector	29.00	pcs											
		3/4 IMC Coupling	17.00	pcs											
		1 IMC Pipe	55.00	lgt											
		1 IMC Connector	24.00	pcs											
		1 IMC Coupling	24.00	pcs											
		1 1/2 IMC Pipe	23.00	lgt											
		1 1/2 IMC Connector	7.00	pcs											
		1 1/2 IMC Coupling	7.00	pcs											
		2 IMC Pipe	16.00	lgt											
		2 IMC Connector	7.00	pcs											
		2 IMC Coupling	7.00	pcs											

Item No.		Description	Qty	Unit	Materials		Labor		Total Direct Cost	Mark-Up		VAT	Total Indirect Cost	Total Cost	Unit Cost
					Unit Cost	Total Amount	Unit Cost	Total Amount		OCM	Profit				
		Utility Box	93.00	pcs											
		Junction box	65.00	pcs											
		Junction box Cover	65.00	pcs											
		Pull Box 300mm x 300mm	9.00	pcs											
		3/8 Threaded Round Bar 3m	74.00	lgt											
		1" x 1" Angle Bar 3m	19.00	lgt											
		U-Bolt 1/2 w/ nut and washer	495.00	pcs											
		3/8 Expansion Bolt	275.00	pcs											
		CABLE PULLING / WIRING	1.00	lot											
		3.5 mm2 THHN Wire (Red)	550.00	m											
		3.5 mm2 THHN Wire (Yellow)	511.00	m											
		3.5 mm2 THHN Wire (Blue)	510.00	m											
		3.5 mm2 THHN Wire (White)	1571.00	m											
		3.5 mm2 THHN Wire (Green)	1061.00	m											
		5.5 mm2 THHN Wire (Red)	847.00	m											
		5.5 mm2 THHN Wire (Yellow)	847.00	m											
		5.5 mm2 THHN Wire (Blue)	770.00	m											
		5.5 mm2 THHN Wire (White)	2464.00	m											
		3.5 mm2 THHN Wire (Green)	1694.00	m											
		14 mm2 THHN Wire (Red)	201.00	m											
		14 mm2 THHN Wire (Yellow)	212.00	m											
		14 mm2 THHN Wire (Blue)	159.00	m											
		14 mm2 THHN Wire (White)	512.00	m											
		8.0 mm2 THHN Wire (Green)	482.00	m											
		8.0 mm2 THHN Wire (Red)	35.00	m											
		8.0 mm2 THHN Wire (Yellow)	35.00	m											
		8.0 mm2 THHN Wire (Blue)	35.00	m											
		8.0 mm2 THHN Wire (White)	65.00	m											
		5.5 mm2 THHN Wire (Green)	35.00	m											
		22 mm2 THHN Wire (Red)	35.00	m											
		22 mm2 THHN Wire (Yellow)	155.00	m											
		22 mm2 THHN Wire (Blue)	155.00	m											
		22 mm2 THHN Wire (White)	155.00	m											
		8.0 mm2 THHN Wire (Green)	155.00	m											
		60 mm2 THHN Wire (Red)	35.00	m											
		60 mm2 THHN Wire (Yellow)	35.00	m											
		60 mm2 THHN Wire (Blue)	35.00	m											
		60 mm2 THHN Wire (White)	35.00	m											
		22 mm2 THHN Wire (Green)	35.00	m											
		DEVICES	1.00	lot											
		2 - Gang Convenience Outlet w/ grounding	76.00	pcs											
		GFCI Convenience Outlet	4.00	pcs											
		Hand dryer outlet	2.00	pcs											
		Consumables													
		Electrical Tape/ Rubber Tape	25.00	pcs											
		Masking Tape	15.00	pcs											
		Newspaper/any Paper	5.00	kgs											
		G.I. Wires	25.00	kgs											
		Cutting Grinding Disk	30.00	pcs											
		Common Nail	5.00	kgs											
		Concrete Nail	5.00	kgs											
		Tox Screw	125.00	pcs											
		Metal Screw	125.00	pcs											
		1/2 IMC Locknut and Bushing	280.00	pcs											
		3/4 IMC Locknut and Bushing	200.00	pcs											
		Cable Lube	7.00	pcs											
		PANELS	1.00	lot											

Item No.		Description	Qty	Unit	Materials		Labor		Total Direct Cost	Mark-Up		VAT	Total Indirect Cost	Total Cost	Unit Cost
					Unit Cost	Total Amount	Unit Cost	Total Amount		OCM	Profit				
		NEMA 3R- 30A	13.00	assy											
		NEMA 3R - 50A	2.00	assy											
		MPB	1.00	assy											
		Main: 150AT/225AF , 3pole, 400V													
		Branches:													
		9 - 50AT / 60AF, 1P, 230V													
		1- SPARE													
		EPP	1.00	assy											
		Main: 100AT/100AF , 3pole, 400V w/neutral bus													
		Branches:													
		16 - 30AT / 50AF, 1P, 230V													
		2-SPARE													
		PP	1.00	assy											
		Main: 75AT/100AF , 3pole, 400V w/neutral bus													
		Branches:													
		15 - 30AT / 50AF, 1P, 230V													
		3-SPARE													
		ELP	1.00	assy											
		Main: 75AT/100AF , 3pole, 400V w/neutral bus													
		Branches:													
		14 - 30AT / 50AF, 1P, 230V													
		1 - spare													
		1 - space													
		LP	1.00	assy											
		Main: 75AT/100AF , 3pole, 400V w/neutral bus													
		Branches:													
		10 - 30AT / 50AF, 1P, 230V													
		2 - spare													
		FOURTH FLOOR													
	A.2	**Lighting System**													
		ROUGH-INS, SLABING, RECTIFICATION, GUIDE WIRING	1.00	lot											
		1/2 IMC Pipe	265.00	lgt											
		1/2 IMC Connector	253.00	pcs											
		1/2 IMC Coupling	49.00	pcs											
		Utility Box	54.00	pcs											
		Junction box	162.00	pcs											
		Junction box Cover	162.00	pcs											
		1/2 Straight Connector	97.00	pcs											
		1/2 Flexible metallic tube	8.00	roll											
		1/2 Mica tube	4.00	roll											
		3/8 Threaded Round Bar 3m	48.00	pcs											
		1" x 1" Angle Bar 3m	14.00	lgt											
		U-Bolt 1/2 w/ nut and washer	35.00	lgt											
		3/8 Expansion Bolt	265.00	pcs											
		CABLE PULLING / WIRING	1.00	lot											
		3.5 mm2 THHN Wire (Red)	550.00	m											

Republic of the Philippines
DEPARTMENT OF HEALTH
PHILIPPINE CHILDREN'S MEDICAL CENTER
Bids and Awards Committee
Quezon Avenue, Quezon City 1100
website: **www.pcmc.gov.ph** email: **bac@pcmc.gov.ph**
Trunkline: 588-9900 local 361/355 Telefax No.: 924-0870

SECTION IX

Checklist of Technical and Financial Documents

One (1) Lot

Construction of Cancer Center Building (Fit Out of 3rd and 4th Floor)

IB-2022-077

Checklist of Technical and Financial Documents

The Bidder shall submit the following **TECHNICAL COMPONENT ENVELOPE (ARRANGED, NUMBERED AND TABBED)** ***[Strictly NO using of staple wire and thick materials for tabs]*** as enumerated below:

Use of indelible ink color blue shall be used by the authorized signatory in signing the required forms.

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

Note: For the purpose of updating the Certificate of Registration and Membership, all Class "A" eligibility documents mentioned in this section supporting the veracity, authenticity and validity of the Certificate shall remain current and updated. The failure by the prospective bidder to update its Certificate with the current and updated Class "A" eligibility documents shall result in the automatic suspension of the validity of its Certificate until such time that all of the expired Class "A" eligibility documents has been updated (per GPPB Resolution No. 15-2021).

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. *(Use of Form No. DOBA-PCMC-SCF3b is required)*

and

☐ (c) Statement of the bidder's Single Largest Completed Contract (SLCC) similar to the contract to be bid (**Refer to Bid Data Sheet ITB Clause 5.2**), except under conditions provided under the rules (*use of Form No.* ***DOBA-PCMC-SCF3a*** *is required*)

☐ (d) Special PCAB License in case of Joint Ventures;
and registration for the type and cost of the contract to be bid
(**Refer to Bid Data Sheet ITB Clause 10.3**); **and**

☐ (e) Original copy of Bid Security. If in the form of a Surety Bond, submit also a certification issued by the Insurance Commission (**Refer to Bid Data Sheet ITB Clause 15.1**);

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 *(Use of the Form No.* ***DOBA-PCMC-SQF24*** *as the guide*)

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;

Supporting documents shall be the following:

i. Statement of the Qualifications of the Key Personnel Proposed to be assigned to the contract (*use of the Form No.* ***DOBA-PCMC-SQF17*** *is required*)
ii. Contractor's letter - Certificate to the Procuring Entity (*use of the Form No.* ***DOBA-PCMC-CCF23*** *is required)*
iii. Key Personnel's Certificate of Employment *use of the Form No.* (***DOBA-PCMC-KCF18*** *is required*)
iv. Bio-Data of each of the key personnel *(use of the Form No.* ***DOBA-PCMC-BPF16*** *is required*)

c. 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 (*use of Form No.* ***DOBA-PCMC-LEF20*** *is required);* **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 the Net Financial Contracting Capacity (NFCC) (*Use of Form No. DOBA–PCMC–NFF4 is required****);***

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.

I. 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;

Note: Bidder shall return to PCMC the issued USB Flash Drive containing the following :

1. ***Soft copy of their accomplished Bill of Quantities and Detailed Price Schedule (in excel format).*** Any discrepancies between the submitted hard copy and soft copy of the Bill of Quantities and Detailed Estimates, the hard copy will prevail.

2. **SCANNED copy** (in **PDF Format**) **of ALL** the required documents under Section VIII. Checklist of Technical and Financial Documents

and

☐ (m) Cash Flow by Quarter and payments schedule (*use of Form No. **DOBA-PCMC-CFF27** as the guide*)

CONFORME:

_____	_____
Authorized Signatory Signature over printed name	Contact No:

_____	_____	_____
Name of Company/Firm Contact No.	Company's Official Email Address (where notices will be sent)	Company's Official