

**PHILIPPINE BIDDING DOCUMENTS**

**Procurement of  
INFRASTRUCTURE  
PROJECTS**

Government of the Republic of the Philippines

**PROPOSED CONSTRUCTION OF HANDWASHING  
FACILITY AND REHABILITATION OF DAY CARE CENTER  
AT DISTRICT 6 AREA XII**

**Project number:  
22-00009**

**Sixth Edition  
July 2020**

# Preface

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

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

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

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

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

- a. All the documents listed in the Table of Contents are normally required for the procurement of Infrastructure Projects. However, they should be adapted as necessary to the circumstances of the particular Project.
- b. Specific details, such as the “*name of the Procuring Entity*” and “*address for bid submission*,” should be furnished in the Instructions to Bidders, Bid Data Sheet, and Special Conditions of Contract. The final documents should contain neither blank spaces nor options.
- c. This Preface and the footnotes or notes in italics included in the Invitation to Bid, BDS, General Conditions of Contract, Special Conditions of Contract, Specifications, Drawings, and Bill of Quantities are not part of the text of the final document, although they contain instructions that the Procuring Entity should strictly follow.
- d. The cover should be modified as required to identify the Bidding Documents as to the names of the Project, Contract, and Procuring Entity, in addition to date of issue.

- e. Modifications for specific Procurement Project details should be provided in the Special Conditions of Contract as amendments to the Conditions of Contract. For easy completion, whenever reference has to be made to specific clauses in the Bid Data Sheet or Special Conditions of Contract, these terms shall be printed in bold typeface on Sections I (Instructions to Bidders) and III (General Conditions of Contract), respectively.
- f. For guidelines on the use of Bidding Forms and the procurement of Foreign-Assisted Projects, these will be covered by a separate issuance of the Government Procurement Policy Board.

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# *Glossary of Terms, Abbreviations, and Acronyms*

**ABC** – Approved Budget for the Contract.

**ARCC** – Allowable Range of Contract Cost.

**BAC** – Bids and Awards Committee.

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

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

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

**BIR** – Bureau of Internal Revenue.

**BSP** – Bangko Sentral ng Pilipinas.

**CDA** – Cooperative Development Authority.

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

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

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

**CPI** – Consumer Price Index.

**DOLE** – Department of Labor and Employment.

**DTI** – Department of Trade and Industry.

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

**GFI** – Government Financial Institution.

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

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

**GOP** – Government of the Philippines.

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

**LGUs** – Local Government Units.

**NFCC** – Net Financial Contracting Capacity.

**NGA** – National Government Agency.

**PCAB** – Philippine Contractors Accreditation Board.

**PhilGEPS** - Philippine Government Electronic Procurement System.

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

**PSA** – Philippine Statistics Authority.

**SEC** – Securities and Exchange Commission.

**SLCC** – Single Largest Completed Contract.

**UN** – United Nations.



## ***Section I. Invitation to Bid***

### **Notes on the Invitation to Bid**

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

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

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

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



**REPUBLIC OF THE PHILIPPINES**  
**QUEZON CITY GOVERNMENT**  
**BIDS AND AWARDS COMMITTEE FOR INFRASTRUCTURE &**  
**CONSULTANCY**



2<sup>nd</sup> floor, Finance Building, Procurement Department, Quezon City Hall Complex, Elliptical Road, Quezon City

January 17, 2022

## Invitation to Bid

| No.                               | Project No. | Project Name   | Location                            | Amount        | Duration Cal. Days | Office            | Source Fund                                     |
|-----------------------------------|-------------|--|-------------------------------------|---------------|--------------------|-------------------|---|
| <b><i>Buildings – Small B</i></b> |             |  |                                     |               |                    |                   |   |
| 1                                 | 22-00001    | Proposed Rehabilitation of Day Care Center at District 5 / Area IX (Cluster 2)   | Novaliches Proper, Nagkaisang Nayon | 3,596,040.51  | 60                 | Engineering Dept. | Engineering Department-Continuing Appropriation |
| 2                                 | 22-00002    | Proposed Construction of Hand Washing Facility and Rehabilitation of Day Care Center at District 5 / Area VIII (Cluster 3) | Kailigayahan, Fairview              | 4,390,415.05  | 60                 | Engineering Dept. | Engineering Department-Continuing Appropriation |
| 3                                 | 22-00003    | Proposed Construction of Hand Washing Facility and Rehabilitation of Day Care Center at District 6 / AREA X                | Sauyo                               | 4,513,739.69  | 75                 | Engineering Dept. | Engineering Department-Continuing Appropriation |
| 4                                 | 22-00004    | Proposed Construction of Hand Washing Facility and Rehabilitation of Day Care Center at District 6 / Area XI               | Balonbato, Sangandaan               | 5,659,364.94  | 90                 | Engineering Dept. | Engineering Department-Continuing Appropriation |
| 5                                 | 22-00005    | Proposed Construction of Hand Washing Facility and Rehabilitation of Day Care Center at District 5 / AREA VIII (Cluster 2) | Pasong Putik Proper, Sta. Lucia     | 6,193,888.63  | 60                 | Engineering Dept. | Engineering Department-Continuing Appropriation |
| 6                                 | 22-00006    | Proposed Construction of Hand Washing Facility and Rehabilitation of Day Care Center at District 5 Area X                  | Bagbag, San Bartolome, Gulod        | 6,734,114.50  | 60                 | Engineering Dept. | Engineering Department-Continuing Appropriation |
| 7                                 | 22-00007    | Proposed Rehabilitation of Day Care Center at District 5 Area IX (Cluster 1)   | Nagkaisang Nayon, San Agustin       | 6,973,975.80  | 60                 | Engineering Dept. | Engineering Department-Continuing Appropriation |
| 8                                 | 22-00008    | Proposed Construction of Two (2) Storey Nomar II Day Care Center at Barangay San Bartolome                                 | San Bartolome                       | 9,776,081.57  | 180                | Engineering Dept. | Engineering Department-Continuing Appropriation |
| 9                                 | 22-00009    | Proposed Construction of Hand Washing Facility and Rehabilitation of Day Care Center at District 6 / Area XII              | Pasong Tamo                         | 9,855,463.80  | 75                 | Engineering Dept. | Engineering Department-Continuing Appropriation |
| 10                                | 22-00010    | Proposed Renovation of ITDD, AMO and District Coordinators at Second Floor Main Building, QC Hall Compound                 | Central                             | 13,236,971.37 | 180                | Engineering Dept. | Engineering Department-Continuing Appropriation |

| <b><u>Buildings – Medium A</u></b>     |          |  |                  |               |     |                   |  |
|--|----------|--|------------------|---------------|-----|-------------------|--|
| 11                                     | 22-00011 | Proposed Construction of Four (4) Storey with Deck Quirino 2-C Barangay Hall                                     | Quirino 2-C      | 41,886,320.36 | 300 | Engineering Dept. | Engineering Department-Continuing Appropriation                              |
| 12                                     | 22-00012 | Proposed Construction of Material Recovery and Composting Facility (MRCF) at Barangay Holy Spirit (Phase 1)      | Holy Spirit      | 75,484,667.34 | 360 | Engineering Dept. | Engineering Department-Continuing Appropriation                              |
| <b><u>Flood Control – Small B</u></b>  |          |  |                  |               |     |                   |  |
| 13                                     | 22-00013 | Proposed Construction of Retaining Wall at Housing No. 23  | Greater Lagro    | 3,611,788.95  | 120 | Engineering Dept. | Local Disaster Risk Reduction and Management Fund - Continuing Appropriation |
| <b><u>Flood Control – Medium A</u></b> |          |  |                  |               |     |                   |  |
| 14                                     | 22-00014 | Proposed Construction of Reinforced Concrete Canal at Balingasa Creek (Old Samson Road)                          | Balingasa        | 39,226,171.70 | 240 | Engineering Dept. | Local Disaster Risk Reduction and Management Fund - Continuing Appropriation |
| 15                                     | 22-00015 | Proposed Construction of Reinforce Concrete Canal at Culiati Creek (Mindanao Avenue to existing Bridge / Road 5) | Project 6        | 60,562,554.95 | 300 | Engineering Dept. | Local Disaster Risk Reduction and Management Fund - Continuing Appropriation |
| <b><u>Parks – Small B</u></b>          |          |  |                  |               |     |                   |  |
| 16                                     | 22-00016 | Proposed Construction of Linear Park (Diamond HOA) at Kasunduan Street   | Commonwealth     | 4,885,324.49  | 90  | Parks Dept.       | Engineering Department-Continuing Appropriation                              |
| <b><u>Roads – Small B</u></b>          |          |  |                  |               |     |                   |  |
| 17                                     | 22-00017 | Proposed Land Development of Human and Pet Crematorium and Columbarium Phase 2 at Barangay Bagong Silangan       | Bagong Silangan  | 2,064,680.70  | 90  | Engineering Dept. | Engineering Department-Continuing Appropriation                              |
| 18                                     | 22-00018 | Proposed Rehabilitation of Drainage System, Sidewalk and Surface Improvement at Economia Street                  | Bagumbayan       | 8,294,235.72  | 150 | Engineering Dept. | OCM - 20% Community Development Fund   |
| 19                                     | 22-00019 | Proposed Rehabilitation of Road and Drainage at Gozum Street (St. James Subdivision)                             | Nagkaisang Nayon | 14,188,360.03 | 180 | Engineering Dept. | OCM - 20% Community Development Fund (Previous Years Accom Balances)         |

1. The **QUEZON CITY LOCAL GOVERNMENT**, through *funding source of various years* intends to apply the sum stated above being the Approved Budget for the Contract (ABC) to payments under the contract *for the above stated Projects*. Bids received in excess of the ABC shall be automatically rejected at bid opening.
2. The **QUEZON CITY LOCAL GOVERNMENT** now invites bids for the above Procurement Project. Completion of the Works is required *as stated above*. Bidders should have completed a contract similar to the Project. The description of an eligible bidder is contained in the Bidding Documents, particularly, in Section II (Instructions to Bidders).
3. Bidding will be conducted through open competitive bidding procedures using non-discretionary "*pass/fail*" criterion as specified in the 2016 revised Implementing Rules and Regulations (IRR) of Republic Act (RA) No. 9184.
4. Interested bidders may obtain further information from **QUEZON CITY LOCAL GOVERNMENT – BAC Secretariat** and inspect the Bidding Documents at the address given below *weekdays from 8:00 am. – 5:00 p.m.*
5. A complete set of Bidding Documents may be acquired by interested bidders on **18 January 2022 (Tuesday)** from given address and website/s below *and upon payment of a non-refundable fee for the Bidding Documents, pursuant to the latest Guidelines issued by the GPPB*. The Procuring Entity shall allow the bidder to present its proof of payment for the fees *presented in person*.

**STANDARD RATES:**

| <b>Approved Budget for the Contract</b> | <b>Maximum Cost of Bidding Documents<br/>(in Philippine Peso)</b> |
|---|---|
| More than 1 Million up to 5 Million     | 5,000.00  |
| More than 5 Million up to 10 Million    | 10,000.00   |
| More than 10 Million up to 50 Million   | 25,000.00   |
| More than 50 Million up to 500 Million  | 50,000.00   |
| More than 500 Million                   | 75,000.00   |

The following are the requirements for purchase of Bidding Documents;

1. PhilGEPS Registration Certificate (Platinum – 3 Pages)
2. Document Request List (DRL)
3. Authorization to purchase bidding documents
  - 3.1 Secretary's Certificate (for corporation)
  - 3.2 Special Power of Attorney (for sole proprietorship)
4. Notarized Joint Venture Agreement (if applicable)
5. Letter of Intent

It must be duly received by the BAC Secretariat at 2<sup>nd</sup> Floor, Procurement Department, Finance Building, Quezon City Hall Compound on or before **January 25, 2022 - 5:00PM**.

6. The **QC- BAC- INFRASTRUCTURE & CONSULTANCY** will hold a Pre-Bid Conference<sup>1</sup> on **January 26, 2022 at 10:00 AM at 2<sup>nd</sup> Floor, Procurement Department-Bidding Room, Finance Building, Quezon City Hall Compound** or we encourage the prospective bidders to join through our **Virtual Conference (ZOOM APP)** which shall be open to prospective bidders.

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



**Virtual Conference (ZOOM APP)**

**Meeting ID: 854 9489 0133**

**Password: 273320**

7. Bids must be duly received by the BAC Secretariat through manual submission at the office address as indicated below, on or before **February 9, 2022 – 9:00AM**. Late bids shall not be accepted.
8. All bids must be accompanied by a bid security in any of the acceptable forms and in the amount stated in **ITB Clause 16**.
9. Bid opening shall be on **February 9, 2022 - 10:00 AM** at **2<sup>nd</sup> Floor, Procurement Department-Bidding Room, Finance Building, Quezon City Hall Compound** and/or via Zoom. Bids will be opened in the presence of the bidders' representatives who choose to attend the activity.

**Virtual Conference (ZOOM APP)**

**Meeting ID: 810 3646 5257**

**Password: 201522**

10. The *Quezon City Local Government* reserves the right to reject any and all bids, declare a failure of bidding, or not award the contract at any time prior to contract award in accordance with Sections 35.6 and 41 of the 2016 revised Implementing Rules and Regulations (IRR) of RA No. 9184, without thereby incurring any liability to the affected bidder or bidders.
11. For further information, please refer to:

**ATTY. DOMINIC B. GARCIA**

OIC, Procurement Department

2<sup>nd</sup> Floor, Procurement Department,

Finance Building, Quezon City Hall Compound

Elliptical Road, Barangay Central Diliman, Quezon City.

Tel. No. (02)8988-4242 loc. 8506/8710

Email Add: [bacinfra.procurement@quezoncity.gov.ph](mailto:bacinfra.procurement@quezoncity.gov.ph)

Website: [www.quezoncity.gov.ph](http://www.quezoncity.gov.ph)

12. You may visit the following websites:

For downloading of Bidding Documents: <https://quezoncity.gov.ph/public-notices/procurement/>

By:

**ATTY. MARK DALE DIAMOND P. PERRAL**

Chairman, BAC-Infra and Consultancy

## ***Section II. Instructions to Bidders***

### **Notes on the Instructions to Bidders**

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

## 1. Scope of Bid

The Procuring Entity, **Quezon City Government** invites Bids for the **PROPOSED CONSTRUCTION OF HANDWASHING FACILITY AND REHABILITATION OF DAY CARE CENTER AT DISTRICT 6 AREA XII**, with Project Identification Number **22-00009**.

*[Note: The Project Identification Number is assigned by the Procuring Entity based on its own coding scheme and is not the same as the PhilGEPS reference number, which is generated after the posting of the bid opportunity on the PhilGEPS website.]*

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 **2022** in the amount of **Nine Million Eight Hundred Fifty-Five Thousand Four Hundred Sixty-Three Pesos & 80/100 Cts. (P 9,855,463.80)**.

2.2. The source of funding is:

a. LGUs, the Annual or Supplemental Budget, as approved by the Sanggunian.

## 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 not allowed.

- 7.1. *[If Procuring Entity has determined that subcontracting is allowed during the bidding , state:]* The Bidder must submit together with its Bid the documentary requirements of the subcontractor(s) complying with the eligibility criterial stated in **ITB** Clause 5 in accordance with Section 23.4 of the 2016 revised IRR of RA No. 9184 pursuant to Section 23.1 thereof.
- 7.2. *[If subcontracting is allowed during the contract implementation stage, state:]* 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 Procuring Entity will hold a pre-bid conference for this Project on the specified date and time and either at its physical address on **January 26, 2022, 10:00 A.M. at 2nd Floor, Procurement Department-Bidding Room, Finance Building, Quezon City Hall Compound** and/or we encourage the prospective bidders to join through our **Virtual Conference (ZOOM APP) Meeting ID: 854 9489 0133 Password: 273320**

## **9. Clarification and Amendment of Bidding Documents**

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

## **10. Documents Comprising the Bid: Eligibility and Technical Components**

- 10.1. The first envelope shall contain the eligibility and technical documents of the Bid as specified in **Section IX. Checklist of Technical and Financial Documents**.
- 10.2. If the eligibility requirements or statements, the bids, and all other documents for submission to the BAC are in foreign language other than English, it must be accompanied by a translation in English, which shall be authenticated by the appropriate Philippine foreign service establishment, post, or the equivalent office having jurisdiction over the foreign bidder's affairs in the Philippines. For Contracting Parties to the Apostille Convention, only the translated documents shall be authenticated through an apostille pursuant to GPPB Resolution No. 13-2019 dated 23 May 2019. The English translation shall govern, for purposes of interpretation of the bid.
- 10.3. A valid PCAB License is required, and in case of joint ventures, a valid special PCAB License, and registration for the type and cost of the contract for this Project. Any additional type of Contractor license or permit shall be indicated in the **BDS**.

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

## **11. Documents Comprising the Bid: Financial Component**

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

## **12. Alternative Bids**

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

## **13. Bid Prices**

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

## **14. Bid and Payment Currencies**

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

## 15. Bid Security

- 15.1. The Bidder shall submit a Bid Securing Declaration or any form of Bid Security in the amount indicated in the **BDS**, which shall be not less than the percentage of the ABC in accordance with the schedule in the **BDS**.
- 15.2. The Bid and bid security **in no case shall exceed One Hundred Twenty (120) calendar days from the date of opening of bids, unless duly extended by the bidder upon the request of the Head of the Procuring Entity (HoPE) of the Quezon City Local Government**. 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.

## 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 5 of the **IB**.

## 18. Opening and Preliminary Examination of Bids

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

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

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

## 19. Detailed Evaluation and Comparison of Bids

- 19.1. The Procuring Entity's BAC shall immediately conduct a detailed evaluation of all Bids rated "*passed*" using non-discretionary pass/fail criteria. The BAC shall consider the conditions in the evaluation of Bids under Section 32.2 of 2016 revised IRR of RA No. 9184.
- 19.2. If the Project allows partial bids, all Bids and combinations of Bids as indicated in the **BDS** shall be received by the same deadline and opened and evaluated simultaneously so as to determine the Bid or combination of Bids offering the lowest calculated cost to the Procuring Entity. Bid Security as required by **ITB** Clause 15 shall be submitted for each contract (lot) separately.
- 19.3. In all cases, the NFCC computation pursuant to Section 23.4.2.6 of the 2016 revised IRR of RA No. 9184 must be sufficient for the total of the ABCs for all the lots participated in by the prospective Bidder.

## **20. Post Qualification**

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

## **21. Signing of the Contract**

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

## ***Section III. Bid Data Sheet***

### **Notes on the Bid Data Sheet (BDS)**

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

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

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

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

# Bid Data Sheet

| ITB Clause |  |                    |                     |                    |                     |   |                  |         |         |   |                |         |         |   |         |         |         |   |                |         |         |   |        |         |         |   |         |        |          |      |               |                    |                     |   |                  |         |         |   |  |         |         |   |                |         |         |
|------------|--|--------------------|---------------------|--------------------|---------------------|---|------------------|---------|---------|---|----------------|---------|---------|---|---------|---------|---------|---|----------------|---------|---------|---|--------|---------|---------|---|---------|--------|----------|------|---------------|--------------------|---------------------|---|------------------|---------|---------|---|--|---------|---------|---|----------------|---------|---------|
| 5.2        | For this purpose, similar contracts shall refer to contracts which have the same major categories of work.   |                    |                     |                    |                     |   |                  |         |         |   |                |         |         |   |         |         |         |   |                |         |         |   |        |         |         |   |         |        |          |      |               |                    |                     |   |                  |         |         |   |  |         |         |   |                |         |         |
| 7.1        | <b>Subcontracting is not allowed.</b>  |                    |                     |                    |                     |   |                  |         |         |   |                |         |         |   |         |         |         |   |                |         |         |   |        |         |         |   |         |        |          |      |               |                    |                     |   |                  |         |         |   |  |         |         |   |                |         |         |
| 10.3       | <p><i>No additional contractor license or permit is required</i></p> <p><b><i>In addition, eligible bidders shall qualify or comply with the following:</i></b></p> <p>1. Bidders with valid Philippine Contractors Accreditation Board (PCAB)</p> <p style="padding-left: 40px;">Type</p> <p style="text-align: center;"><b>Building - Small B</b></p>  |                    |                     |                    |                     |   |                  |         |         |   |                |         |         |   |         |         |         |   |                |         |         |   |        |         |         |   |         |        |          |      |               |                    |                     |   |                  |         |         |   |  |         |         |   |                |         |         |
| 10.4       | <p>The minimum work experience requirements for key personnel are the following:</p> <p style="text-align: center;"><b>PROPOSED CONSTRUCTION OF HAND WASHING FACILITY AND REHABILITATION OF PINGKIAN I DAY CARE CENTER</b></p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;">Qty.</th> <th style="text-align: center;">Key Personnel</th> <th style="text-align: center;">General Experience</th> <th style="text-align: center;">Relevant Experience</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">1</td> <td>Project Engineer</td> <td style="text-align: center;">3 years</td> <td style="text-align: center;">3 years</td> </tr> <tr> <td style="text-align: center;">1</td> <td>Safety Officer</td> <td style="text-align: center;">3 years</td> <td style="text-align: center;">3 years</td> </tr> <tr> <td style="text-align: center;">1</td> <td>Foreman</td> <td style="text-align: center;">3 years</td> <td style="text-align: center;">3 years</td> </tr> <tr> <td style="text-align: center;">6</td> <td>Skilled Worker</td> <td style="text-align: center;">3 years</td> <td style="text-align: center;">3 years</td> </tr> <tr> <td style="text-align: center;">1</td> <td>Driver</td> <td style="text-align: center;">3 years</td> <td style="text-align: center;">3 years</td> </tr> <tr> <td style="text-align: center;">2</td> <td>Laborer</td> <td style="text-align: center;">1 year</td> <td style="text-align: center;">3 months</td> </tr> </tbody> </table> <p style="text-align: center;"><b>PROPOSED CONSTRUCTION OF HAND WASHING FACILITY AND REHABILITATION OF PINGKIAN III ZONE 3 DAY CARE CENTER</b></p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;">Qty.</th> <th style="text-align: center;">Key Personnel</th> <th style="text-align: center;">General Experience</th> <th style="text-align: center;">Relevant Experience</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">1</td> <td>Project Engineer</td> <td style="text-align: center;">3 years</td> <td style="text-align: center;">3 years</td> </tr> <tr> <td style="text-align: center;">1</td> <td>DPWH duly accredited<br/>Materials Engineer</td> <td style="text-align: center;">3 years</td> <td style="text-align: center;">3 years</td> </tr> <tr> <td style="text-align: center;">1</td> <td>Safety Officer</td> <td style="text-align: center;">3 years</td> <td style="text-align: center;">3 years</td> </tr> </tbody> </table> | Qty.               | Key Personnel       | General Experience | Relevant Experience | 1 | Project Engineer | 3 years | 3 years | 1 | Safety Officer | 3 years | 3 years | 1 | Foreman | 3 years | 3 years | 6 | Skilled Worker | 3 years | 3 years | 1 | Driver | 3 years | 3 years | 2 | Laborer | 1 year | 3 months | Qty. | Key Personnel | General Experience | Relevant Experience | 1 | Project Engineer | 3 years | 3 years | 1 | DPWH duly accredited<br>Materials Engineer | 3 years | 3 years | 1 | Safety Officer | 3 years | 3 years |
| Qty.       | Key Personnel  | General Experience | Relevant Experience |                    |                     |   |                  |         |         |   |                |         |         |   |         |         |         |   |                |         |         |   |        |         |         |   |         |        |          |      |               |                    |                     |   |                  |         |         |   |  |         |         |   |                |         |         |
| 1          | Project Engineer   | 3 years            | 3 years             |                    |                     |   |                  |         |         |   |                |         |         |   |         |         |         |   |                |         |         |   |        |         |         |   |         |        |          |      |               |                    |                     |   |                  |         |         |   |  |         |         |   |                |         |         |
| 1          | Safety Officer   | 3 years            | 3 years             |                    |                     |   |                  |         |         |   |                |         |         |   |         |         |         |   |                |         |         |   |        |         |         |   |         |        |          |      |               |                    |                     |   |                  |         |         |   |  |         |         |   |                |         |         |
| 1          | Foreman  | 3 years            | 3 years             |                    |                     |   |                  |         |         |   |                |         |         |   |         |         |         |   |                |         |         |   |        |         |         |   |         |        |          |      |               |                    |                     |   |                  |         |         |   |  |         |         |   |                |         |         |
| 6          | Skilled Worker   | 3 years            | 3 years             |                    |                     |   |                  |         |         |   |                |         |         |   |         |         |         |   |                |         |         |   |        |         |         |   |         |        |          |      |               |                    |                     |   |                  |         |         |   |  |         |         |   |                |         |         |
| 1          | Driver   | 3 years            | 3 years             |                    |                     |   |                  |         |         |   |                |         |         |   |         |         |         |   |                |         |         |   |        |         |         |   |         |        |          |      |               |                    |                     |   |                  |         |         |   |  |         |         |   |                |         |         |
| 2          | Laborer  | 1 year             | 3 months            |                    |                     |   |                  |         |         |   |                |         |         |   |         |         |         |   |                |         |         |   |        |         |         |   |         |        |          |      |               |                    |                     |   |                  |         |         |   |  |         |         |   |                |         |         |
| Qty.       | Key Personnel  | General Experience | Relevant Experience |                    |                     |   |                  |         |         |   |                |         |         |   |         |         |         |   |                |         |         |   |        |         |         |   |         |        |          |      |               |                    |                     |   |                  |         |         |   |  |         |         |   |                |         |         |
| 1          | Project Engineer   | 3 years            | 3 years             |                    |                     |   |                  |         |         |   |                |         |         |   |         |         |         |   |                |         |         |   |        |         |         |   |         |        |          |      |               |                    |                     |   |                  |         |         |   |  |         |         |   |                |         |         |
| 1          | DPWH duly accredited<br>Materials Engineer   | 3 years            | 3 years             |                    |                     |   |                  |         |         |   |                |         |         |   |         |         |         |   |                |         |         |   |        |         |         |   |         |        |          |      |               |                    |                     |   |                  |         |         |   |  |         |         |   |                |         |         |
| 1          | Safety Officer   | 3 years            | 3 years             |                    |                     |   |                  |         |         |   |                |         |         |   |         |         |         |   |                |         |         |   |        |         |         |   |         |        |          |      |               |                    |                     |   |                  |         |         |   |  |         |         |   |                |         |         |

|    |                |         |          |
|----|----------------|---------|----------|
| 1  | Foreman        | 3 years | 3 years  |
| 12 | Skilled Worker | 3 years | 3 years  |
| 1  | Driver         | 3 years | 3 years  |
| 7  | Laborer        | 1 year  | 3 months |

**PROPOSED CONSTRUCTION OF HAND WASHING FACILITY AND REHABILITATION OF PINGKIAN III ZONE 2 DAY CARE CENTER**

| Qty. | Key Personnel    | General Experience | Relevant Experience |
|------|------------------|--------------------|---------------------|
| 1    | Project Engineer | 3 years            | 3 years             |
| 1    | Safety Officer   | 3 years            | 3 years             |
| 1    | Foreman          | 3 years            | 3 years             |
| 6    | Skilled Worker   | 3 years            | 3 years             |
| 1    | Driver           | 3 years            | 3 years             |
| 5    | Laborer          | 1 year             | 3 months            |

**PROPOSED CONSTRUCTION OF HAND WASHING FACILITY AND REHABILITATION OF CENTERVILLE DAY CARE CENTER**

| Qty. | Key Personnel                              | General Experience | Relevant Experience |
|------|--|--------------------|---------------------|
| 1    | Project Engineer                           | 3 years            | 3 years             |
| 1    | DPWH duly accredited<br>Materials Engineer | 3 years            | 3 years             |
| 1    | Safety Officer                             | 3 years            | 3 years             |
| 1    | Foreman                                    | 3 years            | 3 years             |
| 6    | Skilled Worker                             | 3 years            | 3 years             |
| 1    | Driver                                     | 3 years            | 3 years             |
| 6    | Laborer                                    | 1 year             | 3 months            |

**PROPOSED CONSTRUCTION OF HAND WASHING FACILITY AND REHABILITATION OF VETERANS II DAY CARE CENTER**

| Qty. | Key Personnel                           | General Experience | Relevant Experience |
|------|---|--------------------|---------------------|
| 1    | Project Engineer                        | 3 years            | 3 years             |
| 1    | DPWH duly accredited Materials Engineer | 3 years            | 3 years             |
| 1    | Safety Officer                          | 3 years            | 3 years             |
| 1    | Foreman                                 | 3 years            | 3 years             |
| 6    | Skilled Worker                          | 3 years            | 3 years             |
| 1    | Driver                                  | 3 years            | 3 years             |
| 6    | Laborer                                 | 1 year             | 3 months            |

*In addition, the bidder must execute an affidavit of undertaking duly notarized stating that the foregoing personnel shall perform work exclusively for the project until its completion. Please see attached bid forms.*

10.5

The minimum major equipment requirements are the following:

**PROPOSED CONSTRUCTION OF HAND WASHING FACILITY AND REHABILITATION OF PINGKIAN I DAY CARE CENTER**

| Equipment   | Capacity | Number of Units |
|-------------|----------|-----------------|
| Elf Truck   |          | 1               |
| Scaffolding |          | as needed       |
| Power Tools |          | as needed       |
| Minor Tools |          | as needed       |

**PROPOSED CONSTRUCTION OF HAND WASHING FACILITY AND REHABILITATION OF PINGKIAN III ZONE 3 DAY CARE CENTER**

| Equipment   | Capacity | Number of Units |
|-------------|----------|-----------------|
| Elf Truck   |          | 1               |
| Scaffolding |          | as needed       |
| Power Tools |          | as needed       |
| Minor Tools |          | as needed       |



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|-------------|---|-----------------|----------|-----------------|-----------|--|---|-------------|--|-----------|-------------|--|-----------|-------------|--|-----------|-----------|----------|-----------------|-----------|--|---|-------------|--|-----------|-------------|--|-----------|-------------|--|-----------|-----------|----------|-----------------|-----------|--|---|-------------|--|-----------|-------------|--|-----------|-------------|--|-----------|
| Equipment   | Capacity  | Number of Units |          |                 |           |  |   |             |  |           |             |  |           |             |  |           |           |          |                 |           |  |   |             |  |           |             |  |           |             |  |           |           |          |                 |           |  |   |             |  |           |             |  |           |             |  |           |
| Elf Truck   |   | 1               |          |                 |           |  |   |             |  |           |             |  |           |             |  |           |           |          |                 |           |  |   |             |  |           |             |  |           |             |  |           |           |          |                 |           |  |   |             |  |           |             |  |           |             |  |           |
| Scaffolding |   | as needed       |          |                 |           |  |   |             |  |           |             |  |           |             |  |           |           |          |                 |           |  |   |             |  |           |             |  |           |             |  |           |           |          |                 |           |  |   |             |  |           |             |  |           |             |  |           |
| Power Tools |   | as needed       |          |                 |           |  |   |             |  |           |             |  |           |             |  |           |           |          |                 |           |  |   |             |  |           |             |  |           |             |  |           |           |          |                 |           |  |   |             |  |           |             |  |           |             |  |           |
| Minor Tools |   | as needed       |          |                 |           |  |   |             |  |           |             |  |           |             |  |           |           |          |                 |           |  |   |             |  |           |             |  |           |             |  |           |           |          |                 |           |  |   |             |  |           |             |  |           |             |  |           |
| Equipment   | Capacity  | Number of Units |          |                 |           |  |   |             |  |           |             |  |           |             |  |           |           |          |                 |           |  |   |             |  |           |             |  |           |             |  |           |           |          |                 |           |  |   |             |  |           |             |  |           |             |  |           |
| Elf Truck   |   | 1               |          |                 |           |  |   |             |  |           |             |  |           |             |  |           |           |          |                 |           |  |   |             |  |           |             |  |           |             |  |           |           |          |                 |           |  |   |             |  |           |             |  |           |             |  |           |
| Scaffolding |   | as needed       |          |                 |           |  |   |             |  |           |             |  |           |             |  |           |           |          |                 |           |  |   |             |  |           |             |  |           |             |  |           |           |          |                 |           |  |   |             |  |           |             |  |           |             |  |           |
| Power Tools |   | as needed       |          |                 |           |  |   |             |  |           |             |  |           |             |  |           |           |          |                 |           |  |   |             |  |           |             |  |           |             |  |           |           |          |                 |           |  |   |             |  |           |             |  |           |             |  |           |
| Minor Tools |   | as needed       |          |                 |           |  |   |             |  |           |             |  |           |             |  |           |           |          |                 |           |  |   |             |  |           |             |  |           |             |  |           |           |          |                 |           |  |   |             |  |           |             |  |           |             |  |           |
| Equipment   | Capacity  | Number of Units |          |                 |           |  |   |             |  |           |             |  |           |             |  |           |           |          |                 |           |  |   |             |  |           |             |  |           |             |  |           |           |          |                 |           |  |   |             |  |           |             |  |           |             |  |           |
| Elf Truck   |   | 1               |          |                 |           |  |   |             |  |           |             |  |           |             |  |           |           |          |                 |           |  |   |             |  |           |             |  |           |             |  |           |           |          |                 |           |  |   |             |  |           |             |  |           |             |  |           |
| Scaffolding |   | as needed       |          |                 |           |  |   |             |  |           |             |  |           |             |  |           |           |          |                 |           |  |   |             |  |           |             |  |           |             |  |           |           |          |                 |           |  |   |             |  |           |             |  |           |             |  |           |
| Power Tools |   | as needed       |          |                 |           |  |   |             |  |           |             |  |           |             |  |           |           |          |                 |           |  |   |             |  |           |             |  |           |             |  |           |           |          |                 |           |  |   |             |  |           |             |  |           |             |  |           |
| Minor Tools |   | as needed       |          |                 |           |  |   |             |  |           |             |  |           |             |  |           |           |          |                 |           |  |   |             |  |           |             |  |           |             |  |           |           |          |                 |           |  |   |             |  |           |             |  |           |             |  |           |
| 12          | <i>[Insert Value Engineering clause if allowed.]</i>  |                 |          |                 |           |  |   |             |  |           |             |  |           |             |  |           |           |          |                 |           |  |   |             |  |           |             |  |           |             |  |           |           |          |                 |           |  |   |             |  |           |             |  |           |             |  |           |
| 15.1        | <p>The bid security shall be in the form of a Bid Securing Declaration with project number, or any of the following forms and amounts:</p> <p>a) The amount of not less than Php 197,109.28 or equivalent to two percent (2%) of ABC if bid security is in cash, cashier's/manager's check, bank draft/guarantee or irrevocable letter of credit; or</p> <p>b) The amount of not less than Php 492,773.19 or equivalent to five percent (5%) of ABC if bid security is in Surety Bond.</p>  |                 |          |                 |           |  |   |             |  |           |             |  |           |             |  |           |           |          |                 |           |  |   |             |  |           |             |  |           |             |  |           |           |          |                 |           |  |   |             |  |           |             |  |           |             |  |           |
| 19.2        | <b>Partial bid is not allowed.</b> 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.  |                 |          |                 |           |  |   |             |  |           |             |  |           |             |  |           |           |          |                 |           |  |   |             |  |           |             |  |           |             |  |           |           |          |                 |           |  |   |             |  |           |             |  |           |             |  |           |
| 20          | No additional requirement.  |                 |          |                 |           |  |   |             |  |           |             |  |           |             |  |           |           |          |                 |           |  |   |             |  |           |             |  |           |             |  |           |           |          |                 |           |  |   |             |  |           |             |  |           |             |  |           |

|    |   |
|----|---|
| 21 | <b>Additional Contract Documents relevant to the Project as required:</b><br><b>1. Construction Schedule and S-curve,</b><br><b>2. Manpower Schedule,</b><br><b>3. Construction Methods,</b><br><b>4. Equipment Utilization Schedule,</b><br><b>5. PERT/CPM or other acceptable tools of project scheduling, shall be included in the submission of Technical Proposal.</b> |
|----|---|

## ***Section IV. General Conditions of Contract***

### **Notes on the General Conditions of Contract**

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

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

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

## 1. **Scope of Contract**

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

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

## 2. **Sectional Completion of Works**

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

## 3. **Possession of Site**

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

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

## 4. **The Contractor's Obligations**

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

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

## 5. **Performance Security**

- 5.1. Within ten (10) calendar days from receipt of the Notice of Award from the Procuring Entity but in no case later than the signing of the contract by both parties, the successful Bidder shall furnish the performance security in any of the forms prescribed in Section 39 of the 2016 revised IRR.
- 5.2. The Contractor, by entering into the Contract with the Procuring Entity, acknowledges the right of the Procuring Entity to institute action pursuant to RA No. 3688 against any subcontractor be they an individual, firm, partnership, corporation, or association supplying the Contractor with labor, materials and/or equipment for the performance of this Contract.

## **6. Site Investigation Reports**

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

## **7. Warranty**

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

## **8. Liability of the Contractor**

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

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

## **9. Termination for Other Causes**

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

## **10. Dayworks**

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

## **11. Program of Work**

11.1. The Contractor shall submit to the Procuring Entity’s Representative for approval the said Program of Work showing the general methods, arrangements, order, and timing for all the activities in the Works. The submissions of the Program of Work are indicated in the **SCC**.

11.2. The Contractor shall submit to the Procuring Entity’s Representative for approval an updated Program of Work at intervals no longer than the period stated in the **SCC**. If the Contractor does not submit an updated Program of Work within this period, the Procuring Entity’s Representative may withhold the amount stated in the **SCC** from the next payment certificate and continue to withhold this amount until the next payment after the date on which the overdue Program of Work has been submitted.

## **12. Instructions, Inspections and Audits**

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

## **13. Advance Payment**

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

## **14. Progress Payments**

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

## **15. Operating and Maintenance Manuals**

15.1. If required, the Contractor will provide “as built” Drawings and/or operating and maintenance manuals as specified in the **SCC**.

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

## ***Section V. Special Conditions of Contract***

### **Notes on the Special Conditions of Contract**

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

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

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

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



# Special Conditions of Contract

| GCC Clause |   |
|------------|---|
| 2          | Completion of work shall be within 75 calendar days   |
| 4.1        | The Procuring Entity shall give possession of all parts of the Site to the Contractor upon receipt of the Notice to Proceed.  |
| 6          | The site investigation reports are: <i>[list here the required site investigation reports.]</i>   |
| 7.2        | <p><i>[Select one, delete the other.]</i></p> <p><i>[In case of permanent structures, such as buildings of types 4 and 5 as classified under the National Building Code of the Philippines and other structures made of steel, iron, or concrete which comply with relevant structural codes (e.g., DPWH Standard Specifications), such as, but not limited to, steel/concrete bridges, flyovers, aircraft movement areas, ports, dams, tunnels, filtration and treatment plants, sewerage systems, power plants, transmission and communication towers, railway system, and other similar permanent structures:]</i> Fifteen (15) years.</p> <p><i>[In case of semi-permanent structures, such as buildings of types 1, 2, and 3 as classified under the National Building Code of the Philippines, concrete/asphalt roads, concrete river control, drainage, irrigation lined canals, river landing, deep wells, rock causeway, pedestrian overpass, and other similar semi-permanent structures:]</i> Five (5) years.</p> <p><i>[In case of other structures, such as bailey and wooden bridges, shallow wells, spring developments, and other similar structures:]</i> Two (2) years.</p> |
| 10         | Dayworks are applicable at the rate shown in the Contractor’s original Bid.   |
| 13         | The amount of the advance payment is no more that fifteen percent (15%) of the Contract Price subject to approval by the HOPE and compliance with the conditions under RA 9184 and its IRR.   |
| 14         | No further instructions.  |
| 15.1       | <p>The date by which operating and maintenance manuals are required is <i>thirty (30) days</i></p> <p>The date by which “as built” drawings are required as part of final payment</p>   |
| 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 ten (10%) percent of the contract price.  |

## ***Section VI. Specifications***

### **Notes on Specifications**

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

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

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

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

#### **Sample Clause: Equivalency of Standards and Codes**

Wherever reference is made in the Contract to specific standards and codes to be met by the goods and materials to be furnished, and work performed or tested, the provisions of the latest current edition or revision of the relevant standards and codes in effect shall apply, unless otherwise expressly stated in the Contract. Where such standards and codes are

national, or relate to a particular country or region, other authoritative standards that ensure a substantially equal or higher quality than the standards and codes specified will be accepted subject to the Procuring Entity's Representative's prior review and written consent. Differences between the standards specified and the proposed alternative standards shall be fully described in writing by the Contractor and submitted to the Procuring Entity's Representative at least twenty-eight (28) days prior to the date when the Contractor desires the Procuring Entity's Representative's consent. In the event the Procuring Entity's Representative determines that such proposed deviations do not ensure substantially equal or higher quality, the Contractor shall comply with the standards specified in the documents.

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



Republic of the Philippines  
Quezon City

## CITY ENGINEERING DEPARTMENT

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**PROJECT TITLE:** PROPOSED CONSTRUCTION OF HAND WASHING FACILITY AND  
REHABILITATION OF CENTERVILLE DAY CARE CENTER  
**LOCATION:** BARANGAY PASONG TAMO, DISTRICT 6, QUEZON CITY

### TECHNICAL SPECIFICATIONS QUEZON CITY INFRASTRUCTURE PROJECT

#### I. GENERAL REQUIREMENTS

- a. Comply with the current and existing laws, ordinances and applicable codes, rules and regulations and standards. Any works perform contrary to the existing laws, rules and regulations, ordinances and standards without notice shall bear all cost arising therefrom.
- b. Drawings, specifications, codes and standards are minimum requirements. Where requirements differ, the more stringent apply.
- c. Should there be any change(s) in drawings or specifications, it is required to comply with the governing regulations, notify the implementing agency.
- d. Photographs shall be taken as, when and where directed at intervals of not more than one month. The photographs shall be sufficient in number and location to record the exact progress of the works. The photographs shall be retained and will become the property of the Government.
- e. Site verification / inspection shall be conducted to validate the scope of works. No extra compensation and extension of time shall be given due to negligence or inadvertence.
- f. The quality of materials shall be of the best grade of their respective kinds for the purpose. The work shall also be performed in the best and most capable manner in strict accordance with requirements of the plans and details. All materials not conforming to the requirements of these specifications shall be considered as defective.
- g. All equipment and installations shall meet or exceed minimum requirements of the standards and codes.
- h. Mobilization and Demobilization (if applicable)
  - i. Mobilization shall include all activities and related costs for transportation of personnel, equipment, and operating supplies to the site; establishment of offices, buildings, and other necessary general facilities for the operations at the site.
  - ii. Demobilization shall include all activities and costs for transportation of personnel, equipment, and supplies not anymore required within the construction site including the disassembly, removal and site clean-up of offices and other facilities assembled on the site specifically for this contract.
- i. Execute work in strict accordance with the best practices of the trades in a thorough, substantial, workmanlike manner by competent workman. Provide a competent, experienced, full-time supervisor who is authorized to make decisions on behalf of the Contractor.
- j. Temporary Facilities and Utilities

- i. All facilities shall be near the job site, where necessary and shall conform to the best standard for the required types.
  - ii. Temporary facilities shall be provided and maintained including sanitary facilities and first aid stations.
  - iii. Temporary utilities shall be sufficiently provided until the completion of the project such as water, power and communication
  - iv. Temporary enclosure shall be provided within the construction site with adequate guard lights, railings and proper signages.
  - v. Temporary roadways shall be constructed and maintained to sustain loads to be carried on them during the entire construction period.
  - vi. Upon completion of the work, the temporary facilities shall be demolished, hauled-out and disposed properly
- k. Adequate construction safety and health protection shall be provided at all times during the execution of work to both workers and property.
- i. A fully trained Medical Aide shall be employed permanently on the site who shall be engaged solely from medical duties.
  - ii. The medical room shall be provided in waterproof; it could be a building or room designated and used exclusively for the purpose and have a floor area of at least 15 square meters and a glazed window area of at least 2 square meters.
  - iii. The location of the medical room and any other arrangements shall be made known to all employees by posting on prominent locations suitable notices in the site.
  - iv. Additional safety precautions shall be provided in the observance of pandemic. Protocols set-forth by the government shall be strictly followed.
- l. Necessary protections to the adjacent property shall be provided to avoid untoward incidents / accidents
- m. Final cleaning of the work shall be employed prior to the 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 building cleaning and maintenance program

## II. SITE WORKS

- A. All grades, lines, levels and dimensions shall be verified as indicated on the plans and details. Any discrepancies or inconsistencies shall be reported before commencing to work.
- B. Removal / demolition of existing structures shall be done in accordance to safety procedures.

## III. CIVIL / STRUCTURAL WORKS

### A. MASONRY

- a. Masonry Units (CHB):
  - i. 100mm thick for all interior walls and 125mm thick for all exterior walls unless otherwise indicated.
  - ii. Use 400 psi for non-load bearing blocks and 700 psi for load bearing blocks where required
  - iii. Where full height walls are constructed with concrete hollow blocks, these shall extend up to the bottom of beam or slab unless otherwise indicated on plans. Provide stiffener columns & lintel beams as specified in the structural drawings or as specified or as deemed required to assure a stabilized wall due to height & other considerations

## b. Sand:

S-1, washed, clean and greenish in color

## c. Mortar:

One part "Portland" cement and two parts sand and water but not more than three parts sand and water.

## d. Plaster bond:

Apply plaster bond to all wall area.

**B. ROOFING WORKS**

- a. The roof shall be covered with Ga. 24 pre-painted G.I. rib-type roofing sheets as shown on the plans. The roofing shall be secured to the purlins with min. 2 ½" max. 3' long Tek screws. Ridge rolls, hip rolls and valleys to be used shall be those compatible with the Ga. 24 pre-painted G.I. rib-type roofing sheets. They shall lap the roofing sheets at least 250mm. The ridge rolls, hip rolls and valleys shall be riveted to the roofing sheets.
- b. The roof shall be covered with 6mm thick Rib-type polycarbonate sheets as shown on the plans. The roofing shall be secured to the purlins with min. 2 ½" max. 3' long Tek screws. Ridge rolls, hip rolls and valleys to be used shall be those compatible with the 6mm thick solid polycarbonate sheets. They shall lap the roofing sheets at least 250mm. The ridge rolls, hip rolls and valleys shall be riveted to the roofing sheets.
- c. All roofing sheets adjacent to concrete hollow block and other masonry walls such as property line firewalls, shall be provided with Gauge 26 pre-painted plain G.I. Flashing to extend to the top and over to the other side of the wall. All fasteners shall be placed at the top of the corrugations of the roofing sheets to prevent water from standing around the fasteners.

**IV. ARCHITECTURAL WORKS****A. PAINTING WORKS**

- a. All primers, thinners and putty, also waterproofing for internal and external application shall be the same brand as the specified material.
- b. Application shall be as per paint Manufacturer's specification and recommendation.
- c. Provide all drop cloth and other covering requisite for protection of floors, walls, aluminum, glass finishes and other works.
- d. All applications and methods used shall strictly follow the Manufacturer's Instructions and Specifications.
- e. All surfaces including masonry wall shall be thoroughly cleaned, puttied, sandpapered, rubbed and polished, masonry wall shall be treated with Neutralizer.
- f. 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.
- g. All other surfaces endangered by stains and paint marks should be taped and covered with craft paper.

**V. SANITARY / PLUMBING WORKS**

- A. Comply with the current applicable codes, ordinances, and regulations of the authority or authorities having jurisdiction, the rules, regulations and requirements of the utility companies (as applicable).
- B. Supply, installation and testing of the following
  - B.1 Potable water supply system complete in all respects including but not limited to submittals, shop drawings, piping, water meters, valves, bibbs, insulation, all accessories required for complete and operational of the system.
  - B.2 Water service connections including but not limited to water meters, float valves. Any and all other works involve in providing the complete operation of the water supply system.
  - B.3 Soil waste and vent system complete in all respect including but not limited to connection to existing sewer, submittals, shop drawings, pipes, fittings, valves, cleanout, drains, etc. Complete and operational.
  - B.4 Storm drainage system complete in all respect including but not limited to connection to existing storm drainage, submittals, shop drawings, pipes, fittings, valves, cleanout, drains, etc. Complete and operational.
- C. Workmanship and installation methods shall conform to the best modern practice. Employ skilled tradesmen to perform work under the direct supervision of fully qualified personnel.
- D. All equipment and installations shall meet or exceed minimum requirements of the Standards and Codes as specified in plans and program of work.
- E. Install equipment in strict accordance with manufacturers written recommendations.
- F. Physical sizes of all plant and equipment are to be suitable for the space allocated for the accommodation of such plant and equipment, taking into account the requirement of access for maintenance purposes.
- G. In selecting makes and types of equipment, the Contractor shall ascertain that facilities for proper maintenance, repair and replacement are provided.
- H. Where the Contractor proposes to use an item of equipment other than that specified or detailed in the drawing, which requires any redesign of the system, drawings showing the layout of the equipment and such redesign as required therefore shall be prepared by the Contractor at his own expenses. Where such approved deviation necessitates a different quantity and arrangement of materials and equipment's from that originally specified or indicated in the drawings, the Contractor shall furnish and install any such additional materials and equipment's required by the system at no additional cost.
- I. Equipment catalogue and manufacturer's specifications must be submitted for examination and details shall be submitted for approval before any equipment is to be ordered.
- J. This shall include all information necessary to ascertain the equipment comply with this specification and drawings. Data and sales catalogue of a general nature will not be accepted.
- K. All materials, equipment, components and accessories shall be delivered to the Site in a new condition, properly packed and protected against damage or contamination or distortion, breakage or structural weakening due to handling, adverse weather or other circumstances and, as far as practicable, they shall be kept in the packing cases or under approved protective coverings until required for use.
- L. Any items suffering from damage during manufacture, or in transit, or on site whilst in storage or during erection shall be rejected and replaced without extra cost.
- M. All sanitary fittings and pipework shall be cleaned after installation and keep them in a new condition.

- N. All installed pipelines shall be flushed through with water, rodded when necessary to ensure clearance of debris.
- O. Cleaning and flushing shall be carried out in sections as the installation becomes completed.
- P. The Contractor shall carry out hydraulic test on the complete plumbing systems and the drainage system to show that it is functioning satisfactorily within the requirements of this Specification and local regulations.
- Q. The Contractor shall provide suitable test pumps and arrange for a supply of water required in connection with testing of pipework. The test pump shall be fitted with pressure gauges which shall be of suitable range for the pressure being applied.
- R. Hydraulic tests shall be carried out as the pipework is installed and shall be completed before chases in walls and ducts are closed. Also test shall be carried out prior to false ceilings and other finishes are installed.
- S. Testing apparatus shall be provided by the Contractor. Where any section of pipework or equipment is unable to withstand the maximum pipework test pressure, it shall be isolated during the pipework test then that section of pipework or equipment shall be re-tested at the appropriate test pressure.
- T. The Sanitary Contractor must carry out any additional tests required by the end-user and/or approving agency.
- U. Drainage pipe shall be tested by filling the pipe with 3m of water higher than the test section and wait for 15 min, then check for leakage at every joints.
- V. Testing of drainage systems shall be carried out in sections by dividing the system horizontally. Each section shall comprise pipework and fitting for three floors/storeys required for testing.
- W. Drainage pressure pipe shall be hydraulic tested at minimum pressure 50 psi.
- X. Hangers and supports for plumbing piping and equipment shall withstand the effects of gravity loads and stresses within limits and under conditions indicated according to ASCE/SEI 7.
- Y. Install hangers and supports to allow controlled thermal and seismic movement of piping systems, to permit freedom of movement between pipe anchors, and to facilitate action of expansion joints, expansion loops, expansion bends, and similar units.
- Z. Install lateral bracing with pipe hangers and supports to prevent swaying.
- AA. Install building attachments within concrete slabs or attach to structural steel. Install additional attachments at concentrated loads, including valves, flanges, and strainers, NPS 2-1/2 (DN 65) and larger and at changes in direction of piping. Install concrete inserts before concrete is placed, fasten inserts to forms and install reinforcing bars through openings at top of inserts.
- BB. Install hangers and supports so that piping live and dead loads and stresses from movement will not be transmitted to connected equipment.
- CC. Install hangers and supports to provide indicated pipe slopes and to not exceed maximum pipe deflections allowed by ASME B31.9 for building services piping.

## VI. ELECTRICAL WORKS

- A. Comply with the current applicable codes, ordinances, and regulations of the authority or authorities having jurisdiction, the rules, regulations and requirements of the utility companies (as applicable).
- B. Drawings, specifications, codes and standards are minimum requirements. Where requirements differ, the more stringent apply.



- C. All equipment and installations shall meet or exceed minimum requirements of the Standards and Codes
- D. Execute work in strict accordance with the best practices of the trades in a thorough, substantial, workmanlike manner by competent workmen
- E. When the tests and inspections have been completed, a label shall be attached to all devices tested. The label shall provide the name of the testing company, the date the tests were completed, and the initials of the person who performed the tests.

#### F. PANELBOARDS

- F 1 Fabricate and test panelboards according to IEEE 344 to withstand seismic forces defined in Division 16 Sections 16073 and 16074 "Hangers and Supports for Electrical Systems and Vibration and Seismic controls for Electrical Systems" respectively
- F 2 Enclosures: Flush, Surface, Flush- and surface-mounted cabinets.
  - F 2.1 Rated for environmental conditions at installed location
    - i. Indoor Dry and Clean Locations: NEMA 250, Type 1.
    - ii. Outdoor Locations. NEMA 250, Type 3R.
    - iii. Kitchen and Wash-Down Areas: NEMA 250, Type 4X, stainless steel.
    - iv. Other Wet or Damp Indoor Locations. NEMA 250, Type 4
    - v. Indoor Locations Subject to Dust, Falling Dirt, and Dripping Noncorrosive Liquids. NEMA 250, Type 5 or Type 12.
  - F.2.2 Front: Secured to box with concealed trim clamps. For surface-mounted fronts, match box dimensions; for flush-mounted fronts, overlap box.
  - F.2.3 Hinged Front Cover: Entire front trim hinged to box and with standard door within hinged trim cover
  - F 2.4 Skirt for Surface-Mounted Panelboards: Same gage and finish as panelboard front with flanges for attachment to panelboard, wall, and ceiling or floor
  - F 2.5 Gutter Extension and Barrier: Same gage and finish as panelboard enclosure; integral with enclosure body. Arrange to isolate individual panel sections.
  - F 2.6 Finishes
    - i. Panels and Trim: Steel and galvanized steel, factory finished immediately after cleaning and pretreating with manufacturer's standard two-coat baked-on finish consisting of prime coat and thermosetting topcoat.
    - ii. Back Boxes: Galvanized steel Same finish as panels and trim.
    - iii. Fungus Proofing: Permanent fungicidal treatment for overcurrent protective devices and other components.
  - F 2.7 Directory Card: Inside panelboard door, mounted in transparent card holder metal frame with transparent protective cover.
- F.3 Incoming Mains Location: Top or Bottom.
- F.4 Phase, Neutral, and Ground Buses:
  - F 4.1 Material: Hard-drawn copper, 98 percent conductivity.
  - F 4.2 Equipment Ground Bus: Adequate for feeder and branch-circuit equipment grounding conductors; bonded to box.

- F 4 3 Neutral Bus: 100 percent of phase bus 4. Extra-Capacity Neutral Bus: Neutral bus rated 200 percent of phase bus and (JL listed as suitable for nonlinear loads.

  
**JOHN CHRISTOPHER P. TOMACRUZ**  
Planning and Programming Division

  
**JOCELYN A. NAONG**  
Planning and Programming Division



Republika ng Pilipinas  
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**CITY ENGINEERING DEPARTMENT**  
5<sup>TH</sup>, 6<sup>TH</sup>, 7<sup>TH</sup> Floors, QC Civic Center Building "B"  
Telephone Nos. 8988-4242 Local 8538



**PROJECT TITLE :** PROPOSED CONSTRUCTION OF HAND WASHING FACILITY AND  
**REHABILITATION OF PINGKIAN I DAY CARE CENTER**  
**LOCATION :** BARANGAY PASONG TAMO, DISTRICT 8, QUEZON CITY

### TECHNICAL SPECIFICATIONS

#### I. GENERAL REQUIREMENTS

- A. Comply with the current and existing laws, ordinances and applicable codes, rules and regulations, and standards. Any works performed contrary to the existing laws, rules and regulations, ordinances and standards without notice shall bear all cost arising therefrom.
- B. Drawings, specifications, codes and standards are minimum requirements. Where requirements differ, the more stringent apply.
- C. Should there be any change(s) in drawings or specifications, it is required to comply with the governing regulations, notify the implementing agency.
- D. Photographs shall be taken as, when and where directed at intervals of not more than one month. The photographs shall be sufficient in number and location, to record the exact progress of the works. The photographs shall be retained and will become the property of the Government.
- E. Site verification / inspection shall be conducted to validate the scope of works. No extra compensation and extension of time shall be given due to negligence or inadvertence.
- F. The quality of materials shall be of the best grade of their respective kinds for the purpose. The work shall also be performed in the best and most capable manner in strict accordance with requirements of the plans and details. All materials not conforming to the requirements of these specifications shall be considered as defective.
- G. All equipment and installations shall meet or exceed minimum requirements of the standards and codes.
- H. Mobilization and Demobilization (if applicable)
  1. Mobilization shall include all activities and related costs for transportation of personnel, equipment, and operating supplies to the site; establishment of offices, buildings, and other necessary general facilities for the operations at the site.
  2. Demobilization shall include all activities and costs for transportation of personnel, equipment, and supplies not anymore required within the construction site including the disassembly, removal and site clean-up of offices and other facilities assembled on the site specifically for this contract.
- I. Execute work in strict accordance with the best practices of the trades in a thorough, substantial, workmanlike manner by competent workmen. Provide a competent, experienced, full-time supervisor who is authorized to make decisions on behalf of the Contractor.
- J. Temporary Facilities and Utilities
  1. All facilities shall be near the job site, where necessary and shall conform to the best standard for the required types.
  2. Temporary facilities shall be provided and maintained including sanitary facilities and first aid stations.

3. Temporary utilities shall be sufficiently provided until the completion of the project such as water, power and communication.
  4. Temporary enclosure shall be provided around the construction site with adequate guard lights, railings and proper signage
  5. Temporary roadways shall be constructed and maintained to sustain loads to be carried on them during the entire construction period.
  6. Upon completion of the work, the temporary facilities shall be demolished, hauled-out and disposed properly
- K. Adequate construction safety and health protection shall be provided at all times during the execution of work to both workers and property
1. A fully-trained Medical Aide shall be employed permanently on the site who shall be engaged solely to medical duties.
  2. The medical room shall be provided with waterproofing; it could be a building or room designated and used exclusively for the purpose and have a floor area of at least 15 square meters and a glazed window area of at least 2 square meters.
  3. The location of the medical room and any other arrangements shall be made known to all employees by posting on prominent locations and suitable notices in the site
  4. Additional safety precautions shall be provided in the event of a pandemic. Protocols set forth by the government shall be strictly followed.
  5. Personal Protective Equipment (PPE) shall consist of safety helmet/hard hat, safety reflectorized vest, safety insulated gloves, dust mask, safety shoes, safety goggles, and safety harness. Every skilled and unskilled worker, and the project foreman shall be provided PPE by the Contractor. Consideration of quantity shall be made for the Project Engineer, Materials Engineer, Safety Officer/Practitioner (as required) and project driver.
  6. Construction safety materials shall consist of safety net, fire extinguisher and safety signage and posters.
- L. Necessary protections to the adjacent property shall be provided to avoid untoward incidents / accidents.
- M. Final cleaning of the work shall be employed prior to the final inspection for the certification of final acceptance. Final cleaning shall be applied on each surface or unit of work and shall be of condition expected for a building cleaning and maintenance program.

## II. SITE WORKS

- A. All grades, lines, levels and dimensions shall be verified as indicated on the plans and details. Any discrepancies or inconsistencies shall be reported before commencing work.
- B. This item shall consist of the removal wholly or in part, and satisfactory disposal of all buildings, fences, structures, old pavements, abandoned pipe lines, and any other obstructions which are not designated or permitted to remain, except for the obstructions to be removed and disposed of under other items in the Contract.

Removal and/or demolition of existing structures shall be done in accordance to safety procedures.

- C. All excavations shall be made to grade as indicated in the plans. Whenever water is encountered in the excavation process, it shall be removed by pumping, care being taken that the surrounding soil particles are not disturbed or removed.

The Contractor shall notify the Engineer sufficiently in advance of the beginning of any excavation so that cross-sectional elevations and measurements may be taken on the undisturbed ground. The natural ground adjacent to the structure shall not be disturbed without permission of the Engineer.

Trenches or foundation pits for structures or structure footings shall be excavated to the lines and grades or elevations shown on the Plans or as staked by the Engineer. They shall be of sufficient size to permit the placing of structures or structure footings of the full width and length shown. The elevations of the bottoms of footings, as shown on the Plans, shall be considered as approximate only and the Engineer may order, in writing, such changes in dimensions or elevations of footings as may be deemed necessary, to secure a satisfactory foundation.

Boulders, logs, and other objectionable materials encountered in excavation shall be removed.

After each excavation is completed, the Contractor shall notify the Engineer to that effect and no footing, bedding material or pipe culvert shall be placed until the Engineer has approved the depth of excavation and the character of the foundation material.

- D All excavated materials, so far as suitable, shall be utilized as backfill. The surplus materials shall be disposed of in such manner as not to obstruct the stream or otherwise impair the efficiency or appearance of the structure. No excavated materials shall be deposited at any time so as to endanger the partly finished structure.

All backfills shall be placed in layers not exceeding to 150mm in thickness and each layer shall be thoroughly compacted by wetting, tamping and rolling.

- E Soil Poisoning There are two methods usually adopted in soil poisoning which are as follows.

1. **Cordoning** This method is usually adopted when there is no visible evidence of termite infestation. Trenches in concentric circles, squares or rectangles are dug 150mm to 220mm wide and at least one meter apart and applied with Liquid Termicide Concentrate working solution at the rate of 8 liters per linear meter.
2. **Drenching** When soil show termite infestation, this method shall be applied. The building area shall be thoroughly drenched with Liquid Termicide Concentrate working solution at the rate of 24 liters per square meter.

### III. CIVIL / STRUCTURAL WORKS

#### A. ROOFING WORKS

1. The roof shall be covered with Ga. 24 pre-painted G I rib-type roofing sheets as shown on the plans. The roofing shall be secured to the purlins with min. 2 ½" max. 3" long Tek screws. Ridge rolls, hip rolls and valleys to be used shall be those compatible with the Ga. 24 pre-painted G I rib-type roofing sheets. They shall lap the roofing sheets at least 250mm. The ridge rolls, hip rolls and valleys shall be riveted to the roofing sheets.
2. The roof shall be covered with 6mm thick Rib-type polycarbonate sheets as shown on the plans. The roofing shall be secured to the purlins with min. 2 ½" max. 3" long Tek screws. Ridge rolls, hip rolls and valleys to be used shall be those compatible with the 6mm thick solid polycarbonate sheets. They shall lap the roofing sheets at least 250mm. The ridge rolls, hip rolls and valleys shall be riveted to the roofing sheets.
- 3 All roofing sheets adjacent to concrete mollow block and other masonry walls such as property line firewalls, shall be provided with Gauge 26 pre-painted plain G I. Flashing to extend to the top and over to the other side of the wall. All fasteners shall be placed at the top of the corrugations of the roofing sheets to prevent water from standing around the fasteners. Materials.
  - a. Steel and Iron If not specified otherwise use standard mill-finished structural steel shapes or bar iron in compliance with AISC Specifications for Design, Fabrication and Erection of Structural Steel for buildings.
  - b. Bolts, Nuts, Studs and Rivets. ASTM A 307 and A 325
  - c. Screws Fed. Spec FF-S-85, Fed. Spec FF-S-92, and Fed. Spec FF-S-111.

- d. Metal Purlins. High grade galvanized steel with minimum tensile strength of 275 MPa, 1.4mm in thickness or approved equal.

## **B. METAL FABRICATION**

### **1. Materials:**

- e. Steel and Iron. If not specified otherwise, use standard mill-finished structural steel shapes or bar iron in compliance with AISC Specifications for Design, Fabrication and Erection of Structural Steel for buildings.
- f. Bolts, Nuts, Studs and Rivets. ASTM A 307 and A 325.
- g. Screws. Fed. Spec. FF-S-65, Fed. Spec. FF-S-92, and Fed. Spec. FF-S-111.
- h. Metal Purlins. High grade galvanized steel with minimum tensile strength of 275 MPa, 1.4mm in thickness or approved equal.

### **2. Fabrication.**

By mechanics skilled in the trade and in accordance with the manufacturer's directions. Metalwork shall be fabricated to allow for expansion and contraction of materials. Provide welding and bracing of adequate strength and durability, with tight, flush joints, dressed smooth and clean. Complete with bolts and nuts.

### **3. Metal Surfaces.**

Surfaces shall be clean and free from all scale, flake, rust and rust pitting, well-formed and finished to shape and size, with sharp lines, angle and smooth surface. Shearing and punching shall leave clean true lines and surfaces. Weld or rivet permanent connections. Weld and flush rivets shall be used and finished flush smooth on surfaces that will be exposed after installation. Do not use screws or bolts where they can be avoided, when used heads shall be countersunk, screwed up tight and threads nicked to prevent loosening.

### **4. Construction.**

Thickness of metals and details of assembly and supports shall give ample strength and stiffness for the minimum loads specified or indicated. Joints exposed to weather shall be formed to exclude water.

### **5. Welding.**

Use welding electrode E70xx and perform welding, welding inspection and corrective welding in accordance with AWS D1.1. Weld in a manner to prevent permanent distortion of the connected parts. Weld continuously along the entire area of contact (except where tack welding is permitted. Do not tack weld exposed to connections). Grind smooth visible weld in finished installation.

## **IV. ARCHITECTURAL WORKS**

### **A. FLOOR FINISHES**

1. 300mm x 300mm Non-Skid Homogeneous Tiles including tile adhesive
2. 400mm x 400mm Homogeneous Tiles including tile adhesive
3. 50mm concrete Topping with Plain Cement Finish

### **B. WALL FINISHES**

1. 300mm x 300mm Homogeneous Tiles including tile adhesive
2. 50mm concrete Topping with Plain Cement Finish

### **C. PAINTING WORKS**

1. **Paint Materials** All types of paint material and other related products shall be subject to test as to material composition by the Bureau of Research and Standard, DPWH or the National Institute of Science and Technology.
2. **Tinting Colors** Tinting colors shall be first grade quality pigment ground in alkyd resin that disperses and mixes easily with paint to produce the color desired. Use the same brand of paint and tinting color to affect good paint body.
3. **Skim coat.** Skim coat shall be fine powder type material like kalsomine that can be mixed into putty consistency, with oil-based primers and paints to fill minor surface dents and imperfections.
4. **Paint Schedule.**
  - b. **Exterior Masonry Wall** (plain cement plastered finish to be painted)
    - i. 1 coat skim coating, 1 coat primer, 2 coats elastomeric paint finish
  - c. **Interior Masonry Wall** (plain cement plastered finish to be painted)
    - i. 1 coat skim coating, 1 coat primer, 2 coats latex paint finish
  - d. **Interior Dry Wall**
    - i. 1 coat primer, 2 coats latex paint finish
  - e. **Ceiling Boards**
    - i. 1 coat primer, 2 coats latex paint finish
  - f. **Slab Soffit**
    - i. 1 coat primer, 2 coats latex paint finish
  - g. **Metal / Steel Surfaces**
    - i. 1 coat primer, 2 coats epoxy enamel finish
5. **Surface Preparation.** All surfaces shall be in proper condition to receive the finish. Woodworks shall be hand-sanded smooth and dusted clean. All knot-holes, pitch pockets or sappy portions shall be sealed with natural wood filler. Nail holes, cracks or defects shall be carefully puttied after the first coat, matching the color of paint.

Interior woodworks shall be sandpapered between coats. Cracks, holes or imperfections in plaster shall be filled with patching compound and smoothed off to match adjoining surfaces.

Concrete and masonry surfaces shall be coated with concrete neutralizer and allowed to dry before any painting primer coat is applied. When surface is dried apply first coating. Hairline cracks and unevenness shall be patched and sealed with approved putty or patching compound. After all defects are corrected apply the finish coats as specified on the Plans (color scheme approved)

Metal shall be clean, dry and free from mill scale and rust. Remove all grease and oil from surfaces. Wash unprimed galvanized metal with etching solution and allow it to dry. Where required to prime coat surface with Red Lead Primer same shall be approved by the Engineer.

In addition, the Contractor shall undertake the following:

- a. Voids, cracks, nick etc. will be repaired with proper patching material and finished flush with surrounding surfaces
- b. Marred or damaged shop coats on metal shall be spot primed with appropriate metal primer.

- c. Painting and varnishing works shall not be commenced when it is too hot or cold.
  - d. Allow appropriate ventilation during application and drying period
  - e. All hardware will be fitted and removed or protected prior to painting and varnishing works.
- i. Application: Paints when applied by brush shall become non-fluid, thick enough to lay down as adequate film of wet paint. Brush marks shall have flowed out after application of paint.
- Paints made for application by roller must be similar to brushing paint. It must be non-sticky when thinned to spraying viscosity so that it will break up easily into droplets.
- Paint is atomized by high pressure pumping rather than broken up by the large volume of air mixed with it. This procedure changes the required properties of the paint.
- ii. Application shall be as per paint Manufacturer's specification and recommendation.
  - iii. Provide all drop cloth and other covering requisite for protection of floors, walls, aluminum, glass, finishes and other works.
  - iv. All applications and methods used shall strictly follow the Manufacturer's Instructions and Specifications.
  - v. All surfaces including masonry wall shall be thoroughly cleaned, putted, sandpapered, rubbed and polished; masonry wall shall be treated with Neutralizer.
  - vi. 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.
  - vii. All other surfaces endangered by stains and paint marks should be taped and covered with craft paper.

#### **D. CEILING FINISHES**

8mm thick Fiber Cement Board including Metal Framing and Accessories

#### **E. DOORS & WINDOWS**

Follow as per approved plan and specifications.

#### **F. FABRICATED MATERIALS**

Follow as per approved plan and specifications

#### **G. LETTERINGS**

Follow as per approved plan and specifications



## V. SANITARY / PLUMBING WORKS

- A. Comply with the current applicable codes, ordinances, and regulations of the authority or authorities having jurisdiction, the rules, regulations and requirements of the utility companies (as applicable)
- B. Supply, installation and testing of the following:
1. Potable water supply system complete in all respects including but not limited to submittals, shop drawings, piping, water meters, valves, bibbs, insulation, all accessories required for complete and operational of the system
  2. Water service connections including but not limited to water meters, float valves. Any and all other works involve in providing the complete operation of the water supply system.
  3. Soil waste and vent system complete in all respect including but not limited to connection to existing sewer, submittals, shop drawings, pipes, fittings, valves, cleanout, drains, etc. Complete and operational.
  4. Storm drainage system complete in all respect including but not limited to connection to existing storm drainage, submittals, shop drawings, pipes, fittings, valves, cleanout, drains, etc. Complete and operational.
- C. Workmanship and installation methods shall conform to the best modern practice. Employ skilled tradesmen to perform work under the direct supervision of fully qualified personnel
- D. All equipment and installations shall meet or exceed minimum requirements of the Standards and Codes as specified in plans and program of work.
- E. Install equipment in strict accordance with manufacturers written recommendations.
- F. Physical sizes of all plant and equipment are to be suitable for the space allocated for the accommodation of such plant and equipment, taking into account the requirement of access for maintenance purposes
- G. In selecting makes and types of equipment, the Contractor shall ascertain that facilities for proper maintenance, repair and replacement are provided.
- H. Where the Contractor proposes to use an item of equipment other than that specified or detailed in the drawing, which requires any redesign of the system drawings showing the layout of the equipment and such redesign as required therefore shall be prepared by the Contractor at his own expenses. Where such approved deviation necessitates a different quantity and arrangement of materials and equipment's from that originally specified or indicated in the drawings, the Contractor shall furnish and install any such additional materials and equipment's required by the system at no additional cost
- I. Equipment catalogue and manufacturer's specifications must be submitted for examination and details shall be submitted for approval before any equipment is to be ordered.
- J. This shall include all information necessary to ascertain the equipment comply with this specification and drawings. Data and sales catalogue of a general nature will not be accepted.
- K. All materials, equipment, components and accessories shall be delivered to the Site in a new condition, properly packed and protected against damage or contamination or distortion, breakage or structural weakening due to handling adverse weather or other circumstances and, as far as practicable, they shall be kept in the packing cases or under approved protective coverings until required for use.
- L. Any items suffering from damage during manufacture, or in transit, or on site whilst in storage or during erection shall be rejected and replaced without extra cost.
- M. All sanitary fittings and pipework shall be cleaned after installation and keep them in a new condition

- N. All installed pipelines shall be flushed through with water, rodded when necessary to ensure clearance of debris
- O. Cleaning and flushing shall be carried out in sections as the installation becomes completed.
- P. The Contractor shall carry out hydraulic test on the complete plumbing systems and the drainage system to show that it is functioning satisfactorily within the requirements of this Specification and local regulations
- Q. The Contractor shall provide suitable test pumps and arrange for a supply of water required in connection with testing of pipework. The test pump shall be fitted with pressure gauges which shall be of suitable range for the pressure being applied.
- R. Hydraulic tests shall be carried out as the pipework is installed and shall be completed before crases in walls and ducts are closed. Also test shall be carried out prior to false ceilings and other finishes are installed
- S. Testing apparatus shall be provided by the Contractor. Where any section of pipework or equipment is unable to withstand the maximum pipework test pressure, it shall be isolated during the pipework test then that section of pipework or equipment shall be re-tested at the appropriate test pressure.
- T. The Sanitary Contractor must carry out any additional tests required by the end-user and/or approving agency.
- U. Drainage pipe shall be tested by filling the pipe with 3m. of water higher than the test section and wait for 15 min, then check for leakage at every joints.
- V. Testing of drainage systems shall be carried out in sections by dividing the system horizontally. Each section shall comprise pipework and fitting for three floors/storeys required for testing
- W. Drainage pressure pipe shall be hydraulic tested at minimum pressure 50 psi.
- X. Hangers and supports for plumbing piping and equipment shall withstand the effects of gravity loads and stresses within limits and under conditions indicated according to ASCE/SEI 7.
- Y. Install hangers and supports to allow controlled thermal and seismic movement of piping systems, to permit freedom of movement between pipe anchors and to facilitate action of expansion joints, expansion loops, expansion bends, and similar units.
- Z. Install lateral bracing with pipe hangers and supports to prevent swaying.
- AA. Install building attachments within concrete slabs or attach to structural steel. Install additional attachments at concentrated loads, including valves, flanges, and strainers, NPS 2-1/2 (DN 65) and larger and at changes in direction of piping. Install concrete inserts before concrete is placed, fasten inserts to forms and install reinforcing bars through openings at top of inserts
- BB. Install hangers and supports so that piping live and dead loads and stresses from movement will not be transmitted to connected equipment
- CC. Install hangers and supports to provide indicated pipe slopes and to not exceed maximum pipe deflections allowed by ASME B31.9 for building services piping.

## VI. ELECTRICAL WORKS

### A. CONDUITS, BOXES AND FITTINGS

1. This item shall consist of the furnishing and installation of the complete conduit work, consisting of electrical conduits; conduit boxes such as junction boxes, pull boxes, utility boxes, octagonal and square boxes; conduit fittings, such as couplings, locknuts and bushings and other electrical materials needed to complete the conduit roughing-in work of this project.
2. All materials shall be brand new and shall be of the approved type meeting all the requirements of the Philippine Electrical Code and bearing the Philippine Standard Agency (PSA) mark.
3. All works throughout shall be executed in the best practice in a workmanlike manner by qualified and experienced electricians under the immediate supervision of a duly licensed Electrical Engineer.
4. The work to be done under this division of specifications consists 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 other fields. All works shall be done in accordance with the rules and regulations and with the specifications.
5. All lighting fixtures and lamps are as specified and listed on lighting fixture schedule.
6. All grounding system installation shall be executed in accordance with the approved plans. Grounding system shall include building perimeter ground wires, ground rods, clamps, connectors, ground wells and ground wire taps as shown in the approved design.
7. All auxiliary systems such as telephone and intercom system, time clock system, fire alarm system and public address/nurse's call/paging system installations shall be done in accordance with the approved design.
8. Upon completion of the electrical construction work, the contractor shall provide all test equipment and personnel and to submit written copies of all test results.
9. The contractor shall guarantee the electrical installation are done and in accordance with the approved plans and specifications. The contractor shall guarantee that the electrical systems are free from all grounds and from all defective workmanship and materials and will remain so for a period of one year from date and acceptance of works. Any defect shall be remedied by the Contractor at his own expense.

### B. WIRES AND WIRING DEVICES


1. This item shall consist of the furnishing and installation of all wires and wiring devices consisting of electric wires and cables, wall switches, convenience receptacles, heavy duty receptacles and other devices shown on the approved Plans but not mentioned in these specifications.
2. Wires and cables shall be of the approved type meeting all the requirements of the Philippine Electrical Code and bearing the Philippine Standard Agency (PSA) mark. Unless specified or indicated otherwise, all power and lighting conductors shall be insulated for 600 volts. All wires shall be copper, soft drawn and annealed, smooth and of cylindrical form and shall be centrally located inside the insulation.
3. Conductors or wires shall not be drawn in conduits until after the cement plaster is dry and the conduits are thoroughly cleaned and free from dirt and moisture. In drawing wires into conduits, sufficient slack shall be allowed to permit easy connections for fixtures, switches, receptacles and other wiring devices without the use of additional splices.
4. All conductors of convenience outlets and lighting branch circuit homeruns shall be wired with a minimum of 3.5 mm in size. Circuit homeruns to panel boards shall not be

smaller than 3.5 mm but all homeruns to panel board more than 30 meters shall not be smaller than 5.5 mm. No conductor shall be less than 2 mm in size

5. All wires of 14mm and larger in size shall be connected to panels and apparatus by means of approved type lugs or connectors of the solderless type, sufficiently large enough to enclose all strands of the conductors and securely fastened. They shall not loosen under vibration or normal strain
6. All joints, taps and splices on wires larger than 14 mm shall be made of suitable solderless connectors of the approved type and size. They shall be taped with rubber and PVC tapes providing insulation not less than that of the conductors.
7. No splices or joints shall be permitted in either feeder or branch conductors except within outlet boxes or accessible junction boxes or pull boxes. All joints in branch circuit wiring shall be made mechanically and electrically secured by approved splicing devices and taped with rubber and PVC tapes in a manner which will make their insulation as that of the conductor
8. All wall switches and receptacles shall be fitted with standard Bakelite face plate covers. Device plates for flush mounting shall be installed with all four edges in continuous contact with finished wall surfaces without the use of coated wire or similar devices. Plaster filling shall not be permitted. Plates installed in wet locations shall be gasketed.
9. When more than one switch or device is indicated in a single location, gang plate shall be used.



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Telephone Nos. 8986-4242 Local 8538



**PROJECT TITLE :** PROPOSED REHABILITATION OF PINGKIAN III ZONE 2 DAY CARE CENTER  
**LOCATION :** BARANGAY PASONG TAMO, DISTRICT 8, QUEZON CITY

### TECHNICAL SPECIFICATIONS

#### I. GENERAL REQUIREMENTS

- A. Comply with the current and existing laws, ordinances and applicable codes, rules and regulations, and standards. Any works performed contrary to the existing laws, rules and regulations, ordinances and standards without notice shall bear all cost arising therefrom.
- B. Drawings, specifications, codes and standards are minimum requirements. Where requirements differ, the more stringent apply.
- C. Should there be any change(s) in drawings or specifications, it is required to comply with the governing regulations, notify the implementing agency
- D. Photographs shall be taken as, when and where directed at intervals of not more than one month. The photographs shall be sufficient in number and location, to record the exact progress of the works. The photographs shall be retained and will become the property of the Government.
- E. Site verification / inspection shall be conducted to validate the scope of works. No extra compensation and extension of time shall be given due to negligence or inadvertence.
- F. The quality of materials shall be of the best grade of their respective kinds for the purpose. The work shall also be performed in the best and most capable manner in strict accordance with requirements of the plans and details. All materials not conforming to the requirements of these specifications shall be considered as defective.
- G. All equipment and installations shall meet or exceed minimum requirements of the standards and codes
- H. Mobilization and Demobilization (if applicable)
  1. Mobilization shall include all activities and related costs for transportation of personnel, equipment, and operating supplies to the site; establishment of offices, buildings, and other necessary general facilities for the operations at the site.
  2. Demobilization shall include all activities and costs for transportation of personnel, equipment, and supplies not anymore required within the construction site including the disassembly, removal and site clean-up of offices and other facilities assembled on the site specifically for this contract
- I. Execute work in strict accordance with the best practices of the trades in a thorough, substantial, workmanlike manner by competent workmen. Provide a competent, experienced, full-time supervisor who is authorized to make decisions on behalf of the Contractor
- J. Temporary Facilities and Utilities
  1. All facilities shall be near the job site, where necessary and shall conform to the best standard for the required types
  2. Temporary facilities shall be provided and maintained including sanitary facilities and first aid stations.

3. Temporary utilities shall be sufficiently provided until the completion of the project such as water power and communication.
  4. Temporary enclosure shall be provided around the construction site with adequate guard lights, railings and proper signage
  5. Temporary roadways shall be constructed and maintained to sustain loads to be carried on them during the entire construction period
  6. Upon completion of the work, the temporary facilities shall be demolished, hauled out and disposed properly.
- K. Adequate construction safety and health protection shall be provided at all times during the execution of work to both workers and property.**
1. A fully-trained Medical Aide shall be employed permanently on the site who shall be engaged solely to medical duties.
  2. The medical room shall be provided with waterproofing, it could be a building or room designated and used exclusively for the purpose and have a floor area of at least 15 square meters and a glazed window area of at least 2 square meters
  3. The location of the medical room and any other arrangements shall be made known to all employees by posting on prominent locations and suitable notices in the site.
  4. Additional safety precautions shall be provided in the event of a pandemic. Protocols set forth by the government shall be strictly followed.
  5. Personal Protective Equipment (PPE) shall consist of safety helmet/hard hat, safety reflectorized vest, safety insulated gloves, dust mask, safety shoes, safety goggles, and safety harness. Every skilled and unskilled worker, and the project foreman shall be provided PPE by the Contractor. Consideration of quantity shall be made for the Project Engineer, Materials Engineer, Safety Officer/Practitioner (as required) and project driver
  6. Construction safety materials shall consist of safety net, fire extinguisher and safety signage and posters
- L. Necessary protections to the adjacent property shall be provided to avoid untoward incidents / accidents.**
- M. Final cleaning of the work shall be employed prior to the final inspection for the certification of final acceptance. Final cleaning shall be applied on each surface or unit of work and shall be of condition expected for a building cleaning and maintenance program.**

## **II. SITE WORKS**

- A. All grades, lines, levels and dimensions shall be verified as indicated on the plans and details. Any discrepancies or inconsistencies shall be reported before commencing work.**
- B. This item shall consist of the removal wholly or in part, and satisfactory disposal of all buildings, fences, structures, old pavements, abandoned pipe lines and any other obstructions which are not designated or permitted to remain, except for the obstructions to be removed and disposed of under other items in the Contract.**
- Removal and/or demolition of existing structures shall be done in accordance to safety procedures
- C. All excavations shall be made to grade as indicated in the plans. Whenever water is encountered in the excavation process, it shall be removed by pumping, care being taken that the surrounding soil particles are not disturbed or removed.**

The Contractor shall notify the Engineer sufficiently in advance of the beginning of any excavation so that cross-sectional elevations and measurements may be taken on the undisturbed ground. The natural ground adjacent to the structure shall not be disturbed without permission of the Engineer

Trenches or foundation pits for structures or structure footings shall be excavated to the lines and grades or elevations shown on the Plans or as staked by the Engineer. They shall be of sufficient size to permit the placing of structures or structure footings of the full width and length shown. The elevations of the bottoms of footings, as shown on the Plans, shall be considered as approximate only and the Engineer may order, in writing, such changes in dimensions or elevations of footings as may be deemed necessary, to secure a satisfactory foundation.

Boulders, logs, and other objectionable materials encountered in excavation shall be removed.

After each excavation is completed, the Contractor shall notify the Engineer to that effect and no footing, bedding material or pipe culvert shall be placed until the Engineer has approved the depth of excavation and the character of the foundation material.

- D. All excavated materials, so far as suitable, shall be utilized as backfill. The surplus materials shall be disposed of in such manner as not to obstruct the stream or otherwise impair the efficiency or appearance of the structure. No excavated materials shall be deposited at any time so as to endanger the partly finished structure.

All backfills shall be placed in layers not exceeding to 150mm in thickness and each layer shall be thoroughly compacted by wetting, tamping and rolling.

- E. Soil Poisoning. There are two methods usually adopted in soil poisoning which are as follows:

1. Cordoning. This method is usually adopted when there is no visible evidence of termite infestation. Trenches in concentric circles, squares or rectangles are dug 150mm to 220mm wide and at least one meter apart and applied with Liquid Termicide Concentrate working solution at the rate of 8 liters per linear meter.
2. Drenching. When soil show termite infestation, this method shall be applied. The building area shall be thoroughly drenched with Liquid Termicide Concentrate working solution at the rate of 24 liters per square meter.

### III. CIVIL / STRUCTURAL WORKS

#### A. ROOFING WORKS

1. The roof shall be covered with Ga. 24 pre-painted G.I. rib-type roofing sheets as shown on the plans. The roofing shall be secured to the purlins with min. 2 1/2" max. 3" long Tek screws. Ridge rolls, hip rolls and valleys to be used shall be those compatible with the Ga. 24 pre-painted G.I. rib-type roofing sheets. They shall lap the roofing sheets at least 250mm. The ridge rolls, hip rolls and valleys shall be riveted to the roofing sheets.
2. The roof shall be covered with 6mm thick Rib-type polycarbonate sheets as shown on the plans. The roofing shall be secured to the purlins with min. 2 1/2" max. 3" long Tek screws. Ridge rolls, hip rolls and valleys to be used shall be those compatible with the 6mm thick solid polycarbonate sheets. They shall lap the roofing sheets at least 250mm. The ridge rolls, hip rolls and valleys shall be riveted to the roofing sheets.
3. All roofing sheets adjacent to concrete hollow block and other masonry walls such as property line firewalls, shall be provided with Gauge 26 pre-painted plain G.I. Flashing to extend to the top and over to the other side of the wall. All fasteners shall be placed at the top of the corrugations of the roofing sheets to prevent water from standing around the fasteners. Materials
  - a. Steel and Iron. If not specified otherwise, use standard mill-finished structural steel shapes or bar iron in compliance with AISC Specifications for Design, Fabrication and Erection of Structural Steel for buildings.
  - b. Bolts, Nuts, Studs and Rivets. ASTM A 307 and A 325.
  - c. Screws. Fed. Spec. FF-S-85, Fed. Spec. FF-S-92, and Fed. Spec. FF-S-111

- d. Metal Purlins. High grade galvanized steel with minimum tensile strength of 275 MPa, 1.4mm in thickness or approved equal.

## B. METAL FABRICATION

### 1. Materials:

- e. Steel and Iron. If not specified otherwise, use standard mill-finished structural steel shapes or bar iron in compliance with AISC Specifications for Design, Fabrication and Erection of Structural Steel for buildings.
- f. Bolts, Nuts, Studs and Rivets. ASTM A 307 and A 325.
- g. Screws Fed. Spec. FF-S-85 Fed. Spec. FF-S-92, and Fed. Spec. FF-S-111
- h. Metal Purlins. High grade galvanized steel with minimum tensile strength of 275 MPa, 1.4mm in thickness or approved equal.

### 2. Fabrication:

By mechanics skilled in the trade and in accordance with the manufacturer's directions. Metalwork shall be fabricated to allow for expansion and contraction of materials. Provide welding and bracing of adequate strength and durability, with tight, flush joints, dressed smooth and clean. Complete with bolts and nuts.

### 3. Metal Surfaces

Surfaces shall be clean and free from all scale, flake, rust and rust pitting, well-formed and finished to shape and size, with sharp lines, angle and smooth surface. Shearing and punching shall leave clean true lines and surfaces. Weld or rivet permanent connections. Weld and flush rivets shall be used and finished flush smooth on surfaces that will be exposed after installation. Do not use screws or bolts where they can be avoided, when used, heads shall be countersunk, screwed up tight and threads nicked to prevent loosening.

### 4. Construction:

Thickness of metals and details of assembly and supports shall give ample strength and stiffness for the minimum loads specified or indicated. Joints exposed to weather shall be formed to exclude water.

### 5. Welding:

Use welding electrode E70xx and perform welding, welding inspection and corrective welding in accordance with AWS D1.1. Weld in a manner to prevent permanent distortion of the connected parts. Weld continuously along the entire area of contact (except where tack welding is permitted. Do not tack weld exposed to connections). Grind smooth visible weld in finished installation.

## IV. ARCHITECTURAL WORKS

### A. FLOOR FINISHES

1. 300mm x 300mm Non-Skid Homogeneous Tiles including tile adhesive
2. 400mm x 400mm Homogeneous Tiles including tile adhesive
3. 50mm concrete Topping with Plain Cement Finish

### B. WALL FINISHES

1. 300mm x 300mm Homogeneous Tiles including tile adhesive
2. 50mm concrete Topping with Plain Cement Finish

### C. PAINTING WORKS



1. **Paint Materials** All types of paint material and other related products shall be subject to test as to material composition by the Bureau of Research and Standard, DPWH or the National Institute of Science and Technology.
2. **Tinting Colors** Tinting colors shall be first grade quality pigment ground in alkyd resin that disperses and mixes easily with paint to produce the color desired. Use the same brand of paint and tinting color to effect good paint body.
3. **Skim coat** Skim coat shall be fine powder type material like kalsomine that can be mixed into putty consistency, with oil-based primers and paints to fill minor surface dents and imperfections.
4. **Paint Schedule.**
  - b. **Exterior Masonry Wall (plain cement plastered finish to be painted)**
    - i. 1 coat skim coating, 1 coat primer, 2 coats elastomeric paint finish
  - c. **Interior Masonry Wall (plain cement plastered finish to be painted)**
    - i. 1 coat skim coating, 1 coat primer, 2 coats latex paint finish
  - d. **Interior Dry Wall**
    - i. 1 coat primer, 2 coats latex paint finish
  - e. **Ceiling Boards**
    - i. 1 coat primer, 2 coats latex paint finish
  - f. **Slab Soffit**
    - i. 1 coat primer, 2 coats latex paint finish
  - g. **Metal / Steel Surfaces**
    - i. 1 coat primer, 2 coats epoxy enamel finish
5. **Surface Preparation** All surfaces shall be in proper condition to receive the finish. Woodworks shall be hand-sanded smooth and dusted clean. All knot-holes pitch pockets or sappy portions shall be sealed with natural wood filler. Nail holes, cracks or defects shall be carefully puttied after the first coat matching the color of paint.

Interior woodworks shall be sandpapered between coats. Cracks, holes or imperfections in plaster shall be filled with patching compound and smoothed off to match adjoining surfaces.

Concrete and masonry surfaces shall be coated with concrete neutralizer and allowed to dry before any painting primer coat is applied. When surface is dried apply first coating. Hairline cracks and unevenness shall be patched and sealed with approved putty or patching compound. After all defects are corrected apply the finish coats as specified on the Plans (color scheme approved).

Metal shall be clean, dry and free from mill scale and rust. Remove all grease and oil from surfaces. Wash unprimed galvanized metal with etching solution and allow it to dry. Where required to prime coat surface with Red Lead Primer same shall be approved by the Engineer.

In addition, the Contractor shall undertake the following.

- a. Voids, cracks, nick etc. will be repaired with proper patching material and finished flush with surrounding surfaces
- b. Matted or damaged shop coats on metal shall be spot primed with appropriate metal primer.

- c. Painting and varnishing works shall not be commenced when it is too hot or cold.
  - d. Allow appropriate ventilation during application and drying period
  - e. All hardware will be fitted and removed or protected prior to painting and varnishing works.
- i. Application Paints when applied by brush shall become non-fluid, thick enough to lay down as adequate film of wet paint. Brush marks shall have flowed out after application of paint.
- Paints made for application by roller must be similar to brushing paint. It must be non-sticky when thinned to spraying viscosity so that it will break up easily into droplets.
- Paint is atomized by high pressure pumping rather than broken up by the large volume of air mixed with it. This procedure changes the required properties of the paint.
- ii. Application shall be as per paint Manufacturer's specification and recommendation.
  - iii. Provide all drop cloth and other covering requisite for protection of floors, walls, aluminum, glass, finishes and other works
  - iv. All applications and methods used shall strictly follow the Manufacturer's Instructions and Specifications.
  - v. All surfaces including masonry wall shall be thoroughly cleaned, putied, sandpapered, rubbed and polished. masonry wall shall be treated with Neutralizer.
  - vi. 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.
  - vii. All other surfaces endangered by stains and paint marks should be taped and covered with craft paper.

#### **D. CEILING FINISHES**

6mm thick Fiber Cement Board including Metal Framing and Accessories

#### **E. DOORS & WINDOWS**

Follow as per approved plan and specifications.

#### **F. FABRICATED MATERIALS**

Follow as per approved plan and specifications

#### **G. LETTERINGS**

Follow as per approved plan and specifications

## V. SANITARY / PLUMBING WORKS

- A. Comply with the current applicable codes, ordinances, and regulations of the authority or authorities having jurisdiction, the rules, regulations and requirements of the utility companies (as applicable).
- B. Supply, installation and testing of the following:
  - 1. Potable water supply system complete in all respects including but not limited to submittals, shop drawings, piping, water meters, valves, bibbs, insulation, all accessories required for complete and operational of the system.
  - 2. Water service connections including but not limited to water meters, float valves. Any and all other works involve in providing the complete operation of the water supply system.
  - 3. Soil waste and vent system complete in all respect including but not limited to connection to existing sewer submittals, shop drawings, pipes, fittings, valves, cleanout, drains, etc. Complete and operational.
  - 4. Storm drainage system complete in all respect including but not limited to connection to existing storm drainage submittals, shop drawings, pipes, fittings, valves, cleanout, drains, etc. Complete and operational.
- C. Workmanship and installation methods shall conform to the best modern practice. Employ skilled tradesmen to perform work under the direct supervision of fully qualified personnel.
- D. All equipment and installations shall meet or exceed minimum requirements of the Standards and Codes as specified in plans and program of work.
- E. Install equipment in strict accordance with manufacturers written recommendations.
- F. Physical sizes of all plant and equipment are to be suitable for the space allocated for the accommodation of such plant and equipment, taking into account the requirement of access for maintenance purposes.
- G. In selecting makes and types of equipment, the Contractor shall ascertain that facilities for proper maintenance, repair and replacement are provided.
- H. Where the Contractor proposes to use an item of equipment other than that specified or detailed in the drawing, which requires any redesign of the system, drawings showing the layout of the equipment and such redesign as required therefore shall be prepared by the Contractor at his own expenses. Where such approved deviation necessitates a different quantity and arrangement of materials and equipment's from that originally specified or indicated in the drawings, the Contractor shall furnish and install any such additional materials and equipment's required by the system at no additional cost.
- I. Equipment catalogue and manufacturer's specifications must be submitted for examination and details shall be submitted for approval before any equipment is to be ordered.
- J. This shall include all information necessary to ascertain the equipment comply with this specification and drawings. Data and sales catalogue of a general nature will not be accepted.
- K. All materials, equipment, components and accessories shall be delivered to the Site in a new condition, properly packed and protected against damage or contamination or distortion, breakage or structural weakening due to handling, adverse weather or other circumstances and, as far as practicable, they shall be kept in the packing cases or under approved protective coverings until required for use.
- L. Any items suffering from damage during manufacture, or in transit, or on site whilst in storage or during erection shall be rejected and replaced without extra cost.
- M. All sanitary fittings and pipework shall be cleaned after installation and keep them in a new condition.

- N. All installed pipelines shall be flushed through with water, rodded when necessary to ensure clearance of debris.
- O. Cleaning and flushing shall be carried out in sections as the installation becomes completed.
- P. The Contractor shall carry out hydraulic test on the complete plumbing systems and the drainage system to show that it is functioning satisfactorily within the requirements of this Specification and local regulations.
- Q. The Contractor shall provide suitable test pumps and arrange for a supply of water required in connection with testing of pipework. The test pump shall be fitted with pressure gauges which shall be of suitable range for the pressure being applied.
- R. Hydraulic tests shall be carried out as the pipework is installed and shall be completed before chases in walls and ducts are closed. Also test shall be carried out prior to false ceilings and other finishes are installed.
- S. Testing apparatus shall be provided by the Contractor. Where any section of pipework or equipment is unable to withstand the maximum pipework test pressure, it shall be isolated during the pipework test then that section of pipework or equipment shall be re-tested at the appropriate test pressure.
- T. The Sanitary Contractor must carry out any additional tests required by the end-user and/or approving agency.
- U. Drainage pipe shall be tested by filling the pipe with 3m. of water higher than the test section and wait for 15 min, then check for leakage at every joints.
- V. Testing of drainage systems shall be carried out in sections by dividing the system horizontally. Each section shall comprise pipework and filling for three floors/storays required for testing.
- W. Drainage pressure pipe shall be hydraulic tested at minimum pressure 50 psi.
- X. Hangers and supports for plumbing piping and equipment shall withstand the effects of gravity loads and stresses within limits and under conditions indicated according to ASCE/SEI 7.
- Y. Install hangers and supports to allow controlled thermal and seismic movement of piping systems, to permit freedom of movement between pipe anchors, and to facilitate action of expansion joints, expansion loops, expansion bends, and similar units.
- Z. Install lateral bracing with pipe hangers and supports to prevent swaying.
- AA. Install building attachments within concrete slabs or attach to structural steel. Install additional attachments at concentrated loads, including valves, flanges, and strainers, NPS 2-1/2 (DN 65) and larger and at changes in direction of piping. Install concrete inserts before concrete is placed, fasten inserts to forms and install reinforcing bars through openings at top of inserts.
- BB. Install hangers and supports so that piping live and dead loads and stresses from movement will not be transmitted to connected equipment.
- CC. Install hangers and supports to provide indicated pipe slopes and to not exceed maximum pipe deflections allowed by ASME B31.9 for building services piping.

## VI. ELECTRICAL WORKS

### A. CONDUITS, BOXES AND FITTINGS

1. This item shall consist of the furnishing and installation of the complete conduit work consisting of electrical conduits; conduit boxes such as junction boxes, pull boxes, utility boxes, octagonal and square boxes; conduit fittings, such as couplings, locknuts and bushings and other electrical materials needed to complete the conduit roughing-in work of this project.
2. All materials shall be brand new and shall be of the approved type meeting all the requirements of the Philippine Electrical Code and bearing the Philippine Standard Agency (PSA) mark.
3. All works throughout shall be executed in the best practice in a workmanlike manner by qualified and experienced electricians under the immediate supervision of a duly licensed Electrical Engineer.
4. The work to be done under this division of specifications consists 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 other fields. All works shall be done in accordance with the rules and regulations and with the specifications.
5. All lighting fixtures and lamps are as specified and listed on lighting fixture schedule.
6. All grounding system installation shall be executed in accordance with the approved plans. Grounding system shall include building perimeter ground wires, ground rods, clamps, connectors, ground wells and ground wire taps as shown in the approved design.
7. All auxiliary systems such as telephone and intercom system, time clock system, fire alarm system and public address/nurse's call/paging system installations shall be done in accordance with the approved design.
8. Upon completion of the electrical construction work, the contractor shall provide all test equipment and personnel and to submit written copies of all test results.
9. The contractor shall guarantee the electrical installation are done and in accordance with the approved plans and specifications. The contractor shall guarantee that the electrical systems are free from all grounds and from all defective workmanship and materials and will remain so for a period of one year from date and acceptance of works. Any defect shall be remedied by the Contractor at his own expense.

### B. WIRES AND WIRING DEVICES

1. This item shall consist of the furnishing and installation of all wires and wiring devices consisting of electric wires and cables, wall switches, convenience receptacles, heavy duty receptacles and other devices shown on the approved Plans but not mentioned in these specifications.
2. Wires and cables shall be of the approved type meeting all the requirements of the Philippine Electrical Code and bearing the Philippine Standard Agency (PSA) mark. Unless specified or indicated otherwise, all power and lighting conductors shall be insulated for 600 volts. All wires shall be copper, soft drawn and annealed, smooth and of cylindrical form and shall be centrally located inside the insulation.
3. Conductors or wires shall not be drawn in conduits until after the cement plaster is dry and the conduits are thoroughly cleaned and free from dirt and moisture. In drawing wires into conduits, sufficient slack shall be allowed to permit easy connections for fixtures, switches, receptacles and other wiring devices without the use of additional splices.
4. All conductors of convenience outlets and lighting branch circuit homeruns shall be wired with a minimum of 3.5 mm in size. Circuit homeruns to panel boards shall not be

smaller than 3.5 mm but all homeruns to panel board more than 30 meters shall not be smaller than 5.5 mm. No conductor shall be less than 2 mm in size

5. All wires of 14mm and larger in size shall be connected to panels and apparatus by means of approved type lugs or connectors of the solderless type, sufficiently large enough to enclose all strands of the conductors and securely fastened. They shall not loosen under vibration or normal strain.
6. All joints, taps and splices on wires larger than 14 mm shall be made of suitable solderless connectors of the approved type and size. They shall be taped with rubber and PVC tapes providing insulation not less than that of the conductors
7. No splices or joints shall be permitted in either feeder or branch conductors except within outlet boxes or accessible junction boxes or pull boxes. All joints in branch circuit wiring shall be made mechanically and electrically secured by approved splicing devices and taped with rubber and PVC tapes in a manner which will make their insulation as that of the conductor.
8. All wall switches and receptacles shall be fitted with standard Bakelite face plate covers. Device plates for flush mounting shall be installed with all four edges in continuous contact with finished wall surfaces without the use of coiled wire or similar devices. Plaster filling shall not be permitted. Plates installed in wet locations shall be gasketed
9. When more than one switch or device is indicated in a single location, gang plate shall be used



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## TECHNICAL SPECIFICATIONS QUEZON CITY INFRASTRUCTURE PROJECT

**PROJECT TITLE: PROPOSED CONSTRUCTION OF HAND WASHING FACILITY AND REHABILITATION OF PINGKIAN III ZONE 3 DAY CARE CENTER**

**LOCATION: BARANGAY PASONG TAMO, DISTRICT 6, QUEZON CITY**

### I. GENERAL REQUIREMENTS

- a. Comply with the current and existing laws, ordinances and applicable codes, rules and regulations and standards. Any works perform contrary to the existing laws, rules and regulations, ordinances and standards without notice shall bear all cost arising therefrom.
- b. Drawings, specifications, codes and standards are minimum requirements. Where requirements differ, the more stringent apply.
- c. Should there be any change(s) in drawings or specifications, if is required to comply with the governing regulations, notify the implementing agency.
- d. Photographs shall be taken as, when and where directed at intervals of not more than one month. The photographs shall be sufficient in number and location to record the exact progress of the works. The photographs shall be retained and will become the property of the Government.
- e. Site verification / inspection shall be conducted to validate the scope of works. No extra compensation and extension of time shall be given due to negligence or inadvertence.
- f. The quality of materials shall be of the best grade of their respective kinds for the purpose. The work shall also be performed in the best and most capable manner in strict accordance with requirements of the plans and details. All materials not conforming to the requirements of these specifications shall be considered as defective.
- g. All equipment and installations shall meet or exceed minimum requirements of the standards and codes.
- h. Mobilization and Demobilization (if applicable)
  - i. Mobilization shall include all activities and related costs for transportation of personnel, equipment, and operating supplies to the site; establishment of offices, buildings, and other necessary general facilities for the operations at the site.
  - ii. Demobilization shall include all activities and costs for transportation of personnel, equipment, and supplies not anymore required within the construction site including the disassembly, removal and site clean-up of offices and other facilities assembled on the site specifically for this contract.

- i. Execute work in strict accordance with the best practices of the trades in a thorough, substantial, workmanlike manner by competent workmen. Provide a competent, experienced, full-time supervisor who is authorized to make decisions on behalf of the Contractor
- j. Temporary Facilities and Utilities
  - i. All facilities shall be near the job site, where necessary and shall conform to the best standard for the required types.
  - ii. Temporary facilities shall be provided and maintained including sanitary facilities and first aid stations.
  - iii. Temporary utilities shall be sufficiently provided until the completion of the project such as water, power and communication.
  - iv. Temporary enclosure shall be provided within the construction site with adequate guard lights, railings and proper signages.
  - v. Temporary roadways shall be constructed and maintained to sustain loads to be carried on them during the entire construction period.
  - vi. Upon completion of the work, the temporary facilities shall be demolished, hauled-out and disposed properly.
- k. Adequate construction safety and health protection shall be provided at all times during the execution of work to both workers and property
  - i. A fully trained Medical Aide shall be employed permanently on the site who shall be engaged solely from medical duties
  - ii. The medical room shall be provided in waterproof; it could be a building or room designated and used exclusively for the purpose and have a floor area of at least 15 square meters and a glazed window area of at least 2 square meters.
  - iii. The location of the medical room and any other arrangements shall be made known to all employees by posting on prominent locations suitable notices in the site.
  - iv. Additional safety precautions shall be provided in the observance of pandemic. Protocols set-forth by the government shall be strictly followed.
- l. Necessary protections to the adjacent property shall be provided to avoid untoward incidents / accidents.
- m. Final cleaning of the work shall be employed prior to the 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 building cleaning and maintenance program.

## II. SITE WORKS

- A. All grades, lines, levels and dimensions shall be verified as indicated on the plans and details. Any discrepancies or inconsistencies shall be reported before commencing to work.
- B. Removal / demolition of existing structures shall be done in accordance to safety procedures.
- C. All excavations shall be made to grade as indicated in the plans. Whenever water is encountered in the excavation process, it shall be removed by pumping, care being taken that the surrounding soil particles are not disturbed or removed.
- D. All backfills shall be placed in layers not exceeding to 150mm in thickness and each layer shall be thoroughly compacted wetting, tamping and rolling



### III. CIVIL / STRUCTURAL WORKS

#### A. CONCRETE WORK

- a. **Delivery, Storage, and Handling:** All materials shall be so delivered, stored, and handled as to prevent the inclusion of foreign materials and the damage of materials by water or breakage. Package materials shall be delivered and stored in original packages until ready to be used. Packages or materials showing evidence of water or other damage shall be rejected.
- b. Unless otherwise specified herein, concrete works shall conform to the requirements of the ACI Building Code. Full cooperation shall be given on trades to install embedded items. Provisions shall be made for setting items not placed in the forms. Before concrete is placed, embedded items shall have been inspected and tested for concrete aggregates and other materials shall have been done.
- c. **Materials**
  - i. Cement for concrete shall conform to the requirements of specifications for Portland Cement (ASTM C - 150).
  - ii. Water used in mixing concrete shall be clean and free from other injurious amounts of oils, acids, alkaline, organic materials or other substances that may be deleterious to concrete or steel.
  - iii. Fine aggregates shall be beach or river sand conforming to ASTM C33, 'Specification for Concrete Aggregates'. Sand particle shall be coarse, sharp, clean free from salt, dust, loam, dirt and all foreign matters.
  - iv. Coarse aggregates shall be either natural gravel or crushed rock conforming to the 'Specifications for Concrete Aggregates (ASTM C33). The minimum size of aggregates shall be larger than one fifth (1/5) of the narrowest dimensions between sides of the forms within which the concrete is to be cast nor larger than three fourths (3/4) of the minimum clear spacing between reinforcing bars or between reinforcing bars and forms.
- d. **Proportioning and Mixing**
  - i. Proportioning and mixing of concrete shall conform to the requirements for Item 405 of the standard specification with the following proportions:  
 Cement : Sand : Gravel
    - Class 'A' - 1 : 2 : 3
    - Class 'B' - 1 : 2 : 4
    - Class 'C' - 1 : 2 : ½
  - ii. Concrete mixture to be used for concrete shall conform with the structural requirements.
  - iii. Mixing - concrete shall be machine mixed. Mixing shall begin within 30 minutes after the cement has been added to the aggregates.
- e. **Forms**
  - i. **General** - Forms shall be used whatever necessary to confine the concrete and shape it to the required lines, or to insure the concrete of contamination with materials coming from adjacent, excavated surfaces. Forms shall have sufficient strength to withstand the pressure resulting from placement and vibration of the concrete and shall be maintained rigidly in correct position. Forms shall be sufficiently tight to prevent loss of mortar from the concrete. Forms shall be ¼" waterproof plywood and form lumber.
  - ii. **Cleaning of Forms** - before placing the concrete, the contact surfaces of the forms shall be cleaned of encrustations of mortar, the grout or other foreign material.

- iii. Removal of Forms - forms shall be removed in a manner which will prevent damage to the concrete. Forms shall not be removed without approval. Any repairs of surface imperfections shall be formed at once and curing shall be started as soon as the surface is sufficiently hard to permit it without further damage.

1. Placing Reinforcement:

Steel reinforcement shall be provided as indicated, together with all necessary wire ties, chairs, spacer supported and other devices necessary to install and secure the reinforcement properly. All reinforcement, when placed, shall be free from loose, flaky rust and scale, oil grease, clay and other coating and foreign substances that would reduce or destroy its bond with concrete. Reinforcement shall be placed accurately and secured in place by use of metal or concrete supports, spacers and ties. Such supports shall be used in such manner that they will not be exposed or contribute in any way, to the discoloration or deterioration of the concrete.

g. Conveying and Placing Concrete:

- i. Conveying - concrete shall be conveyed from mixer to forms as rapidly as applicable, by methods which will prevent segregation, or loss of ingredients. There will be no vertical drop greater than 1.5 meters except where suitable equipment is provided to prevent segregation and where specifically authorized.
- ii. Placing - concrete shall be worked readily into the corners and angles of the forms and around all reinforcement and imbedded items without permitting the material to segregate, concrete shall be deposited as close as possible to its final position in the forms so that flow within the mass does not exceed two (2) meters and consequently segregation is reduced to a minimum near forms or embedded items, or elsewhere as directed, the discharge shall be so controlled that the concrete may be effectively compacted into horizontal layers not exceeding 30 centimeters in depth within the maximum lateral movement specified.
- iii. Time interval between mixing and placing. Concrete shall be placed before initial set has occurred and before it has contained its water content for more than 45 minutes. No concrete mix shall be placed before 60 complete revolution of the machine mixer.
- iv. Consolidation of Concrete - concrete shall be consolidated with the aid of mechanical vibrating equipment and supplemented by the hand spading and tamping. Vibrators shall not be inserted into lower courses that have commenced initial set; and reinforcement embedded in concrete beginning to set or already set shall not be disturbed by vibrators. Consolidation around major embedded parts shall be by hand spading and tamping and vibrators shall not be used.
- v. Placing Concrete through reinforcement - In placing concrete through reinforcement, care shall be taken that no segregation of the coarse aggregate occurs. On the bottom of beams and slabs, where the congestion of steel near the forms makes placing difficult, a layer of mortar of the same cement-sand ratios as used in concrete shall be first deposited to cover the surfaces.

h. Curing

- i. General - All concrete shall be moist cured for a period not less than seven (7) consecutive days by an approved method or combination applicable to local conditions.
- ii. Moist Curing - The surface of the concrete shall be kept continuously wet by covering with burlap plastic or other approved materials thoroughly saturated with water and keeping the covering spraying or intermittent hosing.

i. Finishing

- i. Concrete surfaces shall not be plastered unless otherwise indicated. Exposed concrete surfaces shall be formed with plywood, and after removal of forms, the surfaces shall be smooth, true to line and shall present or finished appearance.

except for minor defects which can be easily repaired with patching with cement mortar, or can be ground to a smooth surface to remove all joint marks of the form works.

- ii. Concrete Slabs on Fill The concrete slabs on fill shall be laid on a prepared foundation consisting of sub grade and granular fill with thickness equal to the thickness of the overlaying slab except when indicated,

## B. MASONRY

- a. Masonry Units (CHB).
  - i. 100mm thick for all interior walls and exterior walls unless otherwise indicated.
  - ii. Use 400 psi for non-load bearing blocks and 700 psi for load bearing blocks where required
  - iii. Where full height walls are constructed with concrete hollow blocks, these shall extend up to the bottom of beam or slab unless otherwise indicated on plans. Provide stiffener columns & lintel beams as specified in the structural drawings or as specified or as deemed required to assure a stabilized wall due to height & other considerations.
- b. Sand.
 

S-1, washed, clean and greenish in color.
- c. Mortar:
 

One part "Portland" cement and two parts sand and water but not more than three parts sand and water.
- d. Plaster bond:
 

Apply plaster bond to all wall area

## C. ROOFING WORKS

- a. The roof shall be covered with Ga 24 pre-painted G.I. rib-type roofing sheets as shown on the plans. The roofing shall be secured to the purlins with min. 2 1/2" max. 3" long Tek screws. Ridge rolls, hip rolls and valleys to be used shall be those compatible with the Ga 24 pre painted G.I. rib-type roofing sheets. They shall lap the roofing sheets at least 250mm. The ridge rolls, hip rolls and valleys shall be riveted to the roofing sheets.
- b. All roofing sheets adjacent to concrete hollow block and other masonry walls such as property line firewalls, shall be provided with Gauge 26 pre-painted plain G.I. Flashing to extend to the top and over to the other side of the wall. All fasteners shall be placed at the top of the corrugations of the roofing sheets to prevent water from standing around the fasteners

**D. WATERPROOFING****a. 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

**b. Testing:**

Test waterproofed area by seventy two (72) hours and check for any seepages.

Note Thickness should be as per Manufacturers Specifications and Installation depending on the Areas to be applied with

**IV. ARCHITECTURAL WORKS****A. TILE WORKS**

- a. Both broken and unbroken old tiles must be chip-off
- b. Surface should be smoothen & clear
- c. Ceramic tiles shall be soaked in clean water prior to Installation
- d. Lay the tiles true to profile as specified in the plan.

**B. PROVISION OF CABINET**

- a. Good Lumber must be 2" x 2" x 10' for support frames and main frames.
- b. 1/2" thick Plywood must be used.
- c. Countertop must be finished with 300mm x 300mm Tiles.

**C. FABRICATED DOORS & WINDOWS**

All doors and windows must be in approved quality as specified in the plan and program of works

**D. PAINTING WORKS**

- a. All primers, thinners and putty, also waterproofing for internal and external application shall be the same brand as the specified material.
- b. Application shall be as per paint Manufacturer's specification and recommendation
- c. Provide all drop cloth and other covering requisite for protection of floors, walls, aluminum, glass, finishes and other works.
- d. All applications and methods used shall strictly follow the Manufacturer's Instructions and Specifications.
- e. All surfaces including masonry wall shall be thoroughly cleaned, puttyed, sandpapered, rubbed and polished, masonry wall shall be treated with Neutralizer
- f. 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
- g. All other surfaces endangered by stains and paint marks should be taped and covered with craft paper

## V. SANITARY / PLUMBING WORKS

- A. Comply with the current applicable codes, ordinances, and regulations of the authority or authorities having jurisdiction, the rules, regulations and requirements of the utility companies (as applicable).
- B. Supply, installation and testing of the following
  - B.1 Potable water supply system complete in all respects including but not limited to submittals, shop drawings, piping, water meters, valves, bibbs, insulation, all accessories required for complete and operational of the system.
  - B.2 Water service connections including but not limited to water meters, float valves. Any and all other works involve in providing the complete operation of the water supply system
  - B.3 Soil waste and vent system complete in all respect including but not limited to connection to existing sewer, submittals, shop drawings, pipes, fittings, valves, cleanout, drains, etc. Complete and operational.
  - B.4 Storm drainage system complete in all respect including but not limited to connection to existing storm drainage, submittals, shop drawings, pipes, fittings, valves, cleanout, drains, etc. Complete and operational.
- C. Workmanship and installation methods shall conform to the best modern practice. Employ skilled tradesmen to perform work under the direct supervision of fully qualified personnel.
- D. All equipment and installations shall meet or exceed minimum requirements of the Standards and Codes as specified in plans and program of work.
- E. Install equipment in strict accordance with manufacturers written recommendations.
- F. Physical sizes of all plant and equipment are to be suitable for the space allocated for the accommodation of such plant and equipment, taking into account the requirement of access for maintenance purposes.
- G. In selecting makes and types of equipment, the Contractor shall ascertain that facilities for proper maintenance, repair and replacement are provided
- H. Where the Contractor proposes to use an item of equipment other than that specified or detailed in the drawing, which requires any redesign of the system, drawings showing the layout of the equipment and such redesign as required therefore shall be prepared by the Contractor at his own expenses. Where such approved deviation necessitates a different quantity and arrangement of materials and equipment's from that originally specified or indicated in the drawings, the Contractor shall furnish and install any such additional materials and equipment's required by the system at no additional cost.
- I. Equipment catalogue and manufacturer's specifications must be submitted for examination and details shall be submitted for approval before any equipment is to be ordered.
- J. This shall include all information necessary to ascertain the equipment comply with this specification and drawings. Data and sales catalogue of a general nature will not be accepted.
- K. All materials, equipment, components and accessories shall be delivered to the Site in a new condition, properly packed and protected against damage or contamination or distortion, breakage or structural weakening due to handling, adverse weather or other circumstances and, as far as practicable, they shall be kept in the packing cases or under approved protective coverings until required for use.
- L. Any items suffering from damage during manufacture, or in transit, or on site whilst in storage or during erection shall be rejected and replaced without extra cost.

- M. All sanitary fittings and pipework shall be cleaned after installation and keep them in a new condition
- N. All installed pipelines shall be flushed through with water, rodded when necessary to ensure clearance of debris.
- O. Cleaning and flushing shall be carried out in sections as the installation becomes completed.
- P. The Contractor shall carry out hydraulic test on the complete plumbing systems and the drainage system to show that it is functioning satisfactorily within the requirements of this Specification and local regulations.
- Q. The Contractor shall provide suitable test pumps and arrange for a supply of water required in connection with testing of pipework. The test pump shall be fitted with pressure gauges which shall be of suitable range for the pressure being applied
- R. Hydraulic tests shall be carried out as the pipework is installed and shall be completed before chases in walls and ducts are closed. Also test shall be carried out prior to false ceilings and other finishes are installed
- S. Testing apparatus shall be provided by the Contractor. Where any section of pipework or equipment is unable to withstand the maximum pipework test pressure, it shall be isolated during the pipework test then that section of pipework or equipment shall be re-tested at the appropriate test pressure.
- T. The Sanitary Contractor must carry out any additional tests required by the end-user and/or approving agency
- U. Drainage pipe shall be tested by filling the pipe with 3m of water higher than the test section and wait for 15 min, then check for leakage at every joints.
- V. Testing of drainage systems shall be carried out in sections by dividing the system horizontally. Each section shall comprise pipework and fitting for three floors/storeys required for testing
- W. Drainage pressure pipe shall be hydraulic tested at minimum pressure 50 psi
- X. Hangers and supports for plumbing piping and equipment shall withstand the effects of gravity loads and stresses within limits and under conditions indicated according to ASCE/SEI 7
- Y. Install hangers and supports to allow controlled thermal and seismic movement of piping systems, to permit freedom of movement between pipe anchors, and to facilitate action of expansion joints, expansion loops, expansion bends, and similar units.
- Z. Install lateral bracing with pipe hangers and supports to prevent swaying.
- AA. Install building attachments within concrete slabs or attach to structural steel. Install additional attachments at concentrated loads, including valves, flanges, and strainers. NPS 2-1/2 (DN 65) and larger and at changes in direction of piping. Install concrete inserts before concrete is placed; fasten inserts to forms and install reinforcing bars through openings at top of inserts
- BB. Install hangers and supports so that piping live and dead loads and stresses from movement will not be transmitted to connected equipment.
- CC. Install hangers and supports to provide indicated pipe slopes and to not exceed maximum pipe deflections allowed by ASME B31.9 for building services piping.

## VI. ELECTRICAL WORKS

- A. Comply with the current applicable codes, ordinances, and regulations of the authority or authorities having jurisdiction, the rules, regulations and requirements of the utility companies (as applicable).
- B. Drawings, specifications, codes and standards are minimum requirements. Where requirements differ, the more stringent apply.

- C. All equipment and installations shall meet or exceed minimum requirements of the Standards and Codes.
- D. Execute work in strict accordance with the best practices of the trades in a thorough, substantial, workmanlike manner by competent workmen.
- E. When the tests and inspections have been completed, a label shall be attached to all devices tested. The label shall provide the name of the testing company, the date the tests were completed, and the initials of the person who performed the tests.

#### F. PANELBOARDS

- F.1 Fabricate and test panelboards according to IEEE 344 to withstand seismic forces defined in Division 16 Sections 16073 and 16074 "Hangers and Supports for Electrical Systems and Vibration and Seismic controls for Electrical Systems" respectively
- F.2 Enclosures: Flush, Surface, Flush- and surface-mounted cabinets.
  - F.2.1 Rated for environmental conditions at installed location
    - i. Indoor Dry and Clean Locations: NEMA 250, Type 1.
    - ii. Outdoor Locations: NEMA 250, Type 3R
    - iii. Kitchen and Wash-Down Areas: NEMA 250, Type 4X, stainless steel
    - iv. Other Wet or Damp Indoor Locations: NEMA 250, Type 4.
    - v. Indoor Locations Subject to Dust, Falling Dirt, and Dripping Noncorrosive Liquids: NEMA 250, Type 5 or Type 12
  - F.2.2 Front: Secured to box with concealed trim clamps. For surface-mounted fronts, match box dimensions; for flush-mounted fronts, overlap box.
  - F.2.3 Hinged Front Cover: Entire front trim hinged to box and with standard door within hinged trim cover.
  - F.2.4 Skirt for Surface-Mounted Panelboards: Same gage and finish as panelboard front with flanges for attachment to panelboard, wall, and ceiling or floor
  - F.2.5 Gutter Extension and Barrier: Same gage and finish as panelboard enclosure, integral with enclosure body. Arrange to isolate individual panel sections
  - F.2.6 Finishes:
    - i. Panels and Trim: Steel and galvanized steel factory finished immediately after cleaning and pretreating with manufacturer's standard two-coat, baked-on finish consisting of prime coat and thermosetting topcoat.
    - ii. Back Boxes: Galvanized steel Same finish as panels and trim
    - iii. Fungus Proofing: Permanent fungicidal treatment for overcurrent protective devices and other components.
  - F.2.7 Directory Card: Inside panelboard door, mounted in transparent card holder metal frame with transparent protective cover
- F.3 Incoming Mains Location: Top or Bottom.
- F.4 Phase, Neutral, and Ground Buses
  - F.4.1 Material: Hard-drawn copper, 98 percent conductivity

- F.4.2 Equipment Ground Bus: Adequate for feeder and branch-circuit equipment grounding conductors, bonded to box.
- F.4.3 Neutral Bus: 100 percent of phase bus 4. Extra-Capacity Neutral Bus. Neutral bus rated 200 percent of phase bus and UL listed as suitable for nonlinear loads.



KENNETH E. CHAN

Planning and Programming Division



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*Republic of the Philippines*  
*Quezon City*

## **CITY ENGINEERING DEPARTMENT**

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**PROJECT TITLE:** PROPOSED CONSTRUCTION OF HAND WASHING FACILITY AND  
REHABILITATION OF VETERANS II DAY CARE CENTER  
**LOCATION:** BARANGAY PASONG TAMO, DISTRICT 6, QUEZON CITY

## **TECHNICAL SPECIFICATIONS**

### **QUEZON CITY INFRASTRUCTURE PROJECT**

#### **I. GENERAL REQUIREMENTS**

- a. Comply with the current and existing laws, ordinances and applicable codes, rules and regulations and standards. Any works perform contrary to the existing laws, rules and regulations, ordinances and standards without notice shall bear all cost arising therefrom.
- b. Drawings specifications codes and standards are minimum requirements. Where requirements differ, the more stringent apply.
- c. Should there be any change(s) in drawings or specifications, it is required to comply with the governing regulations, notify the implementing agency.
- d. Photographs shall be taken as, when and where directed at intervals of not more than one month. The photographs shall be sufficient in number and location to record the exact progress of the works. The photographs shall be retained and will become the property of the Government.
- e. Site verification / inspection shall be conducted to validate the scope of works. No extra compensation and extension of time shall be given due to negligence or inadvertence.
- f. The quality of materials shall be of the best grade of their respective kinds for the purpose. The work shall also be performed in the best and most capable manner in strict accordance with requirements of the plans and details. All materials not conforming to the requirements of these specifications shall be considered as defective.
- g. All equipment and installations shall meet or exceed minimum requirements of the standards and codes.
- h. Mobilization and Demobilization (if applicable)
  - i. Mobilization shall include all activities and related costs for transportation of personnel, equipment, and operating supplies to the site, establishment of offices, buildings and other necessary general facilities for the operations at the site.
  - ii. Demobilization shall include all activities and costs for transportation of personnel, equipment, and supplies not anymore required within the construction site including the disassembly, removal and site clean-up of offices and other facilities assembled on the site specifically for this contract.
- i. Execute work in strict accordance with the best practices of the trades in a thorough, substantial, workmanlike manner by competent workmen. Provide a competent, experienced, full-time supervisor who is authorized to make decisions on behalf of the Contractor.
- j. Temporary Facilities and Utilities

- i. All facilities shall be near the job site, where necessary and shall conform to the best standard for the required types.
  - ii. Temporary facilities shall be provided and maintained including sanitary facilities and first aid stations.
  - iii. Temporary utilities shall be sufficiently provided until the completion of the project such as water, power and communication.
  - iv. Temporary enclosure shall be provided within the construction site with adequate guard lights, railings and proper signages.
  - v. Temporary roadways shall be constructed and maintained to sustain loads to be carried on them during the entire construction period.
  - vi. Upon completion of the work, the temporary facilities shall be demolished, hauled-out and disposed properly.
- k. Adequate construction safety and health protection shall be provided at all times during the execution of work to both workers and property.
- i. A fully trained Medical Aide shall be employed permanently on the site who shall be engaged solely from medical duties.
  - ii. The medical room shall be provided in waterproof; it could be a building or room designated and used exclusively for the purpose and have a floor area of at least 15 square meters and a glazed window area of at least 2 square meters.
  - iii. The location of the medical room and any other arrangements shall be made known to all employees by posting on prominent locations suitable notices in the site.
  - iv. Additional safety precautions shall be provided in the observance of pandemic. Protocols set-forth by the government shall be strictly followed.
- l. Necessary protections to the adjacent property shall be provided to avoid untoward incidents / accidents.
- m. Final cleaning of the work shall be employed prior to the 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 building cleaning and maintenance program.

## II. SITE WORKS

- A. All grades, lines, levels and dimensions shall be verified as indicated on the plans and details. Any discrepancies or inconsistencies shall be reported before commencing to work.
- B. Removal / demolition of existing structures shall be done in accordance to safety procedures.
- C. All excavations shall be made to grade as indicated in the plans. Whenever water is encountered in the excavation process, it shall be removed by pumping, care being taken that the surrounding soil particles are not disturbed or removed.
- D. All backfills shall be placed in layers not exceeding to 150mm in thickness and each layer shall be thoroughly compacted wetting, tamping and rolling.

## III. CIVIL / STRUCTURAL WORKS

### A. CONCRETE WORK

- a. Delivery, Storage, and Handling. All materials shall be so delivered, stored, and handled as to prevent the inclusion of foreign materials and the damage of materials by water or breakage. Package materials shall be delivered and stored in original packages until ready to be used. Packages or materials showing evidence of water or other damage shall be rejected.

- b. Unless otherwise specified herein, concrete works shall conform to the requirements of the ACI Building Code. Full cooperation shall be given on trades to install embedded items. Provisions shall be made for setting items not placed in the forms. Before concrete is placed, embedded items shall have been inspected and tested for concrete aggregates and other materials shall have been done.
- c. Materials
- i. Cement for concrete shall conform to the requirements of specifications for Portland Cement (ASTM C – 150)
  - ii. Water used in mixing concrete shall be clean and free from other injurious amounts of oils, acids, alkaline, organic materials or other substances that may be deleterious to concrete or steel.
  - iii. Fine aggregates shall be beach or river sand conforming to ASTM C33, "Specification for Concrete Aggregates" Sand particle shall be coarse, sharp, clean free from silt, dust, loam, dirt and all foreign matters.
  - iv. Coarse aggregates shall be either natural gravel or crushed rock conforming to the "Specifications for Concrete Aggregates (ASTM C33). The minimum size of aggregates shall be larger than one fifth (1/5) of the narrowest dimensions between sides of the forms within which the concrete is to be cast nor larger than three fourths (3/4) of the minimum clear spacing between reinforcing bars or between reinforcing bars and forms
- d. Proportioning and Mixing
- i. Proportioning and mixing of concrete shall conform to the requirements for Item 405 of the standard specification with the following proportions:  
Cement . Sand . Gravel
    - Class 'A' - 1 : 2 : 3
    - Class 'B' - 1 : 2 : 4
    - Class 'C' - 1 : 2 ½
  - ii. Concrete mixture to be used for concrete shall conform with the structural requirements.
  - iii. Mixing - concrete shall be machine mixed. Mixing shall begin within 30 minutes after the cement has been added to the aggregates.
- e. Forms
- i. General – Forms shall be used wherever necessary to confine the concrete and shape it to the required lines, or to insure the concrete of contamination with materials caving from adjacent, excavated surfaces. Forms shall have sufficient strength to withstand the pressure resulting from placement and vibration of the concrete, and shall be maintained rigidly in correct position. Forms shall be sufficiently tight to prevent loss or mortar from the concrete. Forms shall be ½" waterproof plywood and form lumber.
  - ii. Cleaning of Forms – before placing the concrete, the contact surfaces of the formed shall be cleaned of encrustations of mortar, the grout or other foreign material.
  - iii. Removal of Forms – forms shall be removed in a manner which will prevent damage to the concrete. Forms shall not be removed without approval. Any repairs of surface imperfections shall be formed at once and airing shall be started as soon as the surface is sufficiently hard to permit it without further damage.
- f. Placing Reinforcement:
- Steel reinforcement shall be provided as indicated, together with all necessary wire ties, chairs, spacer supported and other devices necessary to install and secure the

reinforcement properly. All reinforcement, when placed, shall be free from loose flaky rust and scale, oil grease, clay and other coating and foreign substances that would reduce or destroy its bond with concrete. Reinforcement shall be placed accurately and secured in place by use of metal or concrete supports, spacers and ties. Such supports shall be used in such manner that they will not be exposed or contribute in any way, to the discoloration or deterioration of the concrete.

g. Conveying and Placing Concrete

- i. Conveying – concrete shall be conveyed from mixer to forms as rapidly as applicable, by methods which will prevent segregation, or loss of ingredients. There will be no vertical drop greater than 1.5 meters except where suitable equipment is provided to prevent segregation and where specifically authorized.
- ii. Placing – concrete shall be worked readily into the corners and angles of the forms and around all reinforcement and imbedded items without permitting the material to segregate, concrete shall be deposited as close as possible to its final position in the forms so that flow within the mass does not exceed two (2) meters and consequently segregation is reduced to a minimum near forms or embedded items, or elsewhere as directed, the discharge shall be so controlled that the concrete may be effectively compacted into horizontal layers not exceeding 30 centimeters in depth within the maximum lateral movement specified.
- iii. Time interval between mixing and placing. Concrete shall be placed before initial set has occurred and before it has contained its water content for more than 45 minutes. No concrete mix shall be placed before 60 complete revolution of the machine mixer.
- iv. Consolidation of Concrete – concrete shall be consolidated with the aid of mechanical vibrating equipment and supplemented by the hand spading and tamping. Vibrators shall not be inserted into lower courses that have commenced initial set; and reinforcement embedded in concrete beginning to set or already set shall not be disturbed by vibrators. Consolidation around major embedded parts shall be by hand spading and tamping and vibrators shall not be used.
- v. Placing Concrete through reinforcement – In placing concrete through reinforcement, care shall be taken that no segregation of the coarse aggregate occurs. On the bottom of beams and slabs, where the congestion of steel near the forms makes placing difficult, a layer of mortar of the same cement-sand ratios as used in concrete shall be first deposited to cover the surfaces.

h. Curing

- i. General – All concrete shall be moist cured for a period not less than seven (7) consecutive days by an approved method or combination applicable to local conditions.
- ii. Moist Curing – The surface of the concrete shall be kept continuously wet by covering with burlap plastic or other approved materials thoroughly saturated with water and keeping the covering spraying or intermittent hosing.

i. Finishing

- i. Concrete surfaces shall not be plastered unless otherwise indicated. Exposed concrete surfaces shall be formed with plywood, and after removal of forms, the surfaces shall be smooth, true to line and shall present a finished appearance except for minor defects which can be easily repaired with patching with cement mortar, or can be ground to a smooth surface to remove all joint marks of the form work.
- ii. Concrete Slabs on Fill. The concrete slabs on fill shall be laid on a prepared foundation consisting of sub grade and granular fill with thickness equal to the thickness of the overlaying slab except when indicated.

**B. MASONRY**

- a. Masonry Units (CHB).
  - i. 100mm thick for all interior walls and 125mm thick for all exterior walls unless otherwise indicated.
  - ii. Use 400 psi for non-load bearing blocks and 700 psi for load bearing blocks where required.
  - iii. Where full height walls are constructed with concrete hollow blocks, these shall extend up to the bottom of beam or slab unless otherwise indicated on plans. Provide stiffener columns & lintel beams as specified in the structural drawings or as specified or as deemed required to assure a stabilized wall due to height & other considerations.
- b. Sand.
  - S-1, washed, clean and greenish in color.
- c. Mortar:
  - One part "Portland" cement and two parts sand and water but not more than three parts sand and water.
- d. Plaster bond.
  - Apply plaster bond to all wall area

**C. ROOFING WORKS**

- a. The roof shall be covered with Ga. 24 pre-painted G.I. rib-type roofing sheets as shown on the plans. The roofing shall be secured to the purlins with min. 2 1/4" max. 3" long Tek screws. Ridge rolls, hip rolls and valleys to be used shall be those compatible with the Ga. 24 pre-painted G.I. rib-type roofing sheets. They shall lap the roofing sheets at least 250mm. The ridge rolls, hip rolls and valleys shall be riveted to the roofing sheets.
- b. The roof shall be covered with 6mm thick Rib-type polycarbonate sheets as shown on the plans. The roofing shall be secured to the purlins with min. 2 1/4" max. 3" long Tek screws. Ridge rolls, hip rolls and valleys to be used shall be those compatible with the 6mm thick solid polycarbonate sheets. They shall lap the roofing sheets at least 250mm. The ridge rolls, hip rolls and valleys shall be riveted to the roofing sheets.
- c. All roofing sheets adjacent to concrete hollow block and other masonry walls such as property line firewalls, shall be provided with Gauge 26 pre-painted plain G.I. Flashing to extend to the top and over to the other side of the wall. All fasteners shall be placed at the top of the corrugations of the roofing sheets to prevent water from standing around the fasteners.

**IV. ARCHITECTURAL WORKS****A. PAINTING WORKS**

- a. All primers, thinners and putty, also waterproofing for internal and external application shall be the same brand as the specified material.
- b. Application shall be as per paint Manufacturer's specification and recommendation.
- c. Provide all drop cloth and other covering requisite for protection of floors, walls, aluminum, glass, finishes and other works.
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  - B.2 Water service connections including but not limited to water meters, float valves. Any and all other works involve in providing the complete operation of the water supply system
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    - i. Indoor Dry and Clean Locations: NEMA 250, Type 1
    - ii. Outdoor Locations: NEMA 250, Type 3R
    - iii. Kitchen and Wash-Down Areas: NEMA 250, Type 4X, stainless steel.
    - iv. Other Wet or Damp Indoor Locations: NEMA 250 Type 4
    - v. Indoor Locations Subject to Dust, Falling Dirt, and Dripping Noncorrosive Liquids: NEMA 250, Type 5 or Type 12
  - F.2.2 Front: Secured to box with concealed trim clamps. For surface-mounted fronts, match box dimensions; for flush-mounted fronts, overlap box.
  - F.2.3 Hinged Front Cover: Entire front trim hinged to box and with standard door within hinged trim cover
  - F.2.4 Skirt for Surface-Mounted Panelboards: Same gage and finish as panelboard front with flanges for attachment to panelboard, wall, and ceiling or floor.
  - F.2.5 Gutter Extension and Barrier: Same gage and finish as panelboard enclosure; integral with enclosure body. Arrange to isolate individual panel sections
  - F.2.6 Finishes.
    - i. Panels and Trim: Steel and galvanized steel, factory finished immediately after cleaning and pretreating with manufacturer's standard two-coat, baked-on finish consisting of prime coat and thermosetting topcoat.
    - ii. Back Boxes: Galvanized steel Same finish as panels and trim.
    - iii. Fungus Proofing: Permanent fungicidal treatment for overcurrent protective devices and other components.
  - F.2.7 Directory Card: Inside panelboard door, mounted in transparent card holder metal frame with transparent protective cover



- F.3 Incoming Mains Location: Top or Bottom
- F.4 Phase, Neutral, and Ground Buses:
  - F.4.1 Material Hard-drawn copper, 98 percent conductivity.
  - F.4.2 Equipment Ground Bus. Adequate for feeder and branch-circuit equipment grounding conductors; bonded to box.
  - F.4.3 Neutral Bus: 100 percent of phase bus 4. Extra-Capacity Neutral Bus. Neutral bus rated 200 percent of phase bus and UL listed as suitable for nonlinear loads.

## VII. MECHANICAL WORKS (IF APPLICABLE)

- A. Comply with the current applicable codes, ordinances, and regulations of the authority or authorities having jurisdiction, the rules, regulations and requirements of the utility companies (as applicable).
- B. Drawings, specifications, codes and standards are minimum requirements. Where requirements differ, the more stringent apply
- C. All equipment and installations shall meet or exceed minimum requirements of the Standards and Codes
- D. Execute work in strict accordance with the best practices of the trades in a thorough, substantial, workmanlike manner by competent workmen
- E. When the tests and inspections have been completed, a label shall be attached to all devices tested. The label shall provide the name of the testing company, the date the tests were completed, and the initials of the person who performed the tests

  
 JOHN CHRISTOPHER P. TOMACRUZ  
 Planning and Programming Division

  
 JOCELYN A. NAONG  
 Planning and Programming Division

## ***Section VII. Drawings***

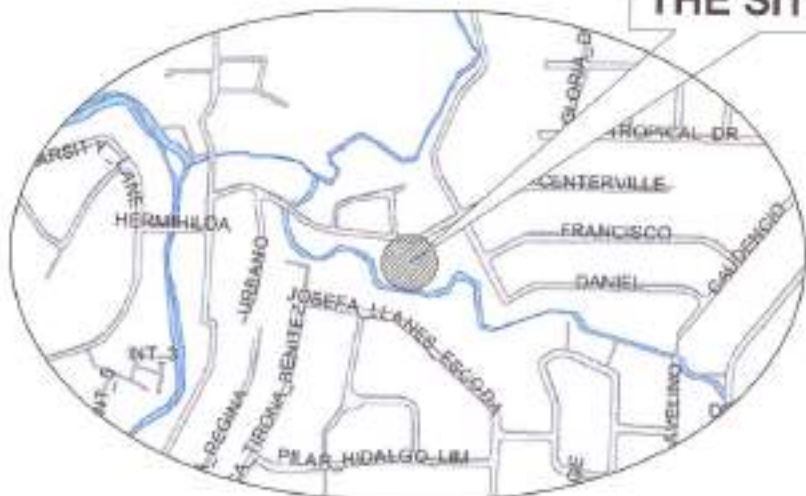
*[Insert here a list of Drawings. The actual Drawings, including site plans, should be attached to this section, or annexed in a separate folder.]*

**THE SITE**



**1 VICINITY MAP**

**THE SITE**



**2 LOCATION MAP**

**3 PERSPECTIVE**



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Republika ng Pilipinas  
Lungsod ng Quezon  
**CITY ENGINEERING DEPARTMENT**

PROJECT TITLE:  
**PROPOSED CONSTRUCTION OF HANDWASHING FACILITY AND REHABILITATION OF CENTERVILLE DAY CARE CENTER**

LOCATION: PASONG TAMBO, DISTRICT 6, QUEZON CITY

DRAWN BY: *ASB*  
DATE: 01/18/2017  
CHECKED BY: *ASB*  
REVISION NO.:

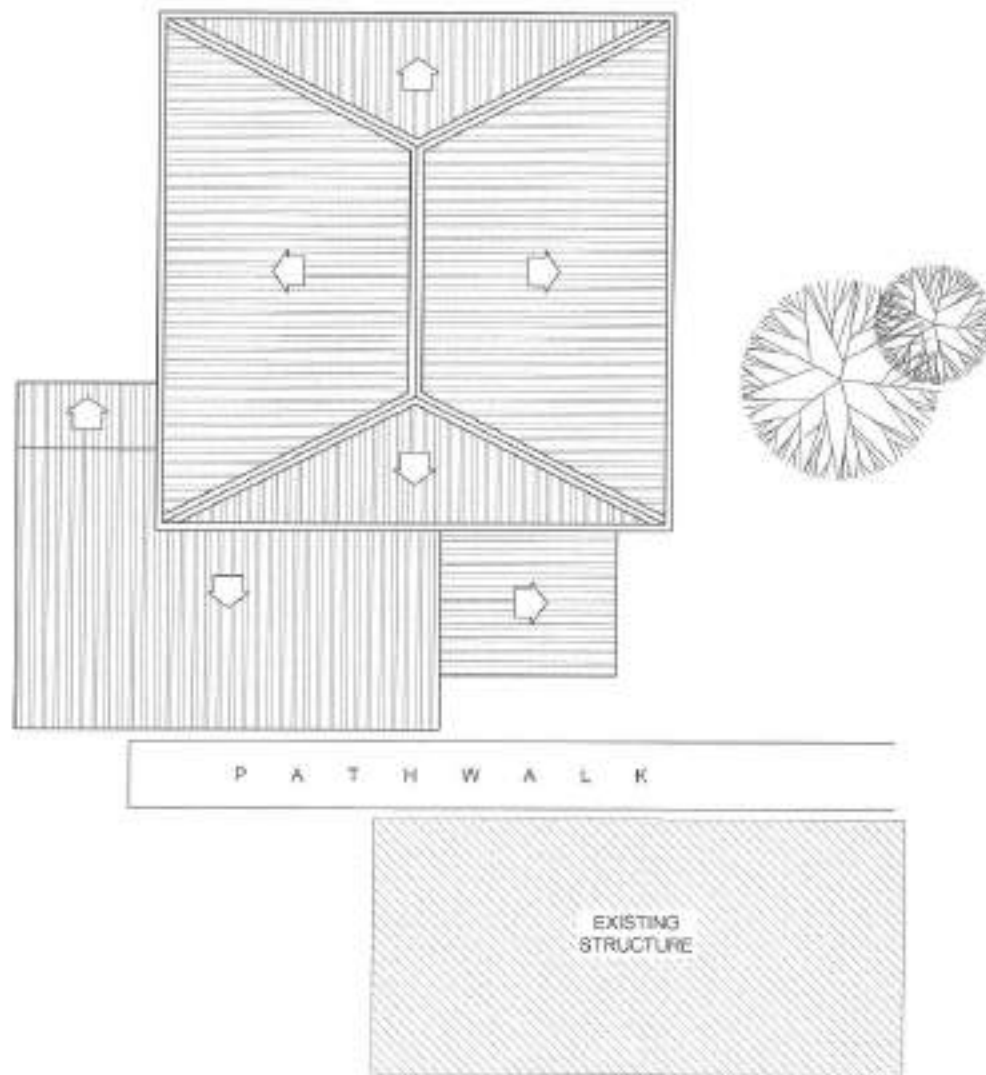
SUBMITTED BY:  
*[Signature]*  
**ENGR. LEO S. DEL ROSARIO**  
HEAD, PLUMBING AND SANITARY SECTION

RECOMMENDING APPROVAL:  
*[Signature]*  
**ENGR. ISAGANIR VERZOSA, JR.**  
D.C. OF PLUMBING AND SANITARY

APPROVED BY:  
*[Signature]*  
**HON. MA. JOSEFINA G. BELMONTE**  
CITY ENGINEER, QUEZON CITY

SHEET CONTENT  
PROJECT NAME  
LOCATION MAP  
PROPOSED PLAN

SHEET NO.  
**AR-01**  
**01/11**

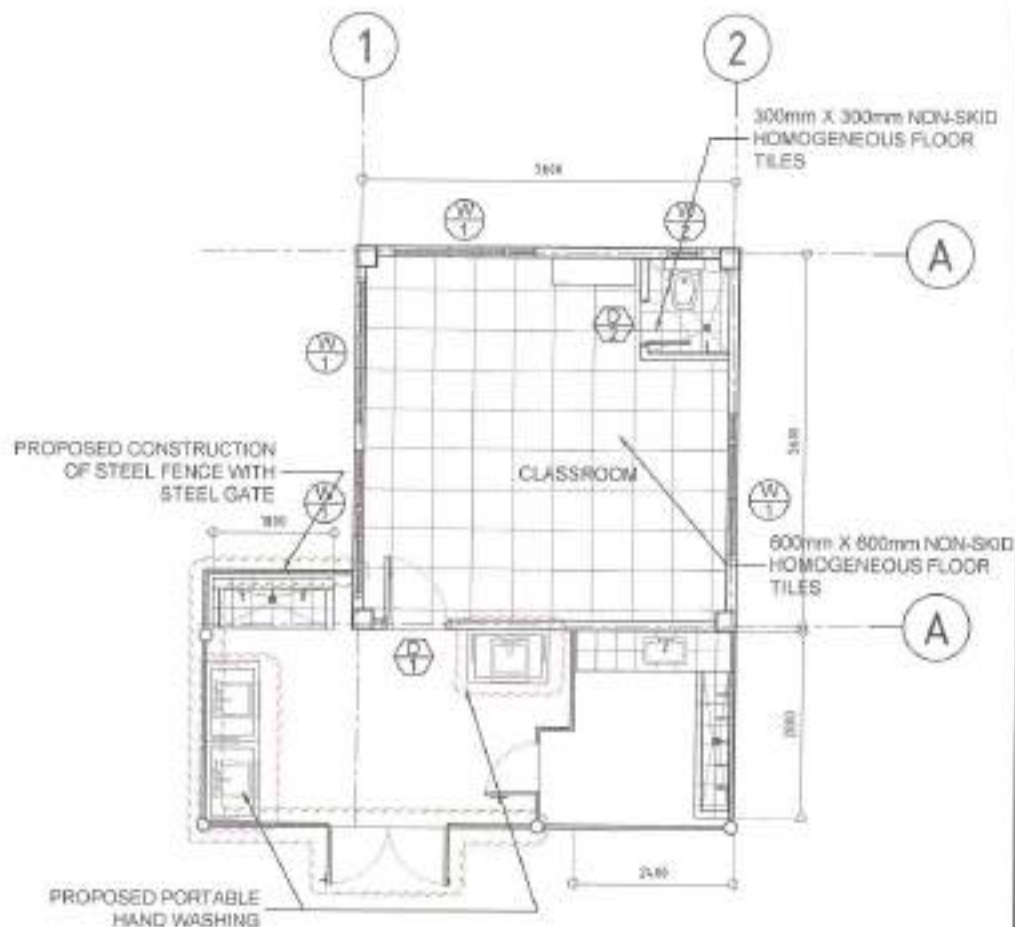


**2 | SITE DEVELOPMENT PLAN**

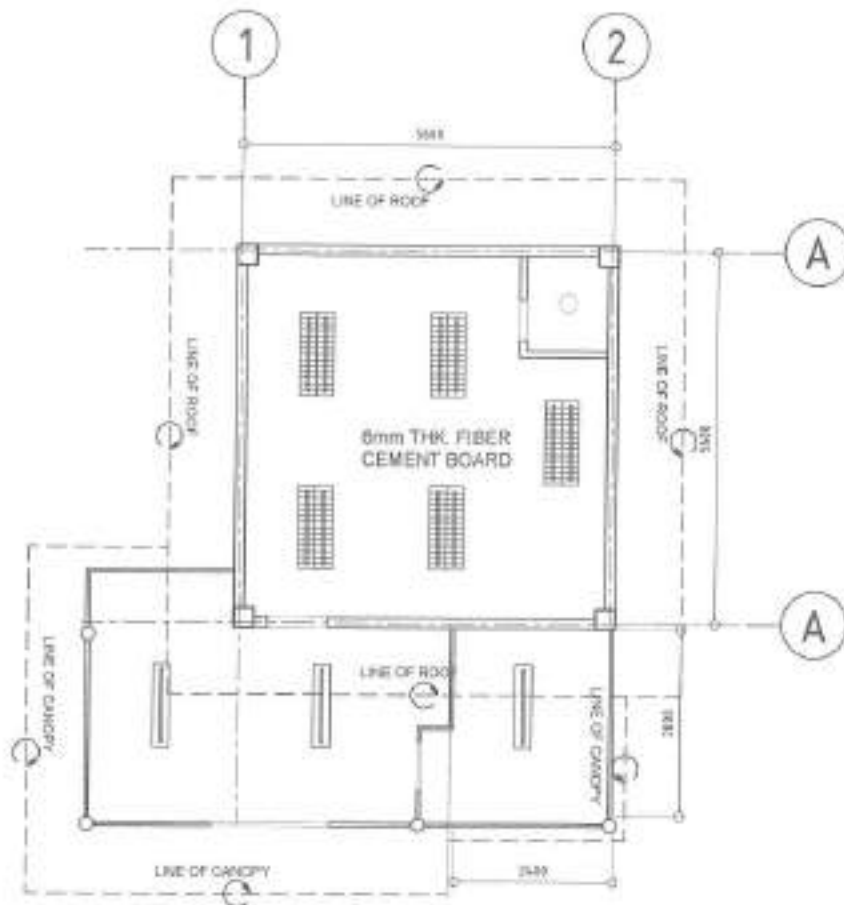


Republika ng Pilipinas  
Lungsod ng Quezon  
**CITY ENGINEERING DEPARTMENT**

| PROJECT TITLE :   | DATE :   | DESIGNED BY : | SUBMITTED BY :   | RECOMMENDING APPROVAL :  | APPROVED BY :  | SHEET CONTENT  | SHEET NO.      |
|---|----------|---------------|--|--|--|----------------|----------------|
| PROPOSED CONSTRUCTION OF HANDWASHING FACILITY AND REHABILITATION OF CENTERVILLE DAY CARE CENTER | 10/12/11 | [Signature]   | [Signature]  | [Signature]  | [Signature]  | RECOMMENDATION | AR-02<br>02/11 |
| LOCATION: PASONG TAMO, DISTRICT 6, QUEZON CITY  |          |               | <b>ENGR. LEO S. DEL ROSARIO</b><br>H.C. PLANNING & PROGRAM COORDINATOR | <b>ENGR. BABANI R. VERZOSA, JR.</b><br>D.C. PLANNING & PROGRAM COORDINATOR | <b>HON. MA. JOSEFINA G. BELMONTE</b><br>CITY ENGINEER, QUEZON CITY |                |                |



- WHOLE STRUCTURE TO BE REPAINTED
- DOORS AND WINDOWS TO BE REPLACED
- FLOOR AND WALL TILES TO BE REPLACED



- CEILING TO BE REPLACED

**1 DAY CARE FLOOR PLAN**

SCALE: 1:80M

**2 REFLECTED CEILING PLAN**

SCALE: 1:80M



Republika ng Pilipinas  
Lungsod ng Quezon  
**CITY ENGINEERING DEPARTMENT**

PROJECT TITLE:  
**PROPOSED CONSTRUCTION OF HANDWASHING FACILITY AND REHABILITATION OF CENTERVILLE DAY CARE CENTER**  
LOCATION: PASONG TAND, DISTRICT 6, QUEZON CITY

DESIGNER: *[Signature]*  
DATE: 07/03/22  
CHECKED BY: *[Signature]*  
REVISIONS:

SUBMITTED BY:  
*[Signature]*  
**ENGR. LEO S. DEL ROSARIO**  
R.M. 2, PASONG TAND, DISTRICT 6, QUEZON CITY

RECOMMENDING APPROVAL:  
*[Signature]*  
**ENGR. ISAGANI R. VERZOSA, JR.**  
R.M. 2, PASONG TAND, DISTRICT 6, QUEZON CITY

APPROVED BY:  
*[Signature]*  
**HON. MA. JOSEFINA G. BELMONTTE**  
CITY ENGINEER, QUEZON CITY

SHEET CONTENT  
PROPOSED CONSTRUCTION OF HANDWASHING FACILITY AND REHABILITATION OF CENTERVILLE DAY CARE CENTER

SHEET NO.  
**AR-03**  
**03/11**

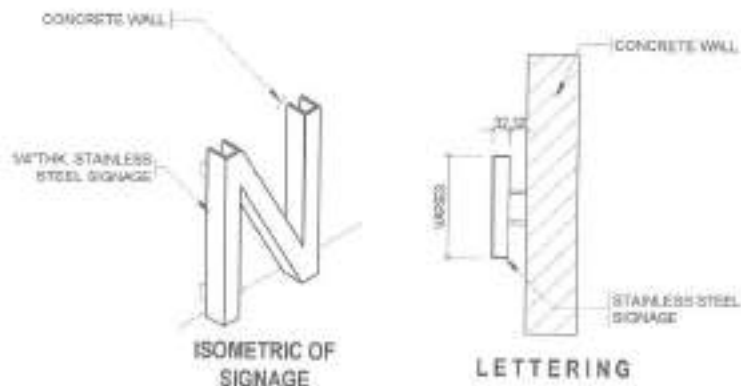




| NO. | DESCRIPTION   | QTY | NO. | DESCRIPTION   | QTY |
|-----|---------------|-----|-----|---------------|-----|
| 1   | WOODEN DOOR   | 1   | 1   | WOODEN DOOR   | 1   |
| 2   | WOODEN WINDOW | 1   | 2   | WOODEN WINDOW | 2   |
| 3   | WOODEN WINDOW | 1   | 3   | WOODEN WINDOW | 3   |
| 4   | WOODEN WINDOW | 1   | 4   | WOODEN WINDOW | 4   |
| 5   | WOODEN WINDOW | 1   | 5   | WOODEN WINDOW | 5   |

### 1 SCHEDULE OF DOORS AND WINDOWS

SCALE: 1/8CM

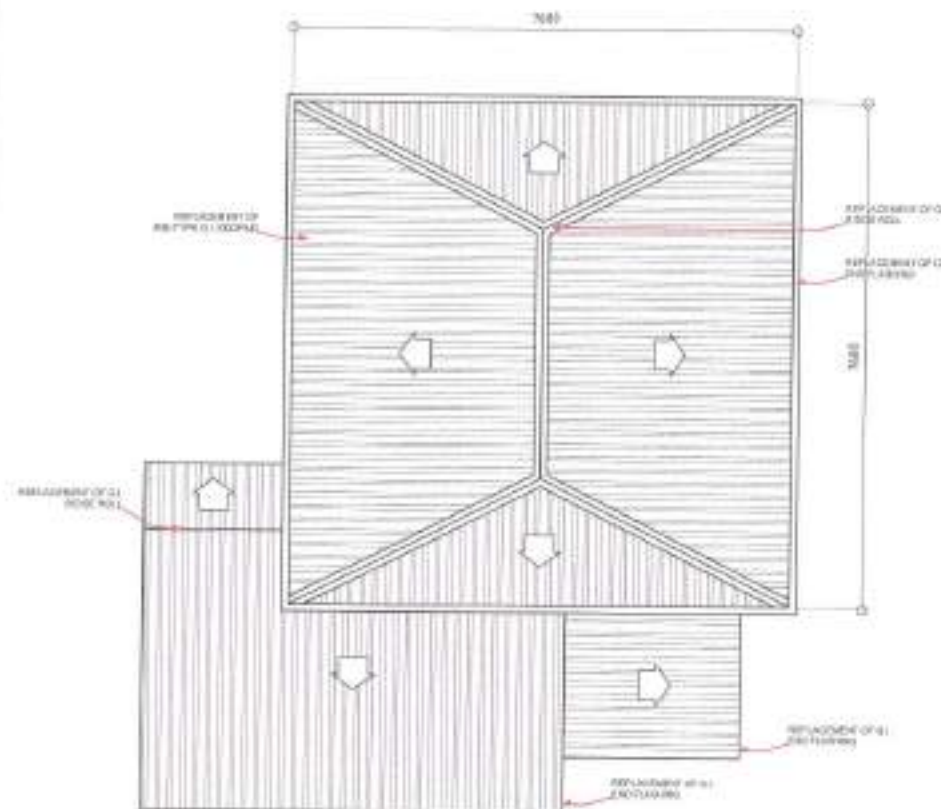


### 2 LETTERING DETAILS

NTS

### 3 ROOF PLAN

SCALE: 1/8CM



Republika ng Pilipinas  
Lungsod ng Quezon  
**CITY ENGINEERING DEPARTMENT**

PROJECT TITLE:  
**PROPOSED CONSTRUCTION OF HANDWASHING FACILITY AND REHABILITATION OF CENTERVILLE DAY CARE CENTER**  
LOCATION: PASONG TANO, DISTRICT 8, QUEZON CITY

DESIGNED BY:  
SITE: 10/10/17  
CHECKED BY:  
REVISION NO.:

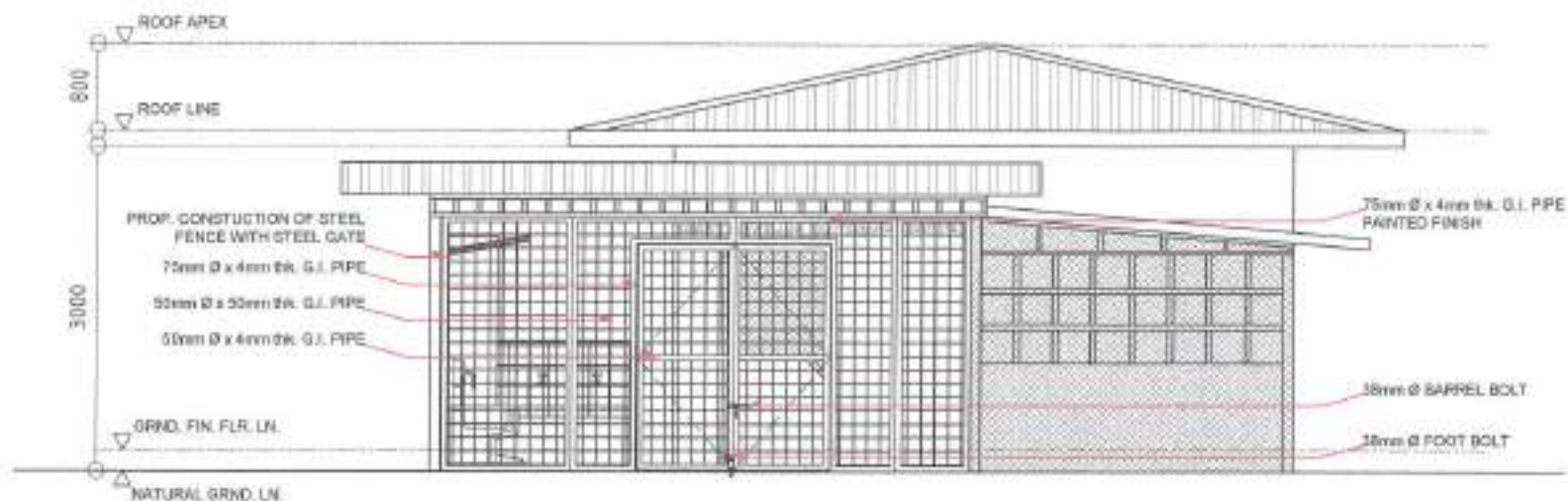
SUBMITTED BY:  
*[Signature]*  
**ENGR. LEO S. DEL ROSARIO**  
CITY ENGINEER

RECOMMENDING APPROVAL:  
*[Signature]*  
**ENGR. ISADIN IL VERZOSA, JR.**  
CITY ENGINEER

APPROVED BY:  
*[Signature]*  
**HON. MA. JOSEFINA G. BELMONTE**  
CITY MAJOR, QUEZON CITY

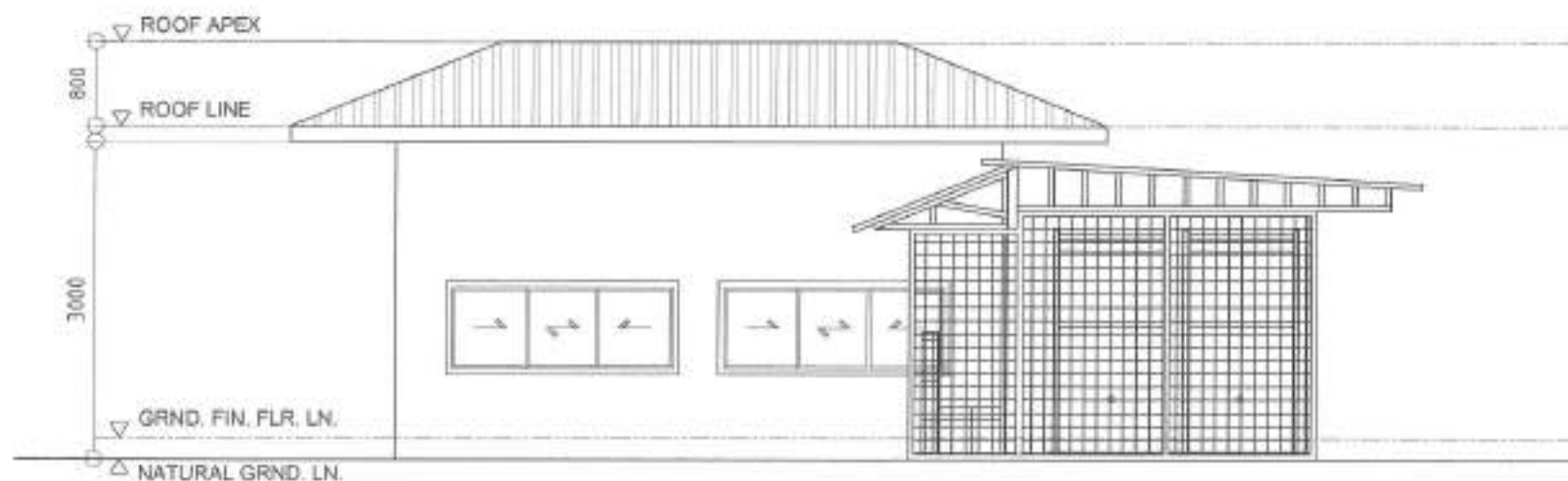
SHEET CONTENT:  
CHECKED BY: [Signature]  
DATE: [Date]  
SCALE: [Scale]

SHEET NO.  
**AR-04**  
**04/11**



# 1 FRONT ELEVATION

SCALE: 1:50M



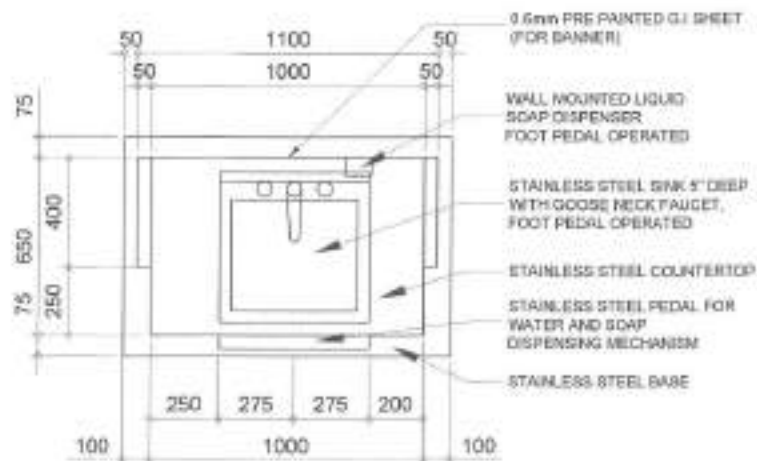
# 1 RIGHT SIDE ELEVATION

SCALE: 1:50M



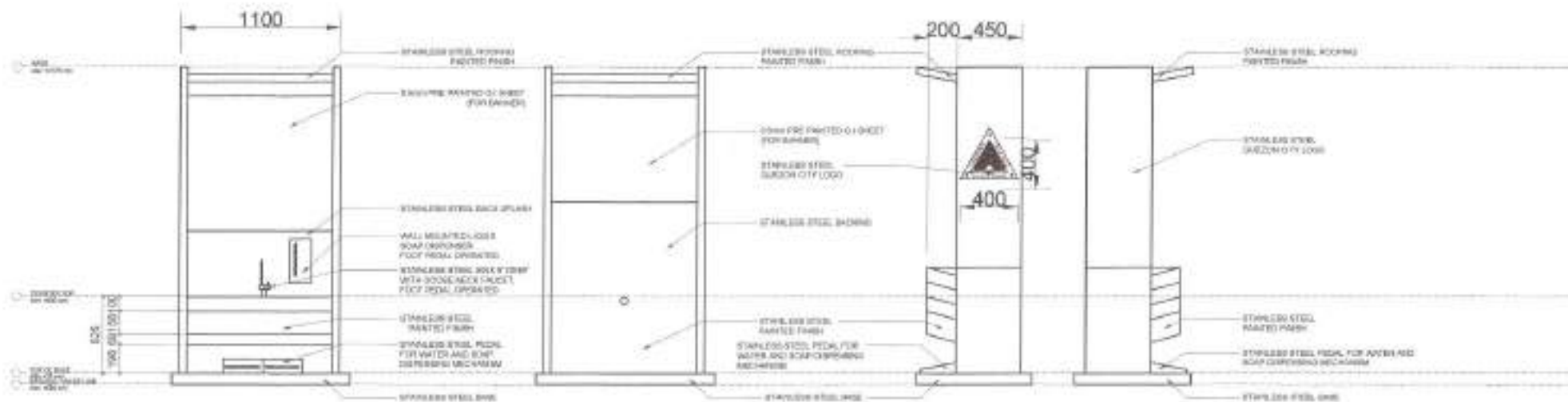
Republika ng Pilipinas  
Lungsod ng Quezon  
**CITY ENGINEERING DEPARTMENT**

| PROJECT TITLE:  | DRAWN BY:                      | SUBMITTED BY:   | RECOMMENDING APPROVAL:  | APPROVED BY:  | SHEET CONTENT                     | SHEET NO.                    |
|---|--------------------------------|---|---|---|-----------------------------------|------------------------------|
| PROPOSED CONSTRUCTION OF HANDWASHING FACILITY AND REHABILITATION OF CENTERVILLE DAY CARE CENTER | DATE: 05/05/21<br>DESIGNED BY: | <br><b>ENGR. LEO S. DEL ROSARIO</b><br>ENR., PLANNING & REHABILITATION DIVISION | <br><b>ENGR. ISAGANI R. VERZOSA, JR.</b><br>SIC OF SUBDIVISION DIVISION | <br><b>HON. MA. JOSEFINA G. BELMONTE</b><br>CITY MAYOR, QUEZON CITY | PLANS DIVISION<br>SHEET NO. 05/11 | <b>AR-05</b><br><b>05/11</b> |
| LOCATION: PASONG TAMD, DISTRICT 6, QUEZON CITY  | PERSONNEL:                     |   |   |   |                                   |                              |



**1 SINGLE SINK PORTABLE HAND WASHING STALL PLAN**

SCALE: 1:20M

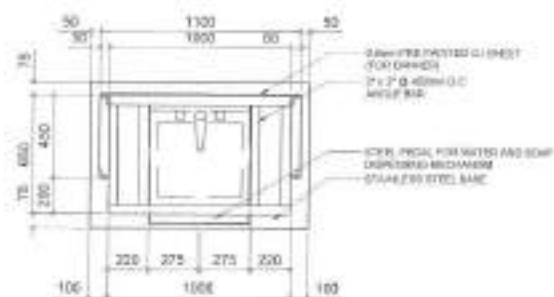


**2 ELEVATIONS**

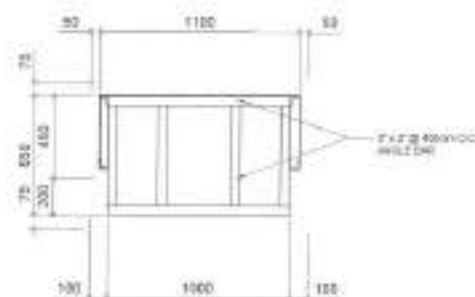
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|   |   |   |   |  |   |   |   |               |
|---|---|---|---|--|---|---|---|---------------|
|  <p>Republika ng Pilipinas<br/>Lungsod ng Quezon<br/><b>CITY ENGINEERING DEPARTMENT</b></p> | PROJECT TITLE:  | DRAWN:    | SUBMITTED BY:   | RECOMMENDING APPROVAL:   | APPROVED BY:  | SHEET CONTENT   | SHEET NO.   |               |
|   | PROPOSED CONSTRUCTION OF HANDWASHING FACILITY AND REHABILITATION OF CENTERVILLE DAY CARE CENTER | DATE: 07/2021   | <br><b>ENGR. LEO S. DEL ROSARIO</b><br><small>REGISTERED PROFESSIONAL ENGINEER</small> | <br><b>ENGR. MAGNO R. VERZOSA, JR.</b><br><small>REGISTERED PROFESSIONAL ENGINEER</small> | <b>HON. MA. JOSEFINA G. BELMONTE</b><br><small>CITY ENGINEER, QUEZON CITY</small> | <small>SCALE AND REVISIONS REFER TO PLAN</small><br><small>AS SHOWN</small> |  |               |
|   | LOCATION: PASONGTAM, DISTRICT 4, QUEZON CITY  | DECIDED:  |   |  |   |   |   | REVISION NO.: |
|   |   |   |   |  |   |   |   |               |
|   |   |   |   |  |   |   |   |               |





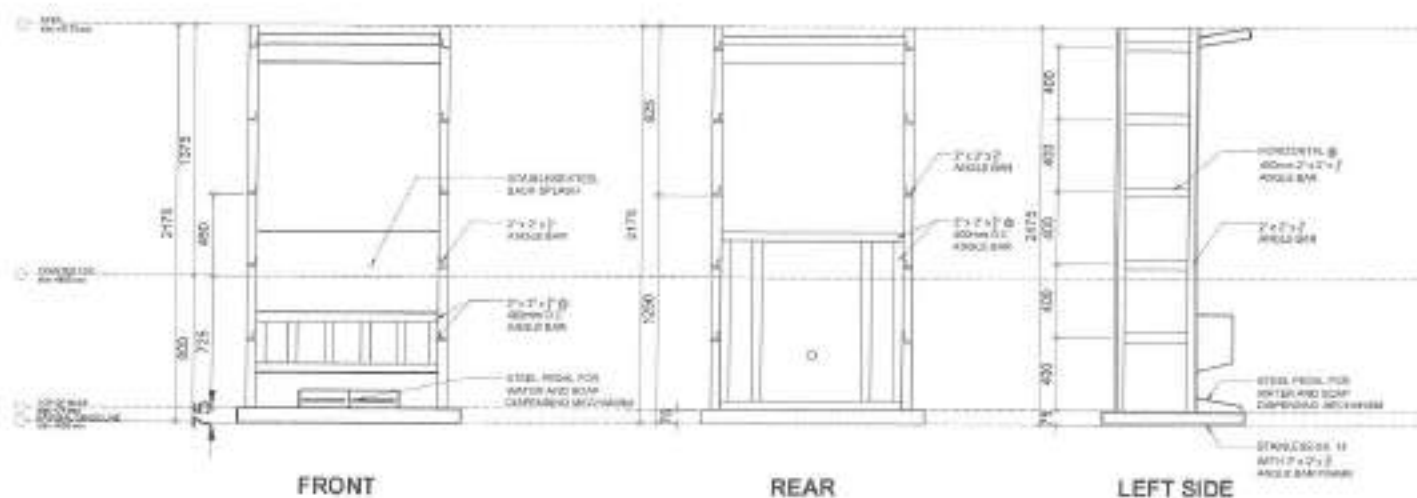
PLAN



ROOF PLAN

## 1 SINGLE SINK PORTABLE HAND WASHING STALL PLAN

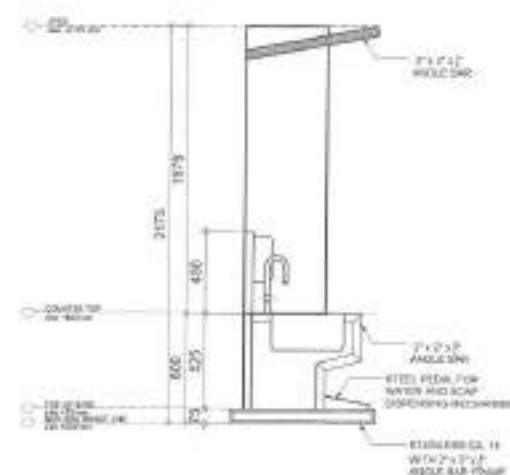
SCALE: 1:300M



FRONT

REAR

LEFT SIDE



FRONT

## 3 TYPICAL SECTION

SCALE: 1:300M

## 2 ELEVATIONS

SCALE: 1:300M



Republika ng Pilipinas  
Lungsod ng Quezon  
CITY ENGINEERING DEPARTMENT

PROJECT TITLE:  
PROPOSED CONSTRUCTION OF HANDWASHING  
FACILITY AND REHABILITATION OF  
CENTERVILLE DAY CARE CENTER  
LOCATION: PASONG TAMD, DISTRICT 6, QUEZON CITY

DRAWN BY: WLD  
DATE: 07/08/21  
CHECKED BY: YL  
REVISIONS:

SUBMITTED BY:  
ENGR. LEO S. DEL ROSARIO  
SEC. CIVIL ENGINEERING DIVISION

RECOMMENDING APPROVAL:  
ENGR. ISABELLI R. VERZOSA, JR.  
SEC. CIVIL ENGINEERING DIVISION

APPROVED BY:  
HON. MA. JOSEFINA G. BELMONTE  
CITY ENGINEER, QUEZON CITY

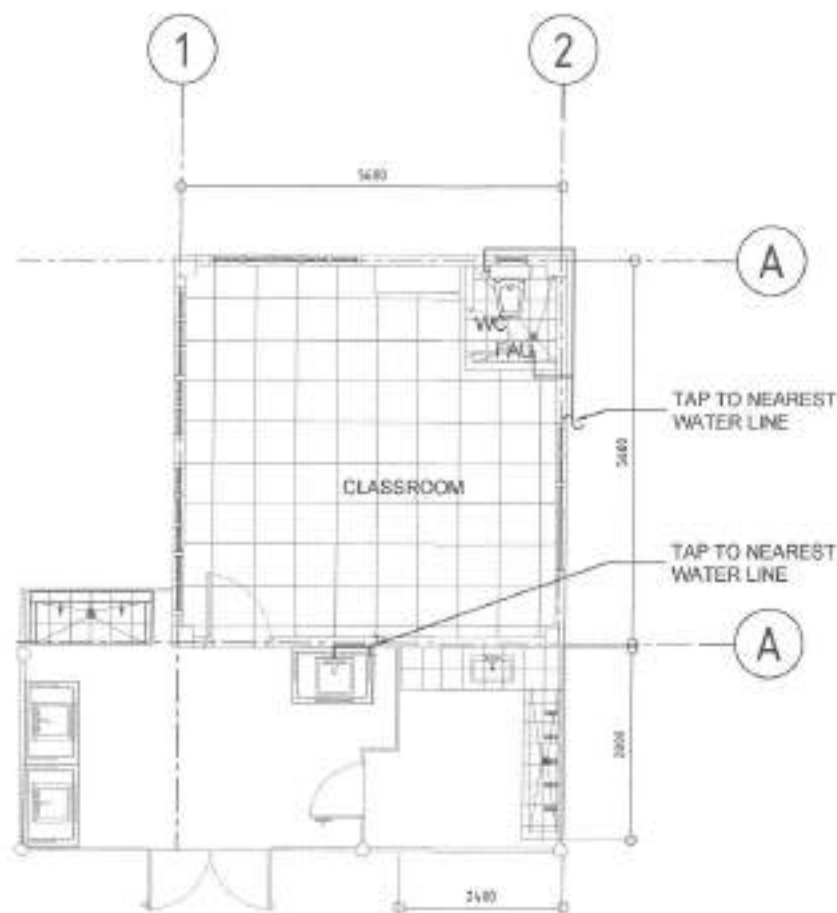
SHEET CONTENT  
SINGLE SINK PORTABLE  
HANDWASHING STALL  
TYPICAL SECTION

SHEET NO.  
ST-01  
07/11

**GENERAL NOTES:**

- All plumbing works and materials indicated herein shall be compliant to the provisions of the latest edition of National Plumbing Code, the rules and regulations of local authorities concerned, the rules and regulations of local utility companies and the provisions of the land developer when and where applicable.
- The plumbing layout is only diagrammatic; pipes, cleanouts and check valves shall be concealed as much as possible. It is not intended to show the actual dimension of the pipes and fixtures in the drawing but all the pipes and fixtures shall be installed as and where indicated. Any relocation will require proper execution in relation with other trades.
- The plumbing contractor shall verify all existing utilities at the site and shall coordinate the work with other trades.
- Pipes shall not be embedded in structural members unless otherwise specified or allowed.
- Minimum slope for horizontal sewer lines shall be 1% and for drain lines shall be 5%.
- Proposed plumbing utilities shall conform with the actual location, depth and invert elevation of all existing pipes/utilities.
- Connection of fixtures to pipes and fittings shall be according to manufacturer's specifications.
- All floor drains shall be vented individually.
- All clean out ferrules shall be flush-mounted to wall and shall be provided with polished cover caps. Do not install floor clean outs except at lines on grade and service areas not subject to traffic.
- All underground G.I. pipes in direct contact with soil shall be provided with two (2) coats of protective tar covering and wrapped with jute cloth thoroughly soaked in tar or asphalt.
- Provide vent stack and vent pipe thru roof of cast iron service weight as required.
- All cast iron pipes shall be of approved quality and G.I. pipes for water distribution lines shall be Schedule 40 U.S. standard weight.
- Provide gate valves to all water supply lines to fixtures.
- All hot water lines shall be provided with proper insulation where exposed.
- All individual branches to fixtures or group of fixtures and/or equipments shall be provided with air chambers or capped vertical pipe extensions of dimensions as shown:  
H = 450 mm for 19 mm Ø and larger  
H = 300 mm for 12 mm Ø and smaller
- All hose bibbs shall be 19 mm Ø (3/4" Ø) unless otherwise indicated.
- Inlet pipe of septic tank is 50 mm higher than the siphon pipe which is 30 mm higher than the outlet pipe.
- All plumbing works and manner of construction shall be under the direct supervision of an able and duly licensed Master Plumber or Registered Sanitary Engineer. Any discrepancies found in plan shall be notified to the same person.

|  |                          |  |                                   |
|--|--------------------------|--|-----------------------------------|
|  | UNION/FITMENT            |  | PIPE UP                           |
|  | CHECK VALVE              |  | MILLIMETER                        |
|  | BUILDING SEWER           |  | GATE VALVE                        |
|  | BUILDING DRAIN           |  | AREA DRAIN / CATCH BASIN          |
|  | WASTE LINE               |  | WATER CLOSET                      |
|  | AREA DRAIN / CATCH BASIN |  | LAVATORY                          |
|  | FLOOR DRAIN              |  | MANHOLE                           |
|  | DIAMETER                 |  | HOSE BIBB                         |
|  | WASTE LINE               |  | STORM DRAIN LINE                  |
|  | WATER LINE               |  | VENT LINE                         |
|  | GATE VALVE               |  | VENT ABOVE CEILING                |
|  | DECK DRAIN               |  | CONCRETE PIPE / REINF. CONC. PIPE |
|  | CLEANOUT                 |  | VENT THRU ROOF                    |
|  | PIPE DOWN                |  | DIRECTION OF FLOW / SLOPE         |



PLUMBING FIXTURES TO BE REPLACED

**1 GENERAL NOTES AND LEGENDS****2 GROUND FLOOR WATER LINE LAYOUT**

SCALE: 1:80M



Republika ng Pilipinas  
Lungsod ng Quezon  
**CITY ENGINEERING DEPARTMENT**

PROJECT TITLE:  
PROPOSED CONSTRUCTION OF HANDWASHING  
FACILITY AND REHABILITATION OF  
CENTERVILLE DAY CARE CENTER  
LOCATION: PASONG TAMO, DISTRICT 4, QUEZON CITY

DATE: 10/10/2021  
DESIGNED BY: [Signature]  
REVISION NO:

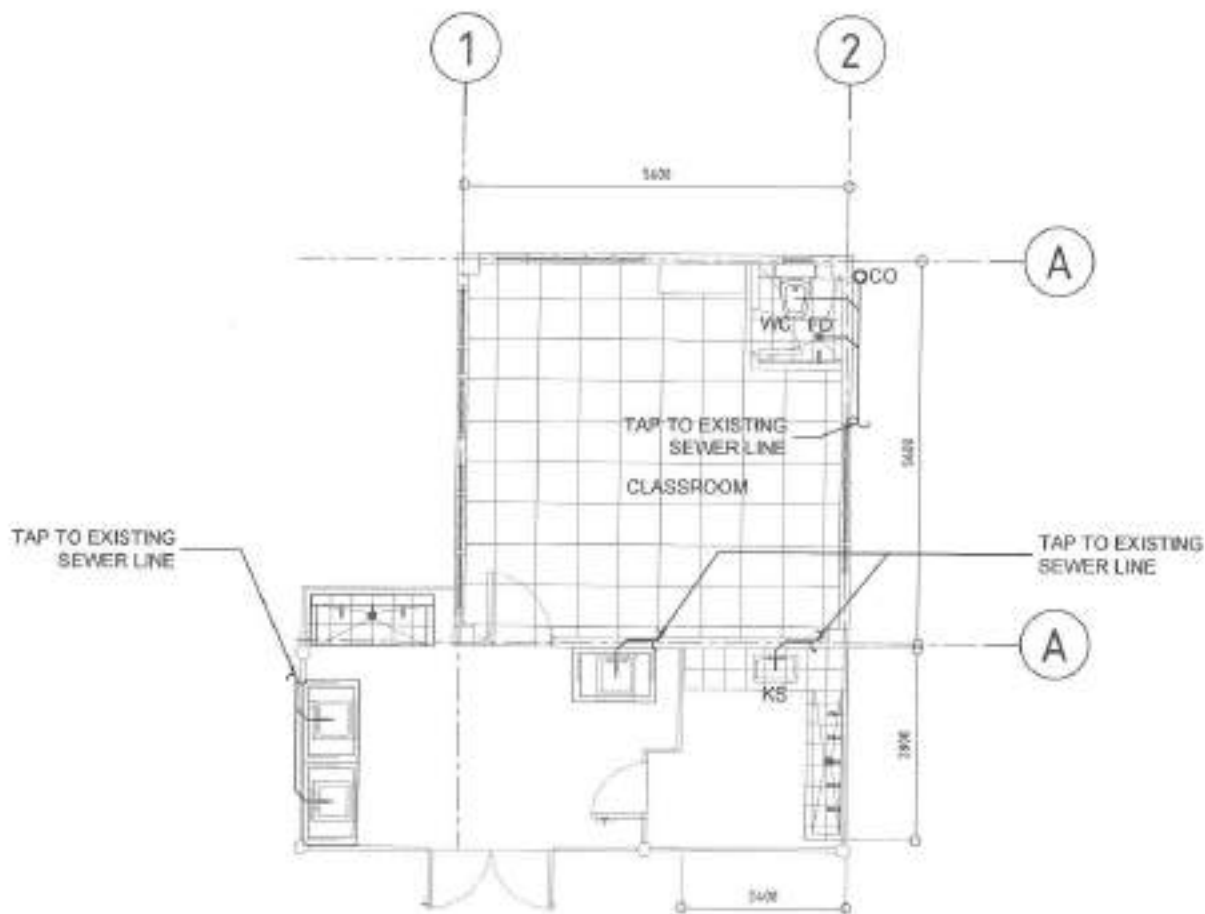
SUBMITTED BY:  
[Signature]  
ENGR. LEO S. DEL ROSARIO  
LMD PLUMBER/REGISTERED ENGINEER

RECOMMENDING APPROVAL:  
[Signature]  
ENGR. ISABANI R. VERZOSA, JR.  
DCL CITY ENGINEERING DEPARTMENT

APPROVED BY:  
[Signature]  
HON. MA. JOSEFINA G. BELMONTE  
CITY ENGINEER, QUEZON CITY

SHEET CONTENT  
GENERAL WATER LINE LAYOUT

SHEET NO.  
PL-01  
08/11



PLUMBING FIXTURES TO BE REPLACED

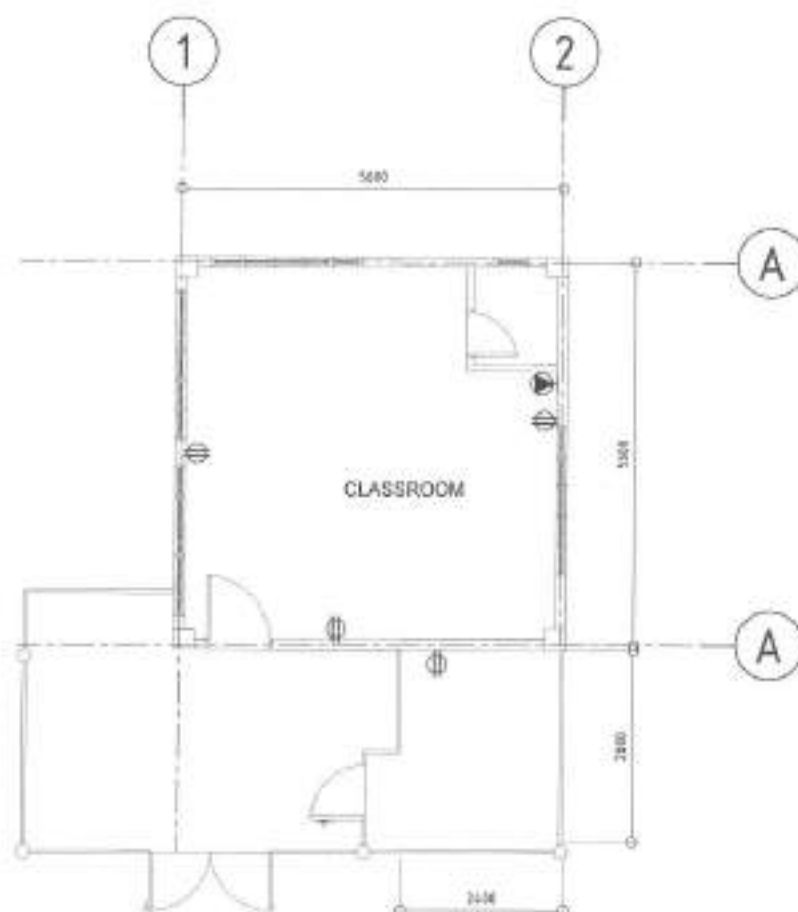
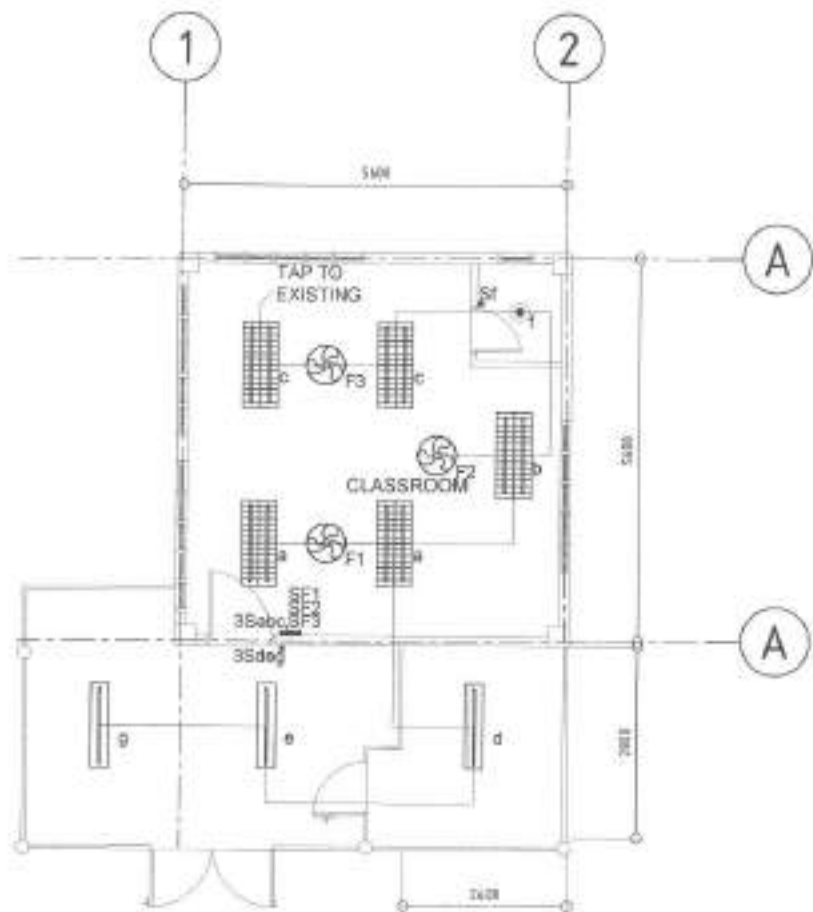
# 1 GROUND FLOOR SANITARY LAYOUT

SCALE: 1:500



Republika ng Pilipinas  
Lungsod ng Quezon  
**CITY ENGINEERING DEPARTMENT**

| PROJECT TITLE:  | DRAWN BY:                                | SUBMITTED BY:  | RECOMMENDING APPROVAL:   | APPROVED BY:   | SHEET CONTENT                | SHEET NO.                    |
|---|--|--|--|--|------------------------------|------------------------------|
| PROPOSED CONSTRUCTION OF HANDWASHING FACILITY AND REHABILITATION OF CENTERVILLE DAY CARE CENTER | DATE: 07/1/20<br>CHECKED BY: [Signature] | [Signature]<br><b>ENGR. LEO S. DEL ROSARIO</b><br>REG. PROFESSIONAL ENGINEER | [Signature]<br><b>ENGR. ISAAC M. R. VERZOSA, JR.</b><br>CC CITY ENGINEERING DEPARTMENT | [Signature]<br><b>HON. MA. JOSEFINA G. BELMONTE</b><br>CITY MAYOR, QUEZON CITY | GROUND FLOOR SANITARY LAYOUT | <b>PL-02</b><br><b>09/11</b> |
| LOCATION: PASONGTANAO, DISTRICT 6, QUEZON CITY  | REVISION NO.:                            |  |  |  |                              |                              |



**1 GROUND FLOOR LIGHTING LAYOUT**

SCALE: 1:50M

**2 GROUND FLOOR POWER LAYOUT**

SCALE: 1:50M



Republika ng Pilipinas  
Lungsod ng Quezon  
**CITY ENGINEERING DEPARTMENT**

PROJECT TITLE:  
**PROPOSED CONSTRUCTION OF HANDWASHING FACILITY AND REHABILITATION OF CENTERVILLE DAY CARE CENTER**

LOCATION: PASANG SAMO, DISTRICT 6, QUEZON CITY

DATE: 10/20/2011  
DRAWN BY: J.A.  
REVISION NO.:

SUBMITTED BY:  
  
**ENGR. LEO B. DEL ROSARIO**  
SEC. PLANNING & RECOMMENDATION

RECOMMENDING APPROVAL:  
  
**ENGR. ISIDORO R. VERZOSA, JR.**  
SEC. CITY ENGINEERING DEPARTMENT

APPROVED BY:  
  
**HON. MA. JOSEFINA G. BELMONTE**  
CITY MAYOR, QUEZON CITY

SHEET CONTENT:  
GROUND FLOOR LIGHTING LAYOUT  
GROUND FLOOR POWER LAYOUT

SHEET NO.  
**EL-02**  
**11/11**



**GENERAL NOTES:**

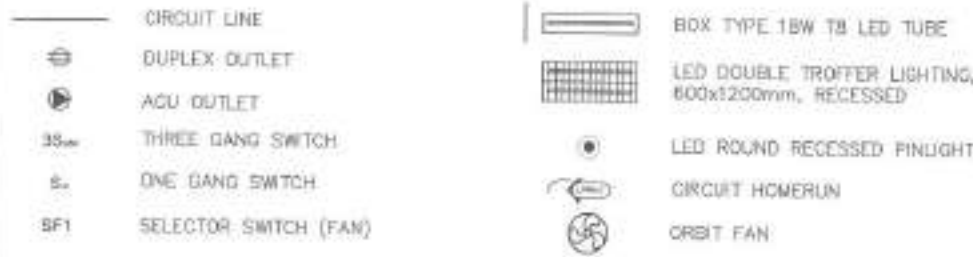
- ALL ELECTRICAL WORK SHALL BE DONE IN ACCORDANCE WITH THE PROVISIONS OF THE LATEST EDITION OF THE PHILIPPINE ELECTRICAL CODE, THE LAWS AND ORDINANCES OF THE LOCAL CODES OF PROVINCE, AUTHORITIES AND THE REQUIREMENTS OF THE LOCAL POWER AND TELEPHONE UTILITY COMPANY.
- THE CONTRACTOR SHALL SECURE ALL PERMITS AND PAY ALL FEES REQUIRED FOR THE WORK AND SHALL FURNISH THE OWNER THROUGH THE ENGINEERS, FINAL CERTIFICATES OF ELECTRICAL INSPECTION AND APPROVAL FROM PROPER GOVERNMENT AUTHORITIES FOR COMPLETION OF WORK.
- ALL EMBEDDED BRANCH CIRCUITS SHALL BE THE CONDUITS AND FOR EXPOSED INSTALLATION SHALL BE BEING SUPPORTED BY CONDUIT CLAMPS EVERY 100 MILLIMETER.
- PULL BOXES SHALL BE PROVIDED BY THE CONTRACTOR WHENEVER NECESSARY TO FACILITATE WIRE PULLING. EACH OF THESE ARE NOT INDICATED ON THE PLANS. SIZES OF ALL PULL BOXES SHALL BE COMPILED BASED ON THE CODE REQUIREMENTS. SUBMIT SHOP DRAWINGS TO THE ENGINEER FOR APPROVAL. PRIOR TO FABRICATION, LOCATION OF PULLBOXES SHALL BE APPROVED BY THE ARCHITECT/ENGINEER AND MUST BE REFLECTED ON THE AS-BUILT PLAN.
- ALL POWER OUTLETS AND SWITCHES SHALL BE GROUNDED TYPE WITH PARALLEL GLETS FOR 200V.
- PROVIDE GROUND FAULT CURRENT INTERRUPTER (GFCI) BREAKER FOR LOADS MARKED "GFI" ON THE PLAN.
- ALL METALLIC CONDUITS, CABINETS AND EQUIPMENT SHALL BE PROPERLY GROUNDED AND BONDED.
- UNLESS OTHERWISE NOTED, ACQUIRING HEIGHT FOR WALL RELATED DEVICES SHALL BE AS FOLLOWS:

PERCENTAGE OUTLET - 100 MM AFF., 100MM ABOVE WORKING SURFACE  
 TELEPHONE OUTLET - 300 MM AFF.  
 CITY OUTLET - 300 MM AFF.  
 LIGHTING SWITCH - 1000 MM AFF.  
 PANELBOARD - 1000 MM AFF.

- REFER TO VED-MANUAL, PLUMBING AND PIPE PROTECTION DRAWINGS FOR SIZES AND LOCATIONS OF EQUIPMENT AS WELL AS THEIR CONTROL SEQUENCES AS SPECIFIED AND OR SHOWN UNDER THEIR RESPECTIVE SECTIONS.
- ALL MATERIALS TO BE USED SHALL BE OF THE BEST QUALITY, BRAND NEW AS SPECIFIED.
- THE DRAWINGS AND SPECIFICATIONS ARE INTENDED TO PRESENT GENERAL LAYOUT AND BROAD OUTLINE RECOGNITION OF THE PROJECT BUT DO NOT NECESSARILY INDICATE DIMENSIONED ACTUAL LOCATIONS, LEVELS AND DISTANCES OF THE EQUIPMENT. THE CONTRACTOR IS HEREBY REQUIRED TO MAKE SUCH ADJUSTMENT AT THE JOB SITE AS LOCATION DISTANCES AND LEVELS ARE GOVERNED BY ACTUAL FIELD CONDITIONS.
- ANY DISCREPANCY BETWEEN THE PLANS AND SPECIFICATIONS SHALL BE BROUGHT TO THE ATTENTION OF THE WORKMAN FOR CLARIFICATION IMMEDIATELY.
- ALL LIGHTING AND COMMERCIAL OUTLET CIRCUITS SHALL BE 3.5 SQ. MM. THINW 2 COPPER WIRE UNLESS OTHERWISE NOTED. MINIMUM SIZE OF WIRE SHALL BE 0.5 SQ. MM. COPPER WIRE. ALL WIRES AND CABLES SHALL BE COLOR CODED AS FOLLOWS:

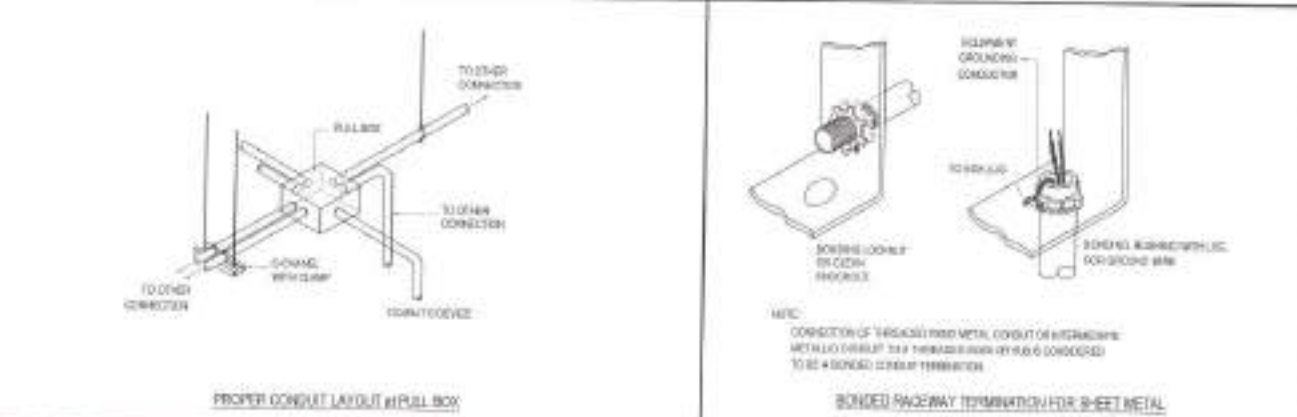
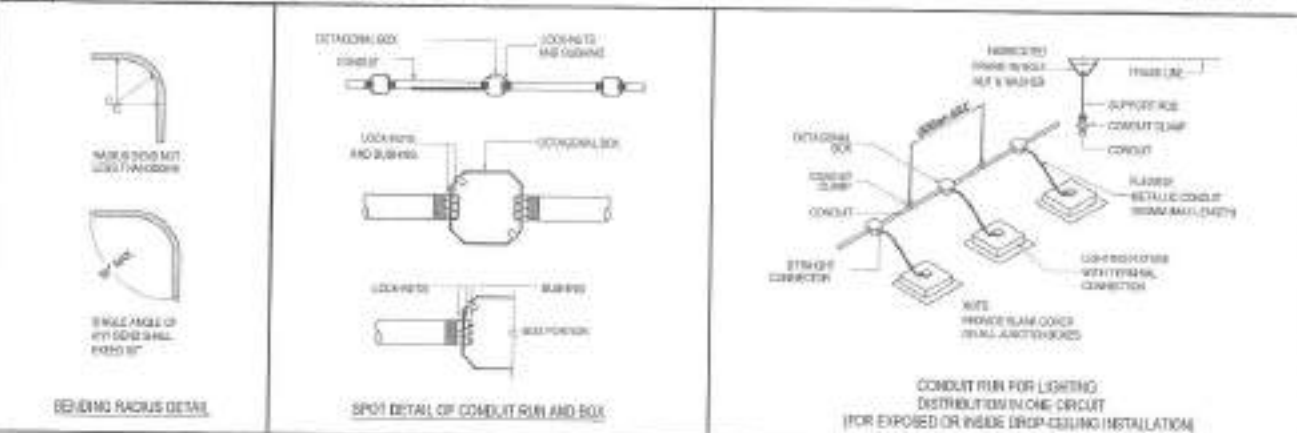
LINE 1 - RED  
 LINE 2 - YELLOW  
 NEUTRAL - WHITE  
 GROUND - GREEN

- BOXES, WIRE, GUTTERS, ENCLOSURE SHALL BE FABRICATED FROM STEEL WITH THICKNESS AS FOLLOWS:  
 MAXIMUM WIDTH OF THE WIDEST SURFACE SIZE:  
 UP TO INCLUDING 100 MM GA 18 PAINTED WITH METAL PRIMER EPOXY AND TOPCOAT  
 OVER 100 MM UP TO 150 MM GA 16 PAINTED WITH METAL PRIMER EPOXY AND TOPCOAT  
 OVER 150 MM UP TO 200 MM GA 14 PAINTED WITH METAL PRIMER EPOXY AND TOPCOAT  
 OVER 200 MM GA 12 PAINTED WITH METAL PRIMER EPOXY AND TOPCOAT
- ALL ELECTRICAL WORKS HEREIN SHALL BE EXECUTED BY EXPERIENCED MEN UNDER THE DIRECT SUPERVISION OF A FULL-TIME LICENSED ELECTRICAL ENGINEER AND A DAILY ACCREDITED ELECTRICAL CONTRACTOR BY LOCAL WORKS SHALL BE HEAVILY PLACED, SECURELY FASTENED AND PROPERLY FINISHED.
- TYPE OF SERVICE ENTRANCE SHALL BE SINGLE-PHASE, TWO-WIRE PLUS GROUND, 20-AMP, 200V AC SERVICE.
- CONDUITS IN NO CASE SHALL THERE BE MORE THAN THE EQUIVALENT OF FOUR QUARTER BENDS IN ANY ONE RUN. ALL CONDUIT BENDS SHALL BE FIELD MADE BY USING HYDRAULIC BENDERS. MINIMUM BENDING RADIUS MUST BE IN ACCORDANCE TO THE CODE REQUIREMENTS.
- UPON COMPLETION OF ELECTRICAL CONSTRUCTION WORK, INSULATION RESISTANCE TEST AND FUNCTIONALITY TEST SHALL BE PERFORMED BY THE CONTRACTOR/ENGINEER OF THE INSTALLATION TO BE RECORDED IN DETAILS ON FORMS APPROVED BY THE DESIGN CITY ENGINEERING DEPARTMENT REPRESENTATIVE. THE GROUND RESISTANCE FOR ELECTRICAL SYSTEMS SHALL NOT BE MORE THAN 5 OHMS. COMMUNICATIONS PROTECTION RESISTANCE SHALL NOT EXCEED 2 OHMS.



**2 LEGEND & SYMBOLS**

SCALE NTS



**1 GENERAL NOTES**

SCALE NTS

**3 MISCELLANEOUS DETAILS**

SCALE MTB

|  |   |          |                          |                               |                               |   |                |
|--|---|----------|--------------------------|-------------------------------|-------------------------------|---|----------------|
| <p>Republika ng Pilipinas<br/>Lungsod ng Quezon<br/><b>CITY ENGINEERING DEPARTMENT</b></p> | PROJECT TITLE:  | DATE:    | SUBMITTED BY:            | RECOMMENDING APPROVAL:        | APPROVED BY:                  | SHEET CONTENT:  | SHEET NO.      |
|  | PROPOSED CONSTRUCTION OF HANDWASHING FACILITY AND REHABILITATION OF CENTERVILLE DAY CARE CENTER | DEC 2021 | ENGR. LEO S. DEL ROSARIO | ENGR. ISABELA R. VERZOSA, JR. | HON. MA. JOSEFINA G. BELMONTE | ORIGINAL NOTES, UNIFORM AND SYMBOLS MISCELLANEOUS DETAILS | EL-01<br>10/11 |
|  | LOCATION: PASONG TAMO, DISTRICT 6, QUEZON CITY  | REVISED: |                          |                               |                               |   |                |

## THE SITE



## 1 VICINITY MAP

SCALE NTS.

## THE SITE



## 2 LOCATION MAP

SCALE NTS.

## 3 PERSPECTIVE

SCALE NTS.



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Republika ng Pilipinas  
Lungsod ng Quezon  
CITY ENGINEERING DEPARTMENT

PROJECT TITLE

PROPOSED CONSTRUCTION OF HAND  
WASHING FACILITY AND  
REHABILITATION OF PINKIAN I DAY  
CARE CENTER

LOCATION

BARANGAY PASONG TAMB, DISTRICT 8, QUEZON CITY

DRAWN BY

DATE: 08/18/21

CHECKED BY: *[Signature]*

REVISION NO.:

SUBMITTED BY:

*[Signature]*  
ENGR. LEO S. DEL ROSARIO  
HEAD, PLANNING & PROGRAMMING DIVISION

RECOMMENDING APPROVAL:

*[Signature]*  
ENGR. ISAAC R. VERZOSA, JR.  
D.C. CITY ENGINEERING DEPARTMENT

APPROVED BY:

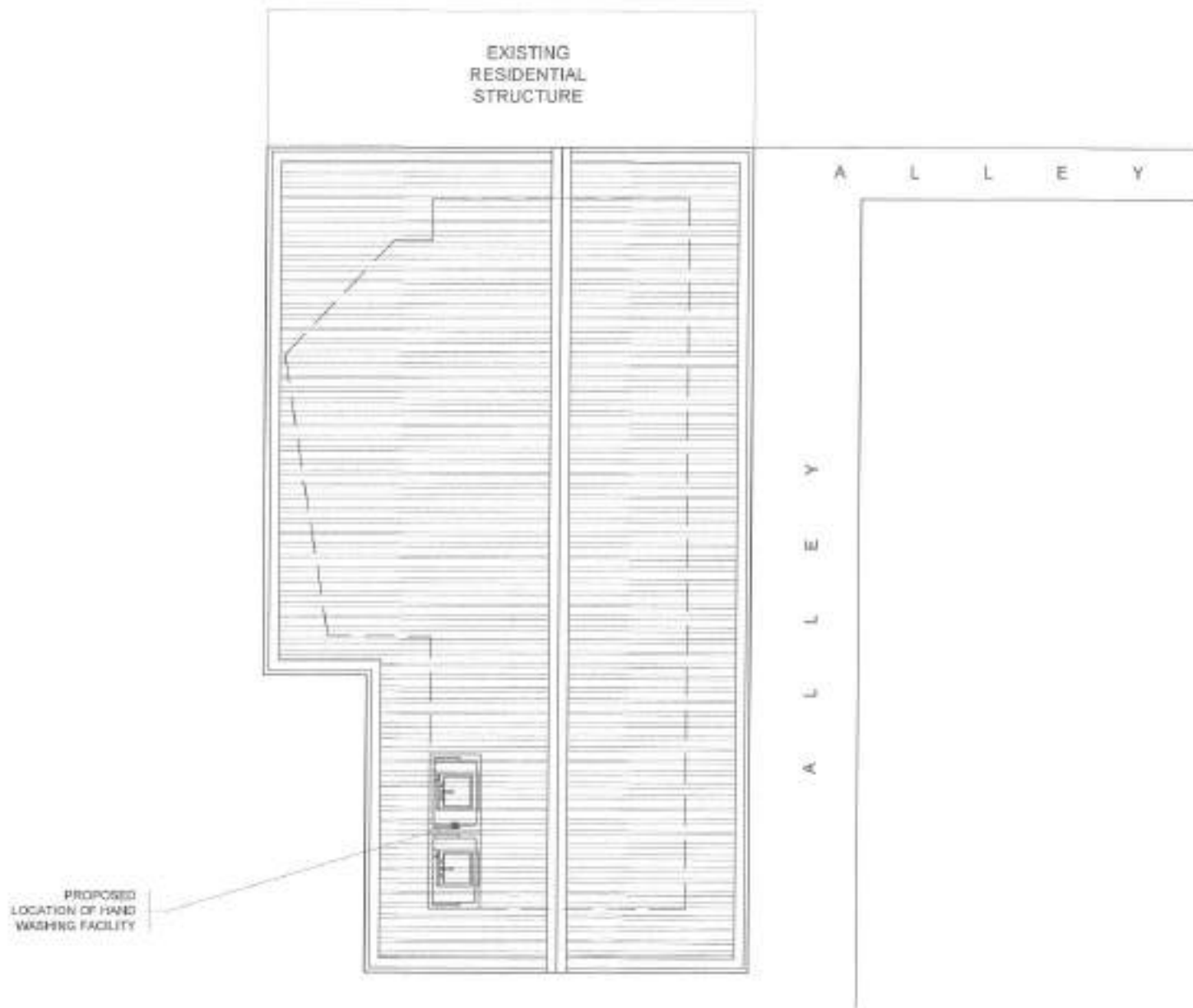
HON. MA. JOSEFINA G. BELMONTE  
CITY MAYOR

SHEET CONTENT

VICINITY MAP  
LOCATION MAP  
PERSPECTIVE

SHEET NO.

AR-01  
01/13



### 3 SITE DEVELOPMENT PLAN

SCALE: NTS



Republika ng Pilipinas  
Lungsod ng Quezon  
CITY ENGINEERING DEPARTMENT

PROJECT TITLE:  
**PROPOSED CONSTRUCTION OF HAND  
WASHING FACILITY AND  
REHABILITATION OF PINGKIAN I DAY  
CARE CENTER**

LOCATION:  
BARANGAY PANGKAL TAMB, DISTRICT 8, QUEZON CITY

DRAWN BY: *J.A.*  
DATE: 08/02/21  
CHECKED BY: *J.A.*  
DESIGNER NO.:

SUBMITTED BY:  
*[Signature]*  
ENOR. LEO S. DEL ROSARIO  
HEAD, PLANNING & PROGRAMING DIVISION

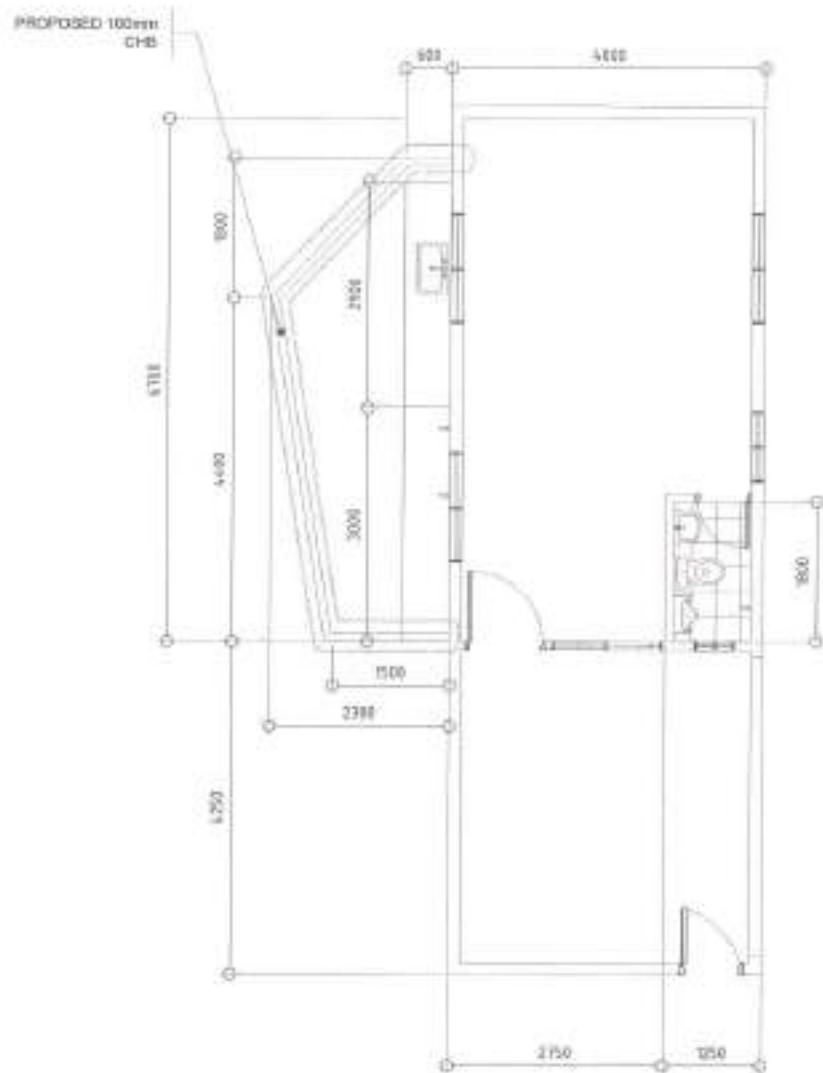
RECOMMENDING APPROVAL:  
*[Signature]*  
ENOR. ISMAEL R. VERZOSA, JR.  
SEC. CITY ENGINEERING DEPARTMENT

APPROVED BY:  
HON. MA. JOSEFINA G. BELMONTE  
CITY MAJOR

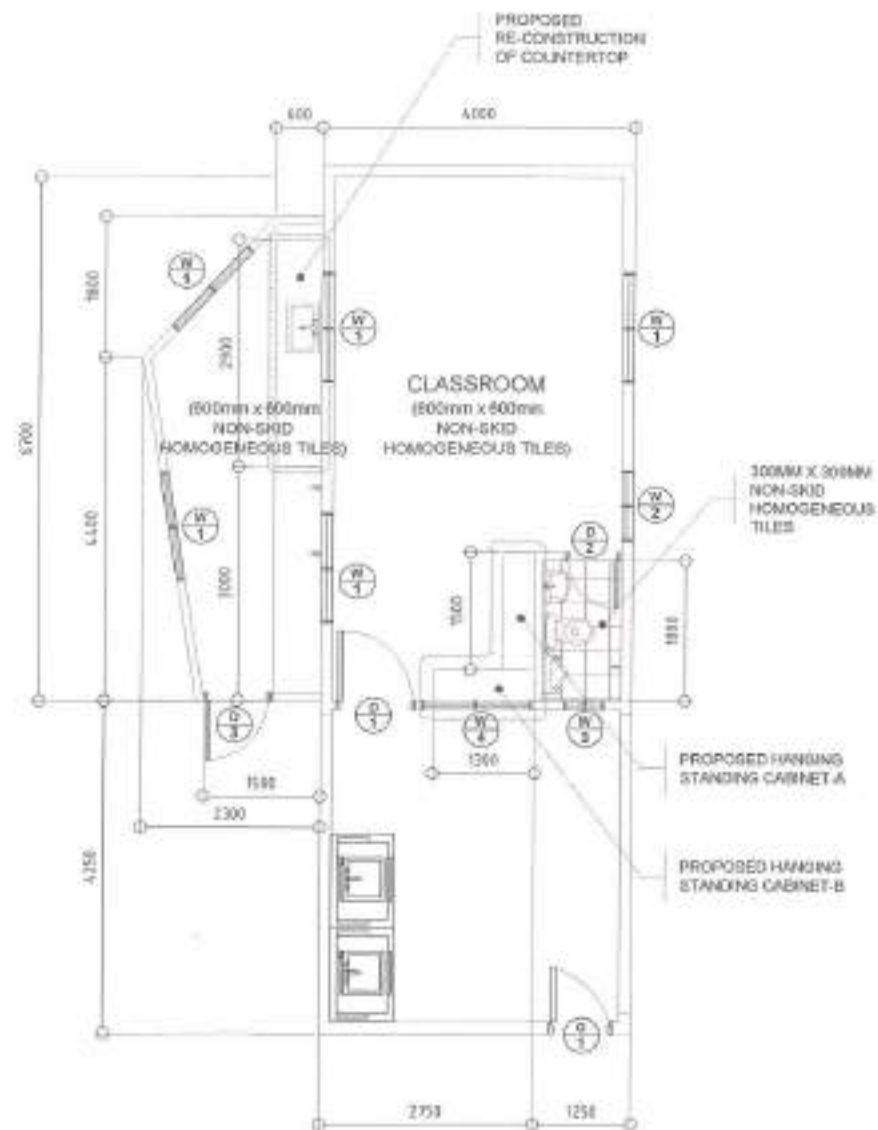
SHEET CONTENT:  
SITE DEVELOPMENT PLAN

SHEET NO.:  
AR-02  
02/13





NOTE:  
1. WALL STRUCTURE TO BE REPAINTED.



NOTE:  
1. DOORS AND WINDOWS TO BE REPLACED  
2. FLOOR AND WALL TILES TO BE REPLACED  
3. GATE TO BE REPLACED.

## 1 GROUND FLOOR PLAN (EXISTING)

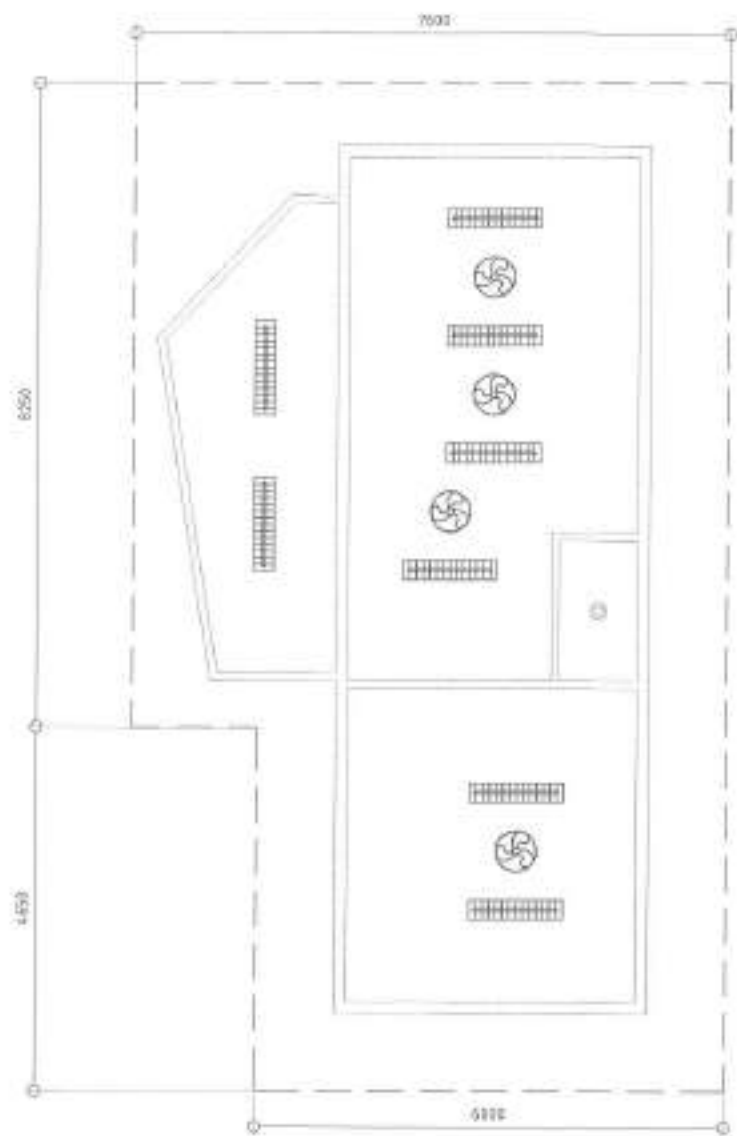
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## 2 GROUND FLOOR PLAN (PROPOSED)

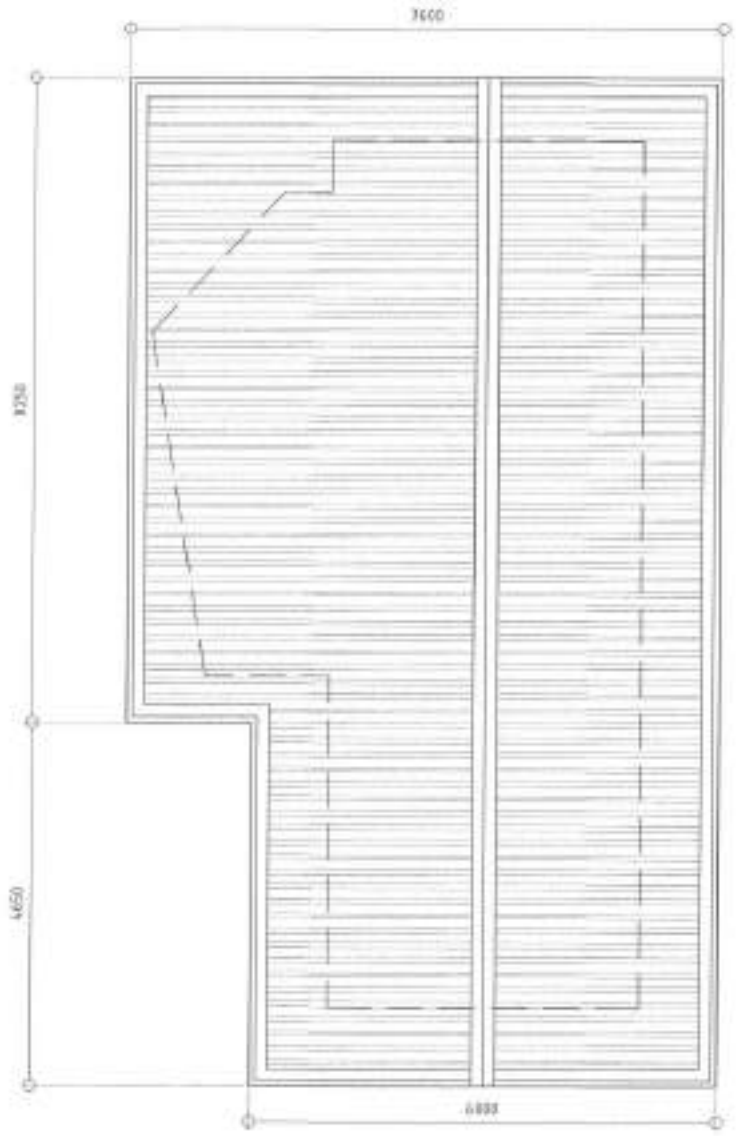
SCALE 1:200

|  |   |  |  |   |   |  |                              |
|--|---|--|--|---|---|--|------------------------------|
|  <p>Republika ng Pilipinas<br/>Lungsod ng Quezon<br/>CITY ENGINEERING DEPARTMENT</p> | PROJECT TITLE:  | ISSUED BY:   | SUBMITTED BY:  | RECOMMENDING APPROVAL:  | APPROVED BY:  | SHEET CONTENT:   | SHEET NO.:                   |
|  | <b>PROPOSED CONSTRUCTION OF HAND WASHING FACILITY AND REHABILITATION OF PINGKAN I DAY CARE CENTER</b> | DATE: 08.16.21<br>CHECKED BY: [Signature]<br>REVISION NO.: | <br><b>ENGR. LEO S. BEL ROSARIO</b><br>HEAD, PLANNING & PROJECT MANAGEMENT DIVISION | <br><b>ENGR. MARK R. VERZOSA, JR.</b><br>CH. CITY ENGINEERING DEPARTMENT | <br><b>HON. MA. JOSEFINA G. BELMONTE</b><br>CITY MAYOR | GROUND FLOOR PLAN (EXISTING)<br>SECOND FLOOR PLAN (PROPOSED) | <b>AR-03</b><br><b>03/13</b> |









- NOTE:
1. REPLACEMENT OF 6mm THICK FIBER CEMENT BOARD INCLUDING ROOF DAVES
  2. REPLACEMENT OF 12mm x 300mm FIBER CEMENT FASCIA BOARD



- NOTE:
1. REPLACEMENT OF G.I. ROOFING AND ACCESSORIES

**1 REFLECTED CEILING PLAN** SCALE 1/70M

**2 ROOF PLAN** SCALE 1/70M

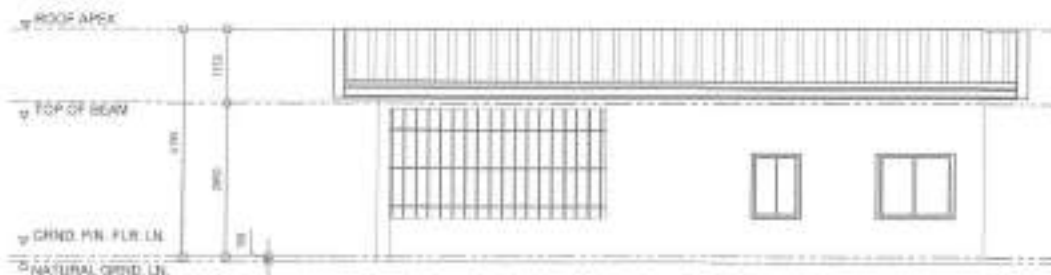
|  |  |   |  |  |  |   |                             |
|--|--|---|--|--|--|---|-----------------------------|
|  <p>Republika ng Pilipinas<br/>Lungsod ng Quezon<br/>CITY ENGINEERING DEPARTMENT</p> | PROJECT TITLE:<br><b>PROPOSED CONSTRUCTION OF HAND WASHING FACILITY AND REHABILITATION OF PINGKIAN I DAY CARE CENTER</b> | DESIGNED BY:<br>DATE: 06/20/21<br>CHECKED BY: <i>[Signature]</i><br>REVISION NO.: | SUBMITTED BY:<br><br>ENGR. LEO S. DEL ROSARIO<br>HEAT, PLUMBING & MECHANICAL DESIGNER | RECOMMENDING APPROVAL:<br><br>ENGR. WILLIAM R. VERZOSA, JR.<br>C.E.C. CITY ENGINEERING DEPARTMENT | APPROVED BY:<br><br>HON. MA. JOSEFINA G. BELMONTE<br>CITY MAYOR | SHEET CONTENT:<br>REFLECTED CEILING PLAN<br>ROOF PLAN | SHEET NO.<br>AR-04<br>04/13 |
|  | LOCATION:<br>BANGHAY PASCAL TAND, DISTRICT 8, QUEZON CITY  |   |  |  |  |   |                             |



NOTE  
1. PROVISION OF DAY CARE SIGNAGES

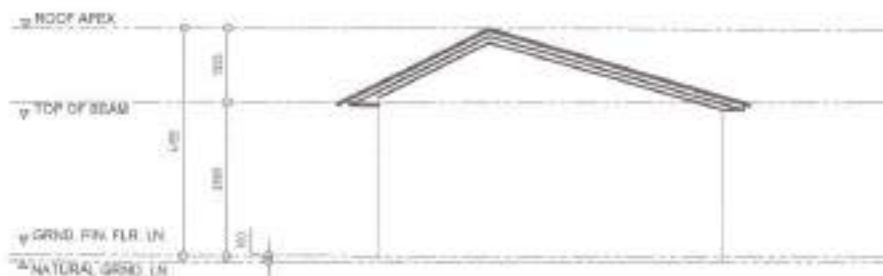
**1 FRONT ELEVATION**

SCALE 1:100M



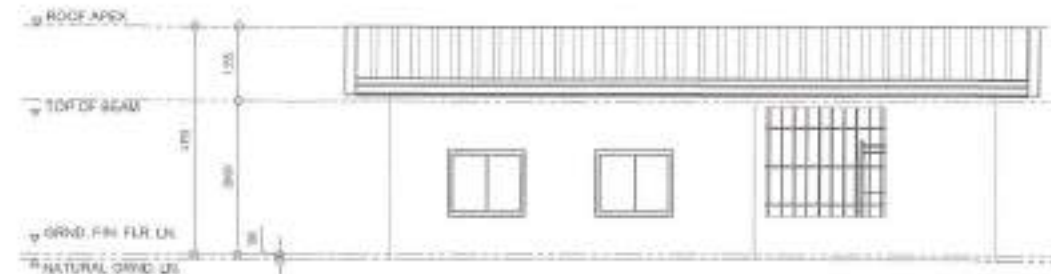
**2 RIGHT SIDE ELEVATION**

SCALE 1:100M



**3 REAR ELEVATION**

SCALE 1:100M



**4 LEFT SIDE ELEVATION**

SCALE 1:100M



Republika ng Pilipinas  
Lungsod ng Quezon  
**CITY ENGINEERING DEPARTMENT**

PROJECT TITLE:  
**PROPOSED CONSTRUCTION OF HAND WASHING FACILITY AND REHABILITATION OF PINGKIAN I DAY CARE CENTER**

LOCATION:  
BAYANGAY PASANG TANDA, DISTRICT 8, QUEZON CITY

DESIGNED BY:  
DATE: 09/18/21  
CHECKED BY:  
REVISION NO.:

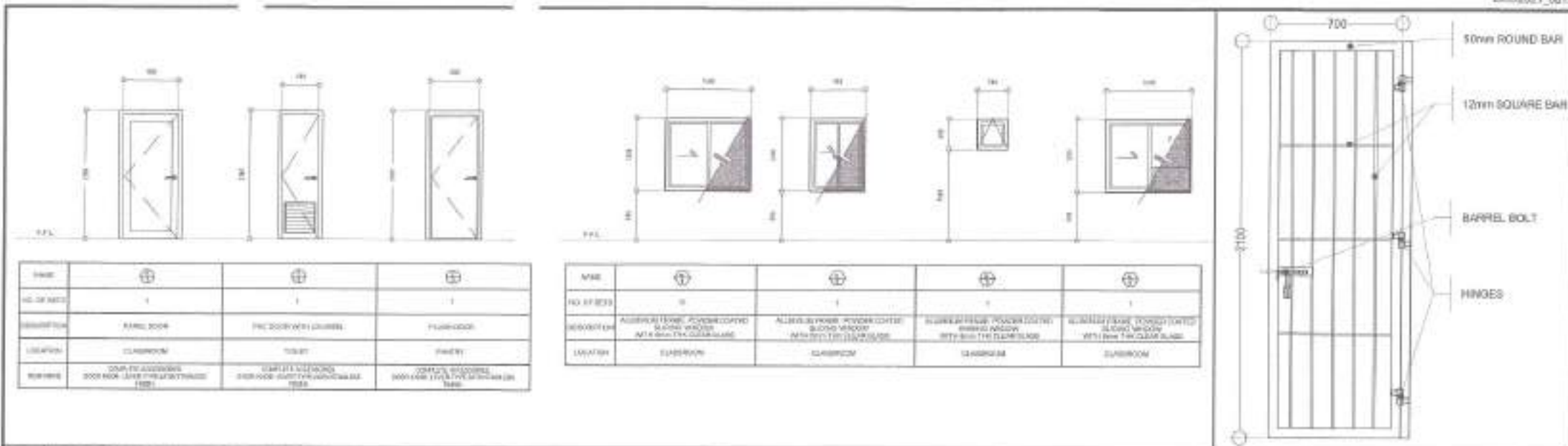
SUBMITTED BY:  
  
**ENGR. LGS DEL ROSARIO**  
HEAD, PLANNING & PROGRAMMING DIVISION

RECOMMENDING APPROVAL:  
  
**ENGR. ASST. R. VERZOSA, JR.**  
CHIEF, CIVIL ENGINEERING DEPARTMENT

APPROVED BY:  
  
**HON. MA. JOSEFINA G. BELMONTE**  
CITY ENGINEER

SHEET CONTENT:  
FRONT ELEVATION  
REAR ELEVATION  
RIGHT SIDE ELEVATION  
LEFT SIDE ELEVATION

SHEET NO.  
**AR-05**  
**05/13**



| NO.         | 1   | 1   | 1   |
|-------------|---|---|---|
| DESCRIPTION | PANEL DOOR  | PVC DOOR WITH LOUVER                              | FLUSH DOOR  |
| LOCATION    | CLASSROOM   | TOILET  | PAVILION  |
| REMARKS     | DOUBLE GLASSING DOOR FOR LIGHT TRANSMISSION (T&A) | DOUBLE GLASSING DOOR FOR LIGHT TRANSMISSION (T&A) | DOUBLE GLASSING DOOR FOR LIGHT TRANSMISSION (T&A) |

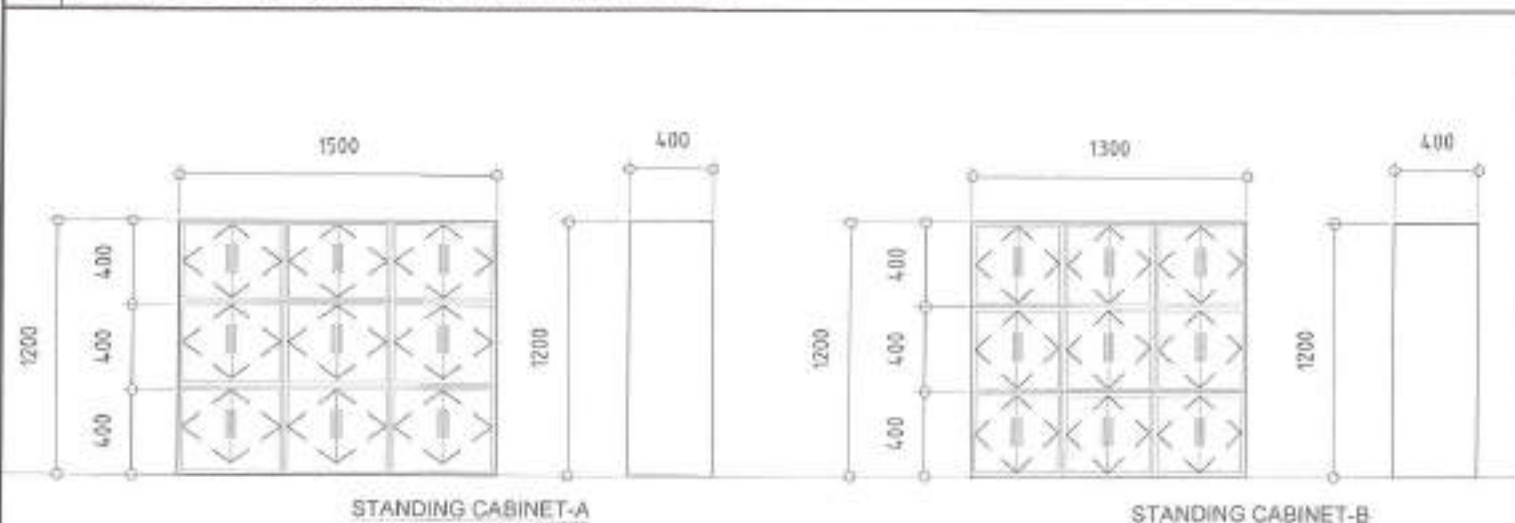
| NO.         | 1  | 1   | 1  | 1  |
|-------------|--|---|--|--|
| DESCRIPTION | ALUMINUM FRAME POWDER COATED SLIDING WINDOW WITH 6MM T&A CLEAR GLASS | ALUMINUM FRAME POWDER COATED SLIDING WINDOW WITH 12MM T&A CLEAR GLASS | ALUMINUM FRAME POWDER COATED SLIDING WINDOW WITH 6MM T&A CLEAR GLASS | ALUMINUM FRAME POWDER COATED SLIDING WINDOW WITH 6MM T&A CLEAR GLASS |
| LOCATION    | CLASSROOM  | CLASSROOM   | CLASSROOM  | CLASSROOM  |

### 1 SCHEDULE OF DOORS AND WINDOWS

SCALE NTS

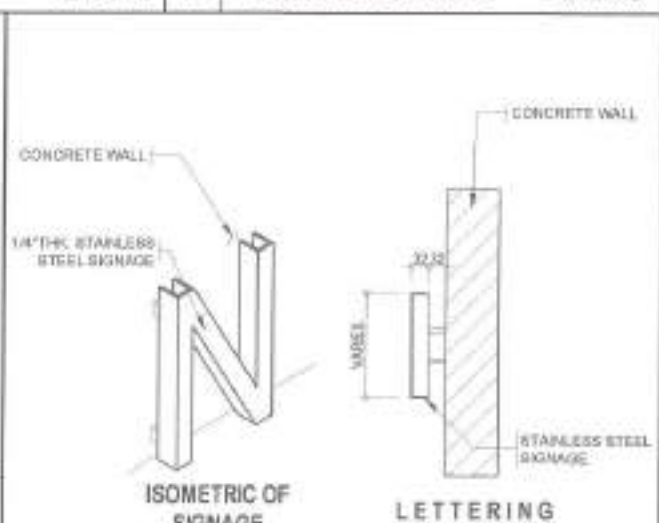
### 2 GATE DETAILS

SCALE NTS



STANDING CABINET-A

STANDING CABINET-B



ISOMETRIC OF SIGNAGE


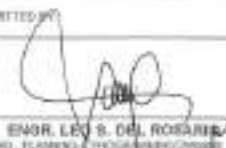


LETTERING

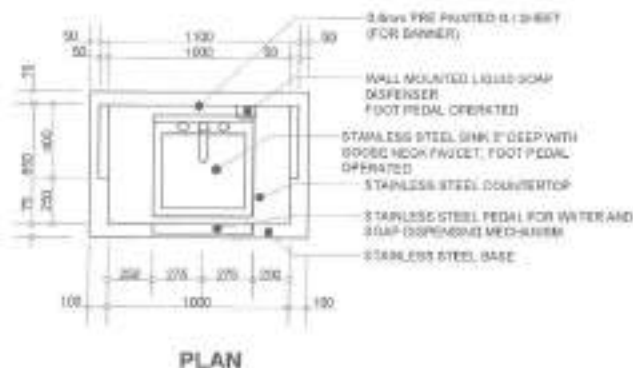
### 3 STANDING CABINET DETAILS

SCALE NTS

### 5 LETTERING DETAILS

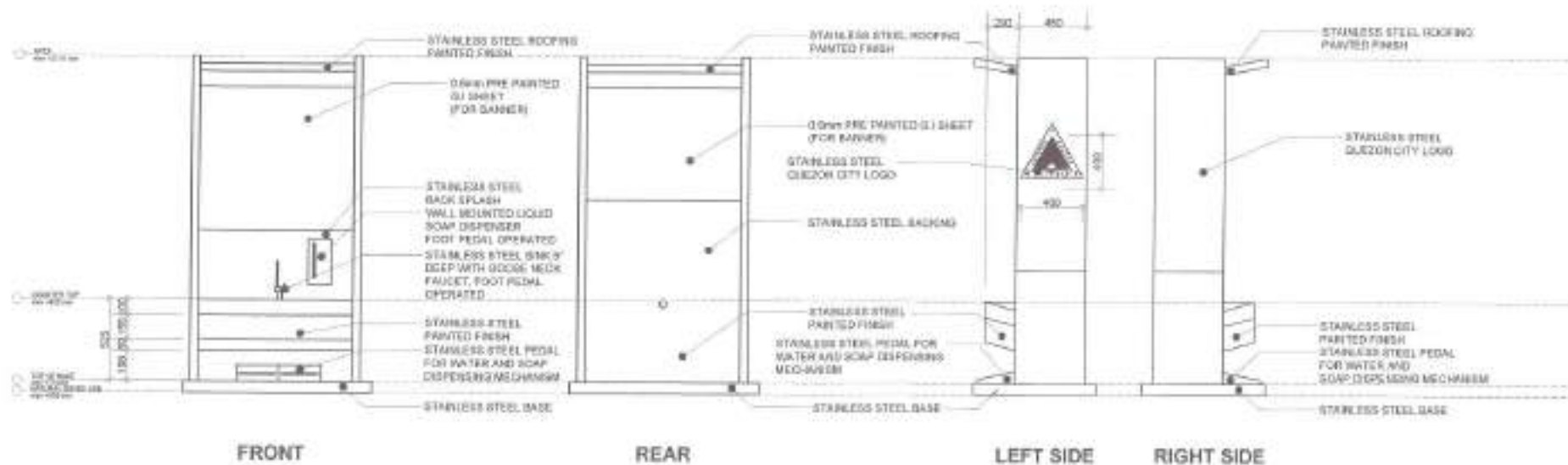
SCALE NTS

|  |  |                                    |   |   |  |   |   |
|--|--|------------------------------------|---|---|--|---|---|
|  <p>Republika ng Pilipinas<br/>Lungsod ng Cebu<br/>CITY ENGINEERING DEPARTMENT</p> | PROJECT TITLE:   | DRAWN BY:                          | SUBMITTED BY:   | RECOMMENDING APPROVAL:  | APPROVED BY:                               | SHEET CONTENT:  | SHEET NO.:  |
|  | PROPOSED CONSTRUCTION OF HAND WASHING FACILITY AND REHABILITATION OF PINKIAN I DAY CARE CENTER<br><br>LOCATION:<br>SANJAWAY PANGONG TIRAS, DISTRICT 6, CEBU CITY | DATE: 06/20/21<br><br>DESIGNED BY: | <br>ENGR. LEV S. DEL ROSARIO<br>HEAD, PLANNING & PROGRAM DEVELOPMENT | <br>ENGR. EULIANO R. VERZOSA, JR.<br>CH. CITY ENGINEERING DEPARTMENT | HON. MA. JOSEFINA G. BELMONTE<br>CITY MAOR | SCHEDULE OF DOORS AND WINDOWS<br>GATE DETAILS<br>HANDING CABINET DETAILS<br>STANDING CABINET DETAILS<br>LETTERING DETAILS |  |



1 SINGLE SINK PORTABLE HAND WASHING STALL PLAN

SCALE 1:300



2 ELEVATIONS

SCALE 1:300



Republika ng Pilipinas  
Lungsod ng Quezon  
CITY ENGINEERING DEPARTMENT

PROJECT TITLE:  
**PROPOSED CONSTRUCTION OF HAND WASHING FACILITY AND REHABILITATION OF PINGKIAN 1 DAY CARE CENTER**

LOCATION:  
SARINAGAY PASONG TAMBAL DISTRICT 9, QUEZON CITY

DESIGNED BY: *[Signature]*  
DATE: 06.16.22  
CHECKED BY: *[Signature]*  
REVISIONS:

SUBMITTED BY:  
*[Signature]*  
ENGR. LEO S. DEL ROSARIO  
HEAD, PLANNING & PROGRAM DIVISION

RECOMMENDING APPLICANT:  
*[Signature]*  
ENGR. MARVIN R. VERZOGA, JR.  
TIG CITY ENGINEERING COMPANY

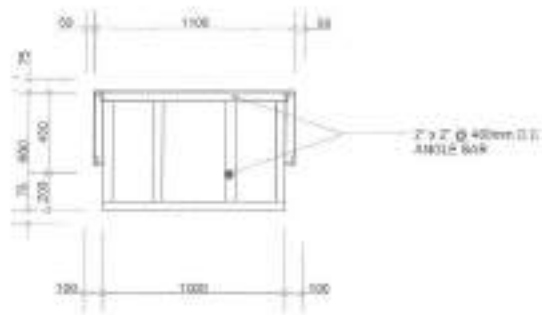
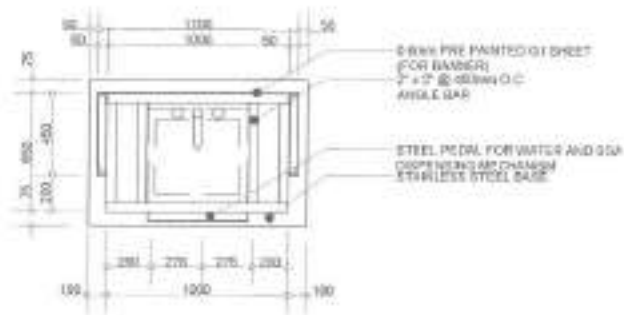
APPROVED BY:  
*[Signature]*  
HOW. MA. JOSEFINA G. BELMONTÉ  
CITY MARCH

SHEET CONTENT:  
SINGLE SINK PORTABLE  
HAND WASHING  
STALL PLAN  
ELEVATIONS

SHEET NO.:  
**AR-07**  
**0713**

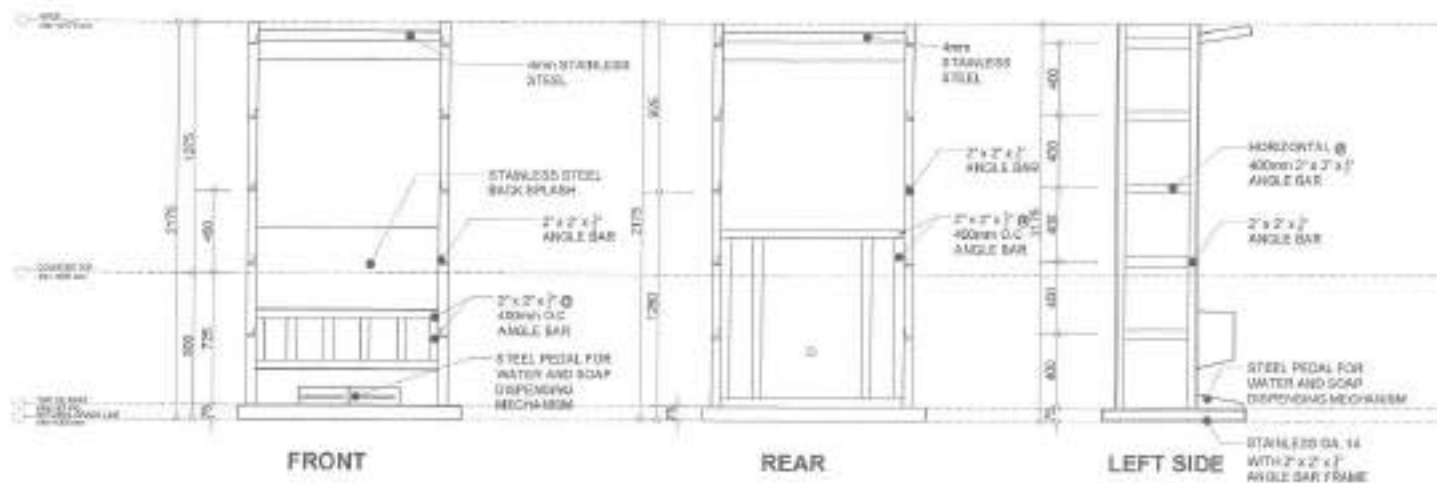






1 SINGLE SINK PORTABLE HAND WASHING STALL PLAN

SCALE 1:300



2 ELEVATIONS

SCALE 1:300

3 TYPICAL SECTION

SCALE 1:300



Republika ng Pilipinas  
Lungsod ng Quezon  
CITY ENGINEERING DEPARTMENT

PROJECT TITLE:  
**PROPOSED CONSTRUCTION OF HAND WASHING FACILITY AND REHABILITATION OF PINGKIAN 1 DAY CARE CENTER**

LOCATION:  
BAMANGAY PANGRO TAMB, DISTRICT 8, QUEZON CITY

DESIGN BY:  
DATE: 08/2021  
CHECKED BY:  
REVISIONS:

SUBMITTED BY:  
  
ENGR. LEO S. DEL ROSARIO  
HEAD, PLANNING & PROGRAM DIVISION

RECOMMENDING APPROVAL:  
  
ENGR. NORMAN R. VERZOSA, JR.  
DIR., CITY ENGINEERING DEPARTMENT

APPROVED BY:  
HON. MA. JOSEFINA G. BELMONTE  
CITY MAYOR

SHEET CONTENT:  
SINGLE SINK PORTABLE HAND WASHING STALL PLAN, ELEVATIONS, TYPICAL SECTIONS

SHEET NO:  
**ST-02**  
**09/13**

- ALL ELECTRICAL WORKS SHALL BE DONE IN ACCORDANCE WITH THE PROVISIONS OF THE LATEST EDITION OF THE PHILIPPINE ELECTRICAL CODE, THE LAWS AND ORDINANCES OF THE LOCAL GOVERNMENT AUTHORITY AND THE REQUIREMENTS OF THE LOCAL POWER AND TELEPHONE UTILITY COMPANY.
- THE CONTRACTOR SHALL SECURE ALL PERMITS AND PAY ALL FEES REQUIRED FOR THE WORK AND SHALL RUBISH THE OWNER THROUGH THE ENGINEER, FINAL CERTIFICATE OF ELECTRICAL INSPECTION AND APPROVAL FROM PROPER GOVERNMENT AUTHORITIES FOR COMPLETION OF WORK.
- ALL EMBEDDED BRANCH CIRCUITS SHALL BE PVC CONDUITS AND FOR EMBEDDED INSTALLATION SHALL BE IAC SUPPORTED BY CONDUIT CLAMPS EVERY 100 MILLIMETERS.
- PULL BOXES SHALL BE PROVIDED BY THE CONTRACTOR WHENEVER NECESSARY TO FACILITATE WIRE PULLING EVEN IF THESE ARE NOT INDICATED ON THE PLANS. SIZING OF ALL PULLBOXES SHALL BE COMPUTED BASED ON THE CODE REQUIREMENTS. SUBMIT SHOP DRAWINGS TO THE ENGINEER FOR APPROVAL. LOCATION OF PULLBOXES SHALL BE APPROVED BY THE ARCHITECT/ENGINEER AND MUST BE REFLECTED ON THE "AS-BUILT" PLAN.
- ALL POWER OUTLETS AND SWITCHES SHALL BE GROUNDING TYPE WITH PARALLEL SLOTS FOR 250V.
- PROVIDE GROUND FAULT CURRENT INTERRUPTER CIRCUIT BREAKER FOR LOADS MARKED "GFCI" ON THE PLAN.
- ALL METALLIC CONDUITS, CABINETS AND EQUIPMENT SHALL BE PROPERLY GROUNDING AND BONDED.
- UNLESS OTHERWISE NOTED, MOUNTING HEIGHT FOR WALL MOUNTED DEVICES SHALL BE AS FOLLOWS:

RECEPTACLE OUTLET - 300 MM AFF, 150MM ABOVE WORKING COUNTER.  
 TELEPHONE OUTLET - 300 MM AFF  
 CATV OUTLET - 300 MM AFF  
 LIGHTING SWITCH - 1400 MM AFF  
 PANELBOARD - 1800 MM AFF

- REFER TO MECHANICAL, PLUMBING AND FIRE PROTECTION DRAWINGS FOR RATINGS AND LOCATIONS OF EQUIPMENT AS WELL AS THEIR CONTROL SEQUENCES AS SPECIFIED AND OR SHOWN UNDER THEIR RESPECTIVE SECTIONS.
- ALL MATERIALS TO BE USED SHALL BE OF THE BEST QUALITY, BRAND NEW AS SPECIFIED.
- THE DRAWINGS AND SPECIFICATIONS ARE INTENDED TO PRESENT GENERAL LAYOUT AND BROAD OUTLINE DESCRIPTION OF THE PROJECT BUT DO NOT NECESSARILY INDICATE DESCRIBED ACTUAL LOCATIONS, LEVEL AND DISTANCES OF THE EQUIPMENT. THE CONTRACTOR IS HEREBY REQUIRED TO MAKE SUCH ADJUSTMENT AT THE SITE AS LOCATION, DISTANCES AND LEVELS ARE COVERED BY ACTUAL FIELD CONDITIONS.
- ANY DISCREPANCY BETWEEN THE PLANS AND SPECIFICATIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER FOR CLARIFICATION DECISION.
- ALL LIGHTING AND CONVENIENCE OUTLET CIRCUITS SHALL BE 14 GA. MM. THWAL3 COPPER WIRE UNLESS OTHERWISE NOTED. MINIMUM SIZE OF WIRE SHALL BE 22 GA. MM. COPPER WIRE. ALL WIRES AND CABLES SHALL BE COLOR CODED AS FOLLOWS:

LINE 1 - RED  
 LINE 2 - YELLOW  
 NEUTRAL - WHITE  
 GROUND - GREEN

- ROSES, WIRE, BUTTING, ENCLOSURE SHALL BE FINNICOATED FROM STEEL WITH THICKNESS AS FOLLOWS:

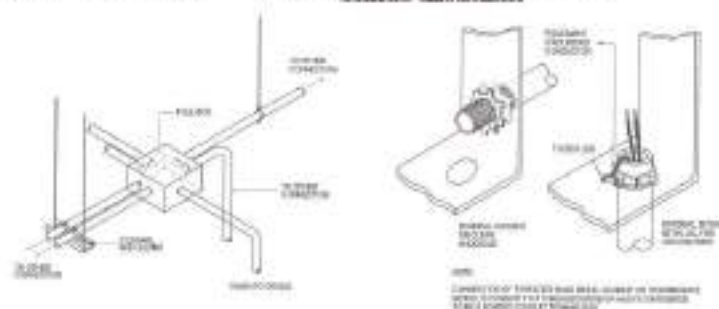
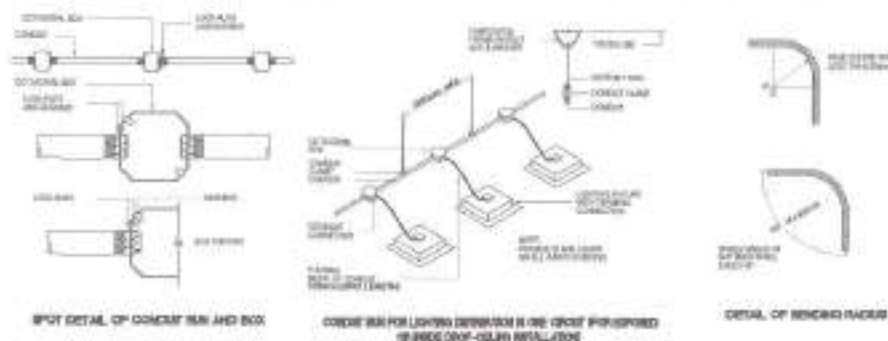
MAXIMUM WIDTH OF THE WIDEST SURFACE EDGE:  
 UP TO INCLUDING 152.40 MM GA 18 PAINTED WITH METAL PRIMER EPOXY AND TOPCOAT  
 OVER 152.40 MM BUT NOT OVER 457.20 GA 18 PAINTED WITH METAL PRIMER EPOXY AND TOPCOAT  
 OVER 457.20 MM BUT NOT OVER 762 MM GA 12 PAINTED WITH METAL PRIMER EPOXY AND TOPCOAT  
 OVER 762 MM GA 10 PAINTED WITH METAL PRIMER EPOXY AND TOPCOAT

- ALL ELECTRICAL WORKS HEREIN SHALL BE EXECUTED BY EXPERIENCED MEN UNDER THE DIRECT SUPERVISION OF A FULL-TIME LICENSED ELECTRICAL ENGINEER AND A DULY ACCREDITED ELECTRICAL CONTRACTOR BY PCAB. WORKS SHALL BE NEATLY PLACED, SECURELY FASTENED AND PROPERLY FINISHED.

- TYPE OF SERVICE ENTRANCE SHALL BE SINGLE-PHASE, TWO-WIRE PLUS GROUND, 60 HERTZ, 230V AC NOMINAL.

- CONDUITS IN NO CASE SHALL THERE BE MORE THAN THE EQUIVALENT OF FOUR QUARTER BENDS IN ANY ONE RUN. ALL CONDUIT BENDS SHALL BE FIELD MADE BY USING HYDRAULIC BENDERS. MINIMUM BENDING RADIUS MUST BE IN ACCORDANCE TO THE CODE REQUIREMENTS.

- UPON COMPLETION OF ELECTRICAL CONSTRUCTION WORK, INSULATION RESISTANCE TEST AND FUNCTIONALITY TEST SHALL BE PERFORMED BY THE CONTRACTOR INCLUDING OF THE INSTALLATION TO BE REPORTED IN DETAILS ON FORMS APPROVED BY THE QUEZON CITY ENGINEERING DEPARTMENT REPRESENTATIVE. THE GROUND RESISTANCE FOR ELECTRICAL SYSTEMS SHALL NOT BE MORE THAN 5 OHMS. COMMUNICATION GROUNDING RESISTANCE SHALL NOT EXCEED 2 OHMS.



## 2 MISCELLANEOUS DETAILS

SCALE: NTS

- |   |  |   |  |
|---|--|---|--|
| ☐ | SINGLE GANG SWITCH (FOR REPLACEMENT)           | ☐ | CEILING FAN (ADDITIONAL)                                 |
| ☐ | TWO GANG SWITCH (FOR REPLACEMENT)              | ☐ | DUPLEX CONVENIENCE OUTLET (FOR REPLACEMENT)              |
| ☐ | SWITCH (FAN)                                   | ☐ | DUPLEX CONVENIENCE OUTLET (ADDITIONAL)                   |
| ☐ | E27 RECEPTACLE WITH LED BULB (FOR REPLACEMENT) | ☐ | PANEL BOARD  |
| ☐ | E27 RECEPTACLE WITH LED BULB (ADDITIONAL)      | ☐ | TROFFER TYPE WITH 1X18W LED TUBE LIGHT (FOR REPLACEMENT) |
|   |  | ☐ | TROFFER TYPE WITH 2X18W LED TUBE LIGHT (FOR REPLACEMENT) |

## 1 GENERAL NOTES

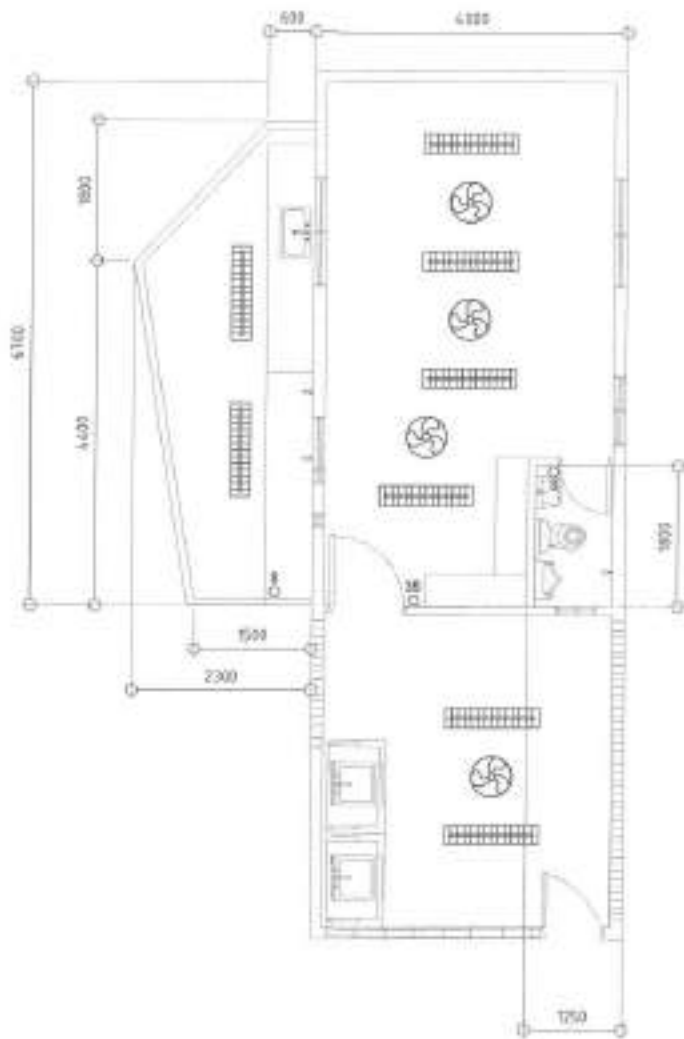
SCALE: NTS

## 3 LEGEND AND SYMBOLS

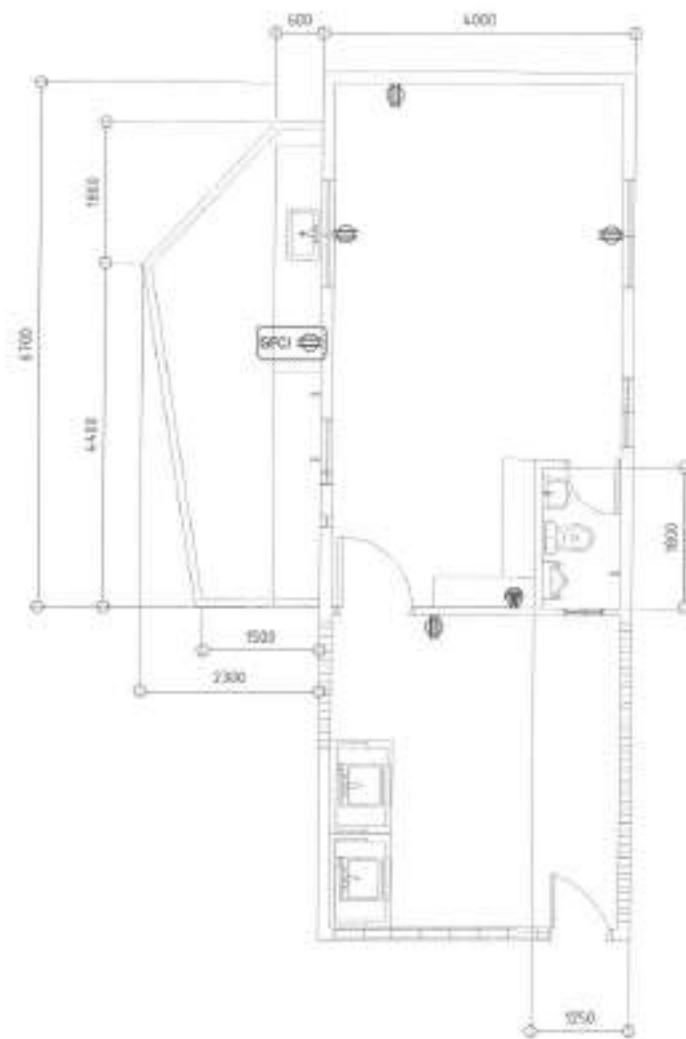
SCALE: NTS

|  |  |                |               |   |   |   |  |
|--|--|----------------|---------------|---|---|---|--|
|  <p>Republika ng Pilipinas<br/>Lungsod ng Quezon<br/>CITY ENGINEERING DEPARTMENT</p> | PROJECT TITLE:   | DESIGNED BY:   | SUBMITTED BY: | RECOMMENDING APPROVAL:  | APPROVED BY:  | SHEET CONTENT:  | SHEET NO.:   |
|  | <b>PROPOSED CONSTRUCTION OF HAND WASHING FACILITY AND REHABILITATION OF PINGKIAN 1 DAY CARE CENTER</b> | DATE: 08-08-21 | CHECKED BY:   | <br><b>ENGR. LEO S. DEL ROSARIO</b><br>HEAD, PLANNING & PROGRAM DIVISION | <br><b>ENGR. USMAN R. VERZOSA, JR.</b><br>CH. OF ELECTRICAL DIVISION | <br><b>HON. MA. JOSEFINA G. BELMONTE</b><br>CITY MAYOR | GENERAL NOTES<br>MISCELLANEOUS DETAILS<br>LEGEND AND SYMBOLS |
|  | LOCATION:<br>SARANGAY YASONS TRINO, DISTRICT 6, QUEZON CITY  | REVISION NO.:  |               |   |   |   |  |





- NOTE:
1. REPLACEMENT OF LIGHTING FIXTURES AND SWITCHES
  2. ADDITIONAL CEILING FANS



- NOTE:
1. REPLACEMENT OF CONVENIENCE OUTLETS AND ACU OUTLET

**1 GROUND FLOOR LIGHTING LAYOUT**

SCALE: NTS

**2 GROUND FLOOR POWER LAYOUT**

SCALE: NTS



Republic of the Philippines  
Lungsod ng Quezon  
**CITY ENGINEERING DEPARTMENT**

PROJECT TITLE:  
**PROPOSED CONSTRUCTION OF HAND WASHING FACILITY AND REHABILITATION OF PINGKIAN 1 DAY CARE CENTER**

LOCATION:  
BAYWAGAY (PARSONS) TAMA, DISTRICT 8, QUEZON CITY

DESIGNED BY:  
DATE: 06-05-21  
CHECKED BY:  
REVIEW NO.:

SUBMITTED BY:  
  
**ENGR. LEO S. DEL ROSARIO**  
HEAD, PLANNING & PROJECT MANAGEMENT DIVISION

RECOMMENDING APPROVAL:  
  
**ENGR. RAMON R. VERZOSA, JR.**  
DIR. CITY ENGINEERING DEPARTMENT

APPROVED BY:  
  
**HON. MA. JOSEFINA D. BELMONTE**  
CITY SAVER

SHEET CONTENT:  
GROUND FLOOR LIGHTING LAYOUT  
GROUND FLOOR POWER LAYOUT

SHEET NO.  
**EL-02**  
**13/13**



1 All plumbing works and materials indicated herein shall be compliant to the provisions of the latest edition of National Plumbing Code, the rules and regulations of local authorities concerned, the rules and regulations of local utility companies and the provisions of the land developer when and where applicable.

2 The plumbing layout is only diagrammatic; pipes, cleanouts and check valves shall be concealed as much as possible. It is not intended to show the actual dimension of the pipes and fixtures in the drawing but all the pipes and fixtures shall be installed as and where indicated. Any relocation will require proper execution in relation with other trades.

3 The plumbing contractor shall verify all existing utilities at the site and shall coordinate the work with other trades.

4 Pipes shall not be embedded in structural members unless otherwise specified or allowed.

5 Minimum slope for horizontal sewer lines shall be 1% and for drain lines shall be 5%.

6 Proposed plumbing utilities shall conform with the actual location, depth and invert elevation of all existing pipes/utilities.

7 Connection of fixtures to pipes and fittings shall be according to manufacturer's specifications.

8 All floor drains shall be vented individually.

9 All clean out females shall be flush-mounted to wall and shall be provided with polished cover caps. Do not install floor clean outs except at lines on grade and service areas not subject to traffic.

10 All underground G.I. pipes in direct contact with soil shall be provided with two (2) coats of protective tar covering and wrapped with jute cloth thoroughly soaked in tar or asphalt.

11 Provide vent stack and vent pipe thru roof of cast iron service weight as required.

12 All cast iron pipes shall be of approved quality and G.I. pipes for water distribution lines shall be Schedule 40 U.S. standard weight.

13 Provide gate valves to all water supply lines to fixtures.

14 All hot water lines shall be provided with proper insulation where exposed.

15 All individual branches to fixtures or group of fixtures and/or equipments shall be provided with air chambers or capped vertical pipe extensions of dimensions as shown.

H = 450 mm for 19 mm Ø and larger


H = 300 mm for 12 mm Ø and smaller

16 All hose bibbs shall be 19 mm Ø (3/4" Ø) unless otherwise indicated.

17 Inlet pipe of septic tank is 50 mm higher than the siphon pipe which is 30 mm higher than the outlet pipe.

18 All plumbing works and manner of construction shall be under the direct supervision of an able and duly licensed Master Plumber or Registered Sanitary Engineer. Any discrepancies found in plan shall be notified to the same person.

I. FIXTURES AND OTHER LEGEND

- FD FLOOR DRAIN
- RD ROOF DRAIN
- SHD SHOWER
- WC WATER CLOSET
- LAV LAVATORY
- URI URINAL
- KS KITCHEN SINK
- BD BUILDING DRAIN
- DD DECK DRAIN
- CCD CEILING CLEANOUT
- FCO FLOOR/GROUND CLEANOUT
- DS DOWNSPOUT
- mm millimeter
- Ø mm DIAMETER
- SHD SHOWER DRAIN
- CB CATCH BASIN
- MH MANHOLE
- DIRECTION OF FLOW
-  GREASE TRAP



|   |                                  |
|---|----------------------------------|
|    | UNION FIXTURE                    |
|    | CHECK VALVE                      |
|    | BUILDING SEWER                   |
|    | BUILDING DRAIN                   |
|    | WASTE LINE                       |
|    | AREA DRAIN / CATCH BASIN         |
|    | FLOOR DRAIN                      |
|    | DIAMETER                         |
|    | WASTE LINE                       |
|    | WATER LINE                       |
|    | GATE VALVE                       |
|    | DECK DRAIN                       |
|    | CLEANOUT                         |
|    | PIPE DOWN                        |
|    | PIPE UP                          |
|    | MILLIMETER                       |
|    | GATE VALVE                       |
|    | AREA DRAIN / CATCH BASIN         |
|    | WATER CLOSET                     |
|    | LAVATORY                         |
|    | MANHOLE                          |
|    | HOSE BIBB                        |
|    | STORM DRAIN LINE                 |
|    | VENT LINE                        |
|   | VENT ABOVE CEILING               |
|  | CONCRETE PIPE / RENF. CORR. PIPE |
|  | VENT THRU ROOF                   |
|  | DIRECTION OF FLOW / SLOPE        |

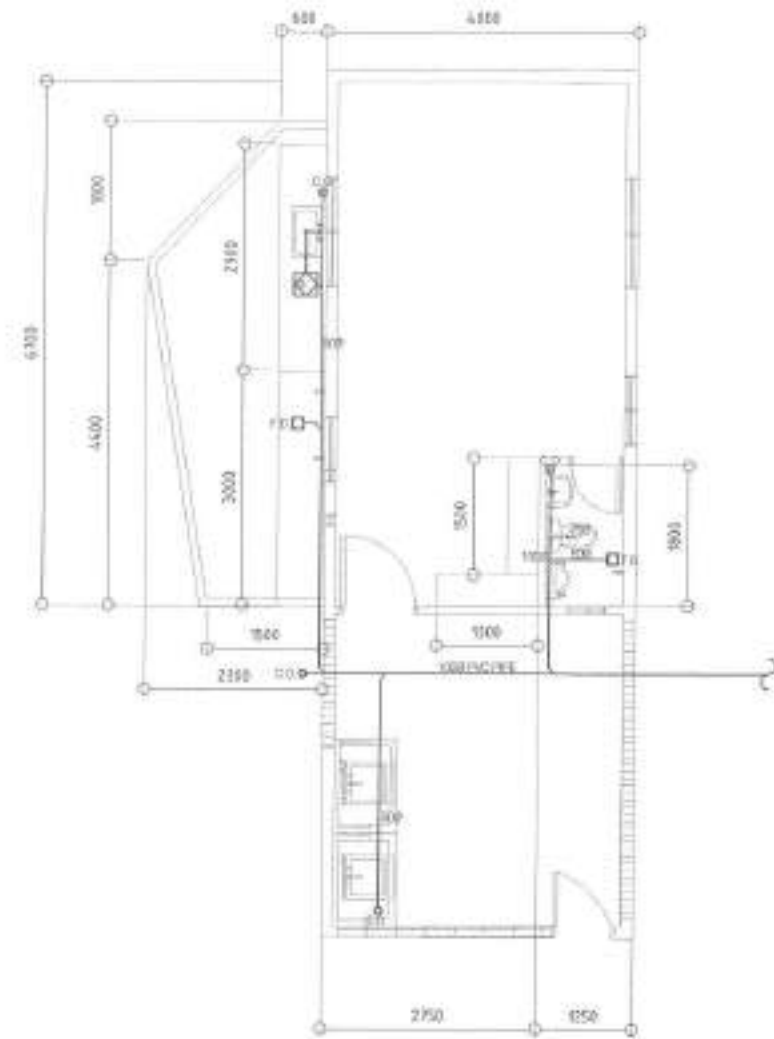
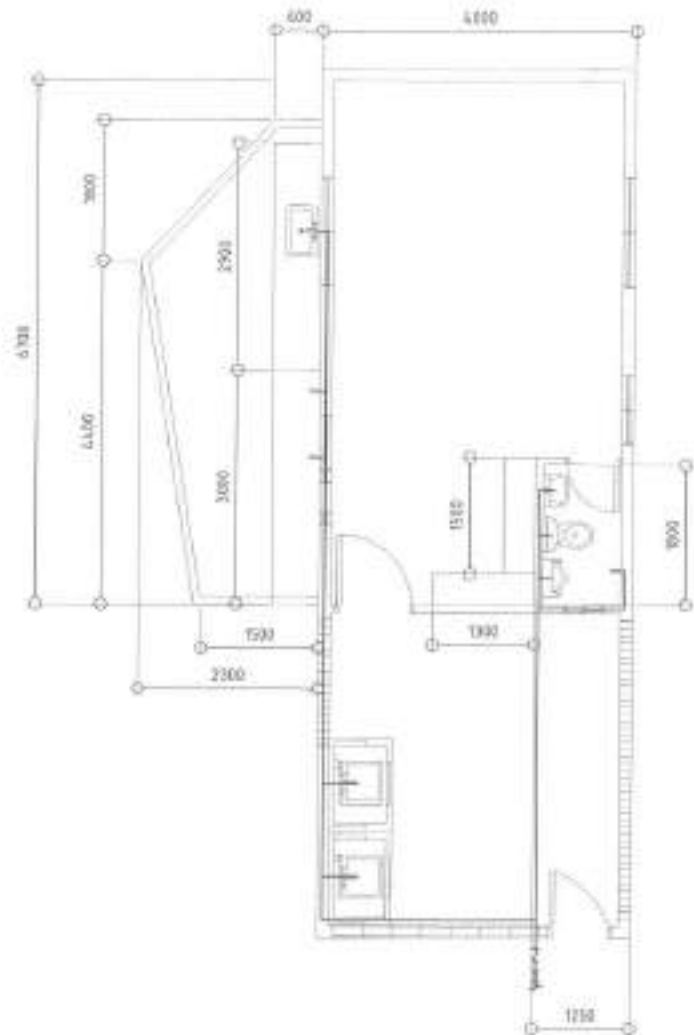
1 GENERAL NOTES

SCALE NTS.

2 LEGEND AND SYMBOLS

SCALE NTS.

|  |  |                                 |  |   |   |   |                   |
|--|--|---------------------------------|--|---|---|---|-------------------|
|  <p>Republika ng Pilipinas<br/>Lungsod ng Quezon<br/>CITY ENGINEERING DEPARTMENT</p> | PROJECT TITLE:   | DRAWN BY:                       | SUBMITTED BY:  | RECOMMENDING APPROVAL:  | APPROVED BY:  | SHEET COUNT:  | SHEET NO.:        |
|  | PROPOSED CONSTRUCTION OF HAND WASHING FACILITY AND REHABILITATION OF PINGKIAN I DAY CARE CENTER<br><br>LOCATION: BAWANGYAN PANGRIB (FAMD, DISTRICT 8, QUEZON CITY) | DATE: 26 FEB<br><br>CHECKED BY: | <br>ENGR. LEO S. DEL ROSARIO<br>HEAD, PLUMBING PROGRAM DIVISION | <br>ENGR. ISAGANI R. VERZOSA, JR.<br>CH. OFF. ENGINEERING DEPARTMENT | <br>HON. MA. JOSEFINA G. BELMONTE<br>CITY MGR. | SHEET COUNT:<br><br>GENERAL NOTES, LEGEND AND SYMBOLS | 10<br>13<br>PL-01 |



- NOTE:  
 1. PLUMBING FIXTURES TO BE REPLACED  
 2. HAND WASHING FAUCETS TO BE REPLACED

## 1 GROUND FLOOR WATER LINE LAYOUT

SCALE 1:70M

## 2 GROUND FLOOR SANITARY LAYOUT

SCALE 1:70M



Republic of the Philippines  
 Lungsod ng Quezon  
 CITY ENGINEERING DEPARTMENT

PROJECT TITLE:  
**PROPOSED CONSTRUCTION OF HAND  
 WASHING FACILITY AND  
 REHABILITATION OF PINGKIAN 1 DAY  
 CARE CENTER**

LOCATION:  
 SANWIKAY PANGKO TAMA, DISTRICT 6, QUEZON CITY

DRAWN BY:  
 DATE: 09.16.22  
 CHECKED BY:  
 REVISION NO.:

DESIGNED BY:  
  
**ENGR. LEO S. DEL ROSARIO**  
 HEAD, PLUMBING & MECHANICAL DIVISION

RECOMMENDING APPROVAL:  
  
**ENGR. RAYMOND R. VERZOSA, JR.**  
 DIC, CITY ENGINEERING DEPARTMENT

APPROVED BY:  
  
**HON. MA. JOSEFINA G. BELMONTE**  
 CITY MAYOR

SHEET CONTENT:  
 GROUND FLOOR  
 WATER LINE LAYOUT  
 GROUND FLOOR  
 SANITARY LAYOUT

SHEET NO.  
**PL-02**  
**1113**

THE SITE



THE SITE



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**ELECTRICAL**

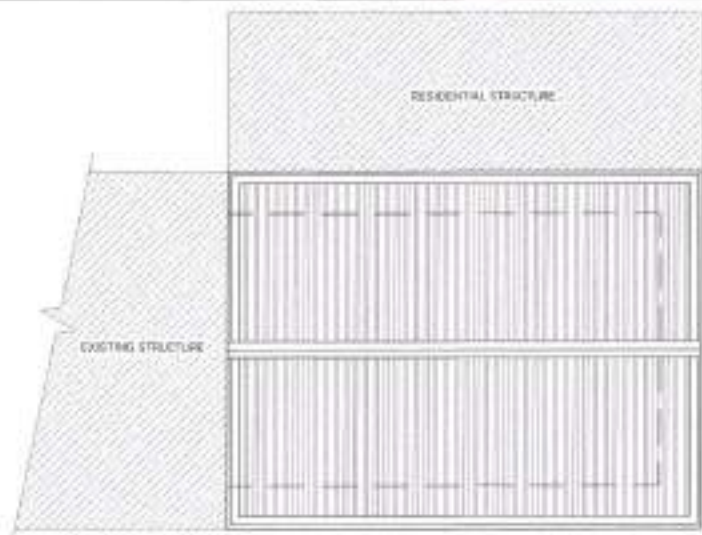
|       |   |
|-------|---|
| EL-01 | GENERAL NOTES<br>MISCELLANEOUS DETAILS<br>LEGENDS AND SYMBOLS |
| EL-02 | GROUND FLOOR LIGHTING LAYOUT<br>GROUND FLOOR POWER LAYOUT     |

**1 VICINITY MAP**

SCALE NTS.

**2 LOCATION MAP**

SCALE NTS.



**3 SITE DEVELOPMENT PLAN**

SCALE NTS.



Republika ng Pilipinas  
Lungsod ng Quezon  
**CITY ENGINEERING DEPARTMENT**

PROJECT TITLE:  
**PROPOSED REHABILITATION OF  
PINGKIAN III ZONE 2 DAY CARE  
CENTER.**

LOCATION:  
BARANGAY PADONG TAMB, DISTRICT 5, QUEZON CITY

DRAWN BY: *[Signature]*  
DATE: 08.18.21  
CHECKED BY: *[Signature]*  
REVISIONS:

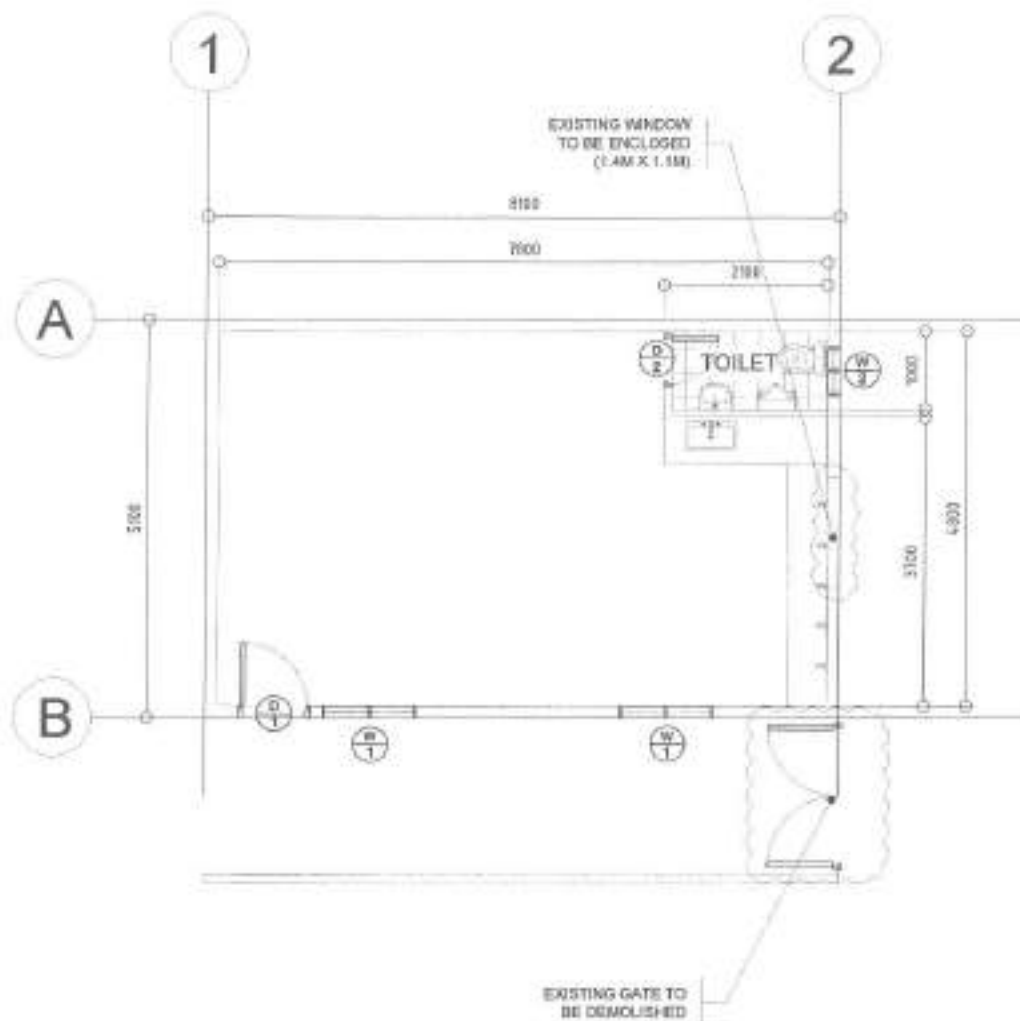
SUBMITTED BY:  
*[Signature]*  
**ENGR. LEO S. DEL ROSARIO**  
HEAD, PLANNING AND ZONING DIVISION

RECOMMENDING APPROVAL:  
*[Signature]*  
**ENGR. EDGARD R. VERZOSA, JR.**  
DC, CITY ENGINEERING DEPARTMENT

APPROVED BY:  
*[Signature]*  
**HON. MA. JOSEFINA G. BELMONTE**  
CITY MAYOR

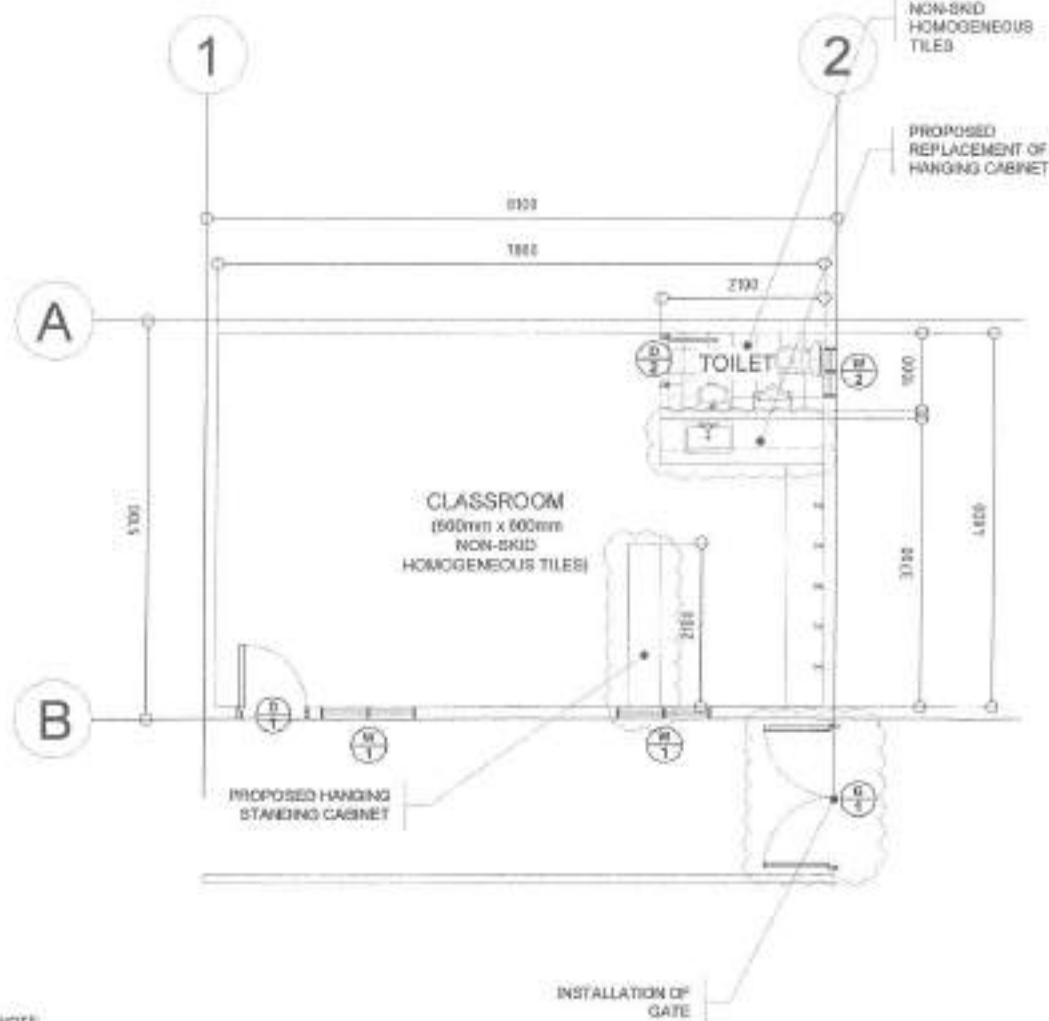
SHEET CONTENT:  
VICINITY MAP  
LOCATION MAP  
SITE DEVELOPMENT PLAN

SHEET NO.:  
**AR-01**  
**01 09**



NOTE:

- EXISTING WINDOW TO BE ENCLOSED.
- GATE TO BE REPLACED.
- CHIPPING OF FLOOR TILES.



NOTE:




- WHOLE STRUCTURE TO BE REPAINTED.
- DOORS AND WINDOWS TO BE REPLACED.
- PROPOSED REPLACEMENT OF HANGING CABINET.
- PROPOSED CONSTRUCTION OF STANDING CABINET.
- FLOOR TILES TO BE REPLACED.

## 1 GROUND FLOOR PLAN (EXISTING)

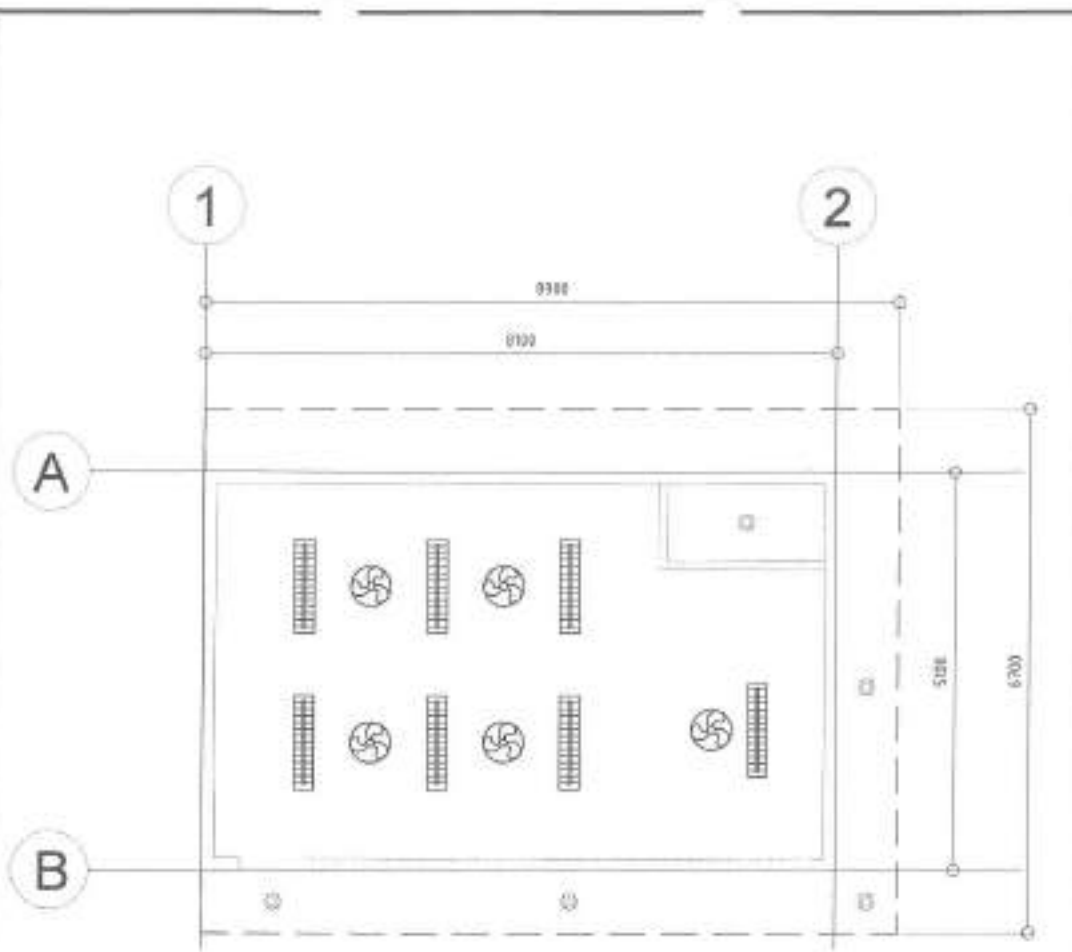
SCALE 1:70M

## 2 GROUND FLOOR PLAN (PROPOSED)

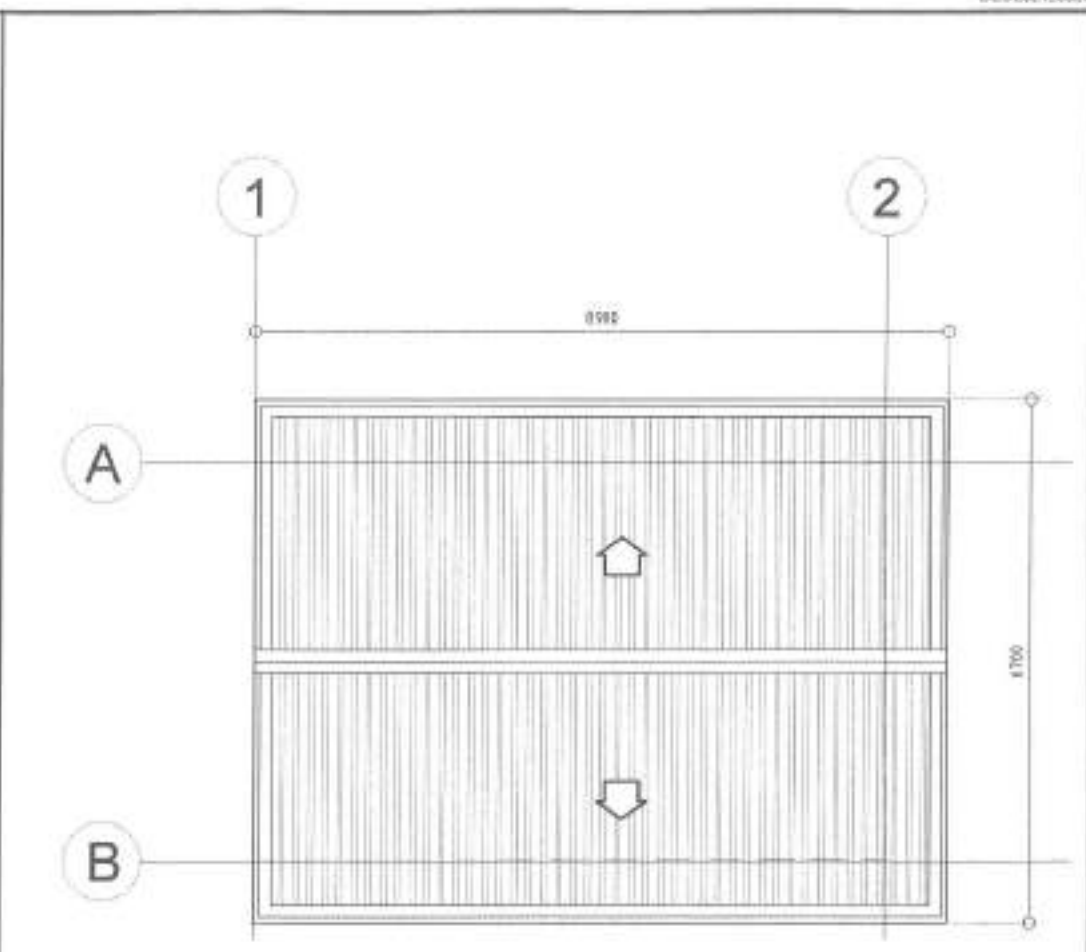
SCALE 1:70M

|  |  |  |   |  |  |  |                        |
|--|--|--|---|--|--|--|------------------------|
|  <p>Republika ng Pilipinas<br/>Lungsod ng Quezon<br/>CITY ENGINEERING DEPARTMENT</p> | PROJECT TITLE:   | DESIGNED BY:   | SUBMITTED BY:   | RECOMMENDING APPROVAL:   | APPROVED BY:   | SHEET CONTENT:   | SHEET NO.              |
|  | <p>PROPOSED REHABILITATION OF<br/>PINKIAN III ZONE 2 DAY CARE<br/>CENTER</p> <p>LOCATION:<br/>BARANGAY PANGAL TANGI, DISTRICT 2, QUEZON CITY</p> | <p>DATE: 08 MAY 2021</p> <p>CHECKED BY: JMN</p> <p>REVISION NO.:</p> |  <p>ENGR. LEO S. DEL ROSARIO<br/>HEAD, PLANNING &amp; PROGRAMMING DIVISION</p> |  <p>ENGR. ISMAEL R. VERZOSA, JR.<br/>DCL, CITY ENGINEERING DEPARTMENT</p> | <p>HON. MA. JOSEFINA G. BELMONTTE<br/>CITY MAYOR</p> | <p>GROUND FLOOR PLAN<br/>(EXISTING)<br/>SECOND FLOOR PLAN<br/>(PROPOSED)</p> | <p>AR-02<br/>02/09</p> |








NOTE:  
1. REPLACEMENT OF EXISTING CEILING AND ROOF EAVES WITH 6mm THK FIBER CEMENT BOARD INCLUDING METAL FRAMING.

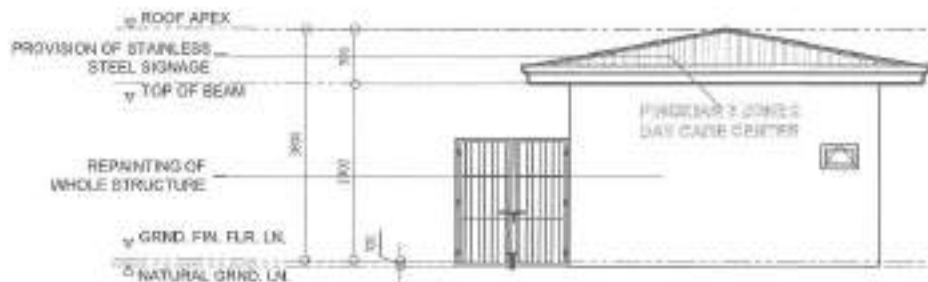


NOTE:  
1. REPLACEMENT OF G.I. ROOFING AND ACCESSORIES.

**1 REFLECTED CEILING PLAN** SCALE 1:75M

**2 ROOF PLAN** SCALE 1:75M

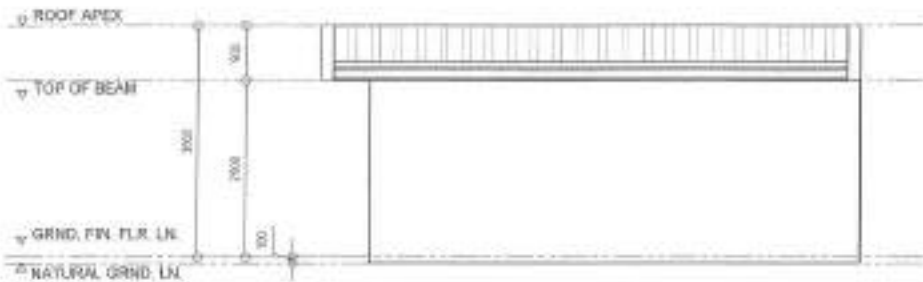
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|  <p>Republika ng Pilipinas<br/>Lungsod ng Quezon<br/>CITY ENGINEERING DEPARTMENT</p> | PROJECT TITLE:  | DESIGN BY:  | SUBMITTED BY:   | RECOMMENDING APPROVAL:  | APPROVED BY:                                       | SHEET CONTENT:                              | SHEET NO.              |
|  | <p><b>PROPOSED REHABILITATION OF PINGKIAN III ZONE 2 DAY CARE CENTER</b></p> <p>LOCATION:<br/>BATAKWAY PASONG TAMB, DISTRICT 8, QUEZON CITY</p> | <p>DATE: 08/03/21</p> <p>CHECKED BY: J.A.H.</p> <p>REVISIONS:</p> | <br><p>ENGR. LEO S. BEL ROSARIO<br/>HEAD, PLUMBING &amp; PIPING DIVISION</p> | <br><p>ENGR. ISAGANI R. VERZOSA, JR.<br/>OC, CITY ENGINEERING DEPARTMENT</p> | <p>HON. MA. JOSEFINA G. BELMONTE<br/>CITY MAOR</p> | <p>REFLECTED CEILING PLAN<br/>ROOF PLAN</p> | <p>AR-03<br/>03/09</p> |



NOTE:  
1. PROVISION OF DAY CARE SIGNAGE

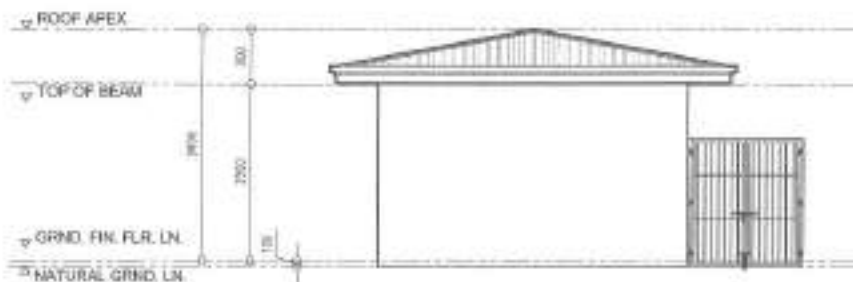
**1 FRONT ELEVATION**

SCALE 1:100M



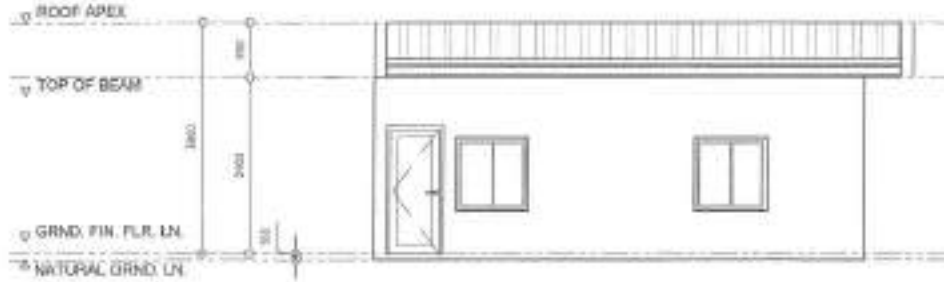
**2 RIGHT SIDE ELEVATION**

SCALE 1:100M




**3 REAR ELEVATION**

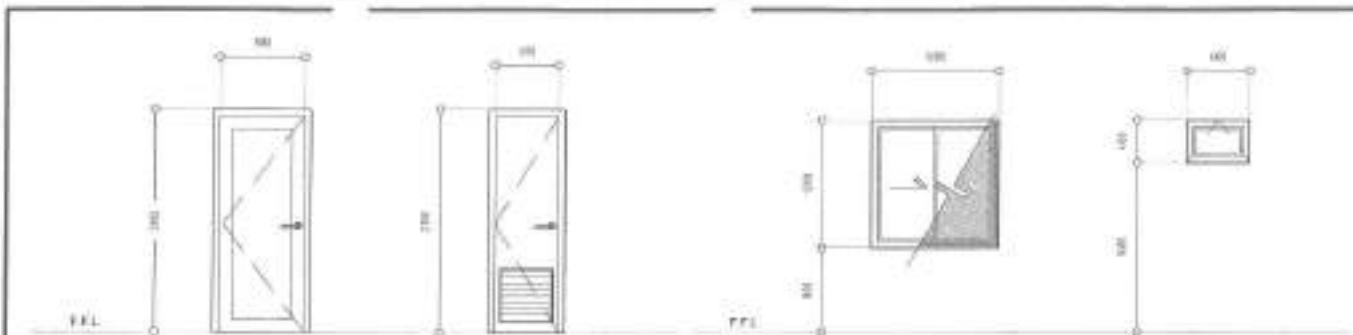
SCALE 1:100M



**4 LEFT SIDE ELEVATION**

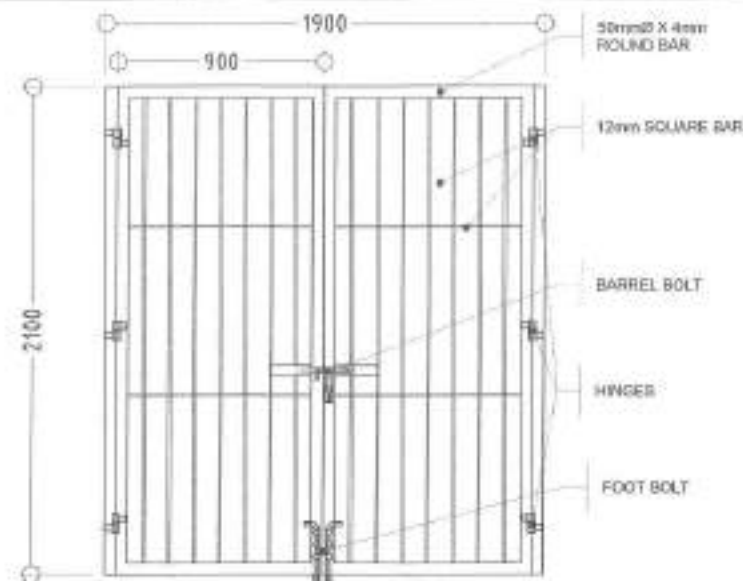
SCALE 1:100M

|  |   |   |  |  |  |  |                                      |
|--|---|---|--|--|--|--|--------------------------------------|
|  <p>Republika ng Pilipinas<br/>Lungsod ng Quezon<br/>CITY ENGINEERING DEPARTMENT</p> | PROJECT TITLE:  | DRAWN BY:   | SUBMITTED BY:  | RECOMMENDING APPROVAL:   | APPROVED BY:   | DRAWING CONTENT:   | SHEET NO.                            |
|  | <p><b>PROPOSED REHABILITATION OF<br/>PINGKIAN III ZONE 2 DAY CARE<br/>CENTER</b></p> <p>LOCATION:<br/>BAMANGAY FRANCIS TAMAY, DISTRICT 8, QUEZON CITY</p> | <p>DATE: 08/20/21<br/>CHECKED BY: JEN<br/>REVISION NO.:</p> | <p>ENGR. LEO S. DEL ROSARIO<br/>HEAD, PLANNING &amp; DESIGN DIVISION</p> | <p>ENGR. EUGEN R. VERZOSA, JR.<br/>DC, CITY ENGINEERING DEPARTMENT</p> | <p>HON. MA. JOSEFINA G. BELMONTTE<br/>CITY SAVOR</p> | <p>RIGHT ELEVATION<br/>REAR ELEVATION<br/>RIGHT SIDE ELEVATION<br/>LEFT SIDE ELEVATION</p> | <p><b>AR-04</b><br/><b>04/09</b></p> |



| NAME        | ⊕  | ⊕  |
|-------------|--|--|
| NO. OF SETS | 1  | 1  |
| DESCRIPTION | PANEL DOOR   | PVC DOOR WITH LOUVERS                                  |
| LOCATION    | CLASSROOM  | TOILET   |
| REMARKS     | COMPLETE ACCESSORY DOOR AND LEAD-PAINTED SMOOTH FINISH | COMPLETE ACCESSORY DOOR AND LEAD-PAINTED SMOOTH FINISH |

| NAME        | ⊕  | ⊕   |
|-------------|--|---|
| NO. OF SETS | 2  | 1   |
| DESCRIPTION | ALUMINUM FRAME POWDER COATED BEATING WINDOW WITH 5MM THK CLEAR GLASS | ALUMINUM FRAME POWDER COATED ANTI-BLAST WINDOW WITH 5MM THK CLEAR GLASS |
| LOCATION    | CLASSROOM  | CLASSROOM   |

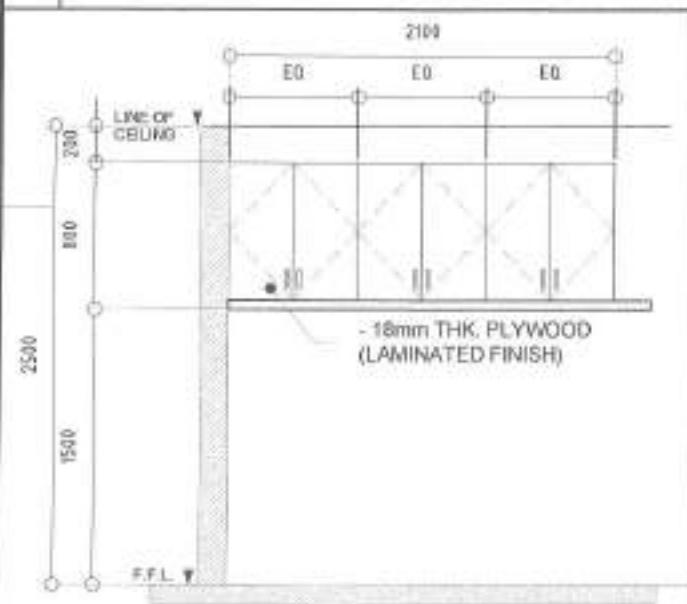


**1 SCHEDULE OF DOORS AND WINDOWS**

SCALE N.T.S.

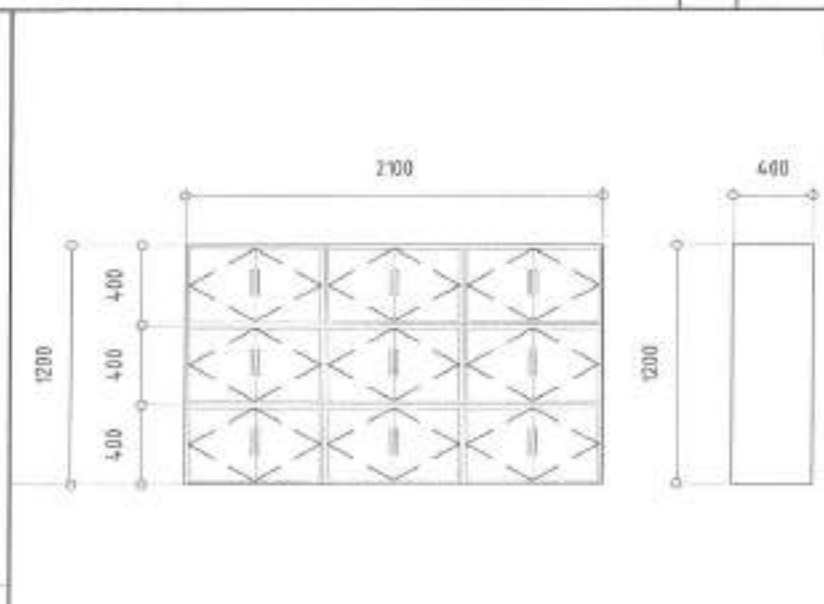
**2 GATE DETAILS**

SCALE N.T.S.



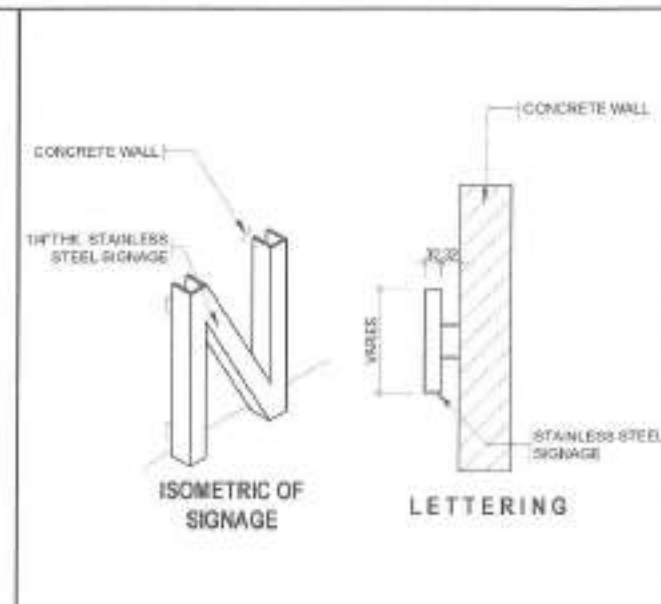
**3 HANGING CABINET DETAILS**

SCALE N.T.S.



**4 STANDING CABINET DETAILS**

SCALE N.T.S.



**5 LETTERING DETAILS**

SCALE N.T.S.

Republika ng Pilipinas  
Lungsod ng Quezon  
**CITY ENGINEERING DEPARTMENT**

PROJECT TITLE:  
**PROPOSED REHABILITATION OF PINGKIAN III ZONE 2 DAY CARE CENTER**

LOCATION:  
BARANGAY PASONG TANDA, DISTRICT 6, QUEZON CITY

DESIGNED BY: *[Signature]*  
DATE: 05/09/21  
CHECKED BY: *[Signature]*  
REVISION NO.:

SUBMITTED BY:  
*[Signature]*  
**ENGR. LEO S. DEL ROSARIO**  
HEAD, PLANNING & PROGRAMMING OFFICE

RECOMMENDING APPROVAL:  
*[Signature]*  
**ENGR. ISIDORO S. VERZOSA, JR.**  
CH. CITY ENGINEERING DEPARTMENT

APPROVED BY:  
*[Signature]*  
**HON. MA. JOSEFINA G. BELMONTTE**  
CITY MAJOR

DRAWING CONTENT:  
RE-BOLE OF DOORS AND WINDOWS, GATE DETAILS, HANGING CABINET DETAILS, STANDING CABINET DETAILS, LETTERING DETAILS

SHEET NO:  
**AR-05**  
**05/09**

1 All plumbing works and materials indicated herein shall be compliant to the provisions of the latest edition of National Plumbing Code, the rules and regulations of local authorities concerned, the rules and regulations of local utility companies and the provisions of the land developer when and where applicable.

2 The plumbing layout is only diagrammatic; pipes, cleanouts and check valves shall be concealed as much as possible. It is not intended to show the actual dimension of the pipes and fixtures in the drawing but all the pipes and fixtures shall be installed as and where indicated. Any relocation will require proper execution in relation with other trades.

3 The plumbing contractor shall verify all existing utilities at the site and shall coordinate the work with other trades.

4 Pipes shall not be embedded in structural members unless otherwise specified or allowed.

5 Minimum slope for horizontal sewer lines shall be 1% and for drain lines shall be 5%.

6 Proposed plumbing utilities shall conform with the actual location, depth and invert elevation of all existing pipes/utilities.

7 Connection of fixtures to pipes and fittings shall be according to manufacturer's specifications.

8 All floor drains shall be vented individually.

9 All clean out females shall be flush-mounted to wall and shall be provided with polished cover caps. Do not install floor clean outs except at areas on grade and service areas not subject to traffic.

10 All underground G.I. pipes in direct contact with soil shall be provided with two (2) coats of protective tar covering and wrapped with jute cloth thoroughly soaked in tar or asphalt.

11 Provide vent stack and vent pipe thru roof of cast iron service weight as required.

12 All cast iron pipes shall be of approved quality and G.I. pipes for water distribution lines shall be Schedule 40 U.S. standard weight.

13 Provide gate valves to all water supply lines to fixtures.

14 All hot water lines shall be provided with proper insulation where exposed.

15 All individual branches to fixtures or group of fixtures and/or equipments shall be provided with air chambers or capped vertical pipe extensions of dimensions as shown

H = 450 mm for 19 mm  $\varnothing$  and larger


H = 300 mm for 12 mm  $\varnothing$  and smaller

16 All hose bibbs shall be 19 mm  $\varnothing$  (3/4"  $\varnothing$ ) unless otherwise indicated.

17 Inlet pipe of septic tank is 50 mm higher than the siphon pipe which is 30 mm higher than the outlet pipe.

18 All plumbing works and manner of construction shall be under the direct supervision of an able and duly licensed Master Plumber or Registered Sanitary Engineer. Any discrepancies found in plan shall be notified to the same person.

#### I. FIXTURES AND OTHER LEGEND

|  |                       |
|--|-----------------------|
| FD   | FLOOR DRAIN           |
| RD   | ROOF DRAIN            |
| SHO  | SHOWER                |
| WC   | WATER CLOSET          |
| LAV  | LAVATORY              |
| URI  | URINAL                |
| KS   | KITCHEN SINK          |
| BD   | BUILDING DRAIN        |
| DD   | DECK DRAIN            |
| CCO  | CEILING CLEANOUT      |
| FCO  | FLOOR/GROUND CLEANOUT |
| DS   | DOWNSPOUT             |
| mm   | millimeter            |
| $\varnothing$  | mm DIAMETER           |
| SHD  | SHOWER DRAIN          |
| CB   | CATCH BASIN           |
| MH   | MANHOLE               |
| $\rightarrow$  | DIRECTION OF FLOW     |
|  | GREASE TRAP           |



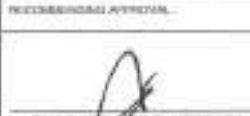
|   |   |
|---|---|
|    | UNION PATENT                            |
|    | CHECK VALVE                             |
|    | BUILDING SEWER                          |
|    | BUILDING DRAIN                          |
|    | WASTE LINE                              |
|    | AREA DRAIN/CATCH BASIN                  |
|    | FLOOR DRAIN                             |
|    | DIAMETER                                |
|    | WASTE LINE                              |
|    | WATER LINE                              |
|    | GATE VALVE                              |
|    | DECK DRAIN                              |
|    | CLEANOUT                                |
|    | PIPE DOWN                               |
|    | PIPE UP                                 |
|    | MILLIMETER                              |
|    | GATE VALVE                              |
|    | AREA DRAIN/CATCH BASIN                  |
|    | WATER CLOSET                            |
|    | LAVATORY                                |
|    | MANHOLE                                 |
|    | HOSE BIBB                               |
|    | STORM DRAIN LINE                        |
|    | VENT LINE                               |
|   | VENT ABOVE CEILING                      |
|  | CONCRETE PIPE/ REINFORCED CONCRETE PIPE |
|  | VENT THRU/ROOF                          |
|  | DIRECTION OF FLOW/SLOPE                 |

## 1 GENERAL NOTES

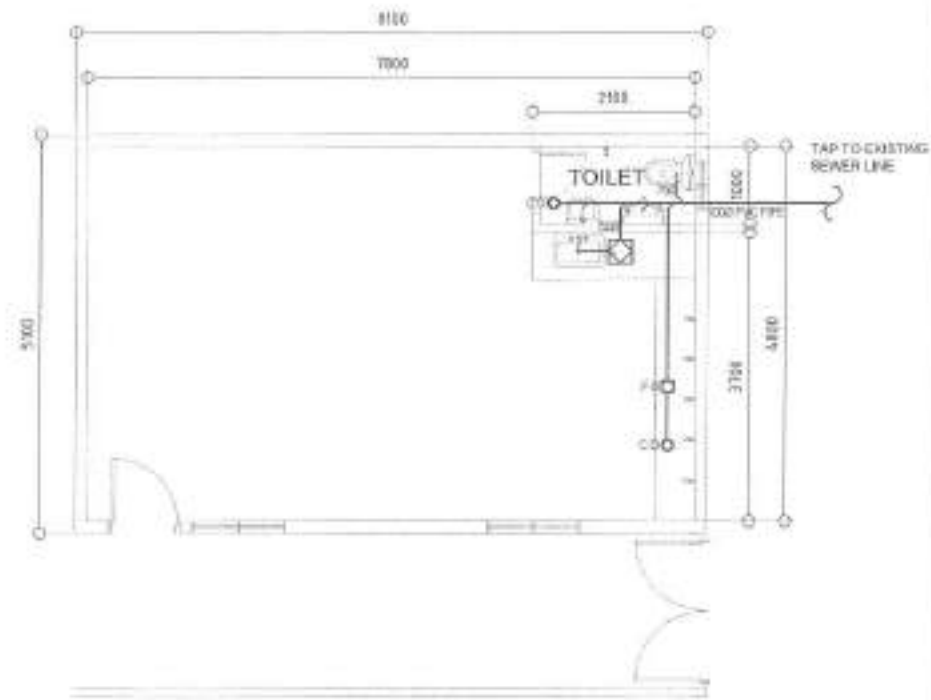
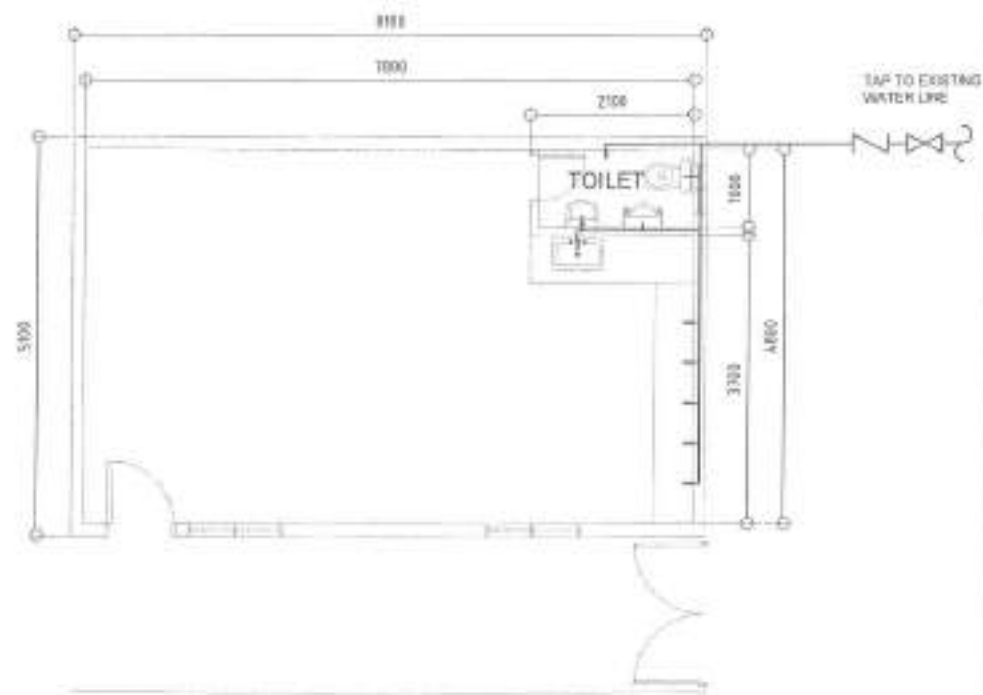
SCALE: NTS.

## 2 LEGEND AND SYMBOLS

SCALE: NTS.

|  |   |                  |                    |  |   |  |                                      |
|--|---|------------------|--------------------|--|---|--|--------------------------------------|
|  <p>Republika ng Pilipinas<br/>Lungsod ng Quezon<br/>CITY ENGINEERING DEPARTMENT</p> | PROJECT TITLE:  | DRAWN BY:        | SUBMITTED BY:      | RECOMMENDED APPROVAL:  | APPROVED BY:  | SHEET CONTENT:                                     | SHEET NO.:                           |
|  | <b>PROPOSED REHABILITATION OF<br/>PINGKIAN III ZONE 2 DAY CARE<br/>CENTER</b> | DATE: 06/09/2021 | CHECKED BY: J.A.M. | <br><b>ENGR. LINO S. DEL ROSARIO</b><br>HEAD, PLANNING & PROJECT MANAGEMENT | <br><b>ENGR. ISAGANI R. VERZOSA, JR.</b><br>D.C. CITY ENGINEERING DEPARTMENT | <b>HON. WA. JOSEFINA G. BELMONTE</b><br>CITY MARCH | GENERAL NOTES,<br>LEGEND AND SYMBOLS |
|  | LOCATION:<br>BAMANGAY PABONG TANDI, DISTRICT 6, DUBOZON CITY                  | PERSON NO.:      |                    |  |   |  |                                      |





## NOTE

1. PLUMBING FIXTURES TO BE REPLACED
2. HAND WASHING FACETS TO BE REPLACED

## 1 GROUND FLOOR WATER LINE LAYOUT

SCALE 1:100M

## 2 GROUND FLOOR SANITARY LAYOUT

SCALE 1:200M



Republic of the Philippines  
Lungsod ng Quezon  
CITY ENGINEERING DEPARTMENT

PROJECT TITLE:  
**PROPOSED REHABILITATION OF  
PINKIAN III ZONE 2 DAY CARE  
CENTER**

LOCATION:  
BAYANAY PABOAL TANGI, DISTRICT 6, QUEZON CITY

DRAWN BY:  
DATE: 08.18.18  
CHECKED BY: JAY  
REVISION NO.:

SUBMITTED BY:  
  
**ENGR. LEO S. BEL ROSARIO**  
HEAD, PLUMBING & PEX DIVISION

RECOMMENDED APPROVAL:  
  
**ENGR. EASON R. VERZOSA, JR.**  
DC, CP, CPE, CEE, CEM, CEN, CENR, CENM, CENP, CENS, CENW, CENX, CENY, CENZ, CENZ, CENAA, CENAB, CENAC, CENAD, CENAE, CENAF, CENAG, CENAH, CENAI, CENAJ, CENAK, CENAL, CENAM, CENAN, CENAO, CENAP, CENAQ, CENAR, CENAS, CENAT, CENAU, CENAV, CENAW, CENAX, CENAY, CENZ

APPROVED BY:  
  
**HON. MA. JOSEFINA G. BELMONTE**  
CITY MAOR

SHEET CONTENT:  
GROUND FLOOR  
WATER LINE LAYOUT  
GROUND FLOOR  
SANITARY LAYOUT

SHEET NO.  
**PL-02**  
**07/09**

1. ALL ELECTRICAL WORK SHALL BE DONE IN ACCORDANCE WITH THE PROVISIONS OF THE LATEST EDITION OF THE PHILIPPINE ELECTRICAL CODE, THE LAWS AND ORDINANCES OF THE LOCAL GOVT. ENFORCING AUTHORITIES AND THE REQUIREMENTS OF THE LOCAL POWER AND TELEPHONE UTILITY COMPANY.
2. THE CONTRACTOR SHALL SECURE ALL PERMITS AND PAY ALL FEES REQUIRED FOR THE WORK AND SHALL FURNISH THE OWNER THROUGH THE ENGINEER, FINAL CERTIFICATES OF ELECTRICAL INSPECTION AND APPROVAL FROM PROPER GOVERNMENT AUTHORITIES FOR COMPLETION OF WORK.
3. ALL EMBEDDED BRANCH CIRCUITS SHALL BE PVC CONDUITS AND FOR EXPOSED INSTALLATION SHALL BE WIRE SUPPORTED BY CONDUIT CLAMPS EVERY 700 MILLIMETERS.
4. PULL BOXES SHALL BE PROVIDED BY THE CONTRACTOR WHENEVER NECESSARY TO FACILITATE WIRE PULLING EVEN IF THESE ARE NOT INDICATED ON THE PLANS. SIZES OF ALL PULLBOXES SHALL BE COMPUTED BASED ON THE CODE REQUIREMENTS. SUBMIT SHOP DRAWINGS TO THE ENGINEER FOR APPROVAL PRIOR TO FABRICATION. LOCATION OF PULLBOXES SHALL BE APPROVED BY THE ARCHITECT/ENGINEER AND MUST BE REFLECTED ON THE AS-BUILT PLAN.
5. ALL POWER OUTLETS AND SWITCHES SHALL BE GROUNDING TYPE WITH PARALLEL SLOTS FOR 200V.
6. PROVIDE GROUND FAULT CURRENT INTERRUPTER CIRCUIT BREAKER FOR LOADS MARKED "GFCI" ON THE PLAN.
7. ALL METALLIC CONDUITS, CABLES AND EQUIPMENT SHALL BE PROPERLY GROUNDED AND BONDED.
8. UNLESS OTHERWISE NOTED, MOUNTING HEIGHT FOR WALL MOUNTED DEVICES SHALL BE AS FOLLOWS:

RECEPTACLE OUTLET - 300 MM AFF, 1000MM ABOVE WORKING COUNTER  
 TELEPHONE OUTLET - 300 MM AFF  
 CATV OUTLET - 300 MM AFF  
 LIGHTING SWITCH - 1400 MM AFF  
 PANELBOARD - 1600 MM AFF

9. REFER TO MECHANICAL, PLUMBING AND FIRE PROTECTION DRAWINGS FOR RATINGS AND LOCATIONS OF EQUIPMENT AS WELL AS THEIR CONTROL SEQUENCES AS SPECIFIED AND OR SHOWN UNDER THEIR RESPECTIVE SECTIONS.
10. ALL MATERIALS TO BE USED SHALL BE OF THE BEST QUALITY, BRAND NERAS SPECIFIED.
11. THE DRAWINGS AND SPECIFICATIONS ARE INTENDED TO PRESENT GENERAL LAYOUT AND BROAD OUTLINE DESCRIPTION OF THE PROJECT BUT DO NOT NECESSARILY INDICATE DESCRIBED ACTUAL LOCATIONS, LEVEL AND DISTANCES OF THE EQUIPMENT. THE CONTRACTOR IS HEREBY REQUIRED TO MAKE SUCH ADJUSTMENT AT THE JOBSITE AS LOCATION, DISTANCES AND LEVELS ARE GOVERNED BY ACTUAL FIELD CONDITIONS.
12. ANY DISCREPANCY BETWEEN THE PLANS AND SPECIFICATIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER FOR CLARIFICATION DECISION.
13. ALL LIGHTING AND CONVENIENCE OUTLET CIRCUITS SHALL BE 2.5 SQ. MM. THIN & COPPER WIRE OR 2.5 SQ. MM. OTHER WIRE NOTED. MINIMUM SIZE OF WIRE SHALL BE 2.5 SQ. MM. COPPER WIRE. ALL WIRES AND CABLES SHALL BE COLOR CODED AS FOLLOWS:

LINE 1 - RED  
 LINE 2 - YELLOW  
 NEUTRAL - WHITE  
 GROUND - GREEN

14. BOXES, WIRE, CUTTERS, ENCLOSURE SHALL BE FABRICATED FROM STEEL WITH THICKNESS AS FOLLOWS:  
 MAXIMUM WIDTH OF THE WIDEST SURFACE EDGE:  
 UP TO 100MM: 1.5MM  
 OVER 100MM: 2.0MM  
 OVER 150MM: 2.5MM  
 OVER 200MM: 3.0MM  
 OVER 250MM: 3.5MM  
 OVER 300MM: 4.0MM  
 OVER 350MM: 4.5MM  
 OVER 400MM: 5.0MM  
 OVER 450MM: 5.5MM  
 OVER 500MM: 6.0MM  
 OVER 550MM: 6.5MM  
 OVER 600MM: 7.0MM  
 OVER 650MM: 7.5MM  
 OVER 700MM: 8.0MM  
 OVER 750MM: 8.5MM  
 OVER 800MM: 9.0MM  
 OVER 850MM: 9.5MM  
 OVER 900MM: 10.0MM  
 OVER 950MM: 10.5MM  
 OVER 1000MM: 11.0MM
15. ALL ELECTRICAL WORK HEREIN SHALL BE EXECUTED BY EXPERIENCED MEN UNDER THE DIRECT SUPERVISION OF A FULL-TIME LICENSED ELECTRICAL ENGINEER AND A QUALY ACCREDITED ELECTRICAL CONTRACTOR BY PCAL. WORKS SHALL BE NEATLY PLACED, SECURELY FASTENED AND PROPERLY FINISHED.
16. TYPE OF SERVICE ENTRANCE SHALL BE SINGLE-PHASE, THREE-WIRE PLUS GROUND, 60 HERTZ, 200V AC NORMAL.
17. CONDUITS IN NO CASE SHALL THERE BE MORE THAN THE EQUIVALENT OF FOUR QUARTER BENDS IN ANY ONE RUN. ALL CONDUIT BENDS SHALL BE FIELD MADE BY USING HYDRAULIC BENDERS. MINIMUM BENDING RADIUS MUST BE IN ACCORDANCE TO THE CODE REQUIREMENTS.
18. UPON COMPLETION OF ELECTRICAL CONSTRUCTION WORK, INSULATION RESISTANCE TEST AND FUNCTIONALITY TEST SHALL BE PERFORMED BY THE CONTRACTOR INCLUSIVE OF THE INSTALLATION TO BE REPORTED IN DETAILS ON FORMS APPROVED BY THE QUEZON CITY ENGINEERING DEPARTMENT REPRESENTATIVE. THE GROUND RESISTANCE FOR ELECTRICAL SYSTEMS SHALL NOT BE MORE THAN 5 OHMS. COMMUNICATION GROUNDING RESISTANCE SHALL NOT EXCEED 2 OHMS.

| LPP                    |                              |       |      |       |    | MOUNTING: METAL, RECESSED WITH GRAY POWDERED COATED FINISH WITH BUILT-TERMINAL BLOCK FOR SOLID GROUND WIRE |                                 |
|------------------------|------------------------------|-------|------|-------|----|--|---------------------------------|
| LOCATION: GROUND FLOOR |                              |       |      |       |    |  |                                 |
| CKT. NO.               | LOAD DESCRIPTION             | VOLTS | VA   | AMP.  | FT | SIZE: IN'  |                                 |
|                        |                              |       |      |       |    | WIRES  | CONDUITS                        |
| 1                      | LIGHTING OUTLET              | 230   | 1050 | 9.48  | 20 | 1-3.5mm <sup>2</sup> THIN COPPER WIRE<br>1-3.5mm <sup>2</sup> TW GROUND WIRE                               | 1/2" 25mm <sup>2</sup> PVC PIPE |
| 2                      | CONVENIENCE OUTLET           | 230   | 540  | 2.33  | 30 | 1-3.5mm <sup>2</sup> THIN COPPER WIRE<br>1-2.5mm <sup>2</sup> TW GROUND WIRE                               | 1/2" 25mm <sup>2</sup> PVC PIPE |
| 3                      | 2.5 AMP AIRCONDITIONING UNIT | 230   | 2760 | 12.00 | 30 | 2-5.5mm <sup>2</sup> THIN COPPER WIRE<br>1-3.5mm <sup>2</sup> TW GROUND WIRE                               | 1/2" 25mm <sup>2</sup> PVC PIPE |
| 4                      | SPARE                        | 230   |      |       | 30 |  |                                 |
|                        |                              |       | 5050 | 34.00 |    |  |                                 |

COMPUTATION :  
 P = 5250  
 230V = 22.83 AMP  
 I = 22.83 AMP

OVER CURRENT PROTECTION  
 USE : 40A, 3P, 230V MOULDED CASE CIRCUIT BREAKER IN NEMA 1  
 MAIN FEEDER:  
 USE : 2 - 5.5mm<sup>2</sup> THIN & 1-5.5mm<sup>2</sup> TW GROUND WIRE  
 IN 1/2" 25mm<sup>2</sup> PVC PIPE

## 2 MISCELLANEOUS DETAILS

SCALE: NTS.

- ☐ SINGLE GANG SWITCH (FOR REPLACEMENT)
- ☐ THREE GANG SWITCH (FOR REPLACEMENT)
- ☐ SWITCH (FAN)
- ☐ E27 RECEPTACLE WITH LED BULB (FOR REPLACEMENT)
- ☐ CEILING FAN (ADDITIONAL)
- ☐ DUPLEX CONVENIENCE OUTLET (FOR REPLACEMENT)
- ☐ GROUND FAULT CIRCUIT INTERRUPTER (FOR REPLACEMENT)
- ☐ AIRCON OUTLET (FOR REPLACEMENT)
- ☐ PANEL BOARD
- ☐ TROFFER TYPE WITH 1X18W LED TUBE LIGHT (FOR REPLACEMENT)

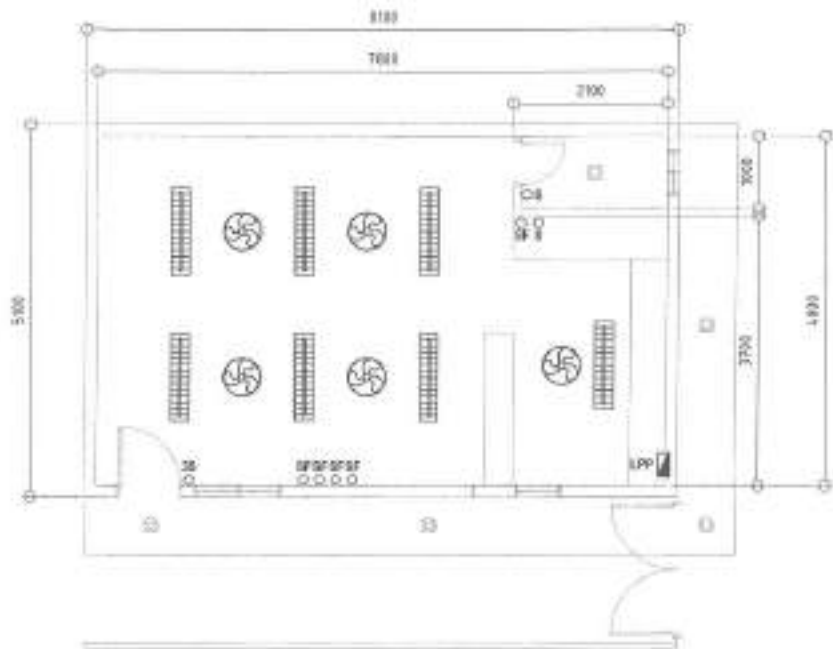
## 1 GENERAL NOTES

SCALE: NTS.

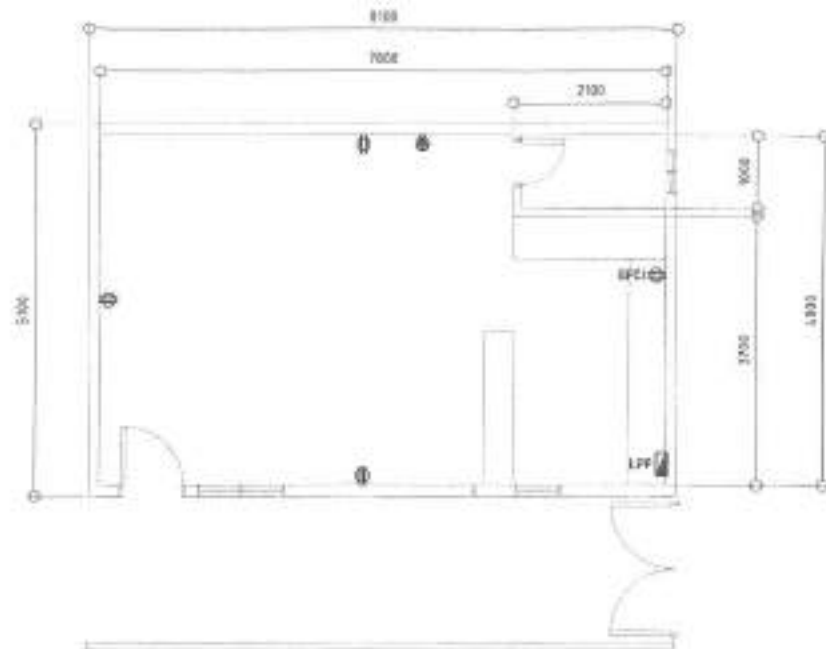
## 3 LEGEND AND SYMBOLS

SCALE: NTS.

|  |  |                        |                    |  |  |   |  |
|--|--|------------------------|--------------------|--|--|---|--|
|  <p>Republika ng Pilipinas<br/>Lungsod ng Quezon<br/>CITY ENGINEERING DEPARTMENT</p> | PROJECT TITLE:   | DRAWN BY: <i>JRM</i>   | SUBMITTED BY:      | RECOMMENDED APPROVAL:  | APPROVED BY:   | SHEET CONTENT:                              | SHEET NO.:   |
|  | PROPOSED REHABILITATION OF PINGKIAN III ZONE 2 DAY CARE CENTER | DATE: 08/16/23         | <i>[Signature]</i> | ENGR. LEO S. DEL ROSARIO<br>HEAD, PLUMBING & PIPING DIVISION | ENGR. ISAGANI A. VERZOSA, JR.<br>DC, CITY ENGINEERING DEPARTMENT | HON. NA. JOSEFINA G. BELMONTÉ<br>CITY MAYOR | GENERAL NOTES<br>MISCELLANEOUS DETAILS<br>LEGEND AND SYMBOLS |
|  | LOCATION:  | CHECKED BY: <i>JRM</i> | REVISION NO.:      |  |  |   |  |
|  | BARANGAY: PASONG TAMA DISTRICT 8, QUEZON CITY                  |                        |                    |  |  |   |  |



NOTE:  
 1. REPLACEMENT OF LIGHTING FIXTURES AND SWITCHES  
 2. ADDITIONAL CEILING FANS



NOTE:  
 1. REPLACEMENT OF CONVENIENCE OUTLETS AND ACU OUTLET

**1 GROUND FLOOR LIGHTING LAYOUT**

SCALE: 1:75 M.

**2 GROUND FLOOR POWER LAYOUT**

SCALE: 1:75 M.

|  |   |   |   |   |   |   |   |
|--|---|---|---|---|---|---|---|
|  <p>Republika ng Pilipinas<br/>Lungsod ng Quezon<br/>CITY ENGINEERING DEPARTMENT</p> | PROJECT TITLE:  | DRAWN BY:   | SUBMITTED BY:   | RECOMMENDING APPROVAL:  | APPROVED BY:  | SHEET DESCRIPTION:  | SHEET NO.:                              |
|  | <p><b>PROPOSED REHABILITATION OF PINGKIAN III ZONE 2 DAY CARE CENTER</b></p> <p>LOCATION:<br/>BARANSAY PABONG TAMB, DISTRICT 6, QUEZON CITY</p> | <p>DATE: 05/14/21</p> <p>CHECKED BY: J.A.M.</p> <p>PERSONNEL:</p> | <br><p>ENGR. LEO S. DEL ROSARIO<br/>REG. ELECTRICAL ENGINEER</p> | <br><p>ENGR. ISMAEL R. VERZOSA, JR.<br/>C.E. CITY ENGINEERING DEPARTMENT</p> | <p>HON. MA. JOSEFINA G. BELMONTÉ<br/>CITY MAYOR</p> | <p>GROUND FLOOR LIGHTING LAYOUT<br/>GROUND FLOOR POWER LAYOUT</p> | <p><b>EL-02</b></p> <p><b>09/09</b></p> |

THE SITE



1 LOCATION MAP

SCALE NTS.

THE SITE



2 VICINITY MAP

SCALE NTS.



3 PERSPECTIVE

SCALE NTS.

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Republika ng Pilipinas  
Lungsod ng Quezon  
CITY ENGINEERING DEPARTMENT

PROJECT TITLE:  
**PROPOSED CONSTRUCTION OF  
HANDWASHING FACILITY AND  
REHABILITATION OF PINKIAN III  
ZONE 3 DAY CARE CENTER**

LOCATION:  
SPED. PARKING YARD, DISTRICT 8, QUEZON CITY

DRAWN BY: *[Signature]*  
DATE:  
CHECKED BY: *[Signature]*  
PERSON NO.:

SUBMITTED BY:  
*[Signature]*  
**ENGR. LEO S. DEL ROSARIO**  
SENIOR PLANNER & PROJECT MANAGER

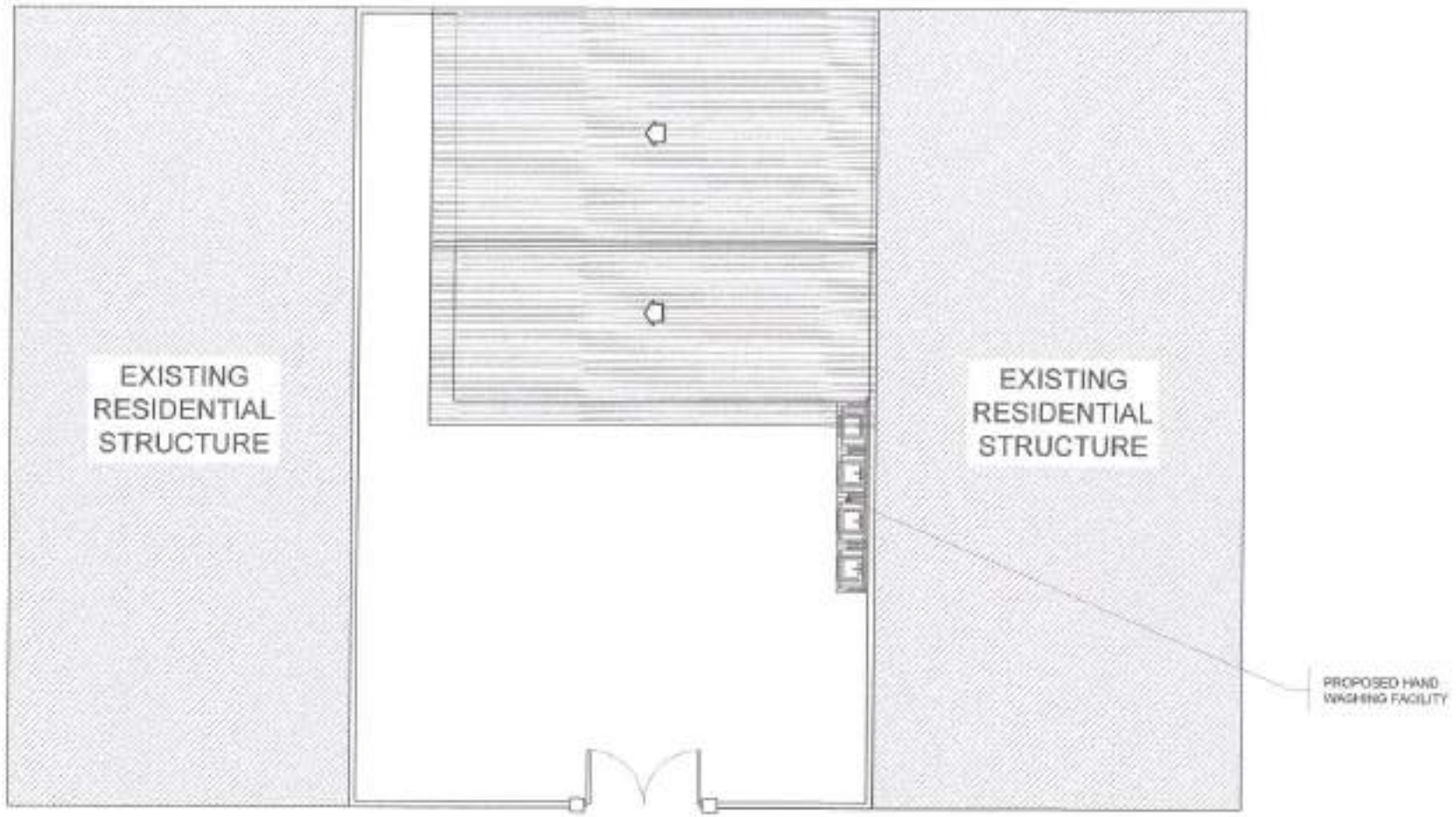
RECOMMENDING OFFICIAL:  
*[Signature]*  
**ENGR. EDWIN R. VERZOSA, JR.**  
D.C. CITY ENGINEERING DEPARTMENT

APPROVED BY:  
*[Signature]*  
**HON. MA. JOSEFINA D. BELMONTÉ**  
CITY MANOR

BRIEF CONTENT:  
LOCATION MAP  
VICINITY MAP  
PERSPECTIVE


SHEET NO.  
**AR-01**  
**01/14**

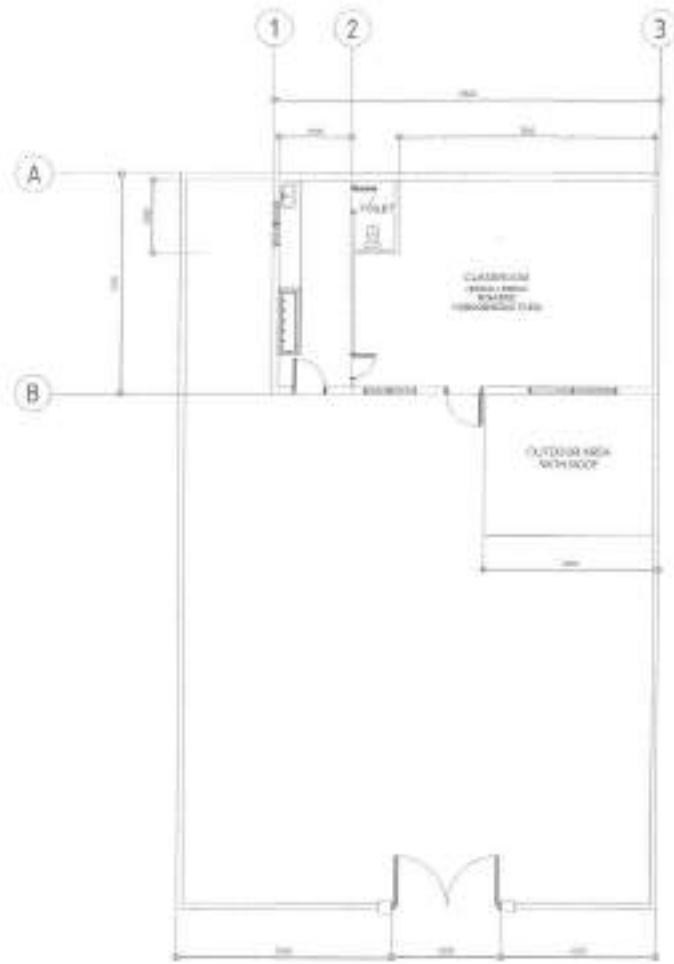




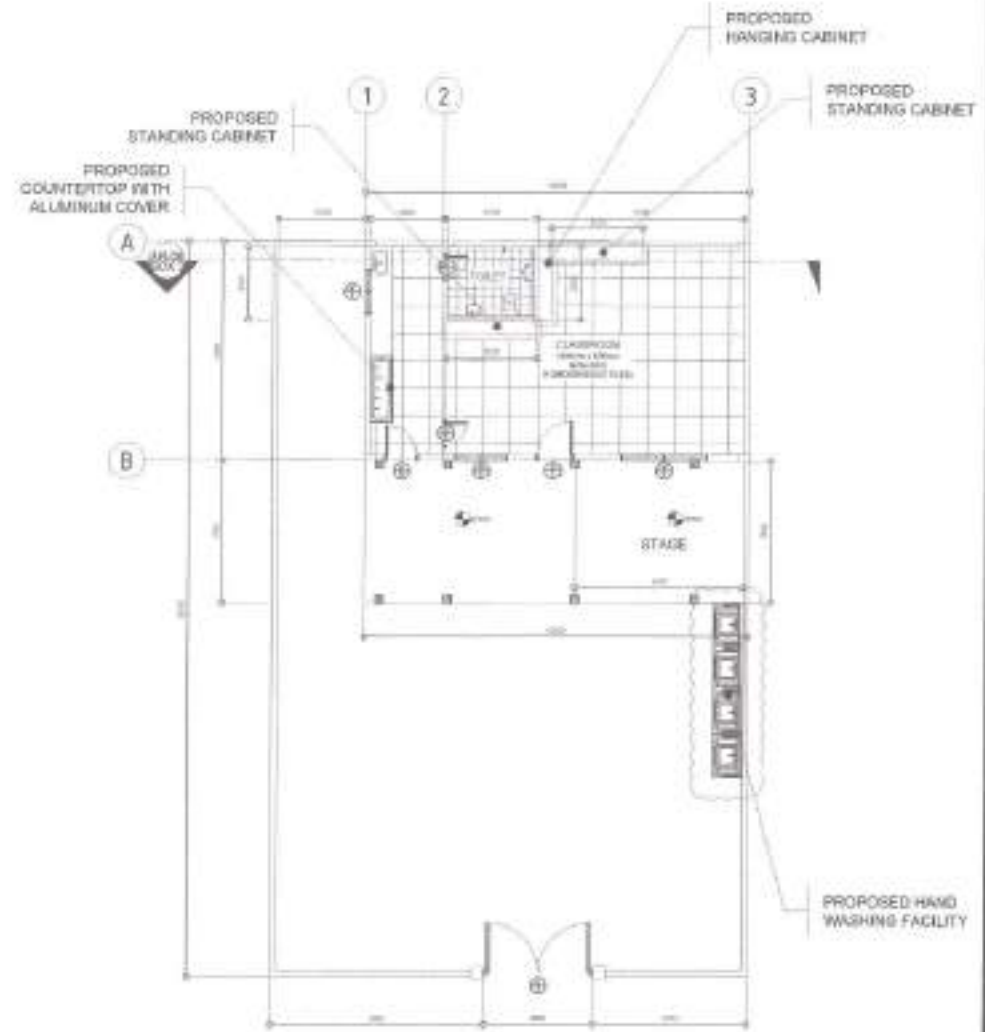
S E R T A M S E .

**1 | SITE DEVELOPMENT PLAN**

|  |  |   |   |  |  |  |  |
|--|--|---|---|--|--|--|--|
|  <p>Republika ng Pilipinas<br/>Lungsod ng Quezon<br/>CITY ENGINEERING DEPARTMENT</p> | <p>PROJECT TITLE:<br/><b>PROPOSED CONSTRUCTION OF<br/>HANDWASHING FACILITY AND<br/>REHABILITATION OF PINGKIAN III<br/>ZONE 3 DAY CARE CENTER</b></p> | <p>DRAWN BY:<br/><i>[Signature]</i></p>         | <p>SUBMITTED BY:<br/><i>[Signature]</i></p> | <p>RECOMMENDING APPROVAL:<br/><i>[Signature]</i></p>                       | <p>APPROVED BY:<br/><i>[Signature]</i></p>                                     | <p>SHEET CONTENT:<br/>SITE DEVELOPMENT PLAN</p>            | <p>SHEET NO.<br/><b>AR-02</b><br/><b>02   14</b></p> |
|  | <p>LOCATION:<br/>BNDY, PANDANG PABO, DISTRICT 8, QUEZON CITY</p>   | <p>DATE:<br/>CHECKED BY: <i>[Signature]</i></p> | <p>REVISIONS:</p>                           | <p><b>ENGR. LEO S. DEL ROSARIO</b><br/>HEAD, PLANNING PROGRAM DIVISION</p> | <p><b>ENGR. JOHANN R. VERZOSA, JR.</b><br/>CIC CITY ENGINEERING DEPARTMENT</p> | <p><b>HON. MA. JOSEFINA G. BELMONTE</b><br/>CITY MAJOR</p> |  |



NOTE:  
1. WHOLE STRUCTURE TO BE REPAINTED








NOTE:  
1. DOORS AND WINDOWS TO BE REPLACED  
2. FLOOR AND WALL TILES TO BE REPLACED  
3. GATE TO BE REPLACED  
4. ROOF TO BE EXTENDED

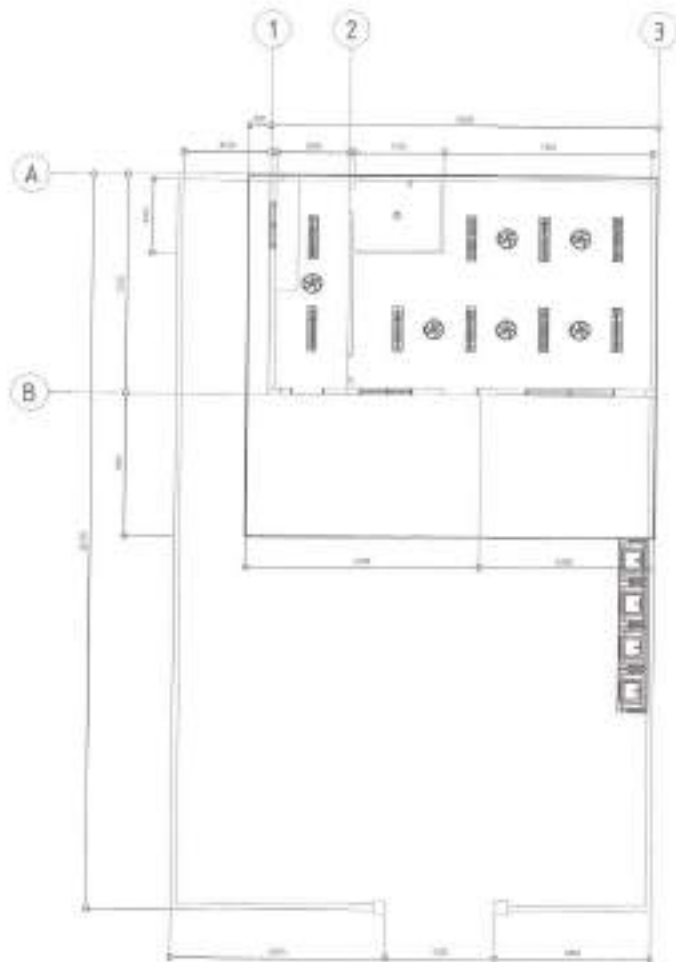
**1 EXISTING FLOOR PLAN**

SCALE 1:150M

**2 PROPOSED FLOOR PLAN**

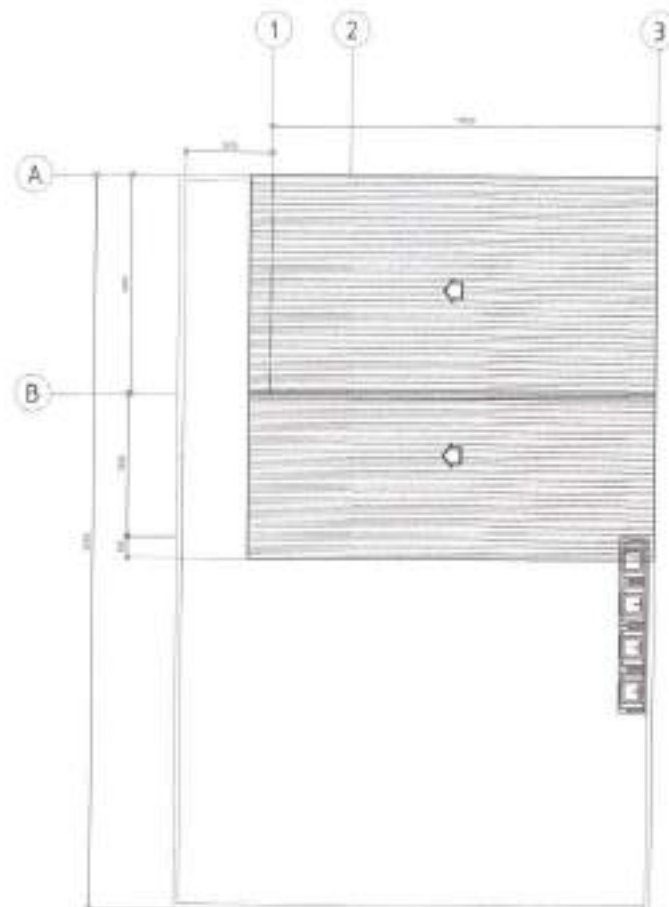
SCALE 1:150M

|  |  |  |   |   |   |   |  |
|--|--|--|---|---|---|---|--|
|  <p>Republika ng Pilipinas<br/>Lungsod ng Quezon<br/>CITY ENGINEERING DEPARTMENT</p> | PROJECT TITLE:   | DRAWN BY:  | SUBMITTED BY:   | RECOMMENDING APPROVAL:  | APPROVED BY:  | SHEET CONTENT:  | SHEET NO.:                                 |
|  | <p><b>PROPOSED CONSTRUCTION OF<br/>HANDWASHING FACILITY AND<br/>REHABILITATION OF PINKIAN III<br/>ZONE 3 DAY CARE CENTER</b></p> | DATE:  |  |  |  |  | EXISTING FLOOR PLAN<br>PROPOSED FLOOR PLAN |
| LOCATION:  | REVISION NO.:  | ENGR. LEO S. DEL ROSARIO<br>HEAD, PLANNING AND ZONING DIVISION | ENGR. MARJAN R. VERZOSA, JR.<br>DEPUTY CHIEF, PLANNING DIVISION                       | HON. MA. JOSEFINA G. BELMONTÉ<br>CITY MAJOR   |   |   |  |



## NOTE:

1. REPLACEMENT OF EXISTING CEILING AND ROOF EAVES WITH 8mm THK FIBER CEMENT BOARD INCLUDING METAL FRAMES
2. REPLACEMENT OF 12mm x 30mm FIBER CEMENT FASCIA BOARD



## NOTE:

1. REPLACEMENT OF G.I. ROOFING AND ACCESSORIES

## 1 REFLECTED CEILING PLAN

SCALE 1:150M

## 2 ROOF PLAN

SCALE 1:150M



Republika ng Pilipinas  
Lungsod ng Quezon  
CITY ENGINEERING DEPARTMENT

PROJECT TITLE:  
**PROPOSED CONSTRUCTION OF  
HANDWASHING FACILITY AND  
REHABILITATION OF PINGKIAN III  
ZONE 3 DAY CARE CENTER**

LOCATION:  
BPOV, PABONG TAMB, DISTRICT 6, QUEZON CITY

DRAWN BY: *J. Dela Cruz*  
DATE:  
CHECKED BY: *J. Dela Cruz*  
REVISION NO.:

SUBMITTED BY:  
*[Signature]*  
**ENGR. LEO S. DEL ROSARIO**  
HEAD, PLANNING & PROGRAMMING DIVISION

RECOMMENDING APPROVAL:  
*[Signature]*  
**ENGR. MARGAN R. VERZOSA, JR.**  
D.C. CITY ENGINEER (CONSTRUCTION)

APPROVED BY:  
*[Signature]*  
**HON. MA. JOSEFINA G. BELMONTE**  
CITY MAOR

SHEET CONTENT:  
REFLECTED CEILING  
PLAN  
ROOF PLAN

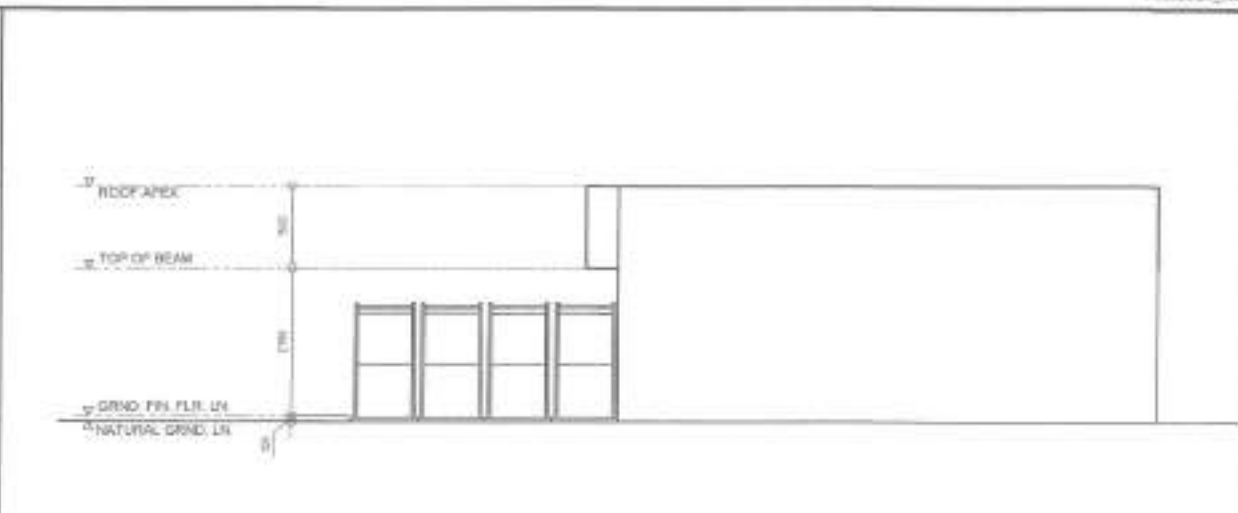
SHEET NO.  
**AR-04**  
**04/14**



NOTE:  
1. PROVISION OF DAY CARE STORAGE

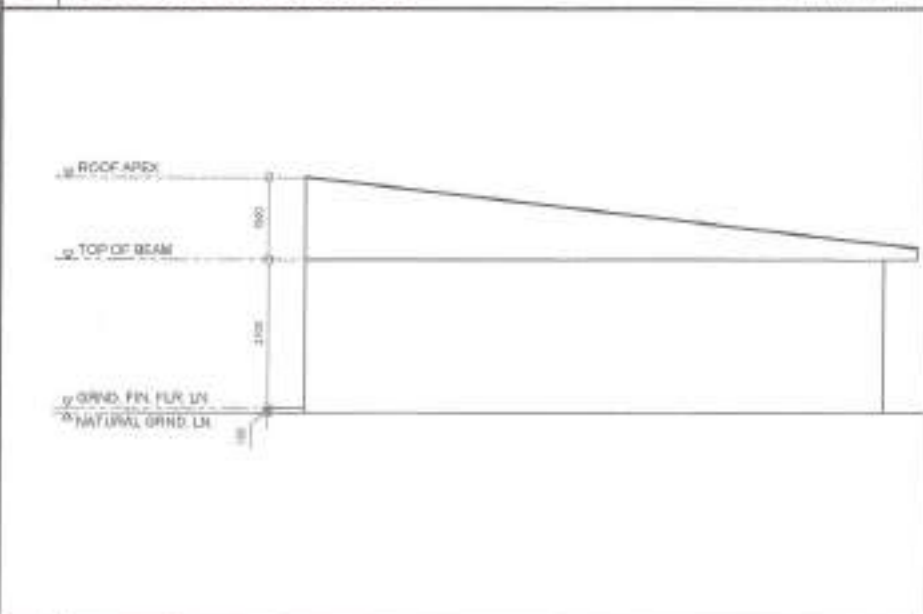
**1 FRONT ELEVATION**

SCALE 1:100M



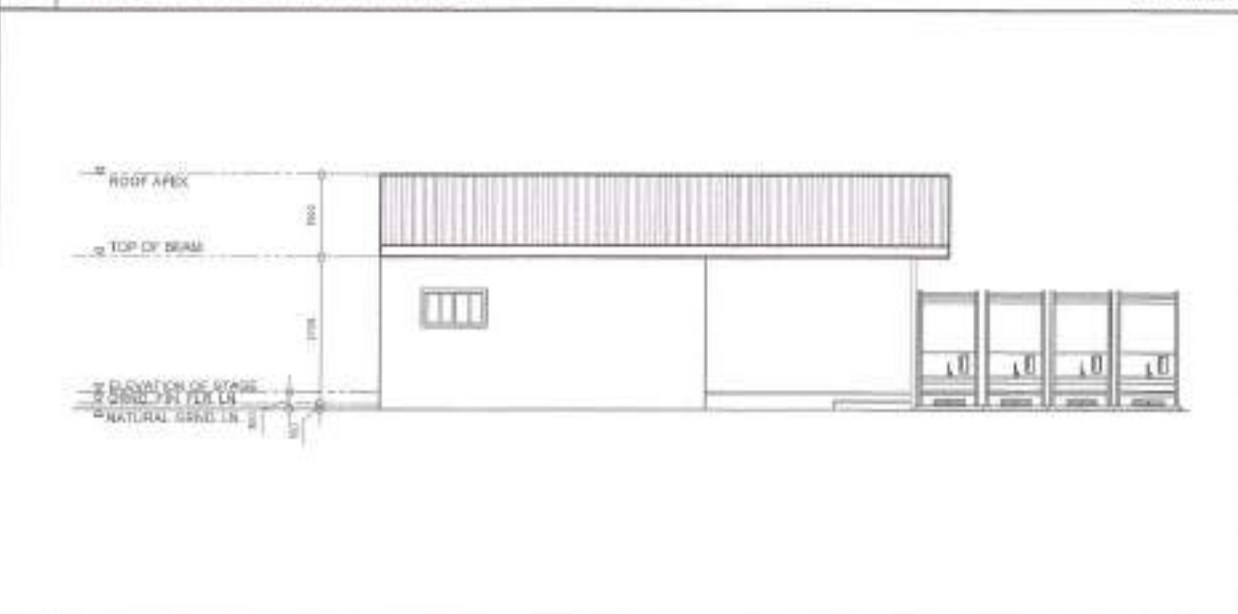
**3 RIGHT SIDE ELEVATION**

SCALE 1:100M




**2 REAR ELEVATION**

SCALE 1:100M



**4 LEFT SIDE ELEVATION**

SCALE 1:100M

|   |  |   |   |   |   |   |  |
|---|--|---|---|---|---|---|--|
|  <p>Republika ng Pilipinas<br/>Lungsod ng Quezon<br/><b>CITY ENGINEERING DEPARTMENT</b></p> | <p>PROJECT TITLE:<br/><b>PROPOSED CONSTRUCTION OF<br/>HANDWASHING FACILITY AND<br/>REHABILITATION OF PINGKIAN III<br/>ZONE 3 DAY CARE CENTER</b></p> | <p>DATE: <u>10/14/2021</u></p> <p>DRAWN BY: <u>[Signature]</u></p> <p>CHECKED BY: <u>[Signature]</u></p> <p>REVISION NO.:</p> | <p>SUBMITTED BY:<br/><u>[Signature]</u><br/><b>ENGR. LEO S. DEL ROSARIO</b><br/>HEAD, PLANNING &amp; PROGRAMMING DIVISION</p> | <p>RECOMMENDING APPROVAL:<br/><u>[Signature]</u><br/><b>ENGR. ISAGAN R. VERZOSA, JR.</b><br/>DIR. CITY ENGINEERING DEPARTMENT</p> | <p>APPROVED BY:<br/><u>[Signature]</u><br/><b>HON. MA. JOSEFINA G. BELMONTTE</b><br/>CITY MAYOR</p> | <p>SHEET CONTENT:<br/>FRONT ELEVATION<br/>REAR ELEVATION<br/>RIGHT SIDE ELEVATION<br/>LEFT SIDE ELEVATION</p> | <p>SHEET NO.<br/><b>AR-05</b><br/><b>05/14</b></p> |
|   | <p>LOCATION:<br/>BPOV, PABONGTAN, DISTRICT 8, QUEZON CITY</p>  |   |   |   |   |   |  |





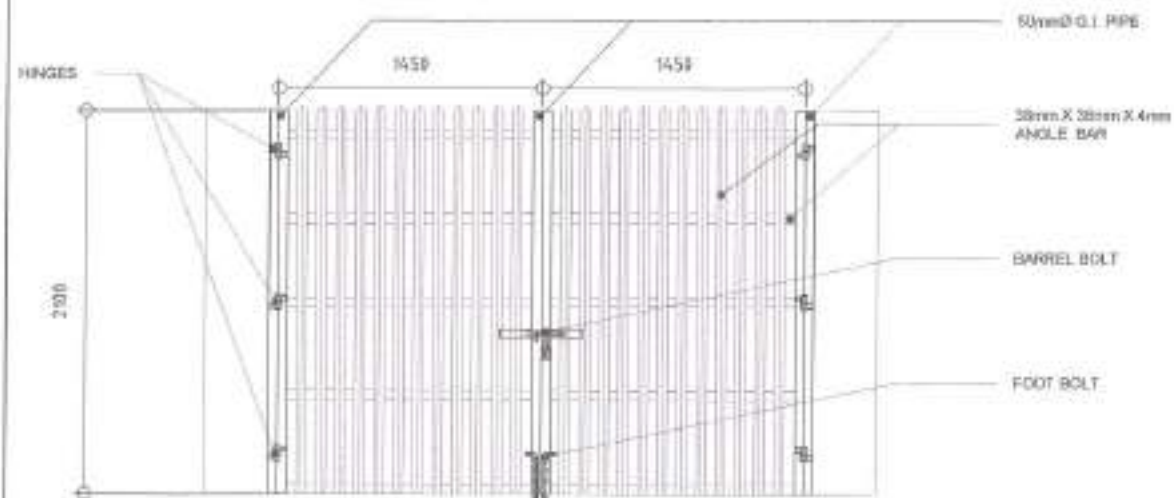
| NAME        | ⊕   | ⊕   | ⊕   | ⊕   |
|-------------|---|---|---|---|
| NO. OF SETS | 1   | 1   | 1   | 1   |
| DESCRIPTION | PANEL DOOR  | PANEL DOOR  | PANEL DOOR  | PVC DOOR WITH LAMBER  |
| LOCATION    | CLASSROOM   | BACK DOOR   | CLASSROOM   | TOILET  |
| REMARKS     | COMPLETE ACCESSORIES<br>DOOR HINGE: LEVER TYPE SATIN<br>FINISH: BRASS | COMPLETE ACCESSORIES<br>DOOR HINGE: LEVER TYPE SATIN<br>FINISH: BRASS | COMPLETE ACCESSORIES<br>DOOR HINGE: LEVER TYPE SATIN<br>FINISH: BRASS | COMPLETE ACCESSORIES<br>DOOR HINGE: LEVER TYPE SATIN<br>FINISH: BRASS |

| NAME        | ⊕  | ⊕  | ⊕  |
|-------------|--|--|--|
| NO. OF SETS | 1  | 1  | 1  |
| DESCRIPTION | ALUMINUM FRAME POWDER COATED SLIDING WINDOW WITH 6mm THK CLEAR GLASS | ALUMINUM FRAME POWDER COATED SLIDING WINDOW WITH 6mm THK CLEAR GLASS | ALUMINUM FRAME POWDER COATED SLIDING WINDOW WITH 6mm THK CLEAR GLASS |
| LOCATION    | CLASSROOM  | CLASSROOM  | CLASSROOM  |

## 1 SCHEDULE OF DOORS AND WINDOWS

SCALE NTS

▽ CEILING HEIGHT  
▽ TOP OF WALL TILES  
▽ GRND. FIN. FLR. LN.



## 2 TOILET DETAILS

SCALE 1:50M

## 3 GATE DETAILS

SCALE 1:50M



Republika ng Pilipinas  
Lungsod ng Quezon  
CITY ENGINEERING DEPARTMENT

PROJECT TITLE:  
**PROPOSED CONSTRUCTION OF  
HANDWASHING FACILITY AND  
REHABILITATION OF PINKIAN III  
ZONE 3 DAY CARE CENTER**

LOCATION:  
BRGY. HANGKALAMANG, DISTRICT 8, QUEZON CITY

DATE:  
CHECKED BY: *[Signature]*  
REVISION NO.:

SUBMITTED BY:  
*[Signature]*  
**ENGR. LEO S. DEL ROSARIO**  
ASST. PLANNING & PROJECT MANAGEMENT

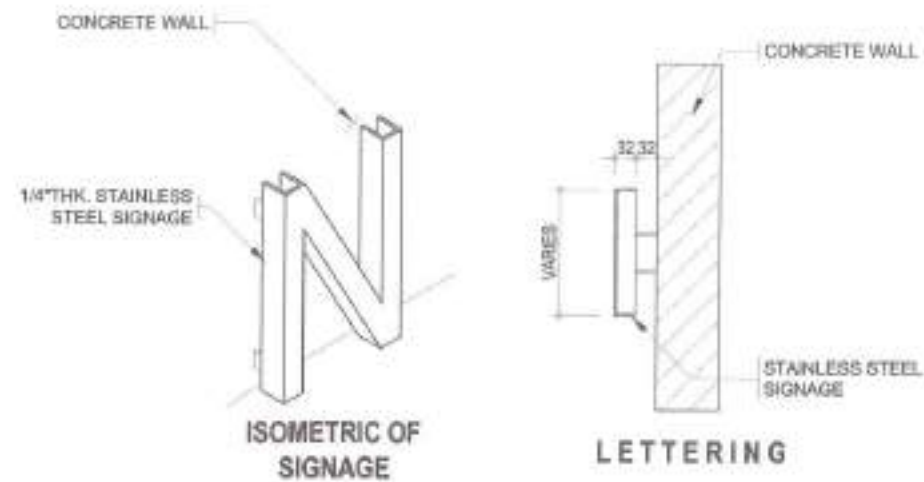
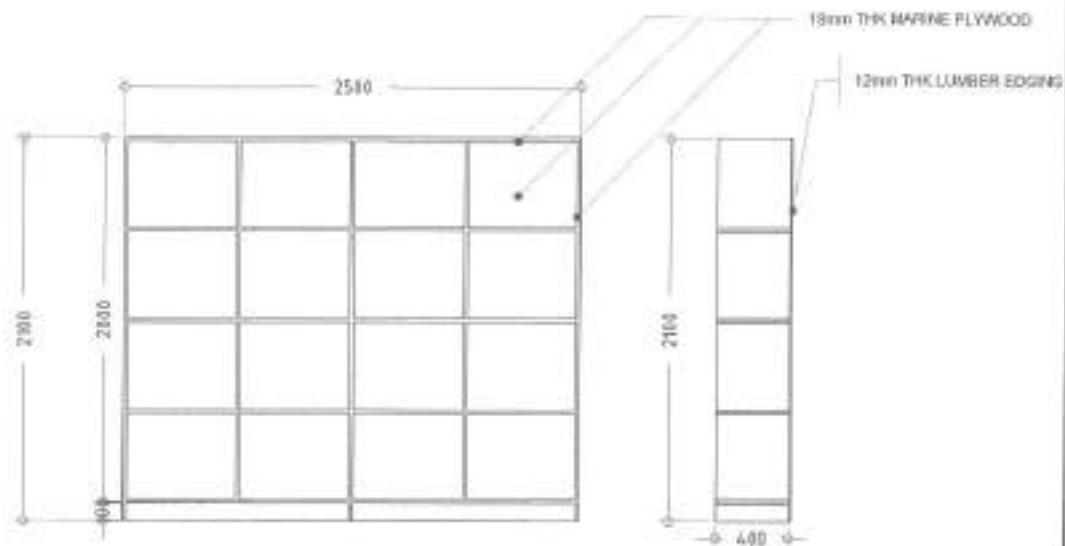
RECOMMENDING APPROVAL:  
*[Signature]*  
**ENGR. ISIDORO R. VERZOSA, JR.**  
SEC. CITY ENGINEERING DEPARTMENT

APPROVED BY:  
*[Signature]*  
**HON. MA. JOSEFINA G. BELMONTÉ**  
CITY MP/ON

SHEET CONTENT:  
SCHEDULE OF DOORS  
AND WINDOWS  
TOILET DETAILS  
GATE DETAILS

SHEET NO.

**AR-06**  
**06/14**

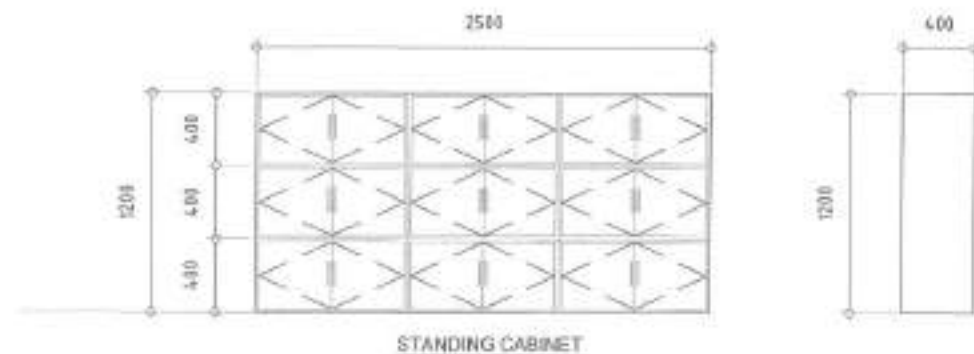
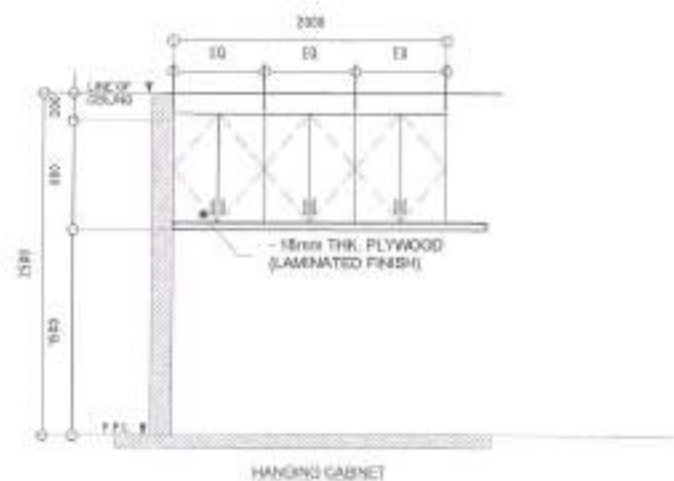


## 1 SHELF DETAILS

SCALE 1:30M.

## 2 LETTERING DETAILS

SCALE 1:275.



## 3 HANGING CABINET DETAILS

SCALE 1:40M.

## 4 STANDING CABINET DETAILS

SCALE 1:30M.



Republika ng Pilipinas  
Lungsod ng Quezon  
CITY ENGINEERING DEPARTMENT

PROJECT TITLE:  
PROPOSED CONSTRUCTION OF  
HANDWASHING FACILITY AND  
REHABILITATION OF PINKIAN III  
ZONE 3 DAY CARE CENTER

LOCATION:  
SHELF HANGING FRAME, DISTRICT 8, QUEZON CITY

DESIGNED BY:  
CHECKED BY:  
REVISION NO.:

DESIGNED BY:  
SUBMITTED BY:  
ENGR. LEO S. DEL ROSARIO  
HEAD, PLANNING & PROVISIONS DIVISION

RECOMMENDING OFFICIAL:  
ENGR. ADAM R. VERZOSA, JR.  
CIC, CITY ENGINEERING DEPARTMENT

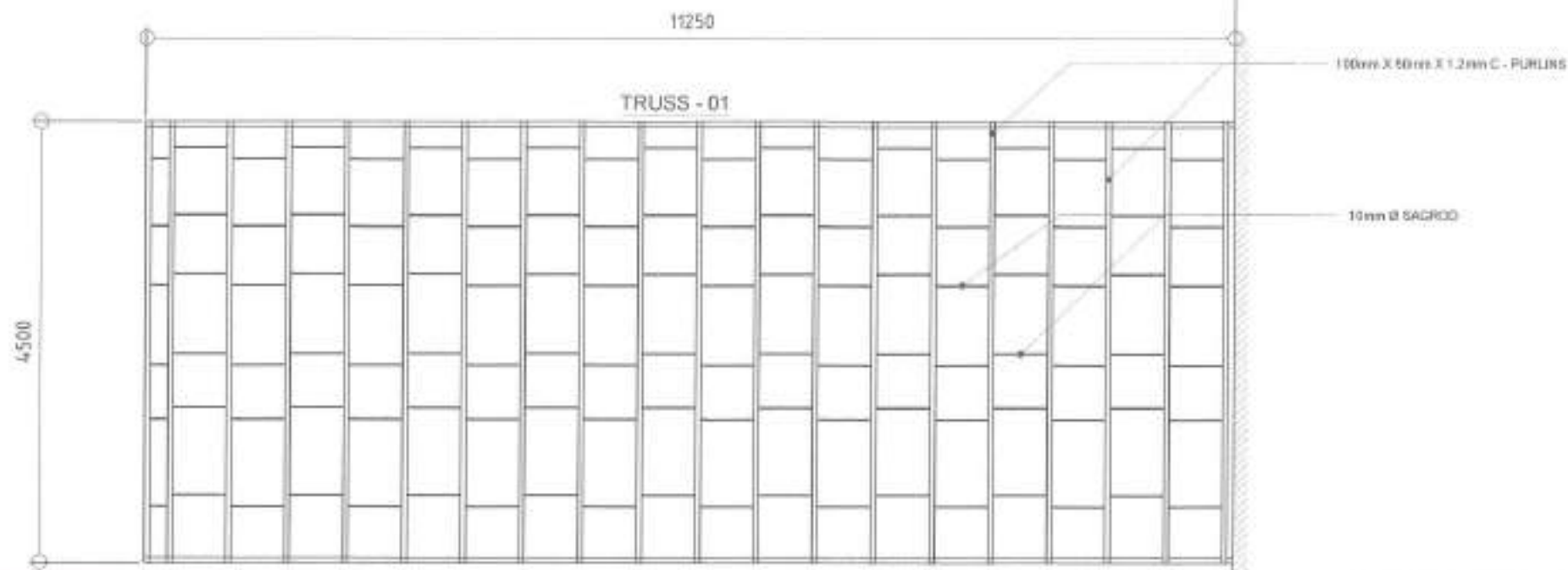
APPROVED BY:  
HON. MA. JOSEFINA G. BELMONTE  
CITY MAYOR

SHEET CONTENT:  
SHELF DETAILS  
LETTERING DETAILS  
HANGING CABINET  
DETAILS  
STANDING CABINET  
DETAILS

SHEET NO.:

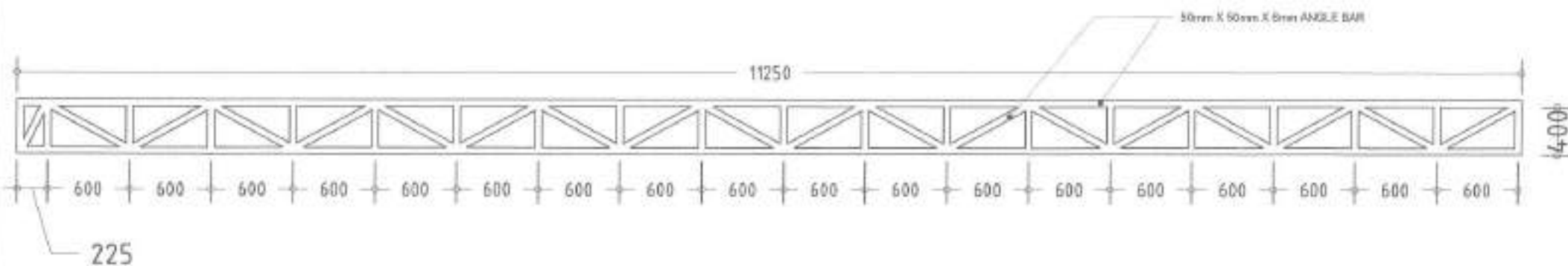
AR-07  
07/14





## 1 STEEL CANOPY FRAMING PLAN

SCALE: NTS



## 2 TRUSS DETAILS

SCALE: NTS



Republika ng Pilipinas  
Lungsod ng Cebu  
CITY ENGINEERING DEPARTMENT

PROJECT TITLE:  
**PROPOSED CONSTRUCTION OF  
HANDWASHING FACILITY AND  
REHABILITATION OF PINGKIAN III  
ZONE 3 DAY CARE CENTER**

LOCATION:  
BUDY PABING TARD, DISTRICT 8, MCDONALD

DRAWN BY: *Y. Tan*

DATE:

CHECKED BY: *J. N.*

REVISIONS:

SUBMITTED BY:

*[Signature]*  
ENGR. LEO S. DEL ROSARIO  
HEAD, PLANNING AND DESIGN DIVISION

RECOMMENDING APPROVAL:

*[Signature]*  
ENGR. ISABELA R. VERZOSA, JR.  
SEC. CITY ENGINEERING DEPARTMENT

APPROVED BY:

*[Signature]*  
HON. MA. JOSEFINA G. DELMONTTE  
CITY MAAYR

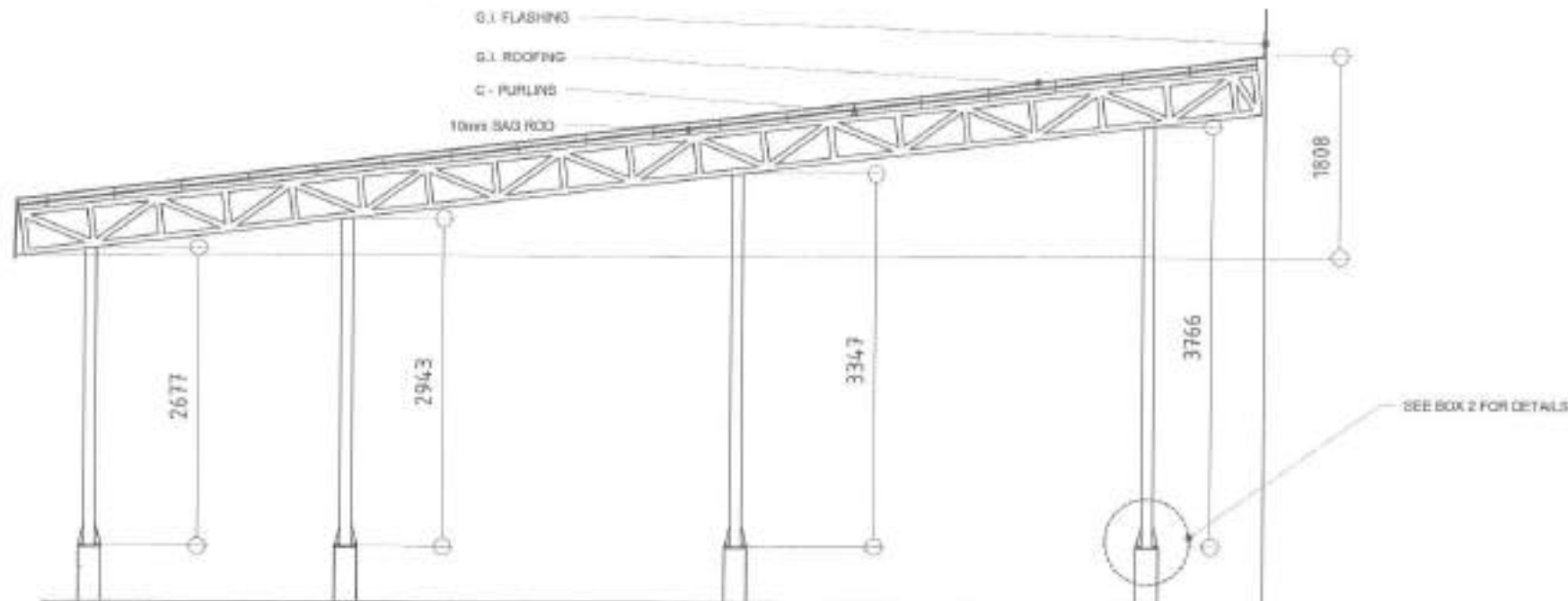
SHEET CONTENT:

STEEL CANOPY FRAMING  
PLAN  
TRUSS DETAILS

SHEET NO.:

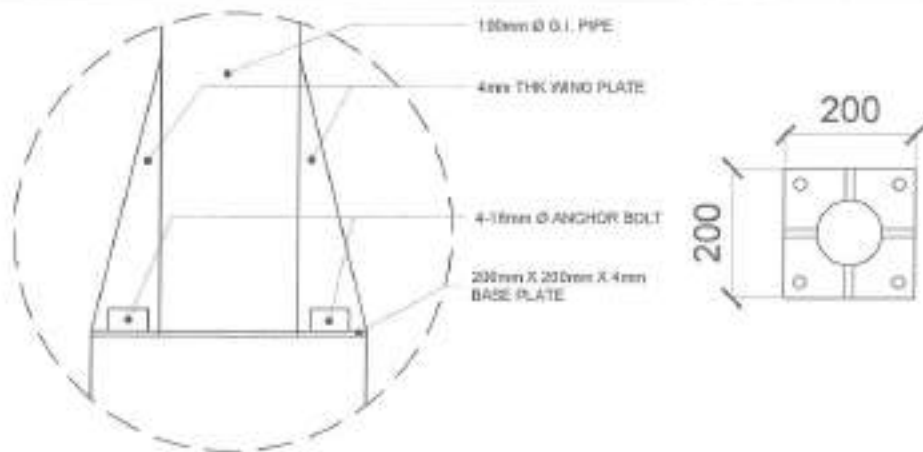
ST-02  
09/14





**1 STEEL CANOPY ELEVATION**

SCALE NTS



| SLAB | I   | REINFORCEMENT |       | SHORT SPAN | LONG SPAN |
|------|-----|---------------|-------|------------|-----------|
| MARK | mm  | MAIN BAR      | TEMP. |            |           |
| 01   | 150 | 10            | 15    | 300        | 600       |

**2 BLOW-UP DETAILS**

SCALE NTS

**3 SCHEDULE OF SLAB**

SCALE NTS



Republika ng Pilipinas  
Lungsod ng Quezon  
CITY ENGINEERING DEPARTMENT

PROJECT TITLE:  
**PROPOSED CONSTRUCTION OF  
HANDWASHING FACILITY AND  
REHABILITATION OF PINGKIAN III  
ZONE 3 DAY CARE CENTER**

LOCATION:  
BUDY PANGRAGI FARM, DISTRICT 8, QUEZON CITY

DESIGNED BY: *[Signature]*  
CHECKED BY: *[Signature]*  
DRAWN BY:

SUBMITTED BY:  
*[Signature]*  
**ENGR. LEO S. DEL ROSARIO**  
HEAD, PLANNING & PROJECTS DIVISION

RECOMMENDED APPROVAL:  
*[Signature]*  
**ENGR. SAOIRAH R. VERZOSA, JR.**  
DPO, CIVIL ENGINEERING DIVISION

APPROVED BY:  
*[Signature]*  
**HON. MA. JOSEFINA G. BELMONTÉ**  
CITY ENGINEER

SHEET CONTENT:  
STEEL CANOPY  
ELEVATION  
BLOW-UP DETAILS  
SCHEDULE OF SLAB

SHEET NO:  
**ST-03**  
**10/14**

1 All plumbing works and materials indicated herein shall be compliant to the provisions of the latest edition of National Plumbing Code, the rules and regulations of local authorities concerned, the rules and regulations of local utility companies and the provisions of the land developer when and where applicable.

2 The plumbing layout is only diagrammatic; pipes, cleanouts and check valves shall be concealed as much as possible. It is not intended to show the actual dimension of the pipes and fixtures in the drawing but all the pipes and fixtures shall be installed as and where indicated. Any relocation will require proper execution in relation with other trades.

3 The plumbing contractor shall verify all existing utilities at the site and shall coordinate the work with other trades.

4 Pipes shall not be embedded in structural members unless otherwise specified or allowed.

5 Minimum slope for horizontal sewer lines shall be 1% and for drain lines shall be 5%.

6 Proposed plumbing utilities shall conform with the actual location, depth and invert elevation of all existing pipes/utilities.

7 Connection of fixtures to pipes and fittings shall be according to manufacturer's specifications.

8 All floor drains shall be vented individually.

9 All clean-out ferrules shall be flush-mounted to wall and shall be provided with polished cover caps. Do not install floor clean-outs except at lines on grade and service areas not subject to traffic.

10 All underground G.I. pipes in direct contact with soil shall be provided with two (2) coats of protective tar covering and wrapped with jute cloth thoroughly soaked in tar or asphalt.

11 Provide vent stack and vent pipe thru roof of cast iron service weight as required.

12 All cast iron pipes shall be of approved quality and G.I. pipes for water distribution lines shall be Schedule 40 U.S. standard weight.

13 Provide gate valves to all water supply lines to fixtures.

14 All hot water lines shall be provided with proper insulation where exposed.

15 All individual branches to fixtures or group of fixtures and/or equipments shall be provided with air chambers or capped vertical pipe extensions of dimensions as shown:

H = 450 mm for 19 mm Ø and larger

H = 300 mm for 12 mm Ø and smaller

16 All hose bibbs shall be 19 mm Ø (¾" Ø) unless otherwise indicated.

17 Inlet pipe of septic tank is 50 mm higher than the siphon pipe which is 30 mm higher than the outlet pipe.

18 All plumbing works and manner of construction shall be under the direct supervision of an able and duly licensed Master Plumber or Registered Sanitary Engineer. Any discrepancies found in plan shall be notified to the same person.

I. FIXTURES AND OTHER LEGEND

|     |                       |
|-----|-----------------------|
| FD  | FLOOR DRAIN           |
| RD  | ROOF DRAIN            |
| SHO | SHOWER                |
| WC  | WATER CLOSET          |
| LAV | LAVATORY              |
| URI | URINAL                |
| KS  | KITCHEN SINK          |
| BD  | BUILDING DRAIN        |
| DD  | DECK DRAIN            |
| CCO | CEILING CLEANOUT      |
| FCO | FLOOR/GROUND CLEANOUT |
| DS  | DOWNSPOUT             |
| mm  | millimeter            |
| Ø   | mm DIAMETER           |
| SHD | SHOWER DRAIN          |
| CB  | CATCH BASIN           |
| MH  | MANHOLE               |
| →   | DIRECTION OF FLOW     |
|     | GREASE TRAP           |

|  |                                   |
|--|-----------------------------------|
|  | UNION PATENT                      |
|  | CHECK VALVE                       |
|  | BUILDING SEWER                    |
|  | BUILDING DRAIN                    |
|  | WASTE LINE                        |
|  | AREA DRAIN / CATCH BASIN          |
|  | FLOOR DRAIN                       |
|  | DIAMETER                          |
|  | WASTE LINE                        |
|  | WATER LINE                        |
|  | GATE VALVE                        |
|  | DECK DRAIN                        |
|  | CLEANOUT                          |
|  | PIPE DOWN                         |
|  | PIPE UP                           |
|  | MILLIMETER                        |
|  | GATE VALVE                        |
|  | AREA DRAIN / CATCH BASIN          |
|  | WATER CLOSET                      |
|  | LAVATORY                          |
|  | MANHOLE                           |
|  | HOSE BIBB                         |
|  | STORM DRAIN LINE                  |
|  | VENT LINE                         |
|  | VENT ABOVE CEILING                |
|  | CONCRETE PIPE / REINF. CONC. PIPE |
|  | VENT THRU ROOF                    |
|  | DIRECTION OF FLOW / SLOPE         |

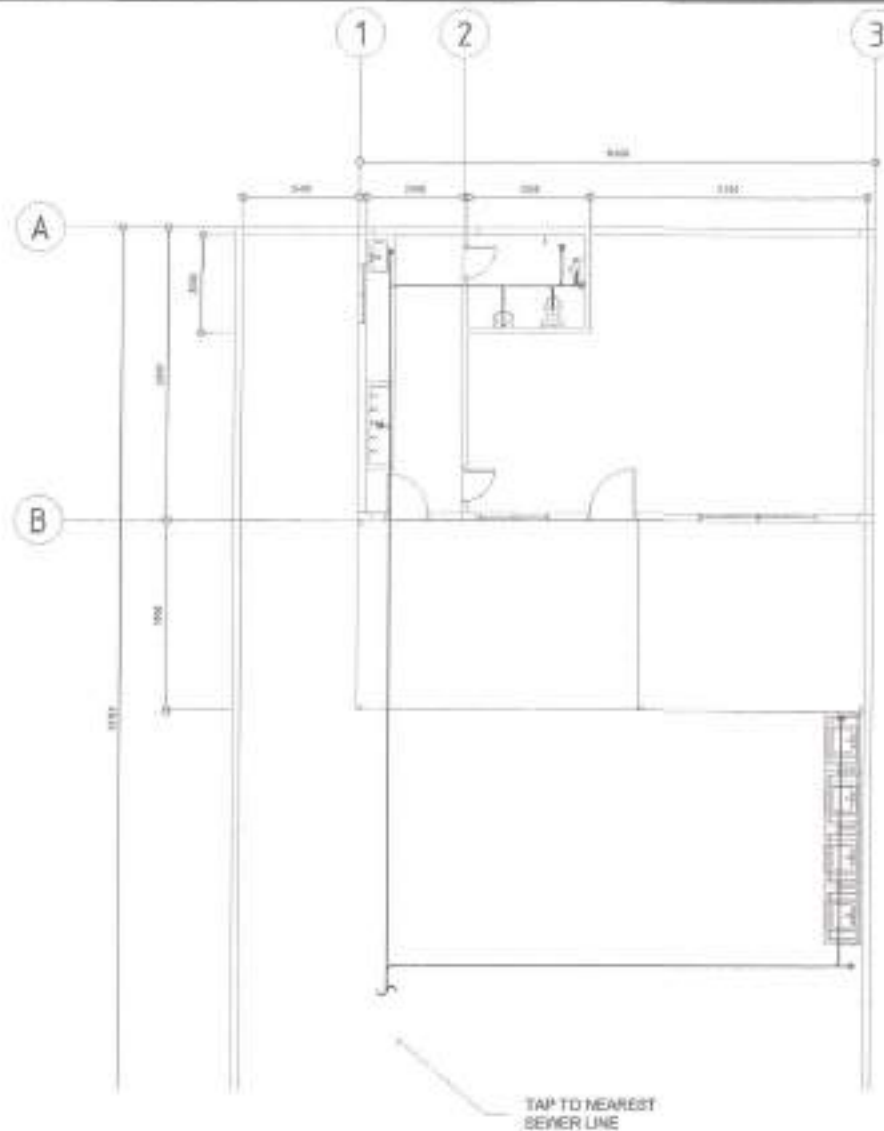
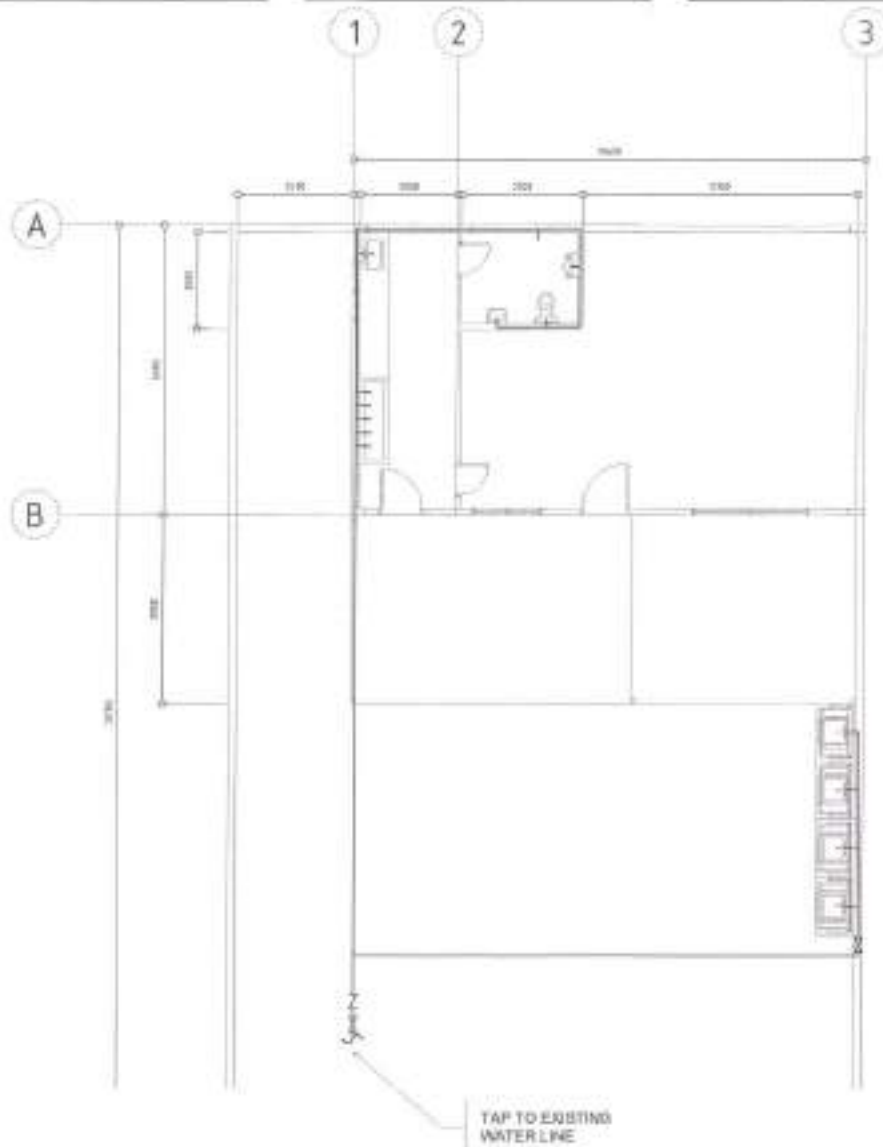
1 GENERAL NOTES

SCALE: NTS.

2 LEGEND AND SYMBOLS

SCALE: NTS.

|   |   |  |   |   |   |                        |              |                        |              |              |
|---|---|--|---|---|---|------------------------|--------------|------------------------|--------------|--------------|
| <p>Republika ng Pilipinas<br/>Lungsod ng Quezon<br/>CITY ENGINEERING DEPARTMENT</p> | PROJECT TITLE:  | DRAWN BY:  | DESIGNED BY:  | REVISIONS:  | DATE:                                       | CHECKED BY:            | REVIEWED BY: | RECOMMENDING APPROVAL: | APPROVED BY: | PROJECT NO.: |
|   | <p>PROPOSED CONSTRUCTION OF<br/>HANDWASHING FACILITY AND<br/>REHABILITATION OF PINKIAN III<br/>ZONE 3 DAY CARE CENTER</p> <p>LOCATION:<br/>BPO, PASUNG TAMB, DISTRICT 6, CALZADILLA</p> | <p>ENGR. LEO S. DEL ROSARIO<br/>HEAD, PLUMBING &amp; PIPING DIVISION</p> | <p>ENGR. JERMAN R. VERZOSA, JR.<br/>CH. CITY ENGINEERING DEPARTMENT</p> | <p>HON. MA. JOSEFINA G. BELMONTÉ<br/>CITY MANAGER</p> | <p>GENERAL NOTES<br/>LISTED AND SYMBOLS</p> | <p>PL-01<br/>11/14</p> |              |                        |              |              |



- NOTE:  
 1. PLUMBING PICTURES TO BE REPLACED  
 2. HAND WASHING AND KIT CUPEN FAUCETS TO BE REPLACED

**1 WATER LINE LAYOUT**

SCALE 1:150M

**2 SANITARY LAYOUT**

SCALE 1:150M



Republika ng Pilipinas  
 Lungsod ng Quezon  
**CITY ENGINEERING DEPARTMENT**

PROJECT TITLE:  
**PROPOSED CONSTRUCTION OF  
 HANDWASHING FACILITY AND  
 REHABILITATION OF PINGKIAN III  
 ZONE 3 DAY CARE CENTER**

LOCATION:  
 BRGY. PANGKANG TAND, DISTRICT 8, QUEZON CITY

DESIGNED BY: *[Signature]*  
 DATE: \_\_\_\_\_  
 CHECKED BY: J.A.N.  
 REVISIONS:

SUBMITTED BY:  
*[Signature]*  
**ENGR. LEO S. DEL ROSARIO**  
 HEAD, PLUMBING & MECHANICAL DIVISION

RECOMMENDED APPROVAL:  
*[Signature]*  
**ENGR. SARAN R. VERZOSA, JR.**  
 CH. CITY ENGINEERING DEPARTMENT

APPROVED BY:  
**HON. MA. JOSEFINA G. BELMONTE**  
 CITY MGR.

SHEET CONTENT:  
 WATER LINE LAYOUT  
 SANITARY LAYOUT

SHEET NO.:  
**PL-02**  
**12/14**



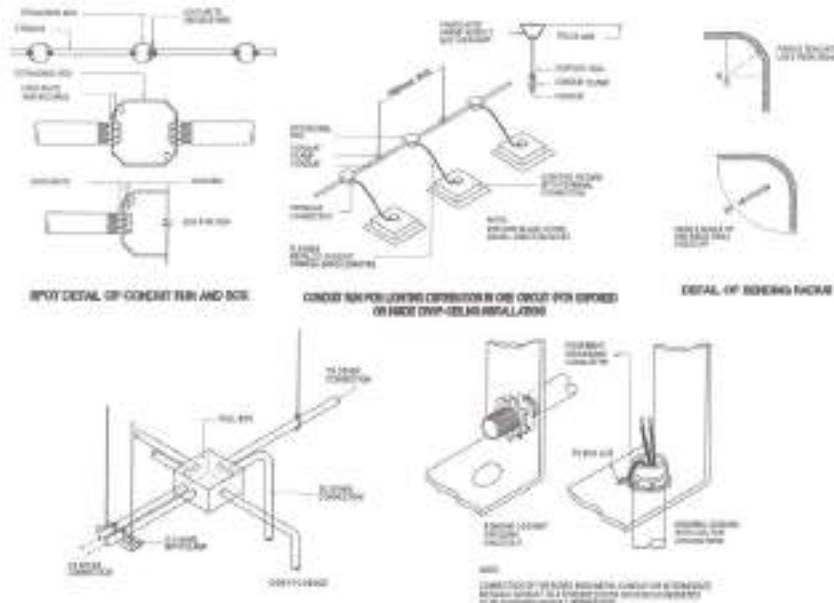
- ALL ELECTRICAL WORKS SHALL BE DONE IN ACCORDANCE WITH THE PROVISIONS OF THE LATEST EDITION OF THE PHILIPPINE ELECTRICAL CODE, THE LAWS AND ORDINANCES OF THE LOCAL CODE ENFORCING AUTHORITIES AND THE REQUIREMENTS OF THE LOCAL POWER AND TELEPHONE UTILITY COMPANY.
- THE CONTRACTOR SHALL SECURE ALL PERMITS AND PAY ALL FEES REQUIRED FOR THE WORK AND SHALL FURNISH THE OWNER THROUGH THE ENGINEER, FINAL CERTIFICATES OF ELECTRICAL INSPECTION AND APPROVAL FROM PROPER GOVERNMENT AUTHORITIES FOR COMPLETION OF WORK.
- ALL CIRCUIT BREAKER CIRCUITS SHALL BE PVC CONDUITS AND FOR EXPOSED INSTALLATION SHALL BE BULB-SUPPORTED BY CONDUIT CLAMPS EVERY 100 MILLIMETERS.
- PULL BOXES SHALL BE PROVIDED BY THE CONTRACTOR WHENEVER NECESSARY TO FACILITATE WIRE PULLING EVEN IF THESE ARE NOT INDICATED ON THE PLANS. SIZES OF ALL PULLBOXES SHALL BE COMPUTED BASED ON THE CODE REQUIREMENTS. SUBMIT "BUSH" DRAWINGS TO THE ENGINEER FOR APPROVAL PRIOR TO FABRICATION. LOCATION OF PULLBOXES SHALL BE APPROVED BY THE ARCHITECT/ENGINEER AND MUST BE REFLECTED ON THE "AS-BUILT" PLAN.
- ALL POWER OUTLETS AND SWITCHES SHALL BE GROUNDING TYPE WITH PARALLEL SLOTS FOR 220 V.
- PROVIDE GROUND FAULT CURRENT INTERRUPTER (CIRCUIT BREAKER) FOR LOADS MARKED "GFCI" ON THE PLAN.
- ALL METALLIC CONDUITS, CABINETS AND EQUIPMENT SHALL BE PROPERLY GROUNDING AND BONDED.
- USE 500 OHM WIRE MESH MOUNTING HEIGHT FOR WALL MOUNTED DEVICES SHALL BE AS FOLLOWS:

RECEPTACLE OUTLET - 300 MM AFF. 180MM ABOVE WORKING COUNTER.  
 TELEPHONE OUTLET - 300 MM AFF.  
 CATV OUTLET - 300 MM AFF.  
 LIGHTING SWITCH - 140 MM AFF.  
 PANELBOARD - 180MM AFF.

- REFER TO MECHANICAL, PLUMBING AND FIRE PROTECTION DRAWINGS FOR RATINGS AND LOCATIONS OF EQUIPMENT AS WELL AS THEIR CONTROL SEQUENCES AS SPECIFIED AND OR SHOWN UNDER THEIR RESPECTIVE SECTION.
- ALL MATERIALS TO BE USED SHALL BE OF THE BEST QUALITY, BRAND NEW AS SPECIFIED.
- THE DRAWINGS AND SPECIFICATIONS ARE INTENDED TO PRESENT GENERAL LAYOUT AND BROAD OUTLINE/DESCRIPTION OF THE PROJECT BUT DO NOT NECESSARILY INDICATE DESCRIBED ACTUAL LOCATIONS, LEVEL AND DISTANCES OF THE EQUIPMENT. THE CONTRACTOR IS HEREBY REQUIRED TO MAKE SUCH ADJUSTMENT AT THE JOBSITE AS LOCATION, DISTANCES AND LEVELS ARE GOVERNED BY ACTUAL FIELD CONDITIONS.
- ANY DISCREPANCY BETWEEN THE PLANS AND SPECIFICATIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER FOR CLARIFICATION DECISION.
- ALL LIGHTING AND CONVENIENCE OUTLET CIRCUITS SHALL BE 25 SQ. MM. THIN-G GAUGE COPPER WIRE UNLESS OTHERWISE NOTED. MINIMUM SIZE OF WIRE SHALL BE 2.5-GG. 90A COPPER WIRE. ALL WIRES AND CABLES SHALL BE COLOR CODED AS FOLLOWS:

LINE 1 - RED  
 LINE 2 - YELLOW  
 NEUTRAL - WHITE  
 GROUND - GREEN

- BOXES, WIRE, GUTTERS, ENCLOSURE SHALL BE FABRICATED FROM STEEL WITH THICKNESS AS FOLLOWS:  
 MAXIMUM WIDTH OF THE INSET SURFACE STEEL  
 UP TO 100 (UP TO 152.40MM) GA 16 PAINTED WITH METAL PRIMER EPOXY AND TOPCOAT  
 OVER 100-400 MM BUT NOT OVER 457.30 GA 14 PAINTED WITH METAL PRIMER EPOXY AND TOPCOAT  
 OVER 457.30 MM BUT NOT OVER 762.00 GA 12 PAINTED WITH METAL PRIMER EPOXY AND TOPCOAT  
 OVER 762.00 MM GA 10 PAINTED WITH METAL PRIMER EPOXY AND TOPCOAT
- ALL ELECTRICAL WORKS HEREIN SHALL BE EXECUTED BY EXPERIENCED MEN UNDER THE DIRECT SUPERVISION OF A FULL-TIME LICENSED ELECTRICAL ENGINEER AND A DULY ACCREDITED ELECTRICAL CONTRACTOR BY PCAB. WORKS SHALL BE NEATLY PLACED, SECURELY FASTENED AND PROPERLY FINISHED.
- TYPE OF SERVICE ENTRANCE SHALL BE 3-WIRE PHASE, TWO-WIRE PLUS GROUND, 60 HERTZ, 220V/60 HERTZ.
- CONDUITS IN RACE SHALL THERE BE MORE THAN THE EQUIVALENT OF FOUR QUARTER BENDS IN ANY ONE RUN. ALL CONDUIT BENDS SHALL BE FIELD MADE BY USING HYDRAULIC BENDERS. MINIMUM BENDING RADIUS MUST BE IN ACCORDANCE TO THE CODE REQUIREMENTS.
- UPON COMPLETION OF ELECTRICAL CONSTRUCTION WORK, INSULATION RESISTANCE TEST AND FUNCTIONALITY TEST SHALL BE PERFORMED BY THE CONTRACTOR INCLUSIVE OF THE INSTALLATION TO BE REPORTED IN DETAILS ON FORMS APPROVED BY THE QUEZON CITY ENGINEERING DEPARTMENT REPRESENTATIVE. THE GROUND RESISTANCE FOR ELECTRICAL SYSTEMS SHALL NOT BE MORE THAN 5 OHMS. COMBINATION GROUNDING RESISTANCE SHALL NOT EXCEED 2 OHMS.



## 2 MISCELLANEOUS DETAILS

SCALE: NTS


- SINGLE GANG SWITCH (FOR REPLACEMENT)
- TWO GANG SWITCH (FOR REPLACEMENT)
- THREE GANG SWITCH (FOR REPLACEMENT)
- SELECTOR SWITCH (CEILING FAN)
- E27 RECEPTACLE WITH LED BULB (FOR REPLACEMENT)
- WALL LAMP (ADDITIONAL)
- GLOBE BULB (ADDITIONAL)
- TRIGGER TYPE WITH 1X18W LED TUBE LIGHT (FOR REPLACEMENT)
- T5, 28WATTS LED TUBE LIGHT (ADDITIONAL)
- CEILING FAN (FOR REPLACEMENT)
- DUPLEX CONVENIENCE OUTLET (FOR REPLACEMENT)
- DUPLEX CONVENIENCE OUTLET (ADDITIONAL)
- PANEL BOARD

## 1 GENERAL NOTES

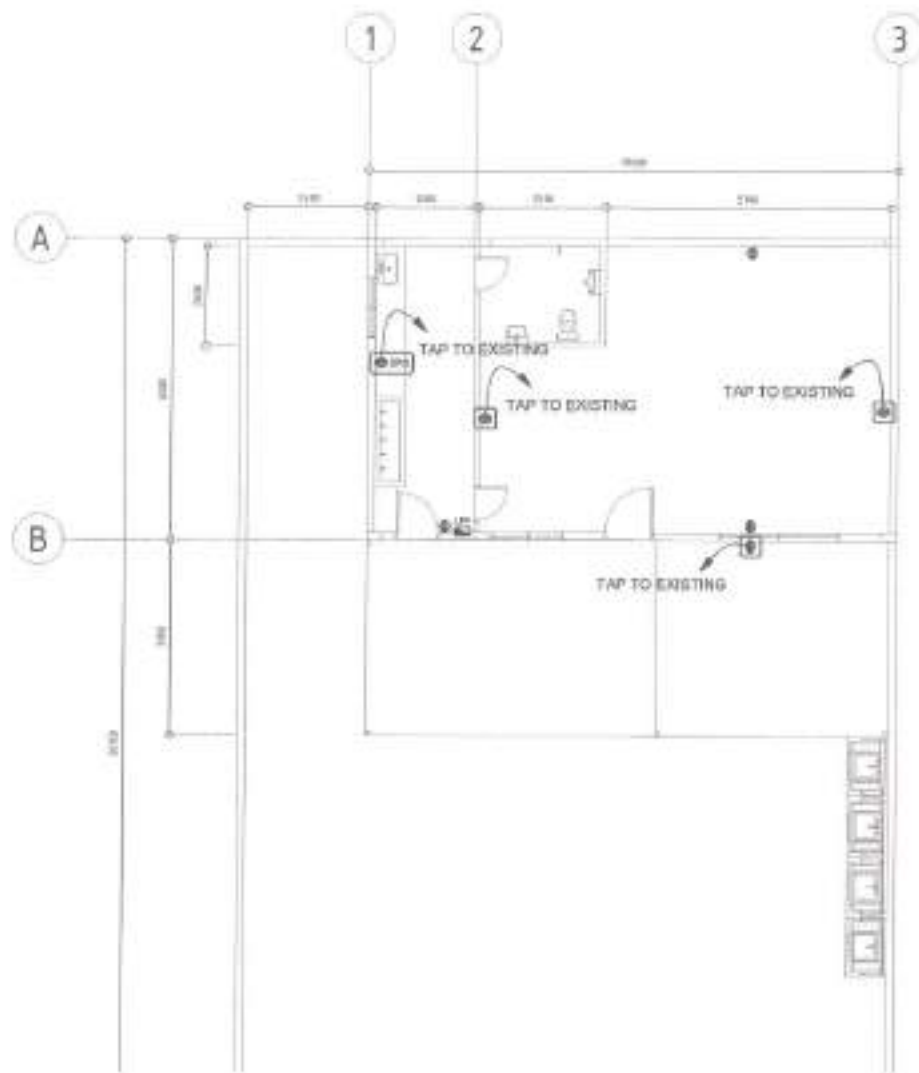
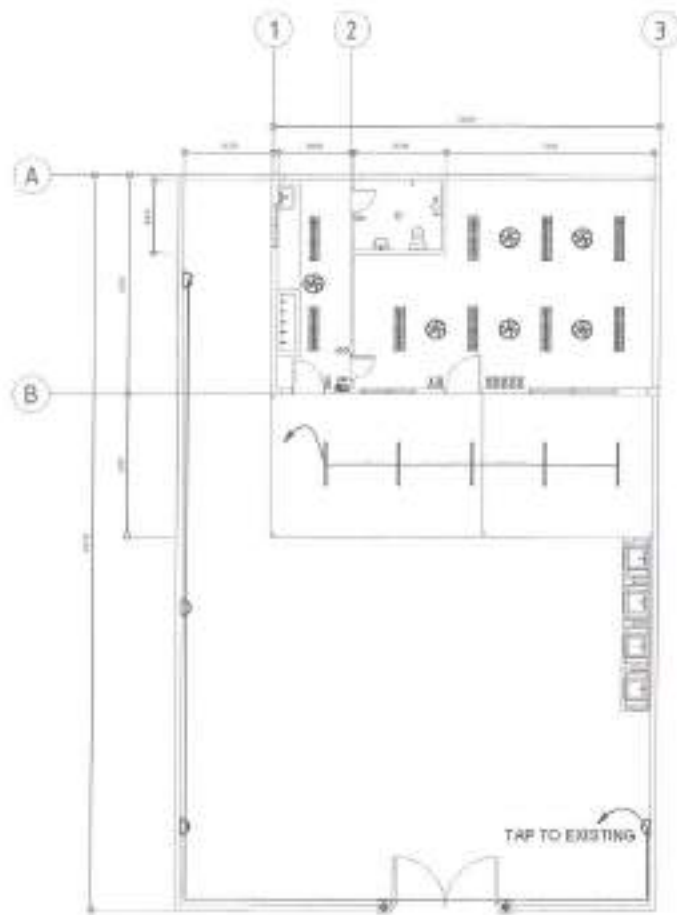
SCALE: NTS

## 3 LEGEND AND SYMBOLS

SCALE: NTS

|  |  |           |                   |   |   |  |   |
|--|--|-----------|-------------------|---|---|--|---|
|  <p>Republika ng Pilipinas<br/>Lungsod ng Quezon<br/>CITY ENGINEERING DEPARTMENT</p> | PROJECT TITLE:   | DRAWN BY: | SUBMITTED BY:     | RECOMMENDED APPROVAL:   | APPROVED BY:  | SHEET CONTENT:                               | SHEET NO.:  |
|  | <p>PROPOSED CONSTRUCTION OF HANDWASHING FACILITY AND REHABILITATION OF PINKKIAN III ZONE 3 DAY CARE CENTER</p> <p>LOCATION:<br/>BUDY, PASUNG TAND, DISTRICT 8, QUEZON CITY</p> | DATE:     | ENGINEER BY: J.S. | ENGR. LEO S. DEL ROSARIO<br>HEAD, PLANNING & PROGRAM DIVISION | ENGR. ISAGAN R. VERZOSA, JR.<br>CH. CITY ENGINEERING DEPARTMENT | HON. MA. JOSEFINA S. BELAMONTE<br>CITY MAJOR | <p>GENERAL NOTES<br/>MISCELLANEOUS DETAILS<br/>LEGEND AND SYMBOLS</p> |






NOTE:  
1. REPLACEMENT OF CONVENIENCE OUTLETS AND ACU OUTLET

**1 LIGHTING LAYOUT**

SCALE 1:150M

**2 POWER LAYOUT**

SCALE NTS

|  |  |  |   |  |   |  |  |
|--|--|--|---|--|---|--|--|
|  <p>Republika ng Pilipinas<br/>Lungsod ng Quezon<br/>CITY ENGINEERING DEPARTMENT</p> | <p>PROJECT TITLE:<br/><b>PROPOSED CONSTRUCTION OF HANDWASHING FACILITY AND REHABILITATION OF PINGKIAN III ZONE 3 DAY CARE CENTER</b></p> | <p>DRAWN BY: <i>[Signature]</i><br/>DATE:<br/>CHECKED BY: J.A.H.<br/>REVISION NO.:</p> | <p>DESIGNER:<br/><i>[Signature]</i><br/><b>ENGR. LEO S. DEL ROSARIO</b><br/>HEAD, PLANNING &amp; PROGRAM DIVISION</p> | <p>RECOMMENDING APPROVAL:<br/><i>[Signature]</i><br/><b>ENGR. ISMAEL R. VERZOSA, JR.</b><br/>DCC CITY ENGINEERING DEPARTMENT</p> | <p>APPROVED BY:<br/><i>[Signature]</i><br/><b>HON. MA. JOSEFINA G. BELMONTE</b><br/>CITY MAOR</p> | <p>ISSUED CONT'D:<br/>LIGHTING LAYOUT<br/>POWER LAYOUT</p> | <p>SHEET NO.<br/><b>EL-02</b><br/><b>14/14</b></p> |
|  | <p>LOCATION:<br/>GRDY. PASONG TANDI, DISTRICT 6, QUEZON CITY</p>   |  |   |  |   |  |  |

**THE SITE**



**1 LOCATION MAP**

SCALE: NTS.

**THE SITE**



**2 VICINITY MAP**

SCALE: NTS.



**3 PERSPECTIVE**

SCALE: NTS.

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|------|--|



Republika ng Pilipinas  
Lungsod ng Baguio  
**CITY ENGINEERING DEPARTMENT**

PROJECT TITLE:  
**PROPOSED CONSTRUCTION OF HAND WASHING FACILITY AND REHABILITATION OF VETERANS II DAY CARE CENTER**

LOCATION:  
BLOY, PARSONS TOWN, DISTRICT 8, BAGUIO CITY

DATE: 10-06-21  
CHECKED BY: [Signature]  
REVISIONS:

SUBMITTED BY: [Signature]  
ENGR. LEO N. DEL ROSARIO  
HEAD, PLANNING & PROGRAM DEVELOPMENT

RECOMMENDING OFFICIAL: [Signature]  
ENGR. SARAH M. B. VERZOSA, JR.  
DEC. OFFICER, ENGINEERING DEPARTMENT

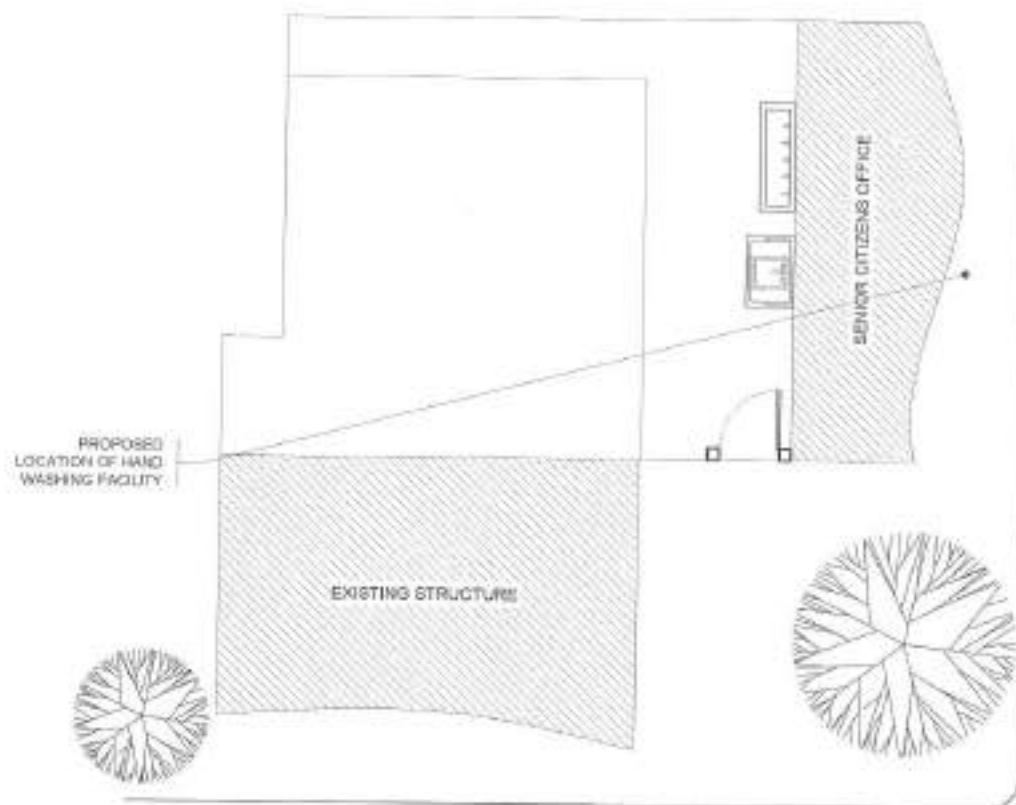
APPROVED BY: [Signature]  
HON. RA. JOSEFINA G. BELMONTE  
CITY MAYOR

PROJECT COMPANY:  
VICINITY MAP, LOCATION MAP, PERSPECTIVES

SHEET NO:  
**AR-01**  
**01/13**

A

B



## 1 SITE DEVELOPMENT PLAN

SCALE 1:1000A



Republika ng Pilipinas  
Lungsod ng Quezon  
CITY ENGINEERING DEPARTMENT

PROJECT TITLE

PROPOSED CONSTRUCTION OF HAND  
WASHING FACILITY AND  
REHABILITATION OF VETERANS II DAY  
CARE CENTER

LOCATION

DRIVE PARKING YARD, DISTRICT 6, QUEZON CITY

DRAWN BY

LRS

DATE: 10.05.21

CHECKED BY: JLM

PERSONNEL

SUBMITTED BY

*[Signature]*  
ENGR. LEO S. DEL ROSARIO  
HEAD, PLANNING & PROGRAMMING DIVISION

RECOMMENDING APPROVAL

*[Signature]*  
ENGR. BASIL R. VERZOSA, JR.  
DIC. CIVIL ENGINEERING DIVISION

APPROVED BY

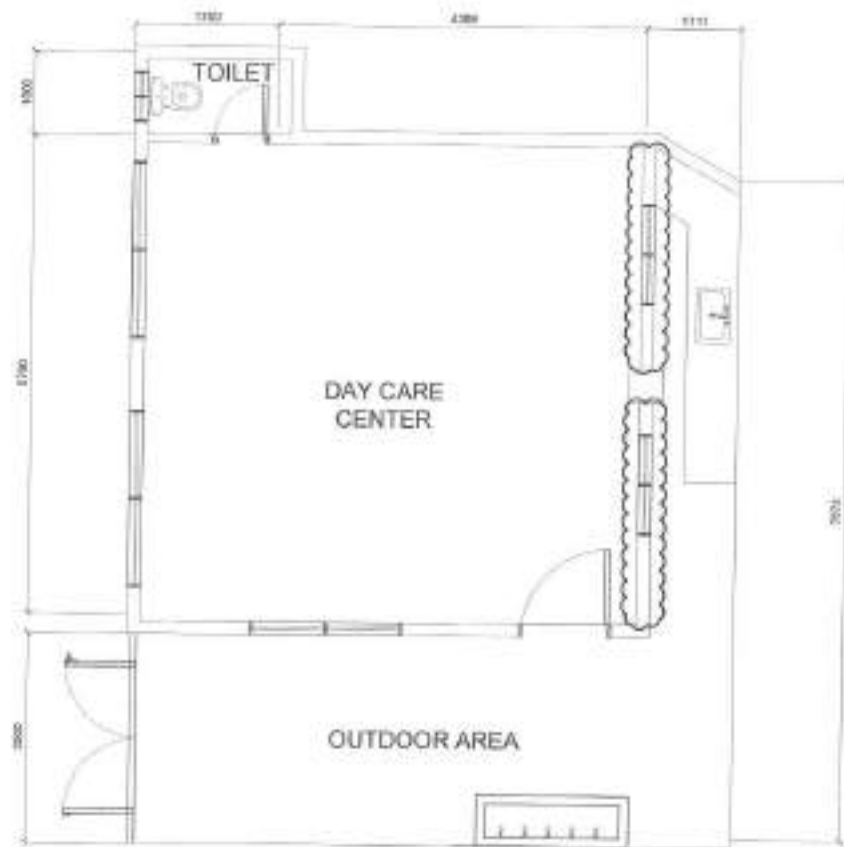
HON. MA. JOSEFINA O. BELMONTE  
CITY MAYOR

SHEET CONTENT

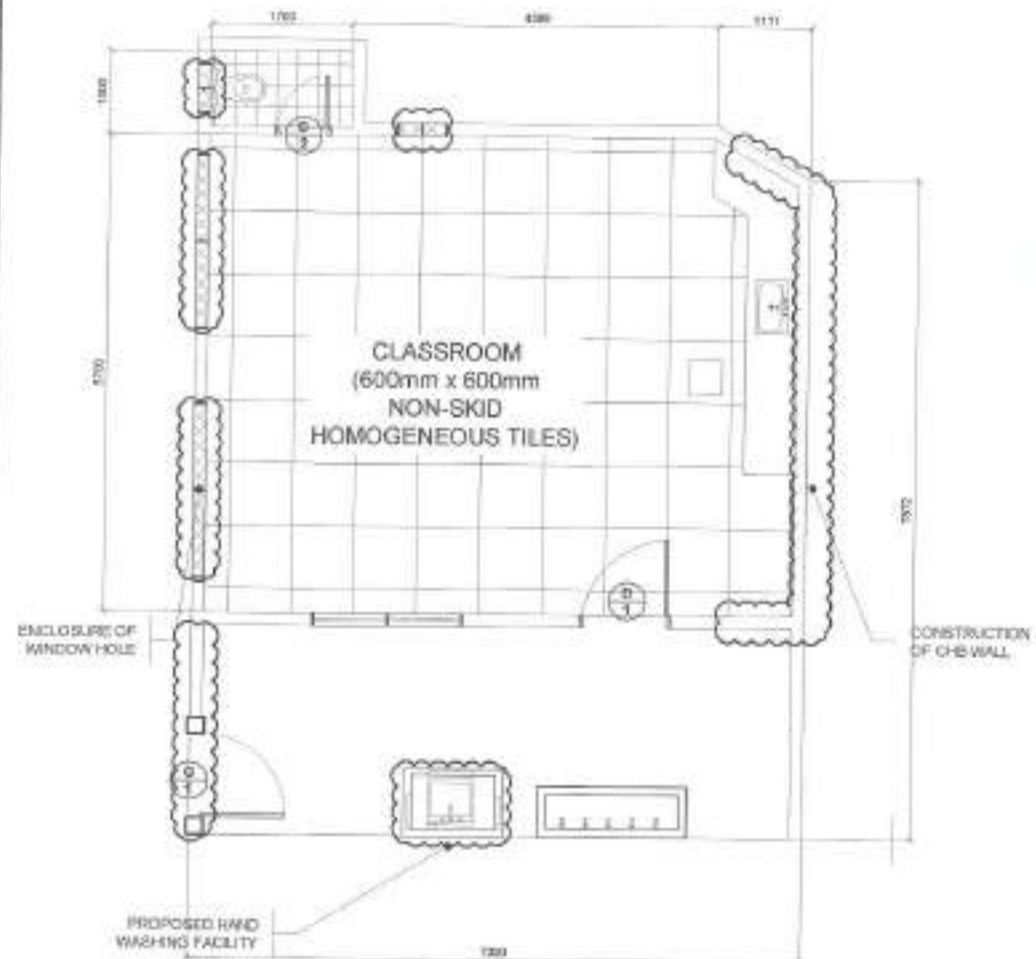
SITE DEVELOPMENT  
PLAN

SHEET NO.

AR-02  
02/13



NOTE:  
1. DEMOLITION OF CH WALL



NOTE:  
1. INTERIOR AND EXTERIOR WALLS TO BE REPAIRED  
2. ALL DOORS AND GATE TO BE REPLACED  
3. HAND WASHING FACILITY TO BE CONSTRUCTED  
4. ENCLOSURE OF WINDOW HOLE  
5. CONSTRUCTION OF CH WALL

### 1 GROUND FLOOR PLAN (EXISTING)

SCALE 1:1000

### 2 GROUND FLOOR PLAN (PROPOSED)

SCALE 1:300M



Republika ng Pilipinas  
Lungsod ng Quezon  
CITY ENGINEERING DEPARTMENT

PROJECT TITLE:  
**PROPOSED CONSTRUCTION OF HAND  
WASHING FACILITY AND  
REHABILITATION OF VETERANS II DAY  
CARE CENTER**

DRAWN BY: *[Signature]*  
DATE: 10/20/21  
CHECKED BY: *[Signature]*  
REVISION NO.

SUBMITTED BY:  
*[Signature]*  
ENGR. UED S. DEL ROSARIO  
HEAD, PLANNING & PROGRAMMING DIVISION

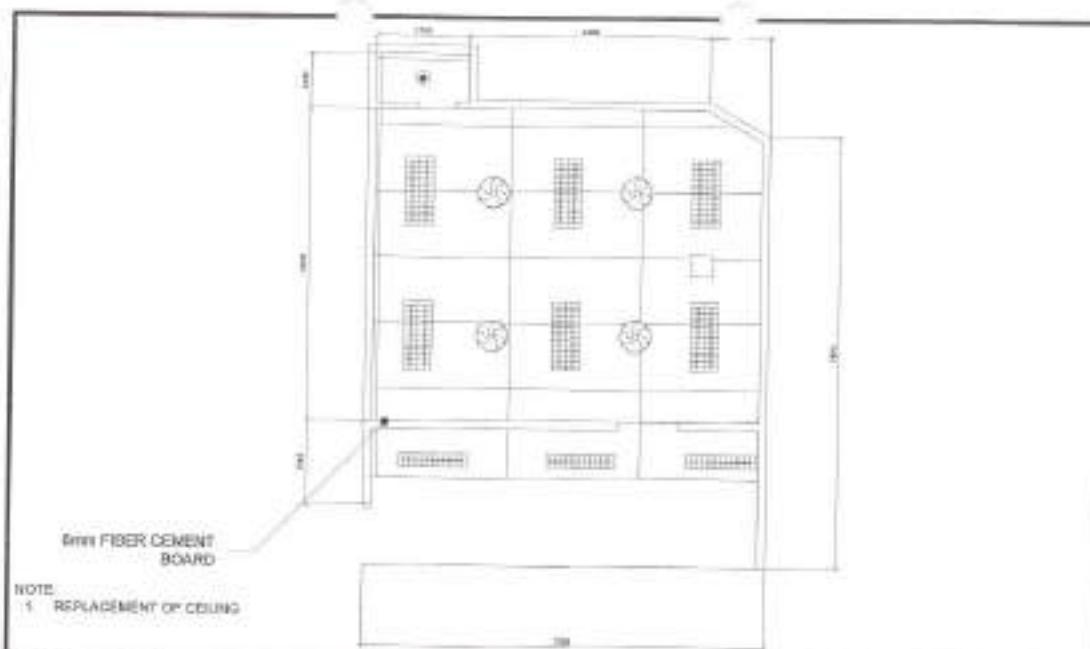
RECOMMENDATION APPROVAL:  
*[Signature]*  
ENGR. HAZEL H. VERZOSA, JR.  
DIE. OF PLANNING EQUIPMENT

APPROVED BY:  
*[Signature]*  
HON. MA. JOSEFA S. BELMONTE  
CITY ENGINEER

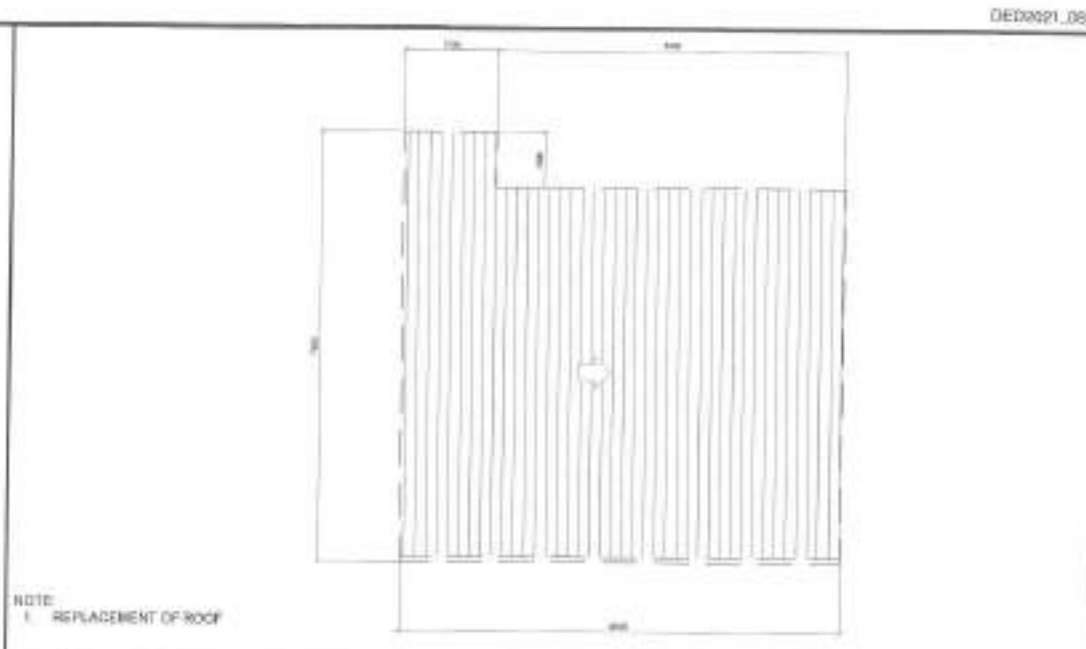
SHEET CONTENT:  
GROUND FLOOR PLAN  
(EXISTING)  
GROUND FLOOR PLAN  
(PROPOSED)

SHEET NO.  
**AR-03**  
**03/13**

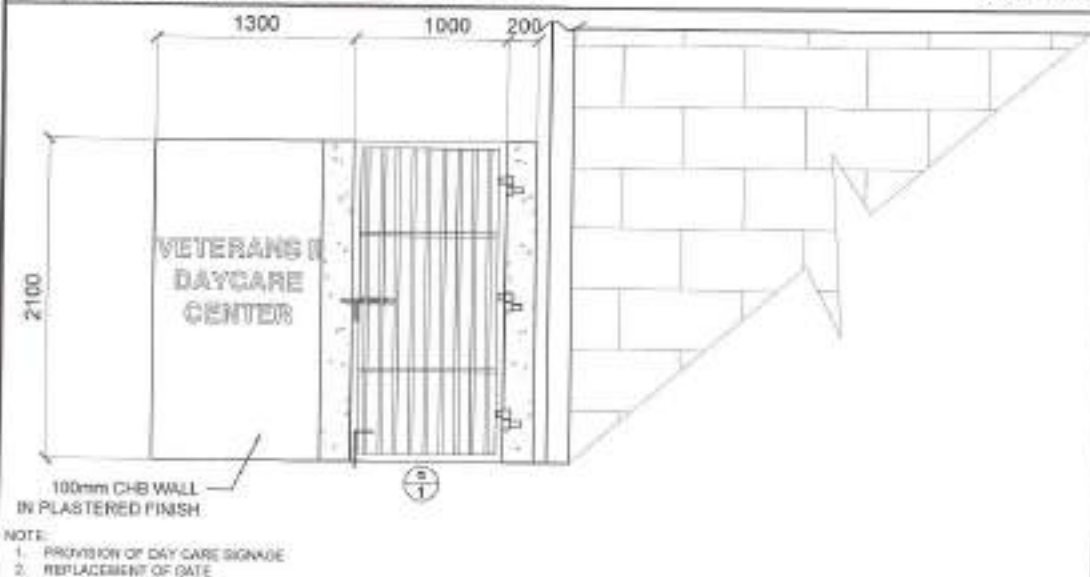


**1 REFLECTED CEILING PLAN**

SCALE 1:100A

**2 ROOF PLAN**


SCALE 1:100A

**3 GATE DETAIL**

SCALE NTS.

**4 FRONT ELEVATION**

SCALE NTS.

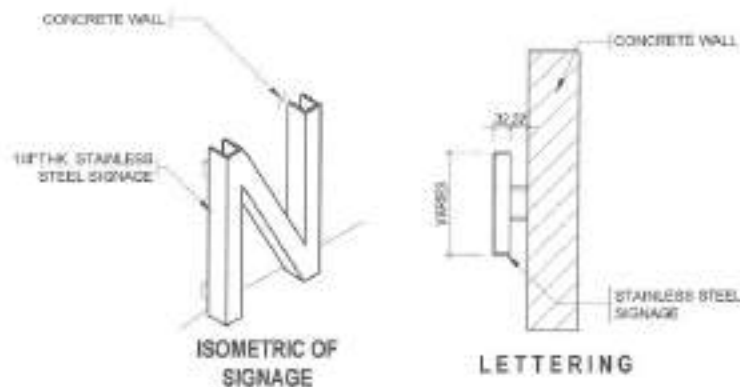
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|  <p>Republika ng Pilipinas<br/>Lungsod ng Quezon<br/>CITY ENGINEERING DEPARTMENT</p> | PROJECT TITLE:   | DRAWN BY: <i>[Signature]</i> | SUBMITTED BY:  | RECOMMENDING AGENCY:   | APPROVED BY:                               | SHEET CONTENT   | SHEET NO. |
|  | PROPOSED CONSTRUCTION OF HAND WASHING FACILITY AND REHABILITATION OF VETERANS II DAY CARE CENTER | DATE: 10.08.21               | <i>[Signature]</i>   |  |  | REFLECTED CEILING PLAN<br>ROOF PLAN<br>GATE DETAIL<br>FRONT ELEVATION | AR-04     |
|  | LOCATION:<br>BPOF RAJONG TAMAS DISTRICT 6, QUEZON CITY   | REVISIONS:                   | ENGR. LEO S. DEL ROSARIO<br>HEAD, PLANNING & PROGRAM DEVELOPMENT | ENGR. ISMAEL R. VERZOSA, JR.<br>LIC. CITY ENGINEERING SUPERVISOR | HON. MA. JOSEFINA G. BELMORTE<br>CITY MAOR |   | 04/13     |



| NAME        | ⊕                      | ⊕                      | ⊕  |
|-------------|------------------------|------------------------|--|
| NO. OF SETS | 1                      | 1                      | 1  |
| DESCRIPTION | PANEL DOOR WITH TRANOM | PVC DOOR WITH LID/WRAP | 30mm x 30mm x 8mm TUBULAR BAR (MAIN FRAME), 25mm x 25mm TUBULAR BAR (BARREL, BULL, FOOT BOLT AND HINGES) |
| LOCATION    | SMALL DOOR             | TOILET                 | MAIN GATE  |
| REMARK      | TO BE REPLACED         | TO BE REPLACED         | TO BE REPLACED   |

## 1 SCHEDULE OF DOORS AND GATE

SCALE: NTS



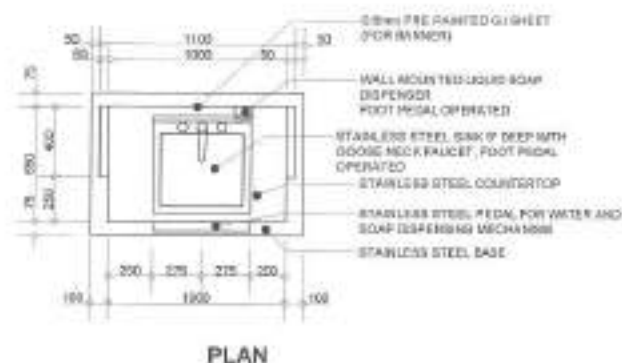
## 1 LETTERING DETAILS

SCALE: NTS



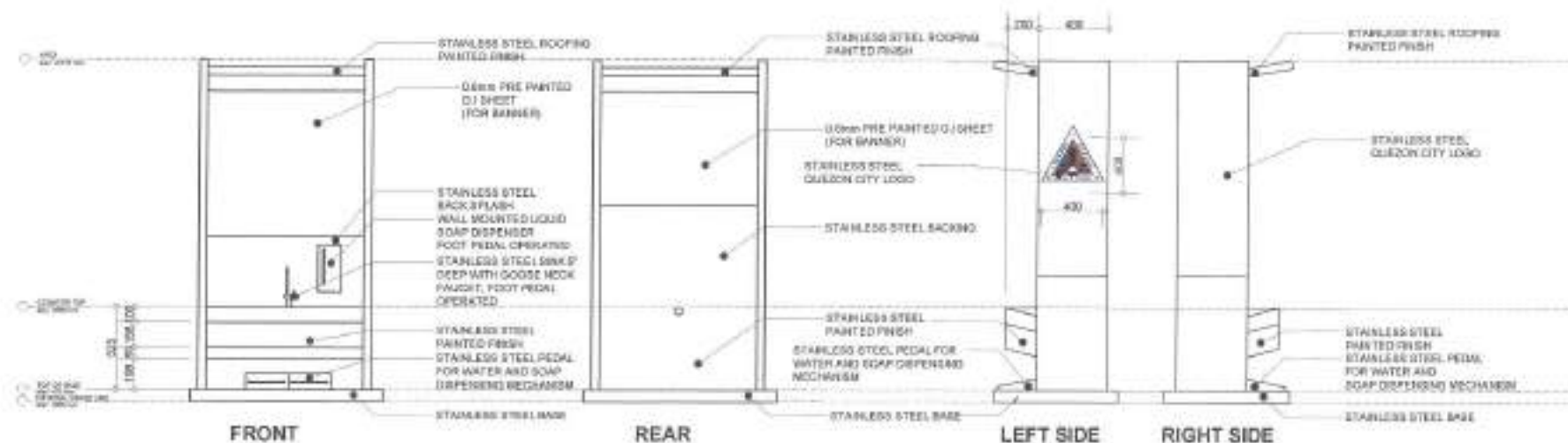
Republika ng Pilipinas  
Lungsod ng Quezon  
CITY ENGINEERING DEPARTMENT

|  |                               |                 |              |             |   |  |   |   |                |
|--|-------------------------------|-----------------|--------------|-------------|---|--|---|---|----------------|
| PROJECT TITLE:<br><b>PROPOSED CONSTRUCTION OF HAND WASHING FACILITY AND REHABILITATION OF VETERANS DAY CARE CENTER</b> | DATE: 03/21<br>CHECKED BY: JG | DESIGNED BY: JG | REVISION NO: | DATE: 03/21 | RECOMMENDED APPROVAL:   | APPROVED BY:   | SHEET CONTENT:                              | SHEET NO.                                     |                |
| LOCATION:<br>BAY, PASONG TANKO, DISTRICT 6, QUEZON CITY  |                               |                 |              |             | ENGR. JO S. DEL ROSARIO<br>HEAD, PLANNING & PROGRAM DEVELOPMENT | ENGR. EDGAR R. VERZOSA, JR.<br>DC, CITY ENGINEERING DEPARTMENT | HON. MA. JOSEFINA G. BELMONTÉ<br>CITY MAYER | SCHEDULE OF DOORS AND GATES LETTERING DETAILS | AR-05<br>05/13 |



## 1 SINGLE SINK PORTABLE HAND WASHING STALL PLAN

SCALE: 1:30M



## 2 ELEVATIONS

SCALE: 1:30M



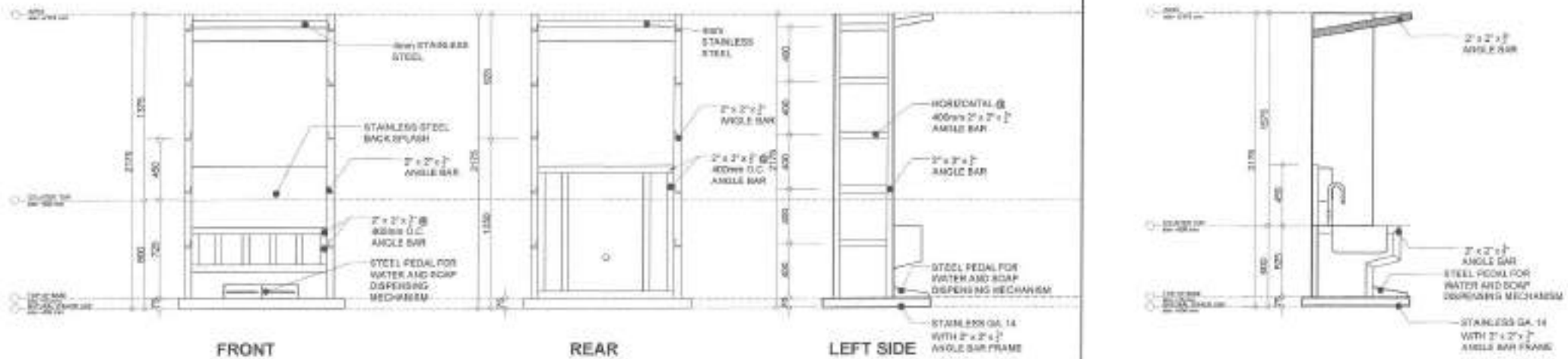
Republika ng Pilipinas  
Lungsod ng Quezon  
CITY ENGINEERING DEPARTMENT

| PROJECT TITLE:   | DESIGNED BY: | DATE:    | CHECKED BY: | REVISION NO.: | SUBMITTED BY:  | RECOMMENDING APPROVAL:   | APPROVED BY:                               | SHEET CONTENT:  | SHEET NO.:    |
|--|--------------|----------|-------------|---------------|--|--|--|---|---------------|
| PROPOSED CONSTRUCTION OF HAND WASHING FACILITY AND REHABILITATION OF VETERANS II DAY CARE CENTER | ARCO         | 03.08.21 | ARCO        |               |  |  |  | SINGLE SINK PORTABLE HAND WASHING STALL PLAN ELEVATIONS | AR-06<br>0613 |
| LOCATION:<br>8907, PASONG TAMA 3 DISTRICT, QUEZON CITY   |              |          |             |               | ENGR. LEO S. DEL ROSARIO<br>HEAD, PLANNING & PROGRAMS DIVISION | ENGR. ROMMEL R. VERZOSA, JR.<br>DTC, CITY ENGINEERING DEPARTMENT | HON. MA. JOSEFINA G. BELMONTE<br>CITY MAOR |   |               |



**1 SINGLE SINK PORTABLE HAND WASHING STALL PLAN**

SCALE: 1:30M



**2 ELEVATIONS**

SCALE: 1:30m

**3 TYPICAL SECTION**

SCALE: 1:30M



Republic of the Philippines  
Lungsod ng Pasig  
**CITY ENGINEERING DEPARTMENT**

|               |   |
|---------------|---|
| PROJECT TITLE | PROPOSED CONSTRUCTION OF HAND WASHING FACILITY AND REHABILITATION OF VETERANS DAY CARE CENTER |
| LOCATION      | DRIVE-PARKING TARI, DISTRICT 6, QUEZON CITY   |

|             |   |
|-------------|---|
| DESIGNED BY | ENGR. LEO S. DEL ROSARIO<br>HEAD, PLANNING & PROGRAM DIVISION |
| CHECKED BY  |   |
| DATE        | 12/01/21  |
| APPROVED BY |   |

|                      |  |
|----------------------|--|
| RECOMMENDED APPROVAL | ENGR. ISMAEL R. VERZOSA, JR.<br>CH. ENGINEER |
|----------------------|--|

|             |   |
|-------------|---|
| APPROVED BY | HON. MA. JOSEFINA G. BELMONTE<br>CITY MAYER |
|-------------|---|

|               |   |
|---------------|---|
| SHEET CONTENT | SINGLE SINK PORTABLE HAND WASHING STALL PLAN ELEVATIONS TYPICAL SECTION |
|---------------|---|

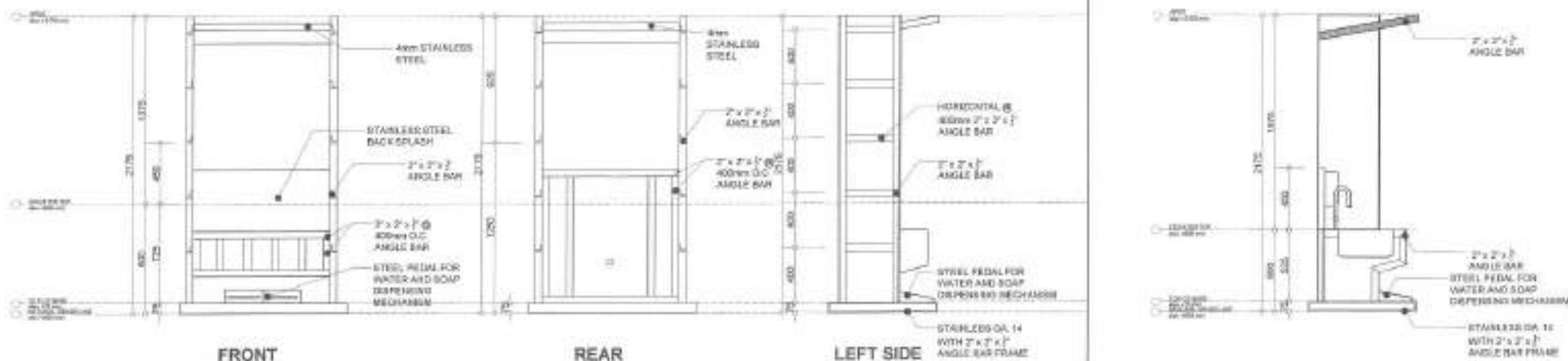
|           |                |
|-----------|----------------|
| SHEET NO. | ST-01<br>07/13 |
|-----------|----------------|





1 SINGLE SINK PORTABLE HAND WASHING STALL PLAN

SCALE: 1:300



2 ELEVATIONS

SCALE: 1:300

3 TYPICAL SECTION

SCALE: 1:300



Republika ng Pilipinas  
Lungsod ng Quezon  
CITY ENGINEERING DEPARTMENT

|  |                             |                              |
|--|-----------------------------|------------------------------|
| PROJECT TITLE:   | DESIGNER:                   | SUBMITTED BY:                |
| PROPOSED CONSTRUCTION OF HAND WASHING FACILITY AND REHABILITATION OF VETERANS II DAY CARE CENTER | DATE: 10/09/21              | ENGR. LEO S. DEL ROSARIO     |
| LOCATION:  | CHECKED BY:                 | RECOMMENDING APPROVAL:       |
| 3RD ST. PASONG TIRAS, DISTRICT 6, QUEZON CITY  | ENGR. ISAAC R. VERZOSA, JR. | HON. NA. JOSEFINA G. BELMONT |
|  | PERSONNEL:                  |                              |
|  |                             |                              |

|                                       |                                  |                              |
|---------------------------------------|----------------------------------|------------------------------|
| DESIGNER:                             | SUBMITTED BY:                    | RECOMMENDING APPROVAL:       |
| ENGR. LEO S. DEL ROSARIO              | ENGR. ISAAC R. VERZOSA, JR.      | HON. NA. JOSEFINA G. BELMONT |
| HEAD, PLANNING & PROGRAMMING DIVISION | CH. ASST. ENGINEERING DEPARTMENT | CITY ENGINEER                |

|                              |  |
|------------------------------|--|
| APPROVED BY:                 | SHEET DESIGN:  |
| HON. NA. JOSEFINA G. BELMONT | SINGLE SINK PORTABLE HAND WASHING STALL PLAN ELEVATION TYPICAL SECTION |
| CITY ENGINEER                |  |

|            |
|------------|
| SHEET NO.: |
| ST-01      |
| 07/13      |

- GENERAL**
1. CONSULT FOR NOTES AND TYPICAL DETAILS EARLY TO AVOID UNNECESSARILY CHANGING WORDS OR NOTES. VERIFY TYPICAL DETAILS AGAINST "COMBINATION CONDITIONS".
  2. IN CASE OF CONFLICTS BETWEEN DIFFERENT SPECIFICATIONS, THE MOST STRINGENT SHALL PREVAIL.
  3. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND MATERIALS BEFORE PROCEEDING. APPROVED MATERIALS AND SUBSTITUTES FOR DIMENSIONS AND MATERIALS SHALL BE APPROVED BY THE ENGINEER.
  4. FINISHES SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE ACCORDING TO THE SPECIFICATIONS AND APPROVED DETAILS. THE FINISHES SHALL BE APPROVED BY THE ENGINEER.
  5. IN CASE OF CONFLICTS BETWEEN DIFFERENT SPECIFICATIONS, THE MOST STRINGENT SHALL PREVAIL.
  6. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND MATERIALS BEFORE PROCEEDING. APPROVED MATERIALS AND SUBSTITUTES FOR DIMENSIONS AND MATERIALS SHALL BE APPROVED BY THE ENGINEER.

**CONCRETE & REINFORCEMENT**

1. ALL STRUCTURAL CONCRETE SHALL CONFORM WITH THE FOLLOWING CODES OF AMERICAN CONCRETE INSTITUTE (ACI 308):

2. ALL CONCRETE SHALL BE PLACED AND FINISHED WITHIN THE SPECIFIED TIME FRAME. THE CONCRETE SHALL BE CURED PROPERLY AND SHALL BE PROTECTED FROM DRYING SHRINKAGE.

| LOCATION             | STRENGTH          | MIX PROPORTION | MAX. SLUMP   |
|----------------------|-------------------|----------------|--------------|
| 4. SLURRY CONCRETE   | 200 PSI (14 MPa)  | 1 in (25mm)    | 4 in (100mm) |
| 5. BRASS, SOLID SLAB | 4000 PSI (28 MPa) | 3 in (75mm)    | 4 in (100mm) |
| 6. BRASS, SOLID WALL | 4000 PSI (28 MPa) | 3 in (75mm)    | 4 in (100mm) |

3. ALL REINFORCEMENT SHALL CONFORM TO THE FOLLOWING CODES OF AMERICAN INSTITUTE (ACI 308):
4. ALL REINFORCEMENT SHALL BE PLACED AND FINISHED WITHIN THE SPECIFIED TIME FRAME. THE REINFORCEMENT SHALL BE CURED PROPERLY AND SHALL BE PROTECTED FROM DRYING SHRINKAGE.
5. ALL REINFORCEMENT SHALL BE PLACED AND FINISHED WITHIN THE SPECIFIED TIME FRAME. THE REINFORCEMENT SHALL BE CURED PROPERLY AND SHALL BE PROTECTED FROM DRYING SHRINKAGE.
6. ALL REINFORCEMENT SHALL BE PLACED AND FINISHED WITHIN THE SPECIFIED TIME FRAME. THE REINFORCEMENT SHALL BE CURED PROPERLY AND SHALL BE PROTECTED FROM DRYING SHRINKAGE.
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8. ALL REINFORCEMENT SHALL BE PLACED AND FINISHED WITHIN THE SPECIFIED TIME FRAME. THE REINFORCEMENT SHALL BE CURED PROPERLY AND SHALL BE PROTECTED FROM DRYING SHRINKAGE.
9. ALL REINFORCEMENT SHALL BE PLACED AND FINISHED WITHIN THE SPECIFIED TIME FRAME. THE REINFORCEMENT SHALL BE CURED PROPERLY AND SHALL BE PROTECTED FROM DRYING SHRINKAGE.
10. ALL REINFORCEMENT SHALL BE PLACED AND FINISHED WITHIN THE SPECIFIED TIME FRAME. THE REINFORCEMENT SHALL BE CURED PROPERLY AND SHALL BE PROTECTED FROM DRYING SHRINKAGE.

| ITEM | DESCRIPTION        | QUANTITY | UNIT           |
|------|--------------------|----------|----------------|
| 1    | REINFORCEMENT BARS | 1000     | kg             |
| 2    | CONCRETE           | 1000     | m <sup>3</sup> |
| 3    | FORMWORK           | 1000     | m <sup>2</sup> |
| 4    | BRASS              | 1000     | m <sup>2</sup> |
| 5    | SLURRY CONCRETE    | 1000     | m <sup>3</sup> |

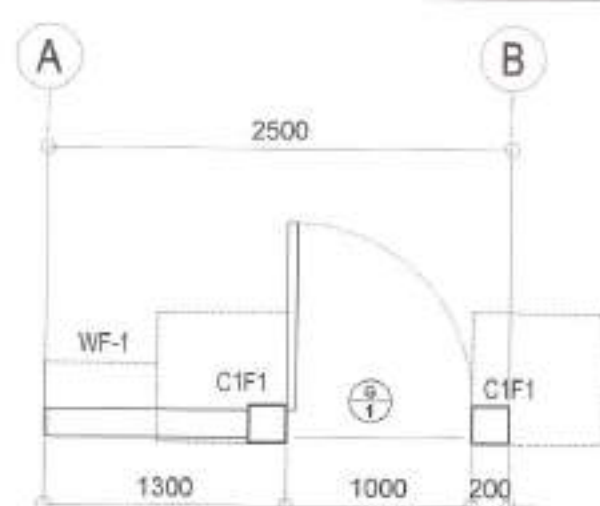
11. ALL DIMENSIONS SHALL BE IN ACCORDANCE WITH THE SPECIFICATIONS AND APPROVED DETAILS.
12. ALL DIMENSIONS SHALL BE IN ACCORDANCE WITH THE SPECIFICATIONS AND APPROVED DETAILS.
13. ALL DIMENSIONS SHALL BE IN ACCORDANCE WITH THE SPECIFICATIONS AND APPROVED DETAILS.
14. ALL DIMENSIONS SHALL BE IN ACCORDANCE WITH THE SPECIFICATIONS AND APPROVED DETAILS.
15. ALL DIMENSIONS SHALL BE IN ACCORDANCE WITH THE SPECIFICATIONS AND APPROVED DETAILS.

- FOUNDATION**
1. FOUNDATION SHALL BE IN ACCORDANCE WITH THE SPECIFICATIONS AND APPROVED DETAILS.
2. FOUNDATION SHALL BE IN ACCORDANCE WITH THE SPECIFICATIONS AND APPROVED DETAILS.
3. FOUNDATION SHALL BE IN ACCORDANCE WITH THE SPECIFICATIONS AND APPROVED DETAILS.
4. FOUNDATION SHALL BE IN ACCORDANCE WITH THE SPECIFICATIONS AND APPROVED DETAILS.
5. FOUNDATION SHALL BE IN ACCORDANCE WITH THE SPECIFICATIONS AND APPROVED DETAILS.

- MASONRY WALLS**
1. ALL MASONRY WALLS SHALL BE IN ACCORDANCE WITH THE SPECIFICATIONS AND APPROVED DETAILS.
2. ALL MASONRY WALLS SHALL BE IN ACCORDANCE WITH THE SPECIFICATIONS AND APPROVED DETAILS.
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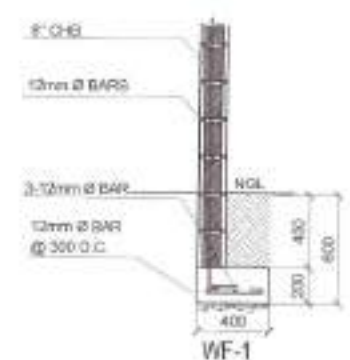
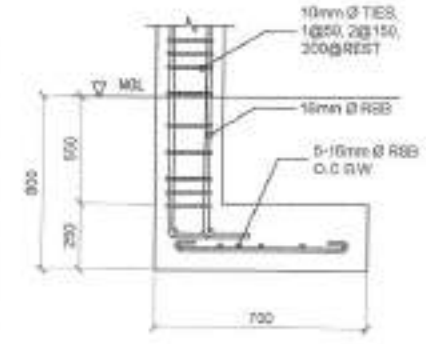
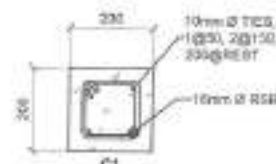
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11. ALL MASONRY WALLS SHALL BE IN ACCORDANCE WITH THE SPECIFICATIONS AND APPROVED DETAILS.
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14. ALL MASONRY WALLS SHALL BE IN ACCORDANCE WITH THE SPECIFICATIONS AND APPROVED DETAILS.
15. ALL MASONRY WALLS SHALL BE IN ACCORDANCE WITH THE SPECIFICATIONS AND APPROVED DETAILS.



**2 FOUNDATION PLAN**

SCALE 1:40M



**1 GENERAL NOTES**

**3 COLUMN AND FOOTING DETAILS**

**4 WALL FOOTING DETAILS**

Republika ng Pilipinas  
Lungsod ng Quezon  
**CITY ENGINEERING DEPARTMENT**

PROJECT TITLE:  
**PROPOSED CONSTRUCTION OF HAND WASHING FACILITY AND REHABILITATION OF VETERANS II DAY CARE CENTER**

LOCATION:  
DRY, BAKING TANG, DISTRICT, QUEZON CITY

DATE: 10/21

CHECKED BY: [Signature]

DESIGNED BY: [Signature]

APPROVED BY: [Signature]

ENGR. LEO S. DEL ROSARIO  
HEAD, PLANNING PROGRAMS DIVISION

RECOMMENDING OFFICIAL:  
ENGR. [Signature]

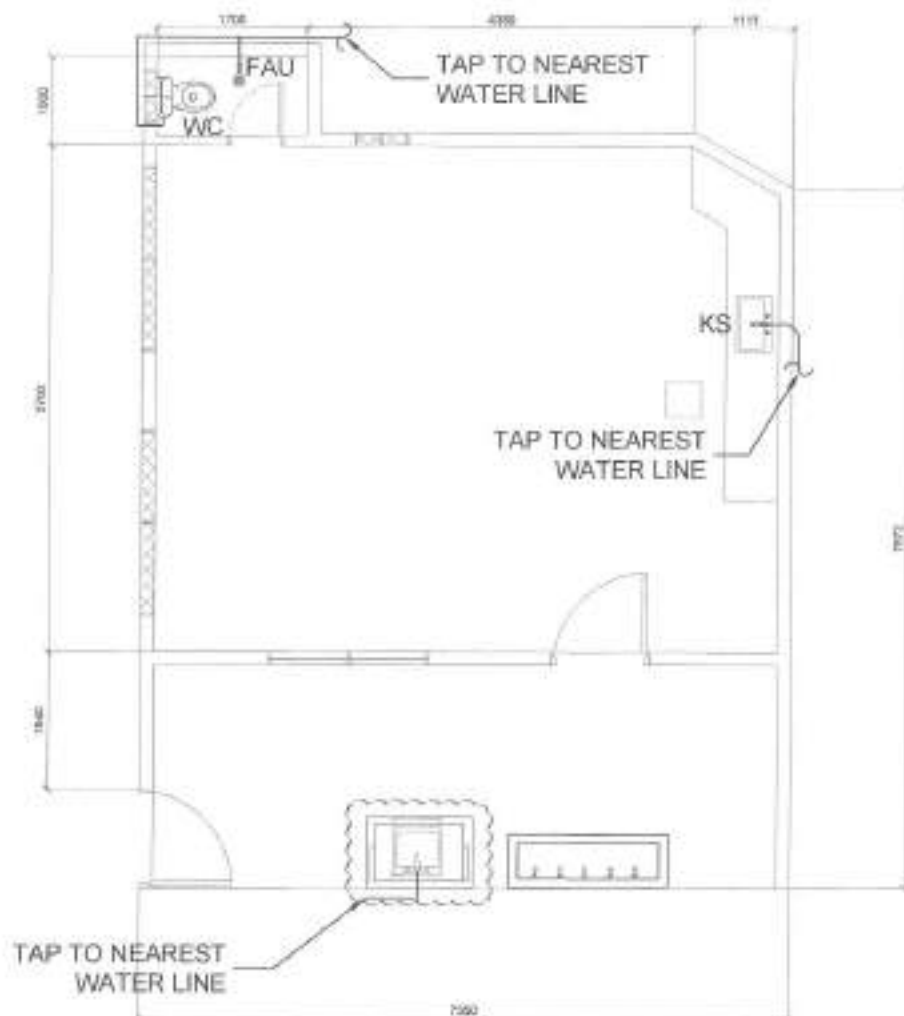
APPROVED BY:  
HON. MA. JOSEFINA G. BELMONTE  
CITY ENGINEER

PROJECT NO.: ST-02  
SHEET NO.: 08/13

**GENERAL NOTES:**

- All plumbing works and materials indicated herein shall be compliant to the provisions of the latest edition of National Plumbing Code, the rules and regulations of local authorities concerned, the rules and regulations of local utility companies and the provisions of the land developer when and where applicable.
- The plumbing layout is only diagrammatic; pipes, cleanouts and check valves shall be concealed as much as possible. It is not intended to show the actual dimension of the pipes and fixtures in the drawing but all the pipes and fixtures shall be installed as and where indicated. Any relocation will require proper execution in relation with other trades.
- The plumbing contractor shall verify all existing utilities at the site and shall coordinate the work with other trades.
- Pipes shall not be embedded in structural members unless otherwise specified or allowed.
- Minimum slope for horizontal sewer lines shall be 1% and for drain lines shall be 5%.
- Proposed plumbing utilities shall conform with the actual location, depth and invert elevation of all existing pipes/utilities.
- Connection of fixtures to pipes and fittings shall be according to manufacturer's specifications.
- All floor drains shall be vented individually.
- All clean out ferrules shall be flush-mounted to wall and shall be provided with polished cover caps. Do not install floor clean outs except at lines on grade and service areas not subject to traffic.
- All underground G.I. pipes in direct contact with soil shall be provided with two (2) coats of protective tar covering and wrapped with jute cloth thoroughly soaked in tar or asphalt.
- Provide vent stack and vent pipe thru roof of cast iron service weight as required.
- All cast iron pipes shall be of approved quality and G.I. pipes for water distribution lines shall be Schedule 40 U.S. standard weight.
- Provide gate valves to all water supply lines to fixtures.
- All hot water lines shall be provided with proper insulation where exposed.
- All individual branches to fixtures or group of fixtures and/or equipments shall be provided with air chambers or capped vertical pipe extensions of dimensions as shown:  
H = 450 mm for 19 mm Ø and larger  
H = 300 mm for 12 mm Ø and smaller
- All hose bibbs shall be 19 mm Ø (3/4" Ø) unless otherwise indicated.
- Inlet pipe of septic tank is 50 mm higher than the siphon pipe which is 30 mm higher than the outlet pipe.
- All plumbing works and manner of construction shall be under the direct supervision of an able and duly licensed Master Plumber or Registered Sanitary Engineer. Any discrepancies found in plan shall be notified to the same person.

|  |                          |  |                                   |
|--|--------------------------|--|-----------------------------------|
|  | UNION PATENT             |  | PIPE Ø                            |
|  | CHECK VALVE              |  | MILLIMETER                        |
|  | BUILDING SEWER           |  | GATE VALVE                        |
|  | BUILDING DRAIN           |  | AREA DRAIN / CATCH BASIN          |
|  | WASTE LINE               |  | WATER CLOSET                      |
|  | AREA DRAIN / CATCH BASIN |  | LAVATORY                          |
|  | FLOOR DRAIN              |  | MANHOLE                           |
|  | DIAMETER                 |  | HOSE BIBB                         |
|  | WASTE LINE               |  | STORM DRAIN LINE                  |
|  | WATER LINE               |  | VENT LINE                         |
|  | GATE VALVE               |  | VENT ABOVE CEILING                |
|  | DECK DRAIN               |  | CONCRETE PIPE / REINF. CONC. PIPE |
|  | CLEANOUT                 |  | VENT THRU ROOF                    |
|  | PIPE DOWN                |  | DIRECTION OF FLOW / SLOPE         |
|  | GREASE TRAP              |  |                                   |



NOTE:  
1. PLUMBING FIXTURES TO BE REPLACED

**1 GENERAL NOTES AND LEGENDS****2 GROUND FLOOR WATER LINE LAYOUT**

Republika ng Pilipinas  
Lungsod ng Quezon  
CITY ENGINEERING DEPARTMENT

PROJECT TITLE:  
**PROPOSED CONSTRUCTION OF HAND  
WASHING FACILITY AND  
REHABILITATION OF VETERANS II DAY  
CARE CENTER**

LOCATION:  
BPOV, PARKS TRAIL DISTRICT, QUEZON CITY

DESIGN BY:  
DATE: 10.09.21  
CHECKED BY:  
REVISION NO.:

SUBMITTED BY:  
  
ENGR. LEO S. DEL ROSARIO  
HEAD, PLUMBING PROGRAM DIVISION

RECOMMENDING OFFICER:  
  
ENGR. ISIDORO VERZOSA, JR.  
CITY ENGINEERING DEPARTMENT

APPROVED BY:  
  
HON. MA. JOSEFINA G. BELMONTE  
CITY MAOR

SHEET CONTENT:  
GENERAL WATER LINE LAYOUT

SHEET NO.:  
**PL-01**  
**09/13**





**GENERAL NOTES:**

- ALL ELECTRICAL WORK SHALL BE DONE IN ACCORDANCE WITH THE PROVISIONS OF THE LATEST EDITION OF THE PHILIPPINE ELECTRICAL CODE, THE LAWS AND ORDINANCES OF THE LOCAL CODE ENFORCING AUTHORITIES AND THE REQUIREMENTS OF THE LOCAL POWER AND TELEPHONE UTILITY COMPANY.
- THE CONTRACTOR SHALL SECURE ALL PERMITS AND PAY ALL FEES REQUIRED FOR THE WORK AND SHALL FURNISH THE OWNER THROUGH THE ARCHITECTURAL, MECHANICAL, ELECTRICAL AND PLUMBING INSPECTION AND APPROVAL FROM RELEVANT GOVERNMENT AUTHORITIES FOR COMPLETION OF WORK.
- ALL EXPOSED BRANCH CIRCUITS SHALL BE TWO CONDUITS AND FOR EXPOSED INSTALLATION SHALL BE WELL SUPPORTED BY CONDUIT CLAMPS EVERY 750MM CENTER.
- PULL BOXES SHALL BE PROVIDED BY THE CONTRACTOR WHEN NECESSARY TO INCLUDE WIRE PULLING FROM IF THESE ARE NOT INDICATED ON THE PLANS. SIZING OF ALL PULLBOXES SHALL BE DETERMINED BASED ON THE CODE REQUIREMENTS. SUBMIT SHOP DRAWINGS TO THE ENGINEER FOR APPROVAL. PRIOR TO INSTALLATION, LOCATION OF PULLBOXES SHALL BE APPROVED BY THE ARCHITECT/ENGINEER AND MUST BE REFLECTED ON THE AS-BUILT PLAN.
- ALL POWER OUTLETS AND SWITCHES SHALL BE GROUNDING TYPE WITH KNURLED SLOTS FOR GROUND.
- PROVIDE GROUND-Fault CURRENT INTERRUPTER (GFI) CIRCUIT BREAKER FOR LIGHTS MARKED "GFI" ON THE PLANS.
- ALL METALLIC CONDUITS, CABINETS AND EQUIPMENT SHALL BE PROPERLY GROUNDED AND BONDED.
- UNLESS OTHERWISE NOTED, MOUNTING HEIGHT FOR WALL MOUNTED DEVICES SHALL BE AS FOLLOWS:

- RECEPTACLE OUTLET - 300 MM AFF. (H/8MM ABOVE WORKING COUNTER)
- TELEPHONE OUTLET - 300 MM AFF
- GATE OUTLET - 800 MM AFF
- LIGHTING SWITCH - 1400 MM AFF
- PANELBOARD - 1800 MM AFF

- REFER TO MECHANICAL PLUMBING AND FIRE PROTECTION DRAWINGS FOR INTENTS AND LOCATIONS OF EQUIPMENT AS WELL AS THEIR CONTROL SEQUENCES AS INDICATED AND OR SHOWN UNDER THEIR RESPECTIVE SYMBOLS.
- ALL MATERIALS TO BE USED SHALL BE OF THE BEST QUALITY, BRAND WHEN AS SPECIFIED.
- THE DRAWINGS AND SPECIFICATIONS ARE INTENDED TO PRESENT GENERAL LAYOUT AND BRUSH OUTLINE DESCRIPTION OF THE PROJECT BUT DO NOT NECESSARILY INDICATE DESIRED ACTUAL LOCATION, LEVEL AND DISTANCES OF THE EQUIPMENT. THE CONTRACTOR IS HEREBY REQUIRED TO MAKE SUCH ADJUSTMENT AT THE JOB SITE AS LOCAL ON DISTANCES AND LEVELS ARE GOVERNED BY ACTUAL FIELD CONDITIONS.
- ANY DISCREPANCY BETWEEN THE PLANS AND SPECIFICATIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER FOR CLARIFICATION OR DECISION.
- ALL LIGHTING AND CONVENIENCE OUTLET CIRCUITS SHALL BE 20 TO 25 AMP, THINWALL COPPER WIRE UNLESS OTHERWISE NOTED. MINIMUM SIZE OF WIRE SHALL BE 1.5 SQ. MM. COPPER WIRE. ALL WIRES AND CABLES SHALL BE COLOR CODED AS FOLLOWS:

- LINE 1 - RED
- LINE 2 - YELLOW
- NEUTRAL - WHITE
- GROUND - GREEN

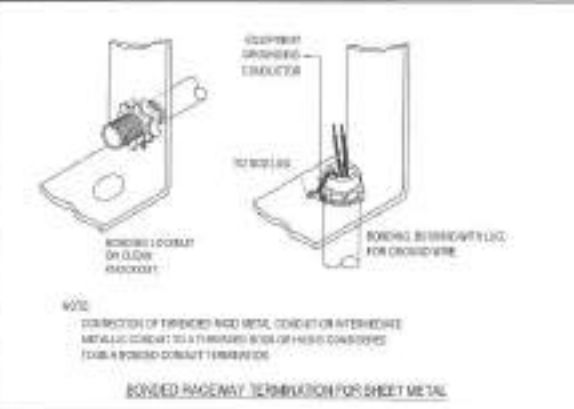
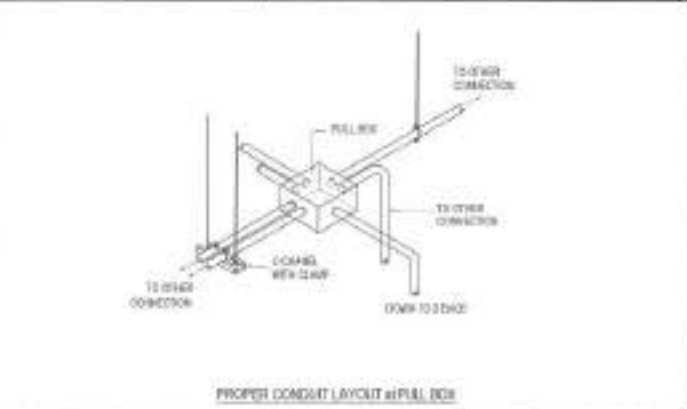
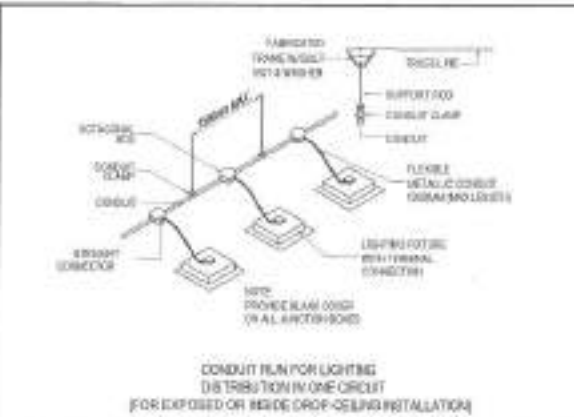
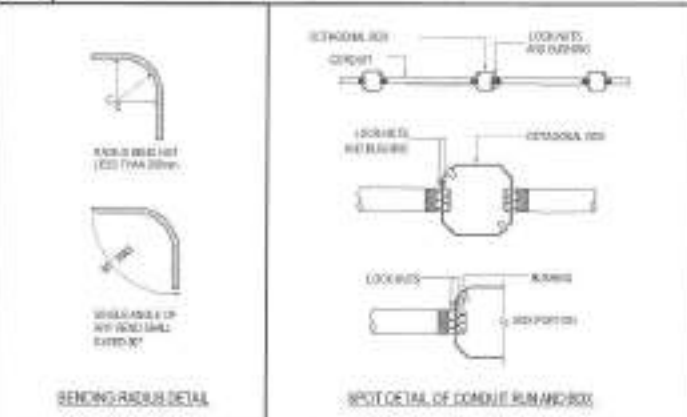
- WORK WIRE, BUTTER, ENCLOSURE SHALL BE FABRICATED FROM STEEL WITH THICKNESS AS FOLLOWS:  
MINIMUM WIDTH OF THE WIDEST SURFACE STEEL:  
UP TO 150, LONG 402.4MM GA 16 PAINTED WITH METAL PRIMER EPOXY AND TORCOAT  
OVER 150 TO 300, LONG 407.30 GA 14 PAINTED WITH METAL PRIMER EPOXY AND TORCOAT  
OVER 300 TO 450, LONG 407.30 GA 12 PAINTED WITH METAL PRIMER EPOXY AND TORCOAT  
OVER 450 TO 600, LONG 407.30 GA 10 PAINTED WITH METAL PRIMER EPOXY AND TORCOAT  
OVER 600MM GA 8 PAINTED WITH METAL PRIMER EPOXY AND TORCOAT
- ALL ELECTRICAL WORK HEREIN SHALL BE EXECUTED BY EXPERIENCED MEN UNDER THE DIRECT SUPERVISION OF A FULL-TIME LICENSED ELECTRICAL ENGINEER AND A QUALY ACCREDITED ELECTRICAL CONTRACTOR BY NAME. WORK SHALL BE NEATLY PLACED, SECURELY FINISHED AND PROPERLY FINISHED.
- TYPE OF SERVICE ENTRANCE SHALL BE SINGLE PHASE, TWO WIRE PLUS GROUND, 60 HERTZ, 200V AC NOMINAL.
- CONDUITS IN NO CASE SHALL THERE BE MORE THAN THE EQUIVALENT OF FOUR QUARTER ROUNDS IN ANY ONE RUN. ALL CONDUIT BENDS SHALL BE FIELD MADE BY USING HYDRAULIC BENDERS, WHETHER BENDING SHALL BE IN ACCORDANCE TO THE CODE REQUIREMENTS.
- UPON COMPLETION OF ELECTRICAL CONSTRUCTION WORK, INSULATION RESISTANCE TEST AND FUNCTIONALITY TEST SHALL BE PERFORMED BY THE CONTRACTOR INCLUSIVE OF THE INSTALLATION TO BE REPORTED IN DETAILS ON FORMS APPROVED BY THE QUEZON CITY ENGINEERING DEPARTMENT REPRESENTATIVE. THE GROUND RESISTANCE FOR ELECTRICAL SYSTEMS SHALL NOT BE MORE THAN 5 OHMS. COMMUNICATION GROUNDING RESISTANCE SHALL NOT EXCEED 5 OHMS.

- CIRCUIT LINE
- DUPLEX OUTLET
- ACU OUTLET
- THREE GANG SWITCH
- ONE GANG SWITCH
- SELECTOR SWITCH (FAN)

- LED TROFFER LIGHTING, 1200x300mm, RECESSED
- LED DOUBLE TROFFER LIGHTING, 600x1200mm, RECESSED
- LED ROUND RECESSED PINLIGHT
- CIRCUIT HOMERUN
- ORBIT FAN

**2 LEGEND & SYMBOLS**

SCALE: NTS



**1 GENERAL NOTES**

SCALE: NTS

**3 MISCELLANEOUS DETAILS**

SCALE: NTS

Republic of the Philippines  
Lungsod ng Quezon  
**CITY ENGINEERING DEPARTMENT**

PROJECT TITLE:  
**PROPOSED CONSTRUCTION OF HAND WASHING FACILITY AND REHABILITATION OF VETERANS II DAY CARE CENTER**

LOCATION:  
BRGY. PAKING (TAM), DISTRICT 8, QUEZON CITY

DRAWN BY: *[Signature]*  
DATE: 10/08/21  
CHECKED BY: *[Signature]*  
REVISION NO.:

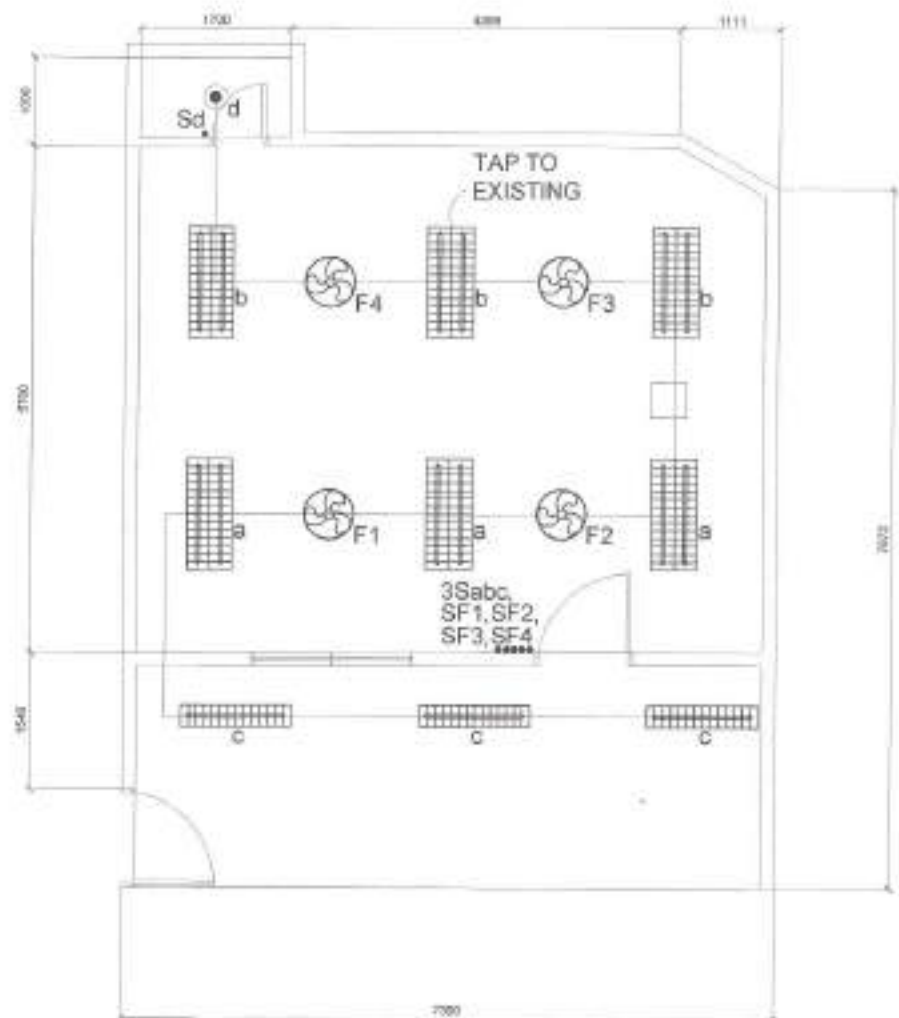
SUBMITTED BY:  
*[Signature]*  
ENGR. LEO S. DEL ROSARIO  
HEAD, PLANNING & PROGRAMMING DIVISION

RECOMMENDING APPROVAL:  
*[Signature]*  
ENGR. EDUARDO R. VERZOSA, JR.  
CH. CIVIL AND MECHANICAL DEPARTMENT

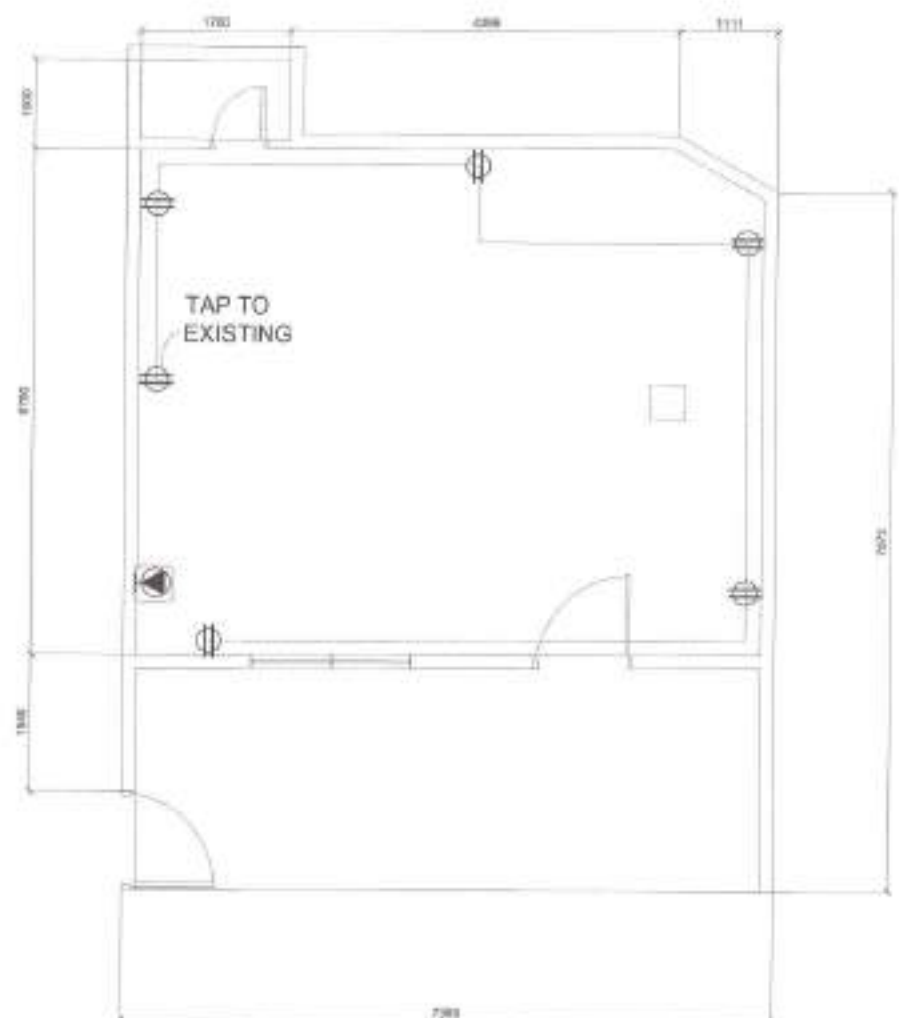
APPROVED BY:  
*[Signature]*  
HON. RA. JOSEFINA G. BELMONTTE  
CITY ENGINEER

SHEET CONTENT:  
GENERAL NOTES, LEGENDS AND SYMBOLS, MISCELLANEOUS DETAILS

SHEET NO.: **EL-01**  
11/13



NOTE:  
 1. REPLACEMENT OF LIGHTING FIXTURES AND SWITCHES  
 2. REPLACEMENT OF CEILING FAN



NOTE:  
 1. REPLACEMENT OF CONVENIENCE OUTLET  
 2. REPLACEMENT OF ACU OUTLET

**1 GROUND FLOOR LIGHTING LAYOUT**

SCALE: 1:80M

**2 GROUND FLOOR POWER LAYOUT**

SCALE: 1:80M



PROJECT TITLE:  
**PROPOSED CONSTRUCTION OF HAND WASHING FACILITY AND REHABILITATION OF VETERANS II DAY CARE CENTER**

LOCATION:  
 BRD 7, PASOYAN TRAIL DISTRICT 5, QUEZON CITY

DRAWN BY: *[Signature]*  
 DATE: 10/05/21  
 CHECKED BY: *[Signature]*  
 REVISIONS:

SUBMITTED BY:  
*[Signature]*  
**ENGR. LEO S. DEL ROSARIO**  
 HEAD, PLANNING & PROGRAMMING DIVISION

RECOMMENDED APPROVAL:  
*[Signature]*  
**ENGR. BRACERIO R. VERZOSA, JR.**  
 O.C. DIVISION CHIEF, CIVIL ENGINEERING DEPARTMENT

APPROVED BY:  
**HON. MA. JOSEFINA D. BELMONTE**  
 CITY ENGINEER

SHEET CONTENT:  
 GROUND FLOOR LIGHTING LAYOUT  
 GROUND FLOOR POWER LAYOUT

SHEET NO.:  
**EL-02**  
**1213**





## *Section VIII. Bill of Quantities*

### **Notes on the Bill of Quantities**

#### **Objectives**

The objectives of the Bill of Quantities are:

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

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

#### **Daywork Schedule**

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

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

#### **Provisional Sums**

A general provision for physical contingencies (quantity overruns) may be made by including a provisional sum in the Summary Bill of Quantities. Similarly, a contingency allowance for possible price increases should be provided as a provisional sum in the Summary Bill of Quantities. The inclusion of such provisional sums often facilitates budgetary approval by avoiding the need to request periodic supplementary approvals as the future need arises. Where such provisional sums or contingency allowances are used, the SCC should state the manner in which they will be used, and under whose authority (usually the Procuring Entity's Representative's).

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

**Signature Box**

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

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

**PROJECT TITLE : PROPOSED CONSTRUCTION OF HAND WASHING FACILITY AND  
REHABILITATION OF DAY CARE CENTER AT DISTRICT 6 / AREA XII**

**LOCATION : BARANGAY PASONG TAMO, DISTRICT 6, QUEZON CITY**

**PROJECT NO. : 22 - 00009**

**DURATION : Seventy Five (75) Calendar Days**

**BREAKDOWN OF COST**

| ITEM NO.                                   | ITEM OF WORK (DESCRIPTION)            | MATERIALS COST | LABOR COST | INDIRECT COST | AGGREGATE COST |
|--|---------------------------------------|----------------|------------|---------------|----------------|
| <b>PINGKIAN I DAY CARE CENTER</b>          |                                       |                |            |               |                |
| I  | GENERAL REQUIREMENTS                  |                |            |               |                |
| II   | CONSTRUCTION OF HAND WASHING FACILITY |                |            |               |                |
| III  | REHABILITATION OF DAY CARE CENTER     |                |            |               |                |
| <b>PINGKIAN III ZONE 3 DAY CARE CENTER</b> |                                       |                |            |               |                |
| I  | GENERAL REQUIREMENTS                  |                |            |               |                |
| II   | CONSTRUCTION OF HAND WASHING FACILITY |                |            |               |                |
| III  | REHABILITATION OF DAY CARE CENTER     |                |            |               |                |
| IV   | REHABILITATION OF STAGE               |                |            |               |                |
| <b>PINGKIAN III ZONE 2 DAY CARE CENTER</b> |                                       |                |            |               |                |
| I  | GENERAL REQUIREMENTS                  |                |            |               |                |
| II   | SITE WORKS                            |                |            |               |                |
| III  | CIVIL / STRUCTURAL WORKS              |                |            |               |                |
| IV   | ARCHITECTURAL WORKS                   |                |            |               |                |
| V  | SANITARY / PLUMBING WORKS             |                |            |               |                |
| VI   | ELECTRICAL WORKS                      |                |            |               |                |
| <b>CENTERVILLE DAY CARE CENTER</b>         |                                       |                |            |               |                |
| I  | GENERAL REQUIREMENTS                  |                |            |               |                |
| II   | CONSTRUCTION OF HAND WASHING FACILITY |                |            |               |                |
| III  | REHABILITATION OF DAY CARE CENTER     |                |            |               |                |
| <b>VETERANS II DAY CARE CENTER</b>         |                                       |                |            |               |                |
| I  | GENERAL REQUIREMENTS                  |                |            |               |                |
| II   | CONSTRUCTION OF HAND WASHING FACILITY |                |            |               |                |
| III  | REHABILITATION OF DAY CARE CENTER     |                |            |               |                |

**TOTAL COST P** \_\_\_\_\_

| ITEM NO. | ITEM OF WORK (DESCRIPTION) | MATERIALS COST | LABOR COST | INDIRECT COST | AGGREGATE COST |
|----------|----------------------------|----------------|------------|---------------|----------------|
|----------|----------------------------|----------------|------------|---------------|----------------|

LUMP SUM BID IN WORDS : \_\_\_\_\_  
\_\_\_\_\_

Contractor : \_\_\_\_\_

**BILL OF QUANTITIES**  
(Building Construction/Rehabilitation Project)

**PROJECT TITLE :** PROPOSED CONSTRUCTION OF HAND WASHING FACILITY AND REHABILITATION OF PINGKIAN 1 DAY CARE CENTER

**LOCATION :** BARANGAY PASONG TAMO, DISTRICT 6, QUEZON CITY

**PROJECT NO. :** 22 - 00009

**SCOPE OF WORK :**

- I GENERAL REQUIREMENTS include temporary enclosure, billboard, scaffolding, construction safety & health and clearing, hauling and disposal of construction materials and debris.
- II CONSTRUCTION OF HAND WASHING FACILITY.
  - a Installation of single sink portable hand washing facility.
  - b Site Works include chipping of concrete for sanitary / plumbing works.
  - c Civil / Structural Works include restoration of concrete for sanitary / plumbing works.
  - d Sanitary / Plumbing Works include installation of roughing-ins, fixtures and accessories.
- III REHABILITATION OF DAY CARE CENTER.
  - a Site Works include removal works, cleaning and clearing for painting preparation, earthworks and termite treatment.
  - b Civil / Structural Works include concrete works, masonry works, metal works and roofing works.
  - c Architectural Works include floor finishes, wall finishes, ceiling finishes, painting works, installation of doors and windows, fabricated materials and letterings.
  - d Sanitary / Plumbing Works include installation of roughing-ins, fixtures and accessories.
  - e Electrical Works include installation of roughing-ins, wirings, devices and fixtures.
- VII All necessary testing and commissioning shall be performed in accordance to standards.

| ITEM NO   | WORK DESCRIPTION & SCOPE OF WORKS                                   | QTY | UNIT  | UNIT COST            | TOTAL COST |
|-----------|---|-----|-------|----------------------|------------|
| <b>I</b>  | <b>GENERAL REQUIREMENTS</b>   |     |       |                      |            |
|           | Billboard   | 1   | unit  | ₱                    | ₱          |
|           | Clearing, Hauling and Disposal of Construction Materials and Debris | 4   | t.l.  |                      |            |
|           | Construction Safety and Health                                      | 1   | unit  |                      |            |
|           | Scaffolding (Rental)  | 37  | sq.m. |                      |            |
|           | Temporary Enclosure Around the Construction Area (h= 2.4m)          | 20  | l.m.  |                      |            |
|           |   |     |       | <b>DIRECT COST I</b> | <b>₱</b>   |
| <b>II</b> | <b>CONSTRUCTION OF HAND WASHING FACILITY</b>                        |     |       |                      |            |
| <b>A</b>  | <b>HAND WASHING FACILITY</b>  |     |       |                      |            |
|           | Single Sink Portable Hand Washing Facility                          | 2   | unit  | ₱                    | ₱          |
|           |   |     |       | MATERIALS COST-A     | ₱          |
|           |   |     |       | LABOR COST-A         |            |
|           |   |     |       | DIRECT COST-A        | ₱          |
| <b>B</b>  | <b>SITE WORKS</b>   |     |       |                      |            |
|           | Removal Works   |     |       |                      |            |
|           | Chipping of Concrete (Sanitary / Plumbing Works)                    | 2   | sq.m. | ₱                    | ₱          |
|           |   |     |       | DIRECT COST-B        | ₱          |
| <b>C</b>  | <b>CIVIL / STRUCTURAL WORKS</b>                                     |     |       |                      |            |
|           | Masonry Works   |     |       |                      |            |

| ITEM NO    | WORK DESCRIPTION & SCOPE OF WORKS                   | QTY | UNIT  | UNIT COST                | TOTAL COST |
|------------|---|-----|-------|--------------------------|------------|
|            | Restoration of Concrete (Sanitary / Plumbing Works) | 2   | sq.m. | ₱                        | ₱          |
|            |   |     |       | MATERIALS COST-C         | ₱          |
|            |   |     |       | LABOR COST-C             |            |
|            |   |     |       | DIRECT COST-C            | ₱          |
| D          | <b>SANITARY / PLUMBING WORKS</b>                    |     |       |                          |            |
|            | Sewer Line / Storm Drainage System                  |     |       |                          |            |
|            | Roughing-Ins  |     |       |                          |            |
|            | 50 mm Ø, PVC with Hub                               | 2   | piece | ₱                        | ₱          |
|            | 50mm Ø, P-Trap                                      | 2   | piece |                          |            |
|            | 50mm Ø, 1/8 Bend                                    | 7   | piece |                          |            |
|            | 100mm Ø x 50mm Ø, Wye                               | 1   | piece |                          |            |
|            | 50mm Ø, Cleanout with Adapter                       | 1   | piece |                          |            |
|            | Waterline System                                    |     |       |                          |            |
|            | Roughing-Ins  |     |       |                          |            |
|            | 20mm Ø, Pipe PPR                                    | 2   | piece |                          |            |
|            | 20mm Ø, Elbow                                       | 4   | piece |                          |            |
|            | 20mm Ø, Coupling                                    | 2   | piece |                          |            |
|            | 20mm Ø, Tee Equal                                   | 2   | piece |                          |            |
|            | Miscellaneous & Consumables                         |     |       |                          |            |
|            | 400cc Solvent Cement                                | 1   | can   |                          |            |
|            | All-Around Sealant                                  | 1   | can   |                          |            |
|            | Hacksaw Blade                                       | 1   | piece |                          |            |
|            | Teflon Tape   | 1   | roll  |                          |            |
|            | Waste Cloth   | 1   | kg    |                          |            |
|            |   |     |       | MATERIALS COST-D         | ₱          |
|            |   |     |       | LABOR COST-D             |            |
|            |   |     |       | DIRECT COST-D            | ₱          |
|            |   |     |       |                          |            |
|            |   |     |       | <b>MATERIALS COST II</b> | <b>₱</b>   |
|            |   |     |       | <b>LABOR COST II</b>     |            |
|            |   |     |       | <b>DIRECT COST II</b>    | <b>₱</b>   |
|            |   |     |       |                          |            |
| <b>III</b> | <b>REHABILITATION OF DAY CARE CENTER</b>            |     |       |                          |            |
| A          | <b>SITE WORKS</b>                                   |     |       |                          |            |
|            | Removal Works                                       |     |       |                          |            |
|            | Removal of Dilapidated Door                         | 2   | set   | ₱                        | ₱          |
|            | Removal of Dilapidated Window                       | 9   | sq.m. |                          |            |
|            | Removal of Dilapidated Gate                         | 1   | set   |                          |            |
|            | Removal of Tiles                                    | 33  | sq.m. |                          |            |
|            | Removal of Countertop                               | 2   | sq.m. |                          |            |
|            | Removal of Ceiling                                  | 78  | sq.m. |                          |            |
|            | Removal of Roofing and Accessories                  | 82  | sq.m. |                          |            |
|            | Removal of Water Closet                             | 1   | set   |                          |            |
|            | Removal of Urinal                                   | 1   | set   |                          |            |
|            | Removal of Lavatory                                 | 1   | set   |                          |            |
|            | Removal of Wall                                     | 5   | sq.m. |                          |            |
|            | Cleaning and Clearing for Painting Preparation      | 150 | sq.m. |                          |            |

| ITEM NO | WORK DESCRIPTION & SCOPE OF WORKS  | QTY | UNIT  | UNIT COST        | TOTAL COST |
|---------|--|-----|-------|------------------|------------|
|         | Excavation for Structures  | 4   | cu.m  |                  |            |
|         | Backfill and Compaction  | 4   | cu.m  |                  |            |
|         |  |     |       | Subtotal         | ₱          |
|         | Termite Treatment  | 2   | gal   | ₱                | ₱          |
|         |  |     |       | Materials Cost   | ₱          |
|         |  |     |       | Labor Cost       |            |
|         |  |     |       | Subtotal         | ₱          |
|         |  |     |       | MATERIALS COST-A | ₱          |
|         |  |     |       | LABOR COST-A     |            |
|         |  |     |       | DIRECT COST-A    |            |
| B       | CIVIL / STRUCTURAL WORKS   |     |       |                  |            |
|         | Concrete Works   |     |       |                  |            |
|         | On-Site Mix Concrete, 21 Mpa, 3/4" Gravel @ 28 Days                            | 2   | cu.m  | ₱                | ₱          |
|         | Reinforcing Steel Bars   |     |       |                  |            |
|         | Grade 40 Reinforcing Steel Bar including G.I. Tie Wire # 16                    |     |       |                  |            |
|         | 10mm Ø Column  | 215 | kg    |                  |            |
|         | 12mm Ø Wall Footing  | 48  | kg    |                  |            |
|         | Grade 60 Reinforcing Steel Bar including G.I. Tie Wire # 16                    |     |       |                  |            |
|         | 16mm Ø Footing   | 140 | kg    |                  |            |
|         | 16mm Ø Column  | 110 | kg    |                  |            |
|         | Formworks  |     |       |                  |            |
|         | Wall Footing   | 5   | sq.m  |                  |            |
|         | Footing  | 3   | sq.m  |                  |            |
|         | Column   | 12  | sq.m  |                  |            |
|         | Masonry Works  |     |       |                  |            |
|         | 100mm CHB Wall Laying, including mortar, reinforcement and two-face plastering | 29  | sq.m  |                  |            |
|         | Metal Works  |     |       |                  |            |
|         | Gate   |     |       |                  |            |
|         | 12mm Square Bar  | 15  | kg    |                  |            |
|         | 50mm Ø X 2mm Round Bar   | 14  | kg    |                  |            |
|         | 38mm Ø Barrel Bolt   | 1   | set   |                  |            |
|         | Cylindrical Hinge, Heavy Duty  | 3   | piece |                  |            |
|         | Window Screen  |     |       |                  |            |
|         | Stainless Steel Mosquito Screen with Complete Framing                          | 9   | sq.m  |                  |            |
|         | Miscellaneous & Consumables  |     |       |                  |            |
|         | Acetylene Tank (Refill)  | 1   | tank  |                  |            |
|         | Cut Off Blade  | 5   | piece |                  |            |
|         | Grinding Disc for Metal  | 5   | piece |                  |            |
|         | Oxygen Tank (Refill)   | 1   | tank  |                  |            |
|         | Welding Rod  | 1   | box   |                  |            |
|         | Roofing Works  |     |       |                  |            |
|         | Pre-painted G.I. Rib Type Roofing  | 101 | sq.m. |                  |            |
|         | Pre-painted G.I. End Flashing  | 43  | l.m.  |                  |            |
|         | Pre-Painted G.I.Ridge Roll   | 14  | l.m.  |                  |            |



| ITEM NO | WORK DESCRIPTION & SCOPE OF WORKS  | QTY | UNIT  | UNIT COST        | TOTAL COST |
|---------|--|-----|-------|------------------|------------|
|         | 12mm x 300mm Fiber Cement Fascia Board   | 43  | l.m.  |                  |            |
|         | 6mm Thk One-sided Aluminum Foil Thermal Insulation   | 101 | sq.m. |                  |            |
|         | Tekscrew   | 171 | piece |                  |            |
|         | Blind Rivets   | 217 | piece |                  |            |
|         | Silicon Sealant  | 5   | tube  |                  |            |
|         |  |     |       | MATERIALS COST-B | ₱          |
|         |  |     |       | LABOR COST-B     |            |
|         |  |     |       | DIRECT COST-B    | ₱          |
|         |  |     |       |                  |            |
| C       | ARCHITECTURAL WORKS  |     |       |                  |            |
|         | Floor Finishes   |     |       |                  |            |
|         | Floor Topping Preparation of Tile Works  | 38  | sq.m  | ₱                | ₱          |
|         | 300mm x 300mm Non-Skid Homogeneous Tiles   | 2   | sq.m  |                  |            |
|         | 400mm x 400mm Non-Skid Homogeneous Tiles   | 37  | sq.m  |                  |            |
|         | Wall Finishes  |     |       |                  |            |
|         | 300mm x 300mm Homogeneous Tiles  | 15  | sq.m  |                  |            |
|         | Ceiling Finishes   |     |       |                  |            |
|         | 6mm thk Fiber Cement Board including Metal Framing   | 96  | sq.m  |                  |            |
|         |  |     |       | Materials Cost   | ₱          |
|         |  |     |       | Labor Cost       |            |
|         |  |     |       | Subtotal         | ₱          |
|         |  |     |       |                  |            |
|         | Installation of Doors  |     |       |                  |            |
|         | D1 - (0.90m x 2.10m) Swing Type Panel Door Painted Finish  | 1   | set   | ₱                | ₱          |
|         | D2 - (0.60m x 2.10m) Swing Type PVC Door Painted Finish (Kitten White) w/ 400mm X 300mm Louver                                       | 1   | set   |                  |            |
|         | D3 - (0.80m x 2.10m) Swing Type Flush Hollow Core Painted Finish   | 1   | set   |                  |            |
|         | Door jamb  |     |       |                  |            |
|         | D1 - (0.90m x 2.10m) Swing Type Panel Door Painted Finish  | 1   | set   |                  |            |
|         | D3 - (0.80m x 2.10m) Swing Type Flush Hollow Core Door   | 1   | set   |                  |            |
|         | Hardware and Accessories   |     |       |                  |            |
|         | Door Hinges, Heavy Duty, Stainless   | 9   | set   |                  |            |
|         | Door Knob, Lever Type, Stainless   | 3   | set   |                  |            |
|         | Installation of Windows  |     |       |                  |            |
|         | W1 -(1.40m x 1.20m) Sliding Window, 6mm Thk, Clear Tempered Glass White Color Powder Coated Aluminum Frame with Complete Accessories | 5   | set   |                  |            |
|         | W2 -(0.90m x 1.20m) Sliding Window, 6mm Thk, Clear Tempered Glass White Color Powder Coated Aluminum Frame with Complete Accessories | 1   | set   |                  |            |
|         | W3 -(0.50m x 0.50m) Awning Window, 6mm Thk, Clear Tempered Glass White Color Powder Coated Aluminum Frame with Complete Accessories  | 1   | set   |                  |            |
|         | W4 -(1.40m x 1.20m) Sliding Window, 6mm Thk, Clear Tempered Glass White Color Powder Coated Aluminum Frame with Complete Accessories | 1   | set   |                  |            |

| ITEM NO | WORK DESCRIPTION & SCOPE OF WORKS                               | QTY | UNIT  | UNIT COST        | TOTAL COST |
|---------|---|-----|-------|------------------|------------|
|         |   |     |       | Materials Cost   | ₱          |
|         |   |     |       | Labor Cost       |            |
|         |   |     |       | Subtotal         | ₱          |
|         | Painting Works  |     |       |                  |            |
|         | Elastomeric Paint Finish (Exterior Wall)                        | 42  | sq.m  | ₱                | ₱          |
|         | Flat Latex Paint Finish   |     |       |                  |            |
|         | Ceiling   | 96  | sq.m  |                  |            |
|         | Interior Wall   | 104 | sq.m  |                  |            |
|         | Epoxy Enamel Paint Finish (Metal Surfaces)                      | 2   | sq.m  |                  |            |
|         | Fabricated Materials  |     |       |                  |            |
|         | Standing Cabinet (Day Care Center)                              | 6   | sq.m  |                  |            |
|         | Countertop  | 3   | l.m.  |                  |            |
|         | Letterings  |     |       |                  |            |
|         | 200mm Stainless Steel Lettering<br>"PINGKIAN I DAY CARE CENTER" | 22  | set   |                  |            |
|         |   |     |       | Material Cost    | ₱          |
|         |   |     |       | Labor Cost       |            |
|         |   |     |       | Subtotal         | ₱          |
|         | Cleaning and Re-Touching of Painting with Simple Design         | 69  | sq.m  | ₱                | ₱          |
|         |   |     |       | Subtotal         | ₱          |
|         |   |     |       | MATERIALS COST-C | ₱          |
|         |   |     |       | LABOR COST-C     |            |
|         |   |     |       | DIRECT COST-C    | ₱          |
| D       | SANITARY / PLUMBING WORKS                                       |     |       |                  |            |
|         | Sewer Line / Storm Drainage System                              |     |       |                  |            |
|         | Roughing-Ins  |     |       |                  |            |
|         | 50 mm Ø, PVC Pipe with Hub                                      | 3   | piece | ₱                | ₱          |
|         | 75 mm Ø, PVC Pipe with Hub                                      | 5   | piece |                  |            |
|         | 100mm Ø, PVC Pipe with Hub                                      | 3   | piece |                  |            |
|         | 50mm Ø, P-Trap  | 5   | piece |                  |            |
|         | 75mm Ø, P-Trap  | 1   | piece |                  |            |
|         | 50mm Ø, 1/8 Bend  | 19  | piece |                  |            |
|         | 75mm Ø, 1/8 Bend  | 3   | piece |                  |            |
|         | 100mm Ø, 1/8 Bend   | 3   | piece |                  |            |
|         | 75mm Ø, 1/4 Bend  | 3   | piece |                  |            |
|         | 75mm Ø x 50mm Ø, Tee  | 2   | piece |                  |            |
|         | 75mm Ø x 75mm Ø, Tee  | 2   | piece |                  |            |
|         | 100mm Ø x 75mm Ø, Tee   | 4   | piece |                  |            |
|         | 50mm Ø x 50mm Ø, Wye  | 2   | piece |                  |            |
|         | 100mm Ø x 50mm Ø, Wye   | 4   | piece |                  |            |
|         | 100mm Ø x 100mm Ø, Wye  | 1   | piece |                  |            |
|         | 50mm Ø, Cleanout with Adapter                                   | 1   | piece |                  |            |
|         | 100mm Ø, Cleanout with Adapter                                  | 2   | piece |                  |            |
|         | 50 mm Ø No Hub Coupling   | 2   | piece |                  |            |

| ITEM NO | WORK DESCRIPTION & SCOPE OF WORKS                                    | QTY | UNIT  | UNIT COST        | TOTAL COST |
|---------|--|-----|-------|------------------|------------|
|         | Waterline System   |     |       |                  |            |
|         | Roughing-Ins   |     |       |                  |            |
|         | 20mm Ø, PPR Pipe   | 5   | piece |                  |            |
|         | 20mm Ø, Elbow  | 15  | piece |                  |            |
|         | 20mm Ø, Coupling   | 5   | piece |                  |            |
|         | 20mm Ø, Tee Equal  | 6   | piece |                  |            |
|         | 20mm Ø, Female Threaded, Elbow                                       | 4   | piece |                  |            |
|         | Valves and Appurtenances   |     |       |                  |            |
|         | 20mmØ PPR Gate Valve   | 1   | piece |                  |            |
|         | 20mm Ø Check Valve   | 1   | piece |                  |            |
|         | Fixtures   |     |       |                  |            |
|         | Bidet with Complete Accessories, Stainless (Water Efficient)         | 1   | set   |                  |            |
|         | Floor Drain, 100mm x 100mm, Stainless                                | 2   | piece |                  |            |
|         | Grease Trap, 5GPM, Stainless   | 1   | set   |                  |            |
|         | Hose Bibb, Lever-Type, Stainless, Heavy-Duty (Water Efficient)       | 3   | set   |                  |            |
|         | Kitchen Faucet Lever Type, Stainless (Water Efficient)               | 1   | set   |                  |            |
|         | Kitchen Sink, Single Tub, Stainless                                  | 1   | set   |                  |            |
|         | Lavatory Faucet, Lever-Type, Stainless, Heavy-Duty (Water Efficient) | 1   | set   |                  |            |
|         | Lavatory, Wall-Hung  | 1   | set   |                  |            |
|         | Water Closet, Kiddy, Tank-Type (Water Efficient)                     | 1   | set   |                  |            |
|         | Soap Holder, Ceramic   | 1   | piece |                  |            |
|         | Tissue Holder, Ceramic   | 1   | set   |                  |            |
|         | Urinal, Flush Valve-Type, Kiddy (Water Efficient)                    | 1   | set   |                  |            |
|         | Accessories  |     |       |                  |            |
|         | Angle Valve, Single Way, Stainless Steel                             | 2   | piece |                  |            |
|         | Angle Valve, Two Way, Stainless Steel                                | 1   | piece |                  |            |
|         | Flexible Hose, Stainless Steel                                       | 3   | piece |                  |            |
|         | Miscellaneous & Consumables  |     |       |                  |            |
|         | 400cc Solvent Cement   | 3   | can   |                  |            |
|         | All Around Sealant   | 3   | can   |                  |            |
|         | Hacksaw Blade  | 2   | piece |                  |            |
|         | Teflon Tape  | 2   | roll  |                  |            |
|         | Waste Cloth  | 2   | kg    |                  |            |
|         |  |     |       | MATERIALS COST-D | ₱          |
|         |  |     |       | LABOR COST-D     |            |
|         |  |     |       | DIRECT COST-D    | ₱          |
| E       | ELECTRICAL WORKS   |     |       |                  |            |
|         | Roughing-ins   |     |       |                  |            |
|         | 20mmØ PVC Pipe   | 25  | piece | ₱                | ₱          |
|         | 25mmØ PVC Pipe   | 25  | piece |                  |            |
|         | 20mmØ PVC Flexible Hose  | 50  | l.m.  |                  |            |
|         | Fittings and Accessories   |     |       |                  |            |
|         | 20mmØ PVC Adaptor  | 30  | piece |                  |            |
|         | 20mmØ PVC Locknut & Bushing  | 30  | piece |                  |            |
|         | 25mmØ PVC Adaptor  | 20  | piece |                  |            |
|         | 25mmØ PVC Locknut & Bushing  | 20  | piece |                  |            |



**BILL OF QUANTITIES**  
(Building Construction/Rehabilitation Project)

**PROJECT :** PROPOSED REHABILITATION OF PINGKIAN III ZON E 2 DAY CARE CENTER

**LOCATION :** BARANGAY PASONG TAMO, DISTRICT 6, QUEZON CITY

**PROJECT NO. :** 22 - 00009

**SCOPE OF WORK :**

- I General Requirements include temporary enclosure, billboard, scaffolding, construction safety and health and clearing, hauling and disposal of construction materials and debris.
- II Site Works include removal works and cleaning and clearing for painting preparation.
- III Civil / Structural Works include masonry works, metal works and roofing works.
- IV Architectural Works include floor finishes, wall finishes, ceiling works, painting works, installation of doors and windows, fabricated materials and letterings.
- V Sanitary / Plumbing Works include installation of roughing-ins, fixtures and accessories.
- VI Electrical Works include installation of roughing-ins, wirings, devices and fixtures.
- VII All necessary testing and commissioning shall be performed in accordance to standards.

| ITEM NO    | WORK DESCRIPTION & SCOPE OF WORKS  | QTY | UNIT  | UNIT COST             | TOTAL COST |
|------------|--|-----|-------|-----------------------|------------|
| <b>I</b>   | <b>GENERAL REQUIREMENTS</b>  |     |       |                       |            |
|            | Billboard  | 1   | unit  | ₱                     | ₱          |
|            | Clearing, Hauling and Disposal of Construction Materials and Debris            | 2   | t.l.  |                       |            |
|            | Construction Safety and Health   | 1   | unit  |                       |            |
|            | Scaffolding (Rental)   | 31  | sq.m. |                       |            |
|            | Temporary Enclosure Around the Construction Area (h= 2.4m)                     | 13  | l.m.  |                       |            |
|            |  |     |       | <b>DIRECT COST I</b>  | <b>₱</b>   |
| <b>II</b>  | <b>SITE WORKS</b>  |     |       |                       |            |
|            | Removal Works  |     |       |                       |            |
|            | Removal of Dilapidated Door  | 2   | set   | ₱                     | ₱          |
|            | Removal of Dilapidated Gate  | 1   | set   |                       |            |
|            | Removal of Dilapidated Window  | 5   | sq.m. |                       |            |
|            | Removal of Tiles   | 45  | sq.m. |                       |            |
|            | Removal of Ceiling   | 60  | sq.m. |                       |            |
|            | Removal of Roofing and Accessories   | 62  | sq.m. |                       |            |
|            | Removal of Water Closet  | 1   | set   |                       |            |
|            | Removal of Lavatory  | 1   | set   |                       |            |
|            | Removal of Urinal  | 1   | set   |                       |            |
|            | Removal of Hanging Cabinet   | 1   | sq.m. |                       |            |
|            | Cleaning and Clearing for Painting Preparation                                 | 111 | sq.m. |                       |            |
|            |  |     |       | <b>DIRECT COST II</b> | <b>₱</b>   |
| <b>III</b> | <b>CIVIL / STRUCTURAL WORKS</b>  |     |       |                       |            |
|            | Masonry Works  |     |       |                       |            |
|            | 100mm CHB Wall Laying, including mortar, reinforcement and two-face plastering | 2   | sq.m  | ₱                     | ₱          |
|            | Metal Works  |     |       |                       |            |

| ITEM NO   | WORK DESCRIPTION & SCOPE OF WORKS  | QTY | UNIT  | UNIT COST                 | TOTAL COST |
|-----------|--|-----|-------|---------------------------|------------|
|           | Gate   |     |       |                           |            |
|           | 12mm Square Bar  | 38  | kg    |                           |            |
|           | 50mm Ø X 4mm Round Bar   | 78  | kg    |                           |            |
|           | 38mm Ø Barrel Bolt   | 1   | set   |                           |            |
|           | 38mmØ Double Foot Bolt   | 1   | set   |                           |            |
|           | Cylindrical Hinge, Heavy Duty  | 6   | piece |                           |            |
|           | Window Screen  |     |       |                           |            |
|           | Stainless Steel Mosquito Screen with Complete Framing  | 4   | sq.m  |                           |            |
|           | Miscellaneous & Consumables  |     |       |                           |            |
|           | Acetylene Tank (Refill)  | 1   | tank  |                           |            |
|           | Cut Off Blade  | 5   | piece |                           |            |
|           | Grinding Disc for Metal  | 5   | piece |                           |            |
|           | Oxygen Tank (Refill)   | 1   | tank  |                           |            |
|           | Welding Rod  | 1   | box   |                           |            |
|           | Roofing Works  |     |       |                           |            |
|           | Pre-painted G.I. Rib Type Roofing  | 65  | sq.m. |                           |            |
|           | Pre-painted G.I. End Flashing  | 26  | l.m.  |                           |            |
|           | Pre-Painted G.I.Ridge Roll   | 10  | l.m.  |                           |            |
|           | 12mm x 300mm Fiber Cement Fascia Board   | 26  | l.m.  |                           |            |
|           | 6mm Thk One-sided Aluminum Foil Thermal Insulation   | 65  | sq.m. |                           |            |
|           | Tekscrew   | 108 | piece |                           |            |
|           | Blind Rivets   | 132 | piece |                           |            |
|           | Silicon Sealant  | 5   | tube  |                           |            |
|           |  |     |       | <b>MATERIALS COST III</b> | <b>₱</b>   |
|           |  |     |       | <b>LABOR COST III</b>     |            |
|           |  |     |       | <b>DIRECT COST III</b>    | <b>₱</b>   |
| <b>IV</b> | <b>ARCHITECTURAL WORKS</b>   |     |       |                           |            |
|           | Floor Finishes   |     |       |                           |            |
|           | Floor Topping Preparation of Tile Works  | 31  | sq.m  | ₱                         | ₱          |
|           | 300mm x 300mm Non-Skid Homogeneous Tiles   | 3   | sq.m  |                           |            |
|           | 600mm x 600mm Non-Skid Homogeneous Tiles   | 29  | sq.m  |                           |            |
|           | Wall Finishes  |     |       |                           |            |
|           | 300mm x 300mm Homogeneous Tiles  | 8   | sq.m  |                           |            |
|           | Ceiling Works  |     |       |                           |            |
|           | 6mm thk Fiber Cement Board including Metal Framing   | 63  | sq.m  |                           |            |
|           |  |     |       | Materials Cost            | ₱          |
|           |  |     |       | Labor Cost                |            |
|           |  |     |       | Subtotal                  | ₱          |
|           | Installation of Doors  |     |       |                           |            |
|           | D1 - (0.80m x 2.10m) Swing Type Panel Door Painted Finish                                      | 1   | set   | ₱                         | ₱          |
|           | D2 - (0.60m x 2.10m) Swing Type PVC Door Painted Finish (Kitten White) w/ 400mm X 300mm Louver | 1   | set   |                           |            |
|           | Door jamb  |     |       |                           |            |
|           | D1 - (0.80m x 2.10m) Swing Type Panel Door   | 1   | set   |                           |            |
|           | Hardware and Accessories   |     |       |                           |            |
|           | Door Hinges, Heavy Duty, Stainless   | 6   | set   |                           |            |
|           | Door Knob, Lever Type, Stainless   | 2   | set   |                           |            |

| ITEM NO  | WORK DESCRIPTION & SCOPE OF WORKS  | QTY | UNIT  | UNIT COST                | TOTAL COST |
|----------|--|-----|-------|--------------------------|------------|
|          | Installation of Windows  |     |       |                          |            |
|          | W1 -(1.20m x 1.20m) Sliding Window, 6mm Thk,<br>Clear Tempered Glass White Color Powder Coated Aluminum<br>Frame with Complete Accessories | 2   | set   |                          |            |
|          | W2 -(0.60m x 0.40m) Awning Window, 6mm Thk,<br>Clear Tempered Glass White Color Powder Coated Aluminum<br>Frame with Complete Accessories  | 1   | set   |                          |            |
|          |  |     |       | Materials Cost           | ₱          |
|          |  |     |       | Labor Cost               |            |
|          |  |     |       | Subtotal                 | ₱          |
|          | Painting Works   |     |       |                          |            |
|          | Flat Latex Paint Finish  |     |       |                          |            |
|          | Ceiling  | 63  | sq.m  | ₱                        | ₱          |
|          | Interior Wall  | 75  | sq.m  |                          |            |
|          | Epoxy Enamel Paint Finish (Metal Surfaces)   | 2   | sq.m  |                          |            |
|          | Fabricated Materials   |     |       |                          |            |
|          | Hanging Cabinet  | 3   | sq.m  |                          |            |
|          | Standing Cabinet (Day Care Center)   | 5   | sq.m  |                          |            |
|          | Under Counter Cover (Aluminum)   | 3   | l.m.  |                          |            |
|          | Letterings   |     |       |                          |            |
|          | 200mm Stainless Steel Lettering<br>"PINGKIAN III ZONE 2 DAY CARE CENTER"   | 29  | set   |                          |            |
|          |  |     |       | Material Cost            | ₱          |
|          |  |     |       | Labor Cost               |            |
|          |  |     |       | Subtotal                 | ₱          |
|          | Cleaning and Re-touching of Painting with Simple Design  | 42  | sq.m  | ₱                        | ₱          |
|          |  |     |       | Subtotal                 | ₱          |
|          |  |     |       | <b>MATERIALS COST IV</b> | <b>₱</b>   |
|          |  |     |       | <b>LABOR COST IV</b>     |            |
|          |  |     |       | <b>DIRECT COST IV</b>    | <b>₱</b>   |
| <b>V</b> | <b>SANITARY / PLUMBING WORKS</b>   |     |       |                          |            |
|          | Sewer Line / Storm Drainage System   |     |       |                          |            |
|          | Roughing-Ins   |     |       |                          |            |
|          | 50 mm Ø, PVC Pipe with Hub   | 2   | piece | ₱                        | ₱          |
|          | 75 mm Ø, PVC Pipe with Hub   | 4   | piece |                          |            |
|          | 100mm Ø, PVC Pipe with Hub   | 3   | piece |                          |            |
|          | 50mm Ø, P-Trap   | 4   | piece |                          |            |
|          | 75mm Ø, P-Trap   | 1   | piece |                          |            |
|          | 50mm Ø, 1/8 Bend   | 19  | piece |                          |            |
|          | 75mm Ø, 1/8 Bend   | 5   | piece |                          |            |
|          | 75mm Ø, 1/4 Bend   | 2   | piece |                          |            |
|          | 75mm Ø x 50mm Ø, Tee   | 2   | piece |                          |            |
|          | 75mm Ø x 75mm Ø, Tee   | 2   | piece |                          |            |
|          | 100mm Ø x 75mm Ø, Tee  | 3   | piece |                          |            |
|          | 100mm Ø x 50mm Ø, Wye  | 5   | piece |                          |            |



| ITEM NO   | WORK DESCRIPTION & SCOPE OF WORKS                                    | QTY | UNIT  | UNIT COST               | TOTAL COST |
|-----------|--|-----|-------|-------------------------|------------|
|           | 100mm Ø x 75mm Ø, Wye  | 1   | piece |                         |            |
|           | 50mm Ø, Cleanout with Adapter  | 1   | piece |                         |            |
|           | 100mm Ø, Cleanout with Adapter                                       | 1   | piece |                         |            |
|           | 50mm Ø No Hub Coupling   | 2   | piece |                         |            |
|           | Waterline System   |     |       |                         |            |
|           | Roughing-Ins   |     |       |                         |            |
|           | 20mm Ø, PPR Pipe   | 3   | piece |                         |            |
|           | 20mm Ø, Elbow  | 11  | piece |                         |            |
|           | 20mm Ø, Coupling   | 3   | piece |                         |            |
|           | 20mm Ø, Tee Equal  | 7   | piece |                         |            |
|           | 20mm Ø, Female Threaded, Tee   | 7   | piece |                         |            |
|           | Valves and Appurtenances   |     |       |                         |            |
|           | 20mm Ø Gate Valve, PPR   | 1   | piece |                         |            |
|           | 20mm Ø Check Valve   | 1   | piece |                         |            |
|           | Fixtures   |     |       |                         |            |
|           | Bidet with Complete Accessories, Stainless (Water Efficient)         | 1   | set   |                         |            |
|           | Floor Drain, 100mm x 100mm, Stainless                                | 1   | piece |                         |            |
|           | Grease Trap, 5GPM, Stainless   | 1   | set   |                         |            |
|           | Hose Bibb, Lever Type, Stainless, Heavy Duty (Water Efficient)       | 6   | set   |                         |            |
|           | Kitchen Sink, Single Tub, Stainless                                  | 1   | set   |                         |            |
|           | Kitchen Sink Faucet, Stainless, Heavy-Duty (Water Efficient)         | 1   | set   |                         |            |
|           | Lavatory, Faucet, Lever Type, Stainless Heavy Duty (Water Efficient) | 1   | set   |                         |            |
|           | Lavatory, Kiddy, Wall Hung   | 1   | set   |                         |            |
|           | Soap Holder, Ceramic   | 1   | set   |                         |            |
|           | Tissue Holder, Ceramic   | 1   | set   |                         |            |
|           | Urinal, Flush Valve-Type, Kiddy(Water Efficient)                     | 1   | set   |                         |            |
|           | Water Closet, Tank-Type, Kiddy (Water Efficient)                     | 1   | set   |                         |            |
|           | Accessories  |     |       |                         |            |
|           | Angle Valve, Single Way, Stainless Steel                             | 3   | piece |                         |            |
|           | Angle Valve, Two Way, Stainless Steel                                | 1   | piece |                         |            |
|           | Flexible Hose, Stainless Steel                                       | 4   | piece |                         |            |
|           | Miscellaneous & Consumables  |     |       |                         |            |
|           | 400cc Solvent Cement   | 3   | can   |                         |            |
|           | All Around Sealant   | 3   | can   |                         |            |
|           | Hacksaw Blade  | 2   | piece |                         |            |
|           | Teflon Tape  | 2   | roll  |                         |            |
|           | Waste Cloth  | 2   | kg    |                         |            |
|           |  |     |       | <b>MATERIALS COST V</b> | <b>P</b>   |
|           |  |     |       | <b>LABOR COST V</b>     |            |
|           |  |     |       | <b>DIRECT COST V</b>    | <b>P</b>   |
| <b>VI</b> | <b>ELECTRICAL WORKS</b>  |     |       |                         |            |
|           | Roughing-ins   |     |       |                         |            |
|           | 20mmØ PVC Pipe   | 25  | piece | <b>P</b>                | <b>P</b>   |
|           | 25mmØ PVC Pipe   | 25  | piece |                         |            |
|           | 32mmØ PVC Pipe   | 6   | piece |                         |            |
|           | 15mmØ PVC Flexible Hose  | 80  | l.m.  |                         |            |
|           | Fittings and Accessories   |     |       |                         |            |

| ITEM NO | WORK DESCRIPTION & SCOPE OF WORKS  | QTY | UNIT  | UNIT COST                | TOTAL COST |
|---------|--|-----|-------|--------------------------|------------|
|         | 20mmØ PVC Adaptor  | 30  | piece |                          |            |
|         | 20mmØ PVC Locknut & Bushing  | 30  | piece |                          |            |
|         | 25mmØ PVC Adaptor  | 30  | piece |                          |            |
|         | 25mmØ PVC Locknut & Bushing  | 30  | piece |                          |            |
|         | 32mmØ PVC Adaptor  | 2   | piece |                          |            |
|         | 32mmØ PVC Elbow  | 2   | piece |                          |            |
|         | 32mmØ PVC Locknut & Bushing  | 2   | piece |                          |            |
|         | 50mm x 100mm PVC Utility Box   | 12  | piece |                          |            |
|         | 100mm x 100mm PVC Junction Box with Cover  | 15  | piece |                          |            |
|         | Wires and Cables   |     |       |                          |            |
|         | 3.5mm² THHN Wire   | 320 | l.m.  |                          |            |
|         | 5.5mm² THHN Wire   | 60  | l.m.  |                          |            |
|         | 8.0mm² THHN Wire   | 40  | l.m.  |                          |            |
|         | 2.0mm² TW Wire   | 160 | l.m.  |                          |            |
|         | 3.5mm² TW Wire   | 30  | l.m.  |                          |            |
|         | 5.5mm² TW Wire   | 20  | l.m.  |                          |            |
|         | Lighting Fixtures (Energy Efficient)   |     |       |                          |            |
|         | 18W LED Bulb   | 5   | set   |                          |            |
|         | 300mm x 1200mm, 1 x 18w LED, Troffer Type, with Complete Accessories   | 7   | set   |                          |            |
|         | E27 Receptacle   | 5   | set   |                          |            |
|         | Wiring Devices and Other Fixtures  |     |       |                          |            |
|         | Aircon Outlet, Multipurpose outlet 250V/20A  | 1   | set   |                          |            |
|         | Ground Fault Circuit Interrupter Outlet 250V/20A   | 1   | set   |                          |            |
|         | Orbit Fan with Selector Switch   | 5   | set   |                          |            |
|         | Outlet with Grounding, Two Gang  | 3   | set   |                          |            |
|         | Switch with Plate and Cover, One Gang  | 2   | set   |                          |            |
|         | Switch with Plate and Cover, Three Gang  | 1   | set   |                          |            |
|         | Panelboard   |     |       |                          |            |
|         | LPP  |     |       |                          |            |
|         | Main: 40AT, 100AF, 2P, 230V, 25 KAIC, MCCB<br>Branches: 2-30AT, 2P, 230V, BOLT-ON<br>2-20AT, 2P, 230V, BOLT-ON<br>Enclosure: Recessed NEMA 1 w/ Ground Terminals | 1   | ass.  |                          |            |
|         | Miscellaneous & Consumables  |     |       |                          |            |
|         | 400cc Solvent Cement   | 1   | can   |                          |            |
|         | Electrical Tape  | 6   | roll  |                          |            |
|         | Hacksaw Blade  | 2   | piece |                          |            |
|         | Torch with Butane  | 1   | set   |                          |            |
|         |  |     |       | <b>MATERIALS COST VI</b> | <b>₱</b>   |
|         |  |     |       | <b>LABOR COST VI</b>     |            |
|         |  |     |       | <b>DIRECT COST VI</b>    | <b>₱</b>   |

**SUMMARY**

| ITEM NO. | WORK DESCRIPTION & SCOPE OF WORKS | TOTAL COST |
|----------|-----------------------------------|------------|
|          |                                   |            |

| ITEM NO  | WORK DESCRIPTION & SCOPE OF WORKS  | QTY | UNIT | UNIT COST                   | TOTAL COST |
|--|--|-----|------|-----------------------------|------------|
| I<br>II<br>III<br>IV<br>V<br>VI  | GENERAL REQUIREMENTS<br>SITE WORKS<br>CIVIL / STRUCTURAL WORKS<br>ARCHITECTURAL WORKS<br>SANITARY / PLUMBING WORKS<br>ELECTRICAL WORKS |     |      |                             | ₱          |
| NOTE:<br><br>• Strictly enforce Health Protocols relative to the latest applicable DPWH Memorandum | Overhead, Contingencies and Miscellaneous Expenses (OCM)<br>Profit<br>VAT  |     |      | <b>TOTAL DIRECT COST</b>    | ₱          |
|  |  |     |      | <b>TOTAL ESTIMATED COST</b> | ₱          |

**BILL OF QUANTITIES**  
(Building Construction/Rehabilitation Project)

**PROJECT TITLE :** PROPOSED CONSTRUCTION OF HAND WASHING FACILITY AND REHABILITATION OF PINGKIAN III ZONE 3 DAY CARE CENTER

**LOCATION :** BARANGAY PASONG TAMO, DISTRICT 6, QUEZON CITY

**PROJECT NO. :** 22 - 00009

**SCOPE OF WORK :**

**I. GENERAL REQUIREMENTS**

A General Requirements include temporary enclosure, billboard, scaffolding, construction safety and health, and clearing, hauling and disposal of construction materials and debris.

**II. CONSTRUCTION OF HAND WASHING FACILITY**

A Installation of single sink portable hand washing facility.

B Site Works include chipping of floor.

C Civil/ Structural Works include restoration of concrete flooring.

D Sanitary/ Plumbing Works include installation of roughing-ins, and accessories.

**III. REHABILITATION OF DAY CARE**

A Site Works include removal works, application of termite treatment, cleaning and clearing for painting preparation.

B Civil/ Structural Works include masonry works, moisture protection, metal works and roofing works.

C Architectural Works include floor finishes, wall finishes, ceiling works, installation of doors and windows , painting works, fabricated materials and letterings.

D Sanitary/ Plumbing Works include installation of roughing-ins, equipment, fixtures and accessories.

E Electrical Works include installation of roughing-ins, wirings, devices, fixtures, panelboard and accessories.

**IV. REHABILITATION OF STAGE**

A Site Works include removal works and earthworks.

B Civil/ Structural Works include concrete works, masonry works, moisture protection, metal works and roofing works.

C Architectural Works include floor finishes and painting works.

**V. TESTING AND COMMISSIONING**

All necessary testing and commissioning shall be performed in accordance to standards.

| ITEM NO.  | WORK DESCRIPTION AND SCOPE OF WORKS                                 | QTY. | UNIT  | UNIT COST            | TOTAL COST |
|-----------|---|------|-------|----------------------|------------|
| <b>I</b>  | <b>GENERAL REQUIREMENTS</b>   |      |       |                      |            |
|           | Billboard   | 1    | unit  | ₱                    | ₱          |
|           | Clearing, Hauling and Disposal of Construction Materials and Debris | 11   | t.l.  |                      |            |
|           | Construction Safety and Health                                      | 1    | unit  |                      |            |
|           | Scaffolding (Rental)  | 222  | sq.m. |                      |            |
|           | Temporary Enclosure Around the Construction Area (h=2.4m)           | 21   | l.m.  |                      |            |
|           |   |      |       | <b>DIRECT COST I</b> | ₱          |
| <b>II</b> | <b>CONSTRUCTION OF HAND WASHING FACILITY</b>                        |      |       |                      |            |
| <b>A</b>  | <b>Hand Washing Facility</b>  |      |       |                      |            |
|           | Single Sink Portable Hand Washing Stall                             | 4    | unit  | ₱                    | ₱          |
|           |   |      |       | Direct Cost A        | ₱          |
| <b>B</b>  | <b>Site Works</b>   |      |       |                      |            |
|           | Chipping of Floor (Plumbing / Sanitary Works)                       | 3    | sq.m. | ₱                    | ₱          |
|           |   |      |       | Direct Cost B        | ₱          |

| ITEM NO.   | WORK DESCRIPTION AND SCOPE OF WORKS                      | QTY. | UNIT  | UNIT COST         | TOTAL COST |
|------------|--|------|-------|-------------------|------------|
| C          | Civil/ Structural Works                                  |      |       |                   |            |
|            | Restoration of Concrete Floor (Sanitary/ Plumbing Works) | 3    | sq.m. | ₱                 | ₱          |
|            |  |      |       | Materials Cost C  | ₱          |
|            |  |      |       | Labor Cost C      |            |
|            |  |      |       | Direct Cost C     | ₱          |
| D          | Sanitary/ Plumbing Works                                 |      |       |                   |            |
|            | Sewer Line / Storm Drainage System                       |      |       |                   |            |
|            | Roughing-Ins   |      |       |                   |            |
|            | 50 mm Ø, PVC Pipe with Hub                               | 5    | piece | ₱                 | ₱          |
|            | 50mm Ø, P-Trap   | 4    | piece |                   |            |
|            | 50mm Ø, 1/8 Bend   | 11   | piece |                   |            |
|            | 50mmØ x 50mmØ, Wye                                       | 1    | piece |                   |            |
|            | 100mm Ø x 50mm Ø, Wye                                    | 1    | piece |                   |            |
|            | 50mm Ø, Cleanout with Adapter                            | 2    | piece |                   |            |
|            | Waterline System   |      |       |                   |            |
|            | Roughing-Ins   |      |       |                   |            |
|            | 20mm Ø, Pipe PPR   | 4    | piece |                   |            |
|            | 20mm Ø, Coupling   | 4    | piece |                   |            |
|            | 20mm Ø, Elbow  | 2    | piece |                   |            |
|            | 20mm Ø, Tee Equal  | 4    | piece |                   |            |
|            | Valves and Appurtenances                                 |      |       |                   |            |
|            | 20mm Ø Gate Valve, PPR                                   | 1    | piece |                   |            |
|            | Miscellaneous & Consumables                              |      |       |                   |            |
|            | 400cc Solvent Cement                                     | 1    | can   |                   |            |
|            | All-Around Sealant                                       | 1    | can   |                   |            |
|            | Hacksaw Blade  | 1    | piece |                   |            |
|            | Teflon Tape  | 1    | rolls |                   |            |
|            | Waste Cloth  | 1    | kgs   |                   |            |
|            |  |      |       | Materials Cost D  | ₱          |
|            |  |      |       | Labor Cost D      |            |
|            |  |      |       | Direct Cost D     | ₱          |
|            |  |      |       | MATERIALS COST II | ₱          |
|            |  |      |       | LABOR COST II     |            |
|            |  |      |       | DIRECT COST II    | ₱          |
| <b>III</b> | <b>REHABILITATION OF DAY CARE CENTER</b>                 |      |       |                   |            |
| A          | Site Works   |      |       |                   |            |
|            | Removal Works  |      |       |                   |            |
|            | Removal of Ceiling                                       | 72   | sq.m. | ₱                 | ₱          |
|            | Removal of Door  | 4    | set   |                   |            |
|            | Removal of Masonry Wall                                  | 6    | sq.m. |                   |            |
|            | Removal of Tiles   | 64   | sq.m. |                   |            |
|            | Removal of Roofing and Accessories                       | 73   | sq.m. |                   |            |
|            | Removal of Window  | 6    | sq.m. |                   |            |
|            | Removal of Water Closet                                  | 1    | set   |                   |            |

| ITEM NO. | WORK DESCRIPTION AND SCOPE OF WORKS                | QTY. | UNIT  | UNIT COST        | TOTAL COST |
|----------|--|------|-------|------------------|------------|
|          | Chipping of Floor (Plumbing and Electrical Works)  | 15   | sq.m. |                  |            |
|          | Clearing and Cleaning for Painting Preparation     | 203  | sq.m. |                  |            |
|          |  |      |       | Subtotal         | ₱          |
|          | Termite Treatment                                  | 5    | gal   | ₱                | ₱          |
|          |  |      |       | Materials Cost   | ₱          |
|          |  |      |       | Labor Cost       |            |
|          |  |      |       | Subtotal         | ₱          |
|          |  |      |       | Materials Cost A | ₱          |
|          |  |      |       | Labor Cost A     |            |
|          |  |      |       | Direct Cost A    | ₱          |
| B        | Civil/ Structural Works                            |      |       |                  |            |
|          | Masonry Works                                      |      |       |                  |            |
|          | Restoration of Concrete (Plumbing and Electrical   | 15   | sq.m. | ₱                | ₱          |
|          | Moisture Protection                                |      |       |                  |            |
|          | Cementitious Capillary Type                        | 1    | sq.m. |                  |            |
|          | Metal Works  |      |       |                  |            |
|          | Gate 1   |      |       |                  |            |
|          | 50mmØ G.I. Pipe, sch. 40                           | 61   | kg    |                  |            |
|          | 38mm x 38mm x 4mm Angle Bar                        | 163  | kg    |                  |            |
|          | Cylindrical Hinges, Heavy Duty                     | 6    | piece |                  |            |
|          | 38mmØ Barrel Bolt                                  | 1    | set   |                  |            |
|          | 38mmØ Foot Bolt                                    | 1    | set   |                  |            |
|          | Miscellaneous & Consumables                        |      |       |                  |            |
|          | Assorted Metal Drill Bit                           | 5    | piece |                  |            |
|          | Cut Off Blade                                      | 2    | piece |                  |            |
|          | Grinding Disc for Metal                            | 4    | piece |                  |            |
|          | Welding Rod  | 1    | box   |                  |            |
|          | Roofing Works                                      |      |       |                  |            |
|          | Pre-painted G.I. Rib Type Roofing                  | 77   | sq.m. |                  |            |
|          | Pre-painted G.I. End Flashing                      | 37   | sq.m. |                  |            |
|          | 12mm x 300mm Fiber Cement Fascia Board             | 37   | l.m.  |                  |            |
|          | 6mm Thk One-sided Aluminum Foil Thermal Insulation | 77   | sq.m. |                  |            |
|          | Tekscrew   | 317  | piece |                  |            |
|          | Blind Rivets                                       | 187  | piece |                  |            |
|          | Silicon Sealant                                    | 5    | tube  |                  |            |
|          |  |      |       | Materials Cost B | ₱          |
|          |  |      |       | Labor Cost B     |            |
|          |  |      |       | Direct Cost B    | ₱          |
| C        | Architectural Works                                |      |       |                  |            |
|          | Floor Finishes                                     |      |       |                  |            |
|          | 400mm x 400mm Non-Skid Homogeneous Floor Tiles     | 6    | sq.m. | ₱                | ₱          |
|          | 600mm x 600mm Non-Skid Homogeneous Floor Tiles     | 62   | sq.m. |                  |            |
|          | Floor Topping For Preparation of Tiles Works       | 68   | sq.m. |                  |            |

| ITEM NO. | WORK DESCRIPTION AND SCOPE OF WORKS                                    | QTY. | UNIT  | UNIT COST      | TOTAL COST |
|----------|--|------|-------|----------------|------------|
|          | Wall Finishes  |      |       |                |            |
|          | 400mm x 400mm Homogenous Wall Tiles                                    | 19   | sq.m. |                |            |
|          | Ceiling Finishes   |      |       |                |            |
|          | 6mm Thk Fiber Cement Board Including Metal Framing                     | 76   | sq.m. |                |            |
|          |  |      |       | Materials Cost | ₱          |
|          |  |      |       | Labor Cost     |            |
|          |  |      |       | Subtotal       | ₱          |
|          | Installation of Doors  |      |       |                |            |
|          | D1 - (0.9m x 2.10m) Panel Door   | 1    | set   | ₱              | ₱          |
|          | D2 - (0.8m x 2.10m) Panel Door   | 1    | set   |                |            |
|          | D3 - (0.6m x 2.10m) Panel Door   | 1    | set   |                |            |
|          | D4- (0.60m x 2.10m) PVC Door with Louver                               | 1    | set   |                |            |
|          | Door Jambs   |      |       |                |            |
|          | D1 - (0.9m x 2.10m) Panel Door   | 1    | set   |                |            |
|          | D2 - (0.8m x 2.10m) Panel Door   | 1    | set   |                |            |
|          | D3 - (0.6m x 2.10m) Panel Door   | 1    | set   |                |            |
|          | Hardwares and Accessories  |      |       |                |            |
|          | Door Hinges, Heavy Duty, Stainless                                     | 12   | set   |                |            |
|          | Door Knob, Lever Type, Stainless                                       | 4    | set   |                |            |
|          | Installation of Windows  |      |       |                |            |
|          | W1 - (2.4m x 1.1m) Sliding Window Powder Coated Aluminum Framed Window | 1    | set   |                |            |
|          | W2 - (1.4m x 0.9m) Sliding Window Powder Coated Aluminum Framed Window | 1    | set   |                |            |
|          | W3 - (1.2m x 0.7m) Sliding Window Powder Coated Aluminum Framed Window | 1    | set   |                |            |
|          |  |      |       | Materials Cost | ₱          |
|          |  |      |       | Labor Cost     |            |
|          |  |      |       | Subtotal       | ₱          |
|          | Fabricated Materials   |      |       |                |            |
|          | Book Shelf (2.5m x 2.1m)   | 6    | l.m.  | ₱              | ₱          |
|          | Hanging Cabinet (2m x 0.8m)  | 2    | sq.m. |                |            |
|          | Standing Cabinet (2.5m x 1.2m)   | 4    | sq.m. |                |            |
|          | Countertop with Aluminum Cover   | 6    | l.m.  |                |            |
|          | Painting Works   |      |       |                |            |
|          | Epoxy Enamel Paint Finish (Steel Surfaces)                             | 14   | sq.m. |                |            |
|          | Elastomeric Paint Finish (Exterior Walls)                              | 95   | sq.m. |                |            |
|          | Flat Latex Paint Finish  |      |       |                |            |
|          | Interior Walls   | 43   | sq.m. |                |            |
|          | Ceiling  | 76   | sq.m. |                |            |
|          |  |      |       | Materials Cost | ₱          |
|          |  |      |       | Labor Cost     |            |
|          |  |      |       | Subtotal       | ₱          |
|          | Letterings   |      |       |                |            |
|          | 200mm Stainless Steel Lettering  | 29   | set   | ₱              | ₱          |
|          |  |      |       | Materials Cost | ₱          |



| ITEM NO. | WORK DESCRIPTION AND SCOPE OF WORKS                                  | QTY. | UNIT  | UNIT COST        | TOTAL COST |
|----------|--|------|-------|------------------|------------|
|          |  |      |       | Labor Cost       |            |
|          |  |      |       | Subtotal         | ₱          |
|          |  |      |       | Materials Cost C | ₱          |
|          |  |      |       | Labor Cost C     |            |
|          |  |      |       | Direct Cost C    | ₱          |
| D        | Sanitary/ Plumbing Works   |      |       |                  |            |
|          | Sewer Line / Storm Drainage System                                   |      |       |                  |            |
|          | Roughing-Ins   |      |       |                  |            |
|          | 50 mm Ø Pipe PVC with Hub  | 2    | piece | ₱                | ₱          |
|          | 75 mm Ø Pipe PVC with Hub  | 7    | piece |                  |            |
|          | 100mm Ø, Pipe PVC with Hub   | 7    | piece |                  |            |
|          | 50mm Ø, P-Trap   | 4    | piece |                  |            |
|          | 75mm Ø, P-Trap   | 1    | piece |                  |            |
|          | 50mm Ø, 1/8 Bend   | 23   | piece |                  |            |
|          | 75mm Ø, 1/8 Bend   | 5    | piece |                  |            |
|          | 100mm Ø, 1/8 Bend  | 3    | piece |                  |            |
|          | 75mm Ø, 1/4 Bend   | 2    | piece |                  |            |
|          | 75mm Ø x 75mm Ø, Tee   | 2    | piece |                  |            |
|          | 100mm Ø x 75mm Ø, Tee  | 3    | piece |                  |            |
|          | 100mm Ø x 50mm Ø, Wye  | 5    | piece |                  |            |
|          | 100mmØ x 75mmØ, Wye  | 1    | piece |                  |            |
|          | 100mm Ø x 100mm Ø, Wye   | 1    | piece |                  |            |
|          | 100mm Ø, Cleanout with Adapter                                       | 2    | piece |                  |            |
|          | 50 mm Ø No Hub Coupling  | 2    | piece |                  |            |
|          | Waterline System   |      |       |                  |            |
|          | Roughing-Ins   |      |       |                  |            |
|          | 20mm Ø PPR Pipe  | 7    | piece |                  |            |
|          | 20mm Ø, Elbow  | 12   | piece |                  |            |
|          | 20mm Ø, Coupling   | 7    | piece |                  |            |
|          | 20mm Ø, Tee Equal  | 9    | piece |                  |            |
|          | 20mm Ø, Female Threaded, Tee   | 4    | piece |                  |            |
|          | Valves and Appurtenances   |      |       |                  |            |
|          | 20mm Ø Gate Valve, PPR   | 1    | piece |                  |            |
|          | 20mm Ø Check Valve   | 1    | piece |                  |            |
|          | Fixtures   |      |       |                  |            |
|          | 100mm x 100mm Floor Drain, Stainless                                 | 2    | piece |                  |            |
|          | Bidet with Complete Accessories, Stainless (Water Efficient)         | 1    | set   |                  |            |
|          | Grease Trap, 5GPM, Stainless   | 1    | set   |                  |            |
|          | Hose Bibb, Lever-Type, Stainless, Heavy-Duty (Water Efficient)       | 6    | set   |                  |            |
|          | Kitchen Sink Faucet, Stainless, Heavy-Duty (Water Efficient)         | 1    | set   |                  |            |
|          | Kitchen Sink, Single Tub, Stainless                                  | 1    | set   |                  |            |
|          | Lavatory Faucet, Lever-Type, Stainless, Heavy-Duty (Water Efficient) | 1    | set   |                  |            |
|          | Lavatory, Wall-Hung  | 1    | set   |                  |            |
|          | Soap Holder, Ceramic   | 1    | piece |                  |            |

| ITEM NO. | WORK DESCRIPTION AND SCOPE OF WORKS                                  | QTY. | UNIT  | UNIT COST        | TOTAL COST |
|----------|--|------|-------|------------------|------------|
|          | Tissue Holder, Ceramic   | 1    | set   |                  |            |
|          | Urinal, Kiddie, Flush Valve-Type (Water Efficient)                   | 1    | set   |                  |            |
|          | Water Closet, Tank Type w/ Accessories, Kiddie (Water Accessories)   | 1    | set   |                  |            |
|          | Angle Valve, Single Way, Stainless                                   | 3    | piece |                  |            |
|          | Angle Valve, Two Way, Stainless                                      | 1    | piece |                  |            |
|          | Flexible Hose, Stainless Steel                                       | 4    | piece |                  |            |
|          | Miscellaneous & Consumables  |      |       |                  |            |
|          | 400cc Solvent Cement   | 4    | can   |                  |            |
|          | All-Around Sealant   | 4    | can   |                  |            |
|          | Hacksaw Blade  | 3    | piece |                  |            |
|          | Teflon Tape  | 2    | rolls |                  |            |
|          | Waste Cloth  | 2    | kgs   |                  |            |
|          |  |      |       | Materials Cost D | ₱          |
|          |  |      |       | Labor Cost D     |            |
|          |  |      |       | Direct Cost D    | ₱          |
| E        | Electrical Works   |      |       |                  |            |
|          | Roughing-ins   |      |       |                  |            |
|          | 20mmØ PVC Pipe   | 20   | piece | ₱                | ₱          |
|          | 25mmØ PVC Pipe   | 20   | piece |                  |            |
|          | 15mmØ PVC Flexible Hose  | 90   | l.m.  |                  |            |
|          | Fittings and Accessories   |      |       |                  |            |
|          | 20mmØ PVC Adaptor  | 40   | piece |                  |            |
|          | 20mmØ PVC Locknut & Bushing  | 40   | piece |                  |            |
|          | 25mmØ PVC Adaptor  | 40   | piece |                  |            |
|          | 25mmØ PVC Locknut & Bushing  | 40   | piece |                  |            |
|          | 50mm x 100mm PVC Utility Box   | 15   | piece |                  |            |
|          | 100mm x 100mm PVC Junction Box with cover                            | 20   | piece |                  |            |
|          | Wires and Cables   |      |       |                  |            |
|          | 3.5mm² THHN Wire   | 360  | l.m.  |                  |            |
|          | Lighting Fixtures (Energy Efficient)                                 |      |       |                  |            |
|          | 18W LED Bulb   | 1    | piece |                  |            |
|          | 300mm x 1200mm, 1 x 18w LED, Troffer Type, with Complete Accessories | 9    | piece |                  |            |
|          | E27 Receptacle   | 1    | piece |                  |            |
|          | Outdoor Waterproof Pillar Light Ball Shape                           | 2    | piece |                  |            |
|          | T8, 18w LED Tube light, Box type                                     | 5    | piece |                  |            |
|          | Wall Mounted Lighting  | 4    | piece |                  |            |
|          | Wiring Devices and Other Fixtures                                    |      |       |                  |            |
|          | Ground Fault Circuit Interrupter Outlet 250V/20A                     | 1    | set   |                  |            |
|          | Orbit Fan with Selector Switch                                       | 6    | set   |                  |            |
|          | Outlet with Grounding, Two Gang                                      | 6    | set   |                  |            |
|          | Switch with Plate and Cover, Single Gang                             | 2    | set   |                  |            |
|          | Switch with Plate and Cover, Two Gang                                | 1    | set   |                  |            |
|          | Switch with Plate and Cover, Three Gang                              | 1    | set   |                  |            |
|          | Miscellaneous & Consumables  |      |       |                  |            |
|          | 400cc Solvent Cement   | 1    | can   |                  |            |
|          | Electrical Tape  | 8    | roll  |                  |            |

| ITEM NO.  | WORK DESCRIPTION AND SCOPE OF WORKS                | QTY. | UNIT  | UNIT COST          | TOTAL COST |
|-----------|--|------|-------|--------------------|------------|
|           | Hacksaw Blade                                      | 2    | piece |                    |            |
|           | Torch with Butane                                  | 1    | set   |                    |            |
|           |  |      |       | Materials Cost E   | ₱          |
|           |  |      |       | Labor Cost E       |            |
|           |  |      |       | Direct Cost E      | ₱          |
|           |  |      |       | MATERIALS COST III | ₱          |
|           |  |      |       | LABOR COST III     |            |
|           |  |      |       | DIRECT COST III    | ₱          |
| <b>IV</b> | <b>REHABILITATION OF STAGE</b>                     |      |       |                    |            |
| A         | Site Works   |      |       |                    |            |
|           | Removal Works                                      |      |       |                    |            |
|           | Removal of Roofing and Accessories                 | 52   | sq.m. | ₱                  | ₱          |
|           | Removal of Concrete Slab                           | 21   | sq.m. |                    |            |
|           | Chipping of Floor (Electrical Works)               | 3    | sq.m. |                    |            |
|           | Layout and Staking                                 | 50   | sq.m. |                    |            |
|           | Site Clearing and Preparation                      | 50   | sq.m. |                    |            |
|           | Excavation for Structures                          | 7    | cu.m. |                    |            |
|           |  |      |       |                    |            |
|           | Gravel Bedding                                     | 1    | cu.m. |                    |            |
|           | Soil Protection                                    | 9    | sq.m. |                    |            |
|           | Imported Earthfill                                 | 4    | cu.m. |                    |            |
|           |  |      |       | Materials Cost     | ₱          |
|           |  |      |       | Labor Cost         |            |
|           |  |      |       | Subtotal           | ₱          |
|           |  |      |       |                    |            |
|           | Backfill and Compaction                            | 6    | cu.m. | ₱                  | ₱          |
|           |  |      |       | Subtotal           | ₱          |
|           |  |      |       |                    |            |
|           |  |      |       | Materials Cost A   | ₱          |
|           |  |      |       | Labor Cost A       |            |
|           |  |      |       | Direct Cost A      | ₱          |
| B         | Civil/ Structural Works                            |      |       |                    |            |
|           | Concrete Works                                     |      |       |                    |            |
|           | On-Site Mix Concrete, 21MPa, 3/4" Gravel @ 28 days |      |       |                    |            |
|           | Column Footing                                     | 2    | cu.m. | ₱                  | ₱          |
|           | Wall Footing                                       | 2    | cu.m. |                    |            |
|           | Column Pedestal                                    | 1    | cu.m. |                    |            |
|           | Slab on Fill                                       | 2    | cu.m. |                    |            |
|           | Reinforcing Steel Bars                             |      |       |                    |            |
|           | Grade 40 Reinforcing Steel Bar including G.I. Tie  |      |       |                    |            |
|           | 10mm Ø Wall Footing                                | 11   | kg    |                    |            |
|           | 10mm Ø Column Pedestal                             | 52   | kg    |                    |            |
|           | 10mm Ø Slab  | 63   | kg    |                    |            |
|           | 12mm Ø Wall Footing                                | 25   | kg    |                    |            |
|           | Grade 60 Reinforcing Steel Bar including G.I. Tie  |      |       |                    |            |

| ITEM NO. | WORK DESCRIPTION AND SCOPE OF WORKS                | QTY. | UNIT  | UNIT COST        | TOTAL COST |
|----------|--|------|-------|------------------|------------|
|          | 16mm Ø Column Footing                              | 144  | kg    |                  |            |
|          | 16mm Ø Column Pedestal                             | 85   | kg    |                  |            |
|          | Formworks  |      |       |                  |            |
|          | Column Footing                                     | 9    | sq.m. |                  |            |
|          | Column Pedestal                                    | 9    | sq.m. |                  |            |
|          | Slab on Fill                                       | 2    | sq.m. |                  |            |
|          | Wall Footing                                       | 6    | sq.m. |                  |            |
|          | Scaffolding and Shoring                            |      |       |                  |            |
|          | Column Pedestal                                    | 2    | l.m.  |                  |            |
|          | Masonry Works                                      |      |       |                  |            |
|          | Restoration of Concrete (Electrical Works)         | 3    | sq.m. |                  |            |
|          | Thermal Protection                                 |      |       |                  |            |
|          | Vapor Barrier                                      | 31   | sq.m. |                  |            |
|          | Metal Works  |      |       |                  |            |
|          | Steel Canopy                                       |      |       |                  |            |
|          | 100mmØ G.I. Pipe, Sch. 40                          | 398  | kg    |                  |            |
|          | 200mm x 200mm x 4mm Base Plate                     | 11   | kg    |                  |            |
|          | 4mm Wing Plate                                     | 9    | kg    |                  |            |
|          | 50mm x 50mm x 6mm Angle Bar                        | 441  | kg    |                  |            |
|          | 50mm x 100mm x 1.2mm C-Purlins                     | 170  | kg    |                  |            |
|          | 10mmØ Sagrod                                       | 45   | kg    |                  |            |
|          | 16mmØ x 200mm Anchor Bolt                          | 32   | piece |                  |            |
|          | Miscellaneous & Consumables                        |      |       |                  |            |
|          | Assorted Metal Drill Bit                           | 5    | piece |                  |            |
|          | Cut Off Blade                                      | 2    | piece |                  |            |
|          | Grinding Disc for Metal                            | 4    | piece |                  |            |
|          | Welding Rod  | 1    | box   |                  |            |
|          | Roofing Works                                      |      |       |                  |            |
|          | Pre-Painted G.I. Rib Type Roofing                  | 54   | sq.m. |                  |            |
|          | Pre-Painted G.I. End Flashing                      | 22   | sq.m. |                  |            |
|          | 12mm x 300mm Fiber Cement Fascia Board             | 33   | l.m.  |                  |            |
|          | 6mm Thk One-sided Aluminum Foil Thermal Insulation | 54   | sq.m. |                  |            |
|          | Tekscrew   | 258  | piece |                  |            |
|          | Blind Rivets                                       | 109  | piece |                  |            |
|          | Silicon Sealant                                    | 5    | tube  |                  |            |
|          |  |      |       | Materials Cost B | ₱          |
|          |  |      |       | Labor Cost B     |            |
|          |  |      |       | Direct Cost B    | ₱          |
|          |  |      |       |                  |            |
| C        | Architectural Works                                |      |       |                  |            |
|          | Floor Finishes                                     |      |       |                  |            |
|          | Plain Cement Finish                                | 20   | sq.m. | ₱                | ₱          |
|          | Painting Works                                     |      |       |                  |            |
|          | Epoxy Enamel Paint Finish (Steel Surfaces)         | 54   | sq.m. |                  |            |
|          | Elastomeric Paint Finish (Exterior Walls)          | 5    | sq.m. |                  |            |
|          |  |      |       | Materials Cost C | ₱          |
|          |  |      |       | Labor Cost C     |            |
|          |  |      |       | Direct Cost C    | ₱          |

| ITEM NO. | WORK DESCRIPTION AND SCOPE OF WORKS | QTY. | UNIT | UNIT COST         | TOTAL COST |
|----------|-------------------------------------|------|------|-------------------|------------|
|          |                                     |      |      |                   |            |
|          |                                     |      |      | MATERIALS COST IV | ₱          |
|          |                                     |      |      | LABOR COST IV     |            |
|          |                                     |      |      | DIRECT COST IV    | ₱          |
|          |                                     |      |      |                   |            |

**SUMMARY**

| ITEM NO   | WORK DESCRIPTION AND SCOPE OF WORKS   | TOTAL COST              |
|---|---|-------------------------|
| I<br>II<br>III<br>IV  | GENERAL REQUIREMENTS<br>CONSTRUCTION OF HAND WASHING FACILITY<br>REHABILITATION OF DAY CARE CENTER<br>REHABILITATION OF STAGE   | ₱                       |
| <b>NOTE:</b>  |   |                         |
| <ul style="list-style-type: none"> <li>Strictly enforce health protocols relative to the latest applicable DPWH memorandum</li> <li>Availability/ legality of the site shall be the responsibility of the end-user / barangayofficial and a requirement prior to bidding</li> </ul> | <p style="text-align: right;"><b>TOTAL DIRECT COST</b></p> <p style="text-align: center;">Overhead, Contingencies and Miscellaneous<br/>and Consumables Expenses (OCM)</p> <p style="text-align: right;">Profit<br/>VAT</p> <p style="text-align: right;"><b>TOTAL ESTIMATED COST</b></p> | <p>₱</p> <hr/> <p>₱</p> |

**BILL OF QUANTITIES**  
(Building Construction/Rehabilitation Project)

**PROJECT TITLE :** PROPOSED CONSTRUCTION OF HAND WASHING FACILITY AND REHABILITATION OF CENTERVILLE DAY CARE CENTER

**LOCATION :** BARANGAY PASONG TAMO, DISTRICT 6, QUEZON CITY

**PROJECT NO. :** 22 - 00009

**SCOPE OF WORK :**

I GENERAL REQUIREMENTS

1.) General Requirements include temporary enclosure billboard, construction safety and health, scaffolding, and clearing, hauling and disposal of construction materials and debris.

II CONSTRUCTION OF HAND WASHING FACILITY

1.) Supply and installation of single sink portable hand washing facility.  
2.) Sanitary/Plumbing Works include installation of roughing-ins, fixtures and accessories.

III REHABILITATION OF DAY CARE CENTER

1.) Site Works include demolition / removal works, cleaning and clearing for painting preparation.  
2.) Civil / Structural Works include masonry works, metal works, window screen, and roofing works.  
3.) Architectural Works include floor, wall and ceiling finishes, painting works, installation of doors and windows, and letterings.  
4.) Sanitary/Plumbing Works include installation of roughing-ins, fixtures and accessories.  
5.) Electrical Works include installation of roughing-ins, wirings, fixtures and accessories.

IV All necessary testing and commissioning shall be performed in accordance to standards.

| ITEM NO.  | WORK DESCRIPTION & SCOPE OF WORKS                                   | QTY. | UNIT  | UNIT COST            | TOTAL COST |
|-----------|---|------|-------|----------------------|------------|
| <b>I</b>  | <b>GENERAL REQUIREMENTS</b>   |      |       |                      |            |
|           | Billboard   | 1    | unit  | ₱                    | ₱          |
|           | Clearing, Hauling and Disposal of Construction Materials and Debris | 2    | t.l.  |                      |            |
|           | Construction Safety and Health                                      | 1    | unit  |                      |            |
|           | Scaffolding (Rental)  | 102  | sq.m. |                      |            |
|           | Temporary Enclosure around the Construction Area (H=2.4m)           | 50   | l.m.  |                      |            |
|           |   |      |       | <b>DIRECT COST I</b> | <b>₱</b>   |
| <b>II</b> | <b>CONSTRUCTION OF HAND WASHING FACILITY</b>                        |      |       |                      |            |
| <b>A</b>  | <b>Hand Washing Facility</b>  |      |       |                      |            |
|           | Single Sink Portable Hand Washing Facility                          | 3    | unit  | ₱                    | ₱          |
|           |   |      |       | Direct Cost A        | ₱          |
| <b>B</b>  | <b>Sanitary / Plumbing Works</b>                                    |      |       |                      |            |
|           | Sanitary Line / Sewer Line / Storm Drainage System                  |      |       |                      |            |
|           | 50mm Ø PVC Pipe with Hub  | 3    | piece | ₱                    | ₱          |
|           | 50mm Ø x 50mm Ø PVC 1/4 Bend  | 6    | piece |                      |            |
|           | Waterline System  |      |       |                      |            |
|           | 25mm Ø PPR Pipe   | 5    | piece |                      |            |
|           | 25mm Ø, Tee Equal   | 2    | piece |                      |            |
|           | 25mm Ø x 25mm Ø PPR 90° Elbow                                       | 7    | piece |                      |            |
|           | 25mm Ø PPR Coupling   | 2    | piece |                      |            |
|           | 25mm Ø x 20mm Ø PPR Reducer   | 1    | piece |                      |            |
|           | 25mm Ø, Union Patente   | 2    | piece |                      |            |

| ITEM NO.   | WORK DESCRIPTION & SCOPE OF WORKS            | QTY. | UNIT  | UNIT COST        | TOTAL COST |
|------------|--|------|-------|------------------|------------|
|            | 32mm Ø x 25mm Ø PPR Reducer                  | 1    | piece |                  |            |
|            | Valves & Appurtenances                       |      |       |                  |            |
|            | 20mm Ø PPR Gate Valve                        | 2    | piece |                  |            |
|            | Miscellaneous & Consumables                  |      |       |                  |            |
|            | 400cc Solvent Cement                         | 1    | can   |                  |            |
|            | All-Around Sealant                           | 1    | can   |                  |            |
|            | Hacksaw Blade                                | 1    | piece |                  |            |
|            | Teflon Tape                                  | 2    | roll  |                  |            |
|            | Waste Cloth                                  | 1    | kg    |                  |            |
|            |  |      |       | Material Cost B  | ₱          |
|            |  |      |       | Labor Cost B     | ₱          |
|            |  |      |       | Direct Cost B    | ₱          |
|            |  |      |       | MATERIAL COST II | ₱          |
|            |  |      |       | LABOR COST II    |            |
|            |  |      |       | DIRECT COST II   | ₱          |
| <b>III</b> | <b>REHABILITATION OF DAY CARE CENTER</b>     |      |       |                  |            |
| A          | Site Works                                   |      |       |                  |            |
|            | Demolition / Removal Works                   |      |       |                  |            |
|            | Chipping of Concrete (Electrical Works)      | 7    | sq.m. | ₱                | ₱          |
|            | Removal of Dilapidated Ceiling               | 32   | sq.m. |                  |            |
|            | Removal of Dilapidated Doors                 | 2    | set   |                  |            |
|            | Removal of Dilapidated Floor Drain           | 1    | piece |                  |            |
|            | Removal of Dilapidated Kitchen Sink          | 1    | piece |                  |            |
|            | Removal of Dilapidated Roofing               | 109  | sq.m. |                  |            |
|            | Removal of Dilapidated Tiles                 | 32   | sq.m. |                  |            |
|            | Removal of Dilapidated Water Closet          | 1    | piece |                  |            |
|            | Removal of Dilapidated Windows               | 11   | sq.m. |                  |            |
|            | Clearing / Cleaning for Painting Preparation | 393  | sq.m. |                  |            |
|            |  |      |       | Direct Cost A    | ₱          |
| B          | Civil Works / Structural Works               |      |       |                  |            |
|            | Masonry Works                                |      |       |                  |            |
|            | Restoration of Concrete (Electrical Works)   | 7    | sq.m. | ₱                | ₱          |
|            | Metal Works                                  |      |       |                  |            |
|            | Steel Gate                                   |      |       |                  |            |
|            | 25mm x 4mm Thick Flat Bar                    | 13   | kg    |                  |            |
|            | 50mmØ x 4mm Thick G.I. Pipe                  | 9    | kg    |                  |            |
|            | 75mmØ x 4mm Thick G.I. Pipe                  | 89   | kg    |                  |            |
|            | 50mm x 50mm x 6mmØ Wire Mesh                 | 4    | sq.m. |                  |            |
|            | 38mmØ Barrel Bolt                            | 1    | set   |                  |            |
|            | 38mmØ Foot Bolt                              | 1    | set   |                  |            |
|            | Cylindrical Hinges, Heavy Duty, Stainless    | 6    | piece |                  |            |
|            | Steel Fence                                  |      |       |                  |            |
|            | 25mm x 4mm Thick Flat Bar                    | 64   | kg    |                  |            |
|            | 50mmØ x 4mm Thick G.I. Pipe                  | 55   | kg    |                  |            |
|            | 75mmØ x 4mm Thick G.I. Pipe                  | 347  | kg    |                  |            |



| ITEM NO. | WORK DESCRIPTION & SCOPE OF WORKS                                   | QTY. | UNIT  | UNIT COST       | TOTAL COST |
|----------|---|------|-------|-----------------|------------|
|          | 50mm x 50mm x 6mmØ Wire Mesh  | 31   | sq.m. |                 |            |
|          | Window Screen   |      |       |                 |            |
|          | Stainless Steel Mosquito Screen with Complete Framing               | 31   | sq.m. |                 |            |
|          | Miscellaneous & Consumables   |      |       |                 |            |
|          | Acetylene Tank Refill   | 1    | tank  |                 |            |
|          | Cut Off Blade   | 1    | piece |                 |            |
|          | Grinding Disc Metal   | 1    | piece |                 |            |
|          | Oxygen tank Refill  | 2    | tank  |                 |            |
|          | Welding Rod   | 1    | box   |                 |            |
|          | Roofing Works   |      |       |                 |            |
|          | Pre-Painted Rib-type G.I. Roofing                                   | 96   | sq.m. |                 |            |
|          | Pre-Painted G.I. End Flashing                                       | 68   | l.m.  |                 |            |
|          | Pre-Painted G.I. Ridge Roll   | 21   | l.m.  |                 |            |
|          | 6mm thick One-Sided Aluminum Foil Thermal Insulation                | 96   | sq.m. |                 |            |
|          | 12mm x 300mm Fiber Cement Fascia Board                              | 31   | l.m.  |                 |            |
|          | Blind Rivets  | 280  | piece |                 |            |
|          | Tekscrew  | 454  | piece |                 |            |
|          | Silicon Sealant   | 2    | tube  |                 |            |
|          |   |      |       | Material Cost B | ₱          |
|          |   |      |       | Labor Cost B    |            |
|          |   |      |       | Direct Cost B   | ₱          |
| C        | Architectural Works   |      |       |                 |            |
|          | Floor Finishes  |      |       |                 |            |
|          | 600mm x 600mm Non-Skid Homogeneous Floor Tiles                      | 29   | sq.m. | ₱               | ₱          |
|          | 300mm x 300mm Non-Skid Homogeneous Floor Tiles ( Comfort Room )     | 3    | sq.m. |                 |            |
|          | Floor Topping for Tile Preparation                                  | 32   | sq.m. |                 |            |
|          | Wall Finishes   |      |       |                 |            |
|          | 300mm x 300mm Homogeneous Wall Tiles                                | 12   | sq.m. |                 |            |
|          | Ceiling Finishes  |      |       |                 |            |
|          | 6mm Thick Fiber Cement Board including Metal Framing                | 32   | sq.m. |                 |            |
|          |   |      |       | Material Cost   | ₱          |
|          |   |      |       | Labor Cost      |            |
|          |   |      |       | Subtotal        | ₱          |
|          | Installation of Doors   |      |       |                 |            |
|          | D1 - ( 2.10m x 0.90m ) Panel Door                                   | 1    | set   | ₱               | ₱          |
|          | D2 - ( 2.10m x 0.60m ) PVC Door with Louver                         | 1    | set   |                 |            |
|          | Door Jambs  |      |       |                 |            |
|          | D1 - ( 2.10m x 0.90m ) Panel Door                                   | 1    | set   |                 |            |
|          | Hardwares and Accessories   |      |       |                 |            |
|          | Door Hinges, Heavy Duty Stainless                                   | 6    | piece |                 |            |
|          | Door Knob, Lever Type, Stainless                                    | 2    | piece |                 |            |
|          | Installation of Windows   |      |       |                 |            |
|          | W1 - ( 1.00m x 2.50m ) Aluminum Framed Powder Coated Sliding Window | 4    | set   |                 |            |
|          | W2 - ( 0.40m x 0.50m ) Aluminum Framed Powder Coated Awning Window  | 1    | set   |                 |            |

| ITEM NO. | WORK DESCRIPTION & SCOPE OF WORKS                       | QTY. | UNIT  | UNIT COST       | TOTAL COST |
|----------|---|------|-------|-----------------|------------|
|          |   |      |       | Material Cost   | ₱          |
|          |   |      |       | Labor Cost      |            |
|          |   |      |       | Subtotal        | ₱          |
|          | Painting Works  |      |       |                 |            |
|          | Elastomeric Paint Finish (Exterior Wall)                | 68   | sq.m. | ₱               | ₱          |
|          | Epoxy Enamel Paint Finish (Steel Members)               | 223  | sq.m. |                 |            |
|          | Flat Latex Paint Finish                                 |      |       |                 |            |
|          | Interior Wall   | 59   | sq.m. |                 |            |
|          | Ceiling   | 32   | sq.m. |                 |            |
|          |   |      |       | Material Cost   | ₱          |
|          |   |      |       | Labor Cost      |            |
|          |   |      |       | Subtotal        | ₱          |
|          | Cleaning and Re-Touching of Painting with Simple Design | 67   | sq.m. | ₱               | ₱          |
|          |   |      |       | Subtotal        | ₱          |
|          | Letterings  |      |       |                 |            |
|          | 200mm Stainless Steel Lettering                         |      |       |                 |            |
|          | "CENTERVILLE DAY CARE CENTER"                           | 24   | set   | ₱               | ₱          |
|          |   |      |       | Material Cost   | ₱          |
|          |   |      |       | Labor Cost      |            |
|          |   |      |       | Subtotal        | ₱          |
|          |   |      |       | Material Cost C | ₱          |
|          |   |      |       | Labor Cost C    |            |
|          |   |      |       | Direct Cost C   | ₱          |
| D        | Sanitary / Plumbing Works                               |      |       |                 |            |
|          | Sewer Line / Storm Drainage System                      |      |       |                 |            |
|          | 100mm Ø, PVC Pipe with Hub                              | 5    | piece | ₱               | ₱          |
|          | 75mm Ø, PVC Pipe with Hub                               | 3    | piece |                 |            |
|          | 50mm Ø, PVC Pipe with Hub                               | 5    | piece |                 |            |
|          | 100mm Ø x 100mm Ø, Wye                                  | 2    | piece |                 |            |
|          | 100mm Ø x 75mm Ø, Wye                                   | 2    | piece |                 |            |
|          | 100mm Ø x 50mm Ø, Wye                                   | 2    | piece |                 |            |
|          | 75mm Ø x 75mm Ø, Wye                                    | 1    | piece |                 |            |
|          | 75mm Ø x 50mm Ø, Tee                                    | 3    | piece |                 |            |
|          | 50mm Ø, 1/4 Bend  | 6    | piece |                 |            |
|          | 100mm Ø, 1/8 Bend                                       | 4    | piece |                 |            |
|          | 75mm Ø, 1/8 Bend  | 3    | piece |                 |            |
|          | 50mm Ø, 1/8 Bend  | 4    | piece |                 |            |
|          | Cleanout 100mm Ø  | 1    | piece |                 |            |
|          | 100mm Ø, P-Trap   | 1    | piece |                 |            |
|          | 50mm Ø, P-Trap  | 1    | piece |                 |            |
|          | 40mm Ø, P-Trap  | 1    | piece |                 |            |
|          | Coupling 100mm Ø  | 6    | piece |                 |            |
|          | Coupling 75mm Ø   | 3    | piece |                 |            |
|          | Waterline System  |      |       |                 |            |

| ITEM NO. | WORK DESCRIPTION & SCOPE OF WORKS   | QTY. | UNIT  | UNIT COST       | TOTAL COST |
|----------|---|------|-------|-----------------|------------|
|          | 25mm Ø, PPR Pipe  | 4    | piece |                 |            |
|          | 25mm Ø, Tee Equal   | 1    | piece |                 |            |
|          | 20mm Ø, Tee Equal   | 11   | piece |                 |            |
|          | 20mm Ø, End Cap   | 11   | piece |                 |            |
|          | 25mm Ø, 90 Deg Elbow  | 2    | piece |                 |            |
|          | 20mm Ø, 90 Deg Elbow  | 24   | piece |                 |            |
|          | 25mm Ø x 15mm Ø, Female Thread Tee  | 11   | piece |                 |            |
|          | 25mm Ø, Coupling  | 4    | piece |                 |            |
|          | 20mm Ø, Coupling  | 4    | piece |                 |            |
|          | 25mm Ø x 20mm Ø, Reducer  | 2    | piece |                 |            |
|          | Fixtures  |      |       |                 |            |
|          | Bidet with Complete Accessories (Water Efficient)                                   | 1    | set   |                 |            |
|          | Floor Drain, 100mm x 100mm Stainless Steel  | 1    | piece |                 |            |
|          | Grease Trap, 5GPM, Heavy Duty with Accessories                                      | 1    | set   |                 |            |
|          | Hose Bibb, Lever Type, Heavy Duty, Stainless Steel (Water                           | 9    | piece |                 |            |
|          | Kitchen Sink, Single Tub, Stainless   | 1    | set   |                 |            |
|          | Kitchen Sink Faucet, Stainless, Heavy Duty (Water Efficient)                        | 1    | set   |                 |            |
|          | Water Closet, Tank Type (Water Efficient)   | 1    | set   |                 |            |
|          | Accessories   |      |       |                 |            |
|          | Angle Valve, Single-Way Stainless   | 1    | piece |                 |            |
|          | Angle Valve, Two-Way Stainless  | 1    | piece |                 |            |
|          | Flexible Hose, Stainless  | 2    | piece |                 |            |
|          | Miscellaneous & Consumables   |      |       |                 |            |
|          | 400cc Solvent Cement  | 2    | can   |                 |            |
|          | All-Around Sealant  | 1    | can   |                 |            |
|          | Hacksaw Blade   | 3    | piece |                 |            |
|          | Teflon Tape   | 3    | roll  |                 |            |
|          | Waste Cloth   | 1    | kg    |                 |            |
|          |   |      |       | Material Cost D | ₱          |
|          |   |      |       | Labor Cost D    |            |
|          |   |      |       | Direct Cost D   | ₱          |
| E        | Electrical Works  |      |       |                 |            |
|          | Roughing-ins  |      |       |                 |            |
|          | 20mmØ PVC Pipe  | 50   | piece | ₱               | ₱          |
|          | Fittings and Accessories  |      |       |                 |            |
|          | 20mmØ PVC Adaptor   | 66   | piece |                 |            |
|          | 20mmØ PVC Flexible Tube   | 20   | l.m.  |                 |            |
|          | 20mmØ PVC Locknut   | 66   | pair  |                 |            |
|          | 50mm x 100mm PVC Utility Box  | 7    | piece |                 |            |
|          | 100mm x 100mm PVC Junction Box with Cover   | 12   | piece |                 |            |
|          | 100mm x 100mm PVC Utility Box (Pullbox)   | 5    | piece |                 |            |
|          | Wires and Cables  |      |       |                 |            |
|          | 3.5mm² THHN Wire  | 2    | roll  |                 |            |
|          | 3.5mm² TW Wire  | 1    | roll  |                 |            |
|          | Lighting Devices  |      |       |                 |            |
|          | 600mm x 1200mm, 2 x 18w LED, Troffer Type, with Complete Accessories, Recessed Type | 5    | set   |                 |            |
|          | T8, 18w LED Tube light  | 3    | piece |                 |            |

| ITEM NO. | WORK DESCRIPTION & SCOPE OF WORKS        | QTY. | UNIT  | UNIT COST                | TOTAL COST |
|----------|--|------|-------|--------------------------|------------|
|          | T8, 18w LED Tube light, Box type         | 3    | piece |                          |            |
|          | 100mm Ø Round Recessed Pinlight Case     | 1    | piece |                          |            |
|          | 100mm Ø Round Recessed Pinlight LED 9W   | 1    | piece |                          |            |
|          | Wiring Devices and Other Fixtures        |      |       |                          |            |
|          | Orbit Fan with Selector Switch           | 3    | set   |                          |            |
|          | Outlet with Grounding, Two Gang          | 4    | piece |                          |            |
|          | Switch With Plate and Cover, One Gang    | 1    | piece |                          |            |
|          | Switch With Plate and Cover, Three Gang  | 2    | piece |                          |            |
|          | Pipe Hangers & Supports                  |      |       |                          |            |
|          | Horizontal Layout of Pipe                | 50   | l.m.  |                          |            |
|          | Miscellaneous & Consumables              |      |       |                          |            |
|          | 400cc Solvent Cement                     | 3    | can   |                          |            |
|          | Electrical Tape                          | 6    | roll  |                          |            |
|          | G.I. Tie Wire Ga. 16 (for Cable Pulling) | 1    | kg    |                          |            |
|          | Hacksaw Blade                            | 5    | piece |                          |            |
|          | Masking Tape                             | 1    | roll  |                          |            |
|          | Pulling Lubricant                        | 1    | can   |                          |            |
|          | Rubber Tape                              | 1    | roll  |                          |            |
|          | Torch With Butane                        | 3    | set   |                          |            |
|          |  |      |       | Material Cost E          | ₱          |
|          |  |      |       | Labor Cost E             |            |
|          |  |      |       | Direct Cost E            | ₱          |
|          |  |      |       | <b>MATERIAL COST III</b> | ₱          |
|          |  |      |       | <b>LABOR COST III</b>    |            |
|          |  |      |       | <b>DIRECT COST III</b>   | ₱          |

**SUMMARY**

| ITEM NO | WORK DESCRIPTION AND SCOPE OF WORKS  | TOTAL COST |
|---------|--|------------|
| I       | GENERAL REQUIREMENTS   | ₱          |
| II      | CONSTRUCTION OF HAND WASHING FACILITY  |            |
| III     | REHABILITATION OF DAY CARE CENTER  |            |
|         | NOTE:<br>• Strictly enforce Health Protocols relative to the latest applicable DPWH Memorandum |            |
|         | <b>TOTAL DIRECT COST</b>   | ₱          |
|         | Overhead, Contingencies and Miscellaneous and Consumables Expenses (OCM)                       |            |
|         | Profit   |            |
|         | VAT  |            |
|         | <b>TOTAL ESTIMATED COST</b>  | ₱          |

**BILL OF QUANTITIES**  
(Building Construction/Rehabilitation Project)

**PROJECT TITLE :** PROPOSED CONSTRUCTION OF HAND WASHING FACILITY AND REHABILITATION OF VETERANS II DAY CARE CENTER

**LOCATION :** BARANGAY PASONG TAMO, DISTRICT 6, QUEZON CITY

**PROJECT NO. :** 22 - 00009

**SCOPE OF WORK :**

**I GENERAL REQUIREMENTS**

1.) General Requirements include temporary facilities and utilities, billboard, construction safety and health, scaffolding, and clearing, hauling and disposal of construction materials and debris.

**II CONSTRUCTION OF HAND WASHING FACILITY**

1.) Supply and installation of single sink portable hand washing facility.

2.) Sanitary/Plumbing Works include installation of roughing-ins, fixtures and accessories.

**III REHABILITATION OF DAY CARE CENTER**

1.) Site Works include demolition / removal works, site clearing and preparations, layout and staking, and earthworks, cleaning and

2.) Civil / Structural Works include concrete works, masonry works, metal works, window screen, and roofing works.

3.) Architectural Works include floor, wall and ceiling finishes, painting works, installation of doors, and letterings.

4.) Sanitary/Plumbing Works include installation of roughing-ins, fixtures and accessories.

5.) Electrical Works include installation of roughing-ins, wirings, fixtures and accessories.

6.) Mechanical Works include installation of roughing-ins, equipment, fixtures and accessories.

**IV** All necessary testing and commissioning shall be performed in accordance to standards.

| ITEM NO.  | WORK DESCRIPTION & SCOPE OF WORKS                                   | QTY. | UNIT  | UNIT COST            | TOTAL COST |
|-----------|---|------|-------|----------------------|------------|
| <b>I</b>  | <b>GENERAL REQUIREMENTS</b>   |      |       |                      |            |
|           | Billboard   | 1    | unit  | ₱                    | ₱          |
|           | Clearing, Hauling and Disposal of Construction Materials and Debris | 2    | t.l.  |                      |            |
|           | Construction Safety and Health                                      | 1    | unit  |                      |            |
|           | Scaffolding (Rental)  | 78   | sq.m. |                      |            |
|           | Temporary Enclosure around the Construction Area (H=2.4m)           | 30   | l.m.  |                      |            |
|           |   |      |       | <b>DIRECT COST I</b> | <b>₱</b>   |
| <b>II</b> | <b>CONSTRUCTION OF HAND WASHING FACILITY</b>                        |      |       |                      |            |
| <b>A</b>  | Hand Washing Facility   |      |       |                      |            |
|           | Single Sink Portable Hand Washing Facility                          | 1    | unit  | ₱                    | ₱          |
|           |   |      |       | Direct Cost A        | ₱          |
| <b>B</b>  | Sanitary / Plumbing Works   |      |       |                      |            |
|           | Sanitary Line / Sewer Line / Storm Drainage System                  |      |       |                      |            |
|           | 50mm Ø PVC Pipe with Hub  | 1    | piece | ₱                    | ₱          |
|           | 50mm Ø x 50mm Ø PVC 1/4 Bend  | 2    | piece |                      |            |
|           | Waterline System  |      |       |                      |            |
|           | 25mm Ø PPR Pipe   | 2    | piece |                      |            |
|           | 25mm Ø, Tee Equal   | 1    | piece |                      |            |
|           | 25mm Ø x 25mm Ø PPR 90° Elbow                                       | 2    | piece |                      |            |
|           | 25mm Ø PPR Coupling   | 2    | piece |                      |            |

| ITEM NO.   | WORK DESCRIPTION & SCOPE OF WORKS            | QTY. | UNIT  | UNIT COST               | TOTAL COST |
|------------|--|------|-------|-------------------------|------------|
|            | 25mm Ø x 20mm Ø PPR Reducer                  | 1    | piece |                         |            |
|            | 25mm Ø, Union Patente                        | 2    | piece |                         |            |
|            | 32mm Ø x 25mm Ø PPR Reducer                  | 1    | piece |                         |            |
|            | Valves & Appurtenances                       |      |       |                         |            |
|            | 20mm Ø PPR Gate Valve                        | 1    | piece |                         |            |
|            | Miscellaneous & Consumables                  |      |       |                         |            |
|            | 400cc Solvent Cement                         | 1    | can   |                         |            |
|            | All-Around Sealant                           | 1    | can   |                         |            |
|            | Hacksaw Blade                                | 1    | piece |                         |            |
|            | Teflon Tape                                  | 1    | roll  |                         |            |
|            | Waste Cloth                                  | 1    | kg    |                         |            |
|            |  |      |       | Material Cost B         | ₱          |
|            |  |      |       | Labor Cost B            |            |
|            |  |      |       | Direct Cost B           | ₱          |
|            |  |      |       | <b>MATERIAL COST II</b> | <b>₱</b>   |
|            |  |      |       | <b>LABOR COST II</b>    |            |
|            |  |      |       | <b>DIRECT COST II</b>   | <b>₱</b>   |
| <b>III</b> | <b>REHABILITATION OF DAY CARE CENTER</b>     |      |       |                         |            |
| A          | Site Works                                   |      |       |                         |            |
|            | Demolition / Removal Works                   |      |       |                         |            |
|            | Chipping of Concrete (Electrical Works)      | 7    | sq.m. | ₱                       | ₱          |
|            | Demolition of CHB Wall                       | 18   | sq.m. |                         |            |
|            | Demolition of Slab-On-Fill (Side)            | 1    | sq.m. |                         |            |
|            | Removal of Dilapidated Ceiling               | 39   | sq.m. |                         |            |
|            | Removal of Dilapidated Doors                 | 2    | set   |                         |            |
|            | Removal of Dilapidated Hose Bibb             | 6    | piece |                         |            |
|            | Removal of Dilapidated Kitchen Sink          | 1    | piece |                         |            |
|            | Removal of Dilapidated Roofing               | 46   | sq.m. |                         |            |
|            | Removal of Dilapidated Tiles                 | 49   | sq.m. |                         |            |
|            | Removal of Dilapidated Water Closet          | 1    | piece |                         |            |
|            | Removal of Dilapidated Window                | 7    | sq.m. |                         |            |
|            | Clearing / Cleaning for Painting Preparation | 271  | sq.m. |                         |            |
|            | Layout and Staking                           | 9    | sq.m. |                         |            |
|            | Site Clearing and Preparation                | 9    | sq.m. |                         |            |
|            | Excavation for Structures                    | 2    | cu.m. |                         |            |
|            |  |      |       | Subtotal                | ₱          |
|            | Gravel Bedding                               | 1    | cu.m. | ₱                       | ₱          |
|            |  |      |       | Material Cost           | ₱          |
|            |  |      |       | Labor Cost              |            |
|            |  |      |       | Subtotal                | ₱          |
|            | Backfill and Compaction                      | 2    | cu.m. | ₱                       | ₱          |
|            |  |      |       | Subtotal                | ₱          |
|            |  |      |       | Material Cost A         | ₱          |

| ITEM NO. | WORK DESCRIPTION & SCOPE OF WORKS  | QTY. | UNIT  | UNIT COST     | TOTAL COST |
|----------|--|------|-------|---------------|------------|
|          |  |      |       | Labor Cost A  |            |
|          |  |      |       | Direct Cost A | ₱          |
| B        | Civil Works / Structural Works   |      |       |               |            |
|          | Concrete Works   |      |       |               |            |
|          | On-Site Mix Concrete, 21MPa, 3/4" Gravel @ 28 days                       |      |       |               |            |
|          | Wall Footing   | 1    | cu.m. | ₱             | ₱          |
|          | Slab-On-Fill   | 1    | cu.m. |               |            |
|          | On-Site Mix Concrete, 28MPa, 3/4" Gravel @ 28 days                       |      |       |               |            |
|          | Column Footing   | 1    | cu.m. |               |            |
|          | Column   | 1    | cu.m. |               |            |
|          | Reinforcing Steel Bars   |      |       |               |            |
|          | Grade 40 Reinforcing Steel Bars including G.I. Tie Wire # 16             |      |       |               |            |
|          | 10mmØ Slab-On-Fill   | 50   | kg    |               |            |
|          | 10mmØ Column   | 17   | kg    |               |            |
|          | 12mmØ Wall Footing   | 15   | kg    |               |            |
|          | Grade 60 Reinforcing Steel Bars including G.I. Tie Wire # 16             |      |       |               |            |
|          | 16mmØ Column Footing   | 32   | kg    |               |            |
|          | 16mmØ Column   | 41   | kg    |               |            |
|          | Formworks  |      |       |               |            |
|          | Column Footing   | 2    | sq.m. |               |            |
|          | Wall Footing   | 2    | sq.m. |               |            |
|          | Column   | 5    | sq.m. |               |            |
|          | Scaffoldings / Shoring   |      |       |               |            |
|          | Column   | 6    | l.m.  |               |            |
|          | Masonry Works  |      |       |               |            |
|          | 150mm CHB Laying including Mortar, Reinforcement and Two-Face Plastering | 28   | sq.m. |               |            |
|          | Restoration of Concrete (Electrical Works)                               | 7    | sq.m. |               |            |
|          | Metal Works  |      |       |               |            |
|          | G1 (Main Gate)   |      |       |               |            |
|          | 50mm x 50mm x 4mm Tubular Bar  | 34   | kg    |               |            |
|          | 25mm x 25mm x 4mm Tubular Bar  | 50   | kg    |               |            |
|          | 38mmØ Barrel Bolt  | 1    | set   |               |            |
|          | 38mmØ Foot Bolt  | 1    | set   |               |            |
|          | Cylindrical Hinges, Heavy Duty, Stainless                                | 3    | piece |               |            |
|          | Window Screen  |      |       |               |            |
|          | Stainless Steel Mosquito Screen with Complete Framing                    | 3    | sq.m. |               |            |
|          | Miscellaneous & Consumables  |      |       |               |            |
|          | Acetylene Tank Refill  | 1    | tank  |               |            |
|          | Cut Off Blade  | 1    | piece |               |            |
|          | Grinding Disc Metal  | 1    | piece |               |            |
|          | Oxygen tank Refill   | 1    | tank  |               |            |
|          | Welding Rod  | 1    | box   |               |            |
|          | Roofing Works  |      |       |               |            |
|          | Pre-Painted Rib-type G.I. Roofing  | 51   | sq.m. |               |            |
|          | Pre-Painted G.I. End Flashing  | 30   | l.m.  |               |            |



| ITEM NO. | WORK DESCRIPTION & SCOPE OF WORKS                               | QTY. | UNIT  | UNIT COST       | TOTAL COST |
|----------|---|------|-------|-----------------|------------|
|          | 6mm thick One-Sided Aluminum Foil Thermal Insulation            | 51   | sq.m. |                 |            |
|          | 12mm x 300mm Fiber Cement Fascia Board                          | 15   | l.m.  |                 |            |
|          | Blind Rivets  | 124  | piece |                 |            |
|          | Tekscrew  | 241  | piece |                 |            |
|          | Silicon Sealant   | 1    | tube  |                 |            |
|          |   |      |       | Material Cost B | ₱          |
|          |   |      |       | Labor Cost B    |            |
|          |   |      |       | Direct Cost B   | ₱          |
| C        | Architectural Works   |      |       |                 |            |
|          | Floor Finishes  |      |       |                 |            |
|          | 600mm x 600mm Non-Skid Homogeneous Floor Tiles                  | 49   | sq.m. | ₱               | ₱          |
|          | 300mm x 300mm Non-Skid Homogeneous Floor Tiles ( Comfort Room ) | 3    | sq.m. |                 |            |
|          | Floor Topping for Tile Preparation                              | 52   | sq.m. |                 |            |
|          | Wall Finishes   |      |       |                 |            |
|          | 300mm x 300mm Homogeneous Wall Tiles                            | 12   | sq.m. |                 |            |
|          | Ceiling Finishes  |      |       |                 |            |
|          | 6mm Thick Fiber Cement Board including Metal Framing            | 51   | sq.m. |                 |            |
|          |   |      |       | Material Cost   | ₱          |
|          |   |      |       | Labor Cost      |            |
|          |   |      |       | Subtotal        | ₱          |
|          | Installation of Doors   |      |       |                 |            |
|          | D1 - ( 2.10m x 1.00m ) Panel Door with Transom                  | 1    | set   | ₱               | ₱          |
|          | D2 - ( 2.10m x 0.60m ) PVC Door with Louver                     | 1    | set   |                 |            |
|          | Door Jambs  |      |       |                 |            |
|          | D1 - ( 2.10m x 1.00m ) Panel Door with Transom                  | 1    | set   |                 |            |
|          | Hardwares and Accessories                                       |      |       |                 |            |
|          | Door Hinges, Heavy Duty Stainless                               | 6    | piece |                 |            |
|          | Door Knob, Lever Type, Stainless                                | 2    | piece |                 |            |
|          |   |      |       | Material Cost   | ₱          |
|          |   |      |       | Labor Cost      |            |
|          |   |      |       | Subtotal        | ₱          |
|          | Painting Works  |      |       |                 |            |
|          | Elastomeric Paint Finish (Exterior Wall)                        | 196  | sq.m. | ₱               | ₱          |
|          | Epoxy Enamel Paint Finish (Steel Members)                       | 1    | sq.m. |                 |            |
|          | Flat Latex Paint Finish   |      |       |                 |            |
|          | Interior Wall   | 95   | sq.m. |                 |            |
|          | Ceiling   | 51   | sq.m. |                 |            |
|          | Letterings  |      |       |                 |            |
|          | 200mm Stainless Steel Lettering                                 |      |       |                 |            |
|          | "VETERANS II DAY CARE CENTER"                                   | 23   | set   |                 |            |
|          |   |      |       | Material Cost   | ₱          |
|          |   |      |       | Labor Cost      |            |
|          |   |      |       | Subtotal        | ₱          |
|          |   |      |       | Material Cost C | ₱          |

| ITEM NO. | WORK DESCRIPTION & SCOPE OF WORKS                            | QTY. | UNIT  | UNIT COST     | TOTAL COST |
|----------|--|------|-------|---------------|------------|
|          |  |      |       | Labor Cost C  |            |
|          |  |      |       | Direct Cost C | ₱          |
| D        | Sanitary / Plumbing Works                                    |      |       |               |            |
|          | Sewer Line / Storm Drainage System                           |      |       |               |            |
|          | 100mm Ø, PVC Pipe with Hub                                   | 7    | piece | ₱             | ₱          |
|          | 75mm Ø, PVC Pipe with Hub                                    | 3    | piece |               |            |
|          | 50mm Ø, PVC Pipe with Hub                                    | 5    | piece |               |            |
|          | 100mm Ø x 100mm Ø, Wye                                       | 2    | piece |               |            |
|          | 100mm Ø x 75mm Ø, Wye  | 2    | piece |               |            |
|          | 100mm Ø x 50mm Ø, Wye  | 2    | piece |               |            |
|          | 75mm Ø x 75mm Ø, Wye   | 1    | piece |               |            |
|          | 75mm Ø x 50mm Ø, Tee   | 3    | piece |               |            |
|          | 50mm Ø, 1/4 Bend   | 6    | piece |               |            |
|          | 100mm Ø, 1/8 Bend  | 4    | piece |               |            |
|          | 75mm Ø, 1/8 Bend   | 3    | piece |               |            |
|          | 50mm Ø, 1/8 Bend   | 4    | piece |               |            |
|          | Cleanout 100mm Ø   | 1    | piece |               |            |
|          | 100mm Ø, P-Trap  | 1    | piece |               |            |
|          | 50mm Ø, P-Trap   | 1    | piece |               |            |
|          | 40mm Ø, P-Trap   | 1    | piece |               |            |
|          | Coupling 100mm Ø   | 8    | piece |               |            |
|          | Coupling 75mm Ø  | 3    | piece |               |            |
|          | Waterline System   |      |       |               |            |
|          | 25mm Ø, PPR Pipe   | 3    | piece |               |            |
|          | 20mm Ø, PPR Pipe   | 4    | piece |               |            |
|          | 25mm Ø, Tee Equal  | 1    | piece |               |            |
|          | 20mm Ø, Tee Equal  | 8    | piece |               |            |
|          | 20mm Ø, End Cap  | 8    | piece |               |            |
|          | 25mm Ø, 90 Deg Elbow   | 3    | piece |               |            |
|          | 20mm Ø, 90 Deg Elbow   | 22   | piece |               |            |
|          | 25mm Ø x 15mm Ø, Female Thread Tee                           | 8    | piece |               |            |
|          | 25mm Ø, Coupling   | 3    | piece |               |            |
|          | 20mm Ø, Coupling   | 3    | piece |               |            |
|          | 25mm Ø x 20mm Ø, Reducer                                     | 2    | piece |               |            |
|          | Fixtures   |      |       |               |            |
|          | Bidet with Complete Accessories (Water Efficient)            | 1    | set   |               |            |
|          | Floor Drain, 100mm x 100mm Stainless Steel                   | 1    | piece |               |            |
|          | Grease Trap, 5GPM, Heavy Duty with Accessories               | 1    | set   |               |            |
|          | Hose Bibb, Lever Type, Heavy Duty, Stainless Steel (Water    | 6    | piece |               |            |
|          | Kitchen Sink, Single Tub, Stainless                          | 1    | set   |               |            |
|          | Kitchen Sink Faucet, Stainless, Heavy Duty (Water Efficient) | 1    | set   |               |            |
|          | Water Closet, Tank Type, Kiddy (Water Efficient)             | 1    | set   |               |            |
|          | Accessories  |      |       |               |            |
|          | Angle Valve, Single-Way Stainless                            | 1    | piece |               |            |
|          | Angle Valve, Two-Way Stainless                               | 1    | piece |               |            |
|          | Flexible Hose, Stainless                                     | 2    | piece |               |            |
|          | Miscellaneous & Consumables                                  |      |       |               |            |

| ITEM NO. | WORK DESCRIPTION & SCOPE OF WORKS   | QTY. | UNIT  | UNIT COST       | TOTAL COST |
|----------|---|------|-------|-----------------|------------|
|          | 400cc Solvent Cement  | 1    | can   |                 |            |
|          | All-Around Sealant  | 1    | can   |                 |            |
|          | Hacksaw Blade   | 3    | piece |                 |            |
|          | Teflon Tape   | 2    | roll  |                 |            |
|          | Waste Cloth   | 1    | kg    |                 |            |
|          |   |      |       | Material Cost D | ₱          |
|          |   |      |       | Labor Cost D    |            |
|          |   |      |       | Direct Cost D   | ₱          |
| E        | Electrical Works  |      |       |                 |            |
|          | Roughing-ins  |      |       |                 |            |
|          | 20mmØ PVC Pipe  | 50   | piece | ₱               | ₱          |
|          | Fittings and Accessories  |      |       |                 |            |
|          | 20mmØ PVC Adaptor   | 56   | piece |                 |            |
|          | 20mmØ PVC Flexible Tube   | 20   | lm    |                 |            |
|          | 20mmØ PVC Locknut   | 56   | pair  |                 |            |
|          | 50mm x 100mm PVC Utility Box  | 8    | piece |                 |            |
|          | 100mm x 100mm PVC Junction Box with Cover   | 14   | piece |                 |            |
|          | 100mm x 100mm PVC Utility Box (Pullbox)   | 5    | piece |                 |            |
|          | Wires and Cables  |      |       |                 |            |
|          | 3.5mm² THHN Wire  | 2    | roll  |                 |            |
|          | 5.5mm² THHN Wire  | 30   | lm    |                 |            |
|          | 3.5mm² TW Wire  | 1    | roll  |                 |            |
|          | Lighting Devices  |      |       |                 |            |
|          | 300mm x 1200mm, 1 x 18w LED, Troffer Type, with Complete Accessories, Recessed Type | 3    | set   |                 |            |
|          | 600mm x 1200mm, 2 x 18w LED, Troffer Type, with Complete Accessories, Recessed Type | 6    | set   |                 |            |
|          | 100mm Ø Round Recessed Pinlight Case  | 1    | piece |                 |            |
|          | 100mm Ø Round Recessed Pinlight LED 9W  | 1    | piece |                 |            |
|          | Wiring Devices and Other Fixtures   |      |       |                 |            |
|          | Orbit Fan with Selector Switch  | 4    | piece |                 |            |
|          | Outlet with Grounding, Two Gang   | 6    | piece |                 |            |
|          | Switch With Plate and Cover, One Gang   | 1    | piece |                 |            |
|          | Switch With Plate and Cover, Three Gang   | 1    | piece |                 |            |
|          | Pipe Hangers & Supports   |      |       |                 |            |
|          | Horizontal Layout of Pipe   | 50   | lm    |                 |            |
|          | Miscellaneous & Consumables   |      |       |                 |            |
|          | 400cc Solvent Cement  | 3    | can   |                 |            |
|          | Electrical Tape   | 5    | roll  |                 |            |
|          | G.I. Tie Wire Ga. 16 (for Cable Pulling)  | 1    | kg    |                 |            |
|          | Hacksaw Blade   | 4    | piece |                 |            |
|          | Masking Tape  | 1    | roll  |                 |            |
|          | Pulling Lubricant   | 1    | can   |                 |            |
|          | Rubber Tape   | 1    | roll  |                 |            |
|          | Torch With Butane   | 3    | set   |                 |            |
|          |   |      |       | Material Cost E | ₱          |
|          |   |      |       | Labor Cost E    |            |
|          |   |      |       | Direct Cost E   | ₱          |

| ITEM NO. | WORK DESCRIPTION & SCOPE OF WORKS  | QTY. | UNIT  | UNIT COST                | TOTAL COST |
|----------|--|------|-------|--------------------------|------------|
| F        | Mechanical Works   |      |       |                          |            |
|          | Airconditioning System   |      |       |                          |            |
|          | Condensate Water Drainage System   |      |       |                          |            |
|          | 20mm Ø x 3m uPVC Pipe  | 1    | piece | ₱                        | ₱          |
|          | 20mm Ø uPVC Elbow  | 2    | piece |                          |            |
|          | Insulation   |      |       |                          |            |
|          | 20mmØ x 12mm thick Rubber Foam Insulation  | 1    | piece |                          |            |
|          | Window-type Air Conditioning Unit  |      |       |                          |            |
|          | Window-Type Air Conditioning Unit, 2.50 hp, 25,500 KJ/Hr Cooling Capacity, 2,660 W, 230/1/60 | 1    | unit  |                          |            |
|          | Pipe Hangers and Supports  |      |       |                          |            |
|          | Condensate Water Drainage System Support   | 1    | l.m.  |                          |            |
|          | Window Type Aircon Steel Bracket   | 1    | unit  |                          |            |
|          | Miscellaneous & Consumables  |      |       |                          |            |
|          | 400cc Solvent Cement   | 1    | can   |                          |            |
|          | 50mm x 10m Duct Tape   | 1    | roll  |                          |            |
|          | Waste Cloth  | 1    | kg    |                          |            |
|          |  |      |       | Material Cost F          | ₱          |
|          |  |      |       | Labor Cost F             |            |
|          |  |      |       | Direct Cost F            | ₱          |
|          |  |      |       |                          |            |
|          |  |      |       | <b>MATERIAL COST III</b> | ₱          |
|          |  |      |       | <b>LABOR COST III</b>    |            |
|          |  |      |       | <b>DIRECT COST III</b>   | ₱          |
|          |  |      |       |                          |            |

### SUMMARY

| ITEM NO | WORK DESCRIPTION AND SCOPE OF WORKS  | TOTAL COST   |
|---------|--|--|
| I       | GENERAL REQUIREMENTS   | ₱  |
| II      | CONSTRUCTION OF HAND WASHING FACILITY  |  |
| III     | REHABILITATION OF DAY CARE CENTER  |  |
|         | NOTE:<br>• Strictly enforce Health Protocols relative to the latest applicable DPWH Memorandum |  |
|         |  | <b>TOTAL DIRECT COST</b> ₱   |
|         |  | Overhead, Contingencies and Miscellaneous and Consumables Expenses (OCM) |
|         |  | Profit   |
|         |  | VAT  |
|         |  | <b>TOTAL ESTIMATED COST</b> ₱  |

## ***Section IX. Checklist of Technical and Financial Documents***

### **Notes on the Checklist of Technical and Financial Documents**

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

- a. GPPB Resolution No. 09-2020 on the efficient procurement measures during a State of Calamity or other similar issuances that shall allow the use of alternate documents in lieu of the mandated requirements; or
- b. any subsequent GPPB issuances adjusting the documentary requirements after the effectivity of the adoption of the PBDs.

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

# Checklist of Technical and Financial Documents

## I. TECHNICAL COMPONENT ENVELOPE

### *Class “A” Documents*

#### Legal Documents

- (a) Valid PhilGEPS Registration Certificate (Platinum Membership) (all pages);  
**and**
- (b) Registration certificate from Securities and Exchange Commission (SEC), Department of Trade and Industry (DTI) for sole proprietorship, or Cooperative Development Authority (CDA) for cooperatives or its equivalent document;  
**and**
- (c) Mayor’s or Business permit issued by the city or municipality where the principal place of business of the prospective bidder is located, or the equivalent document for Exclusive Economic Zones or Areas;  
**and**
- (e) Tax clearance per E.O. No. 398, s. 2005, as finally reviewed and approved by the Bureau of Internal Revenue (BIR).

#### Technical Documents

- (f) 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 (*please see attached prescribed forms required by the QC – BAC for Infrastructure and Consultancy*); **and**
- (g) Statement of the bidder’s Single Largest Completed Contract (SLCC) similar to the contract to be bid, except under conditions provided under the rules with an attached Notice of Award, Notice to Proceed, Contract and Certificate of Acceptance (*please see attached prescribed form required by the QC – BAC for Infrastructure and Consultancy*); **and**
- (h) Philippine Contractors Accreditation Board (PCAB) License;  
**or**  
Special PCAB License in case of Joint Ventures;  
**and** registration for the type and cost of the contract to be bid; **and**
- (i) Original copy of Bid Security. If in the form of a Surety Bond, submit also a certification issued by the Insurance Commission;  
**or**  
Original copy of Notarized Bid Securing Declaration; **and**
- (j) Project Requirements, which shall include the following:
  - a. Organizational chart for the contract to be bid;
  - b. List of contractor’s key personnel (*e.g.*, Project Manager, Project Engineers, Materials Engineers, and Foremen), to be assigned to the contract to be bid, with their complete qualification and experience data (*please see attached prescribed form required by the QC – BAC for Infrastructure and Consultancy*);
  - c. List of contractor’s major equipment units, which are owned, leased, and/or under purchase agreements, supported by proof of ownership or certification of availability of equipment from the equipment

lessor/vendor for the duration of the project, as the case may be (*please see attached prescribed form required by the QC – BAC for Infrastructure and Consultancy*); **and**

- (k) 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.

Additional Technical Requirements:

- Certificate of Site Inspection or Affidavit of Site Inspection as part of Omnibus Sworn Statement
- Affidavit of Undertaking for Key Personnel and Equipment (*please see attached prescribed form required by the QC – BAC for Infrastructure and Consultancy*)
- Equipment Utilization Schedule
- Manpower Schedule
- Construction Schedule and S-Curve
- PERT-CMP
- Construction Methods

#### Financial Documents

- (l) The prospective bidder's audited financial statements, showing, among others, the prospective bidder's total and current assets and liabilities, stamped "received" by the BIR or its duly accredited and authorized institutions, for the preceding calendar year which should not be earlier than two (2) years from the date of bid submission; **and**
- (m) The prospective bidder's computation of Net Financial Contracting Capacity (NFCC) (*please see attached prescribed form required by the QC – BAC for Infrastructure and Consultancy*).

#### **Class "B" Documents**

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

## **II. FINANCIAL COMPONENT ENVELOPE**

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

#### Other documentary requirements under RA No. 9184

- (p) Original of duly signed Bid Prices in the Bill of Quantities; **and**
- (q) Duly accomplished Detailed Estimates Form, including a summary sheet indicating the unit prices of construction materials, labor rates, and equipment rentals used in coming up with the Bid; **and**
- (r) Cash Flow by Quarter.

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

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**BID FORM**

Date : \_\_\_\_\_  
Project Identification No. : \_\_\_\_\_

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

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

- a. We have no reservation to the PBDs, including the Supplemental or Bid Bulletins, for the Procurement Project: *[insert name of contract]*;
- b. We offer to execute the Works for this Contract in accordance with the PBDs;
- c. The total price of our Bid in words and figures, excluding any discounts offered below is: *[insert information]*;
- d. The discounts offered and the methodology for their application are: *[insert information]*;
- e. The total bid price includes the cost of all taxes, such as, but not limited to: *[specify the applicable taxes, e.g. (i) value added tax (VAT), (ii) income tax, (iii) local taxes, and (iv) other fiscal levies and duties]*, which are itemized herein and reflected in the detailed estimates,
- f. Our Bid shall be valid within the a period stated in the PBDs, and it shall remain binding upon us at any time before the expiration of that period;
- g. If our Bid is accepted, we commit to obtain a Performance Security in the amount of *[insert percentage amount]* percent of the Contract Price for the due performance of the Contract, or a Performance Securing Declaration in lieu of the the allowable forms of Performance Security, subject to the terms and conditions of issued GPPB guidelines<sup>1</sup> for this purpose;
- h. We are not participating, as Bidders, in more than one Bid in this bidding process, other than alternative offers in accordance with the Bidding Documents;
- i. We understand that this Bid, together with your written acceptance thereof included in your notification of award, shall constitute a binding contract between us, until a formal Contract is prepared and executed; and
- j. We understand that you are not bound to accept the Lowest Calculated Bid or any other Bid that you may receive.

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<sup>1</sup> currently based on GPPB Resolution No. 09-2020



- k. We likewise certify/confirm that the undersigned, is the duly authorized representative of the bidder, and granted full power and authority to do, execute and perform any and all acts necessary to participate, submit the bid, and to sign and execute the ensuing contract for the [Name of Project] of the [Name of the Procuring Entity].
- l. We acknowledge that failure to sign each and every page of this Bid Form, including the Bill of Quantities, shall be a ground for the rejection of our bid.

Name: \_\_\_\_\_

Legal Capacity: \_\_\_\_\_

Signature: \_\_\_\_\_

Duly authorized to sign the Bid for and behalf of: \_\_\_\_\_

Date: \_\_\_\_\_

## **Bid Securing Declaration Form**

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

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REPUBLIC OF THE PHILIPPINES)  
CITY OF \_\_\_\_\_) S.S.

### **BID SECURING DECLARATION** **Project Identification No.: *[Insert number]***

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

I/We, the undersigned, declare that:

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

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

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

**[Jurat]**

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

## Omnibus Sworn Statement (Revised)

*[shall be submitted with the Bid]*

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REPUBLIC OF THE PHILIPPINES )  
CITY/MUNICIPALITY OF \_\_\_\_\_ ) S.S.

### AFFIDAVIT

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

1. *[Select one, delete the other:]*

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

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

2. *[Select one, delete the other:]*

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

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

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

4. Each of the documents submitted in satisfaction of the bidding requirements is an authentic copy of the original, complete, and all statements and information provided therein are true and correct;

5. [Name of Bidder] is authorizing the Head of the Procuring Entity or its duly authorized representative(s) to verify all the documents submitted;

6. *[Select one, delete the rest:]*

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

*[If a partnership or cooperative:]* None of the officers and members of [Name of Bidder] is related to the Head of the Procuring Entity, members of the Bids and Awards Committee (BAC), the Technical Working Group, and the BAC Secretariat, the head of the Project

Management Office or the end-user unit, and the project consultants by consanguinity or affinity up to the third civil degree;

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

7. *[Name of Bidder]* complies with existing labor laws and standards; and
8. *[Name of Bidder]* is aware of and has undertaken the responsibilities as a Bidder in compliance with the Philippine Bidding Documents, which includes:
  - a. Carefully examining all of the Bidding Documents;
  - b. Acknowledging all conditions, local or otherwise, affecting the implementation of the Contract;
  - c. Making an estimate of the facilities available and needed for the contract to be bid, if any; and
  - d. Inquiring or securing Supplemental/Bid Bulletin(s) issued for the *[Name of the Project]*.
9. *[Name of Bidder]* did not give or pay directly or indirectly, any commission, amount, fee, or any form of consideration, pecuniary or otherwise, to any person or official, personnel or representative of the government in relation to any procurement project or activity.
10. **In case advance payment was made or given, failure to perform or deliver any of the obligations and undertakings in the contract shall be sufficient grounds to constitute criminal liability for Swindling (Estafa) or the commission of fraud with unfaithfulness or abuse of confidence through misappropriating or converting any payment received by a person or entity under an obligation involving the duty to deliver certain goods or services, to the prejudice of the public and the government of the Philippines pursuant to Article 315 of Act No. 3815 s. 1930, as amended, or the Revised Penal Code.**
11. We pledge that the project will be completed in accordance and congruency with the approved plans and programs.

**IN WITNESS WHEREOF**, I have hereunto set my hand this \_\_\_ day of \_\_\_\_\_ 20\_\_ at \_\_\_\_\_, Philippines.

*[Insert NAME OF BIDDER OR ITS AUTHORIZED REPRESENTATIVE]*

*[Insert signatory's legal capacity]*

Affiant

**[Jurat]**

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

**Contract Agreement Form for the  
Procurement of Infrastructure Projects (Revised)**

*[not required to be submitted with the Bid, but it shall be submitted within ten (10) days after  
receiving the Notice of Award]*

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**CONTRACT AGREEMENT**

THIS AGREEMENT, made this *[insert date]* day of *[insert month]*, *[insert year]* between *[name and address of PROCURING ENTITY]* (hereinafter called the "Entity") and *[name and address of Contractor]* (hereinafter called the "Contractor").

WHEREAS, the Entity is desirous that the Contractor execute *[name and identification number of contract]* (hereinafter called "the Works") and the Entity has accepted the Bid for *[contract price in words and figures in specified currency]* by the Contractor for the execution and completion of such Works and the remedying of any defects therein.

NOW THIS AGREEMENT WITNESSETH AS FOLLOWS:

1. In this Agreement, words and expressions shall have the same meanings as are respectively assigned to them in the Conditions of Contract hereinafter referred to.
2. The following documents as required by the 2016 revised Implementing Rules and Regulations of Republic Act No. 9184 shall be deemed to form and be read and construed as part of this Agreement, viz.:
  - a. Philippine Bidding Documents (PBDs);
    - i. Drawings/Plans;
    - ii. Specifications;
    - iii. Bill of Quantities;
    - iv. General and Special Conditions of Contract;
    - v. Supplemental or Bid Bulletins, if any;
  - b. Winning bidder's bid, including the Eligibility requirements, Technical and Financial Proposals, and all other documents or statements submitted;  
  
Bid form, including all the documents/statements contained in the Bidder's bidding envelopes, as annexes, and all other documents submitted (e.g., Bidder's response to request for clarifications on the bid), including corrections to the bid, if any, resulting from the Procuring Entity's bid evaluation;
  - c. Performance Security;
  - d. Notice of Award of Contract and the Bidder's conforme thereto; and
  - e. Other contract documents that may be required by existing laws and/or the Procuring Entity concerned in the PBDs. **Winning bidder agrees that additional contract documents or information prescribed by the GPPB that are subsequently required for submission after the contract execution, such as the Notice to Proceed, Variation Orders, and Warranty Security, shall likewise form part of the Contract.**
3. In consideration for the sum of *[total contract price in words and figures]* or such other sums as may be ascertained, *[Named of the bidder]* agrees to *[state the object of the contract]* in accordance with his/her/its Bid.

- The *[Name of the procuring entity]* agrees to pay the above-mentioned sum in accordance with the terms of the Bidding.

IN WITNESS whereof the parties thereto have caused this Agreement to be executed the day and year first before written.

*[Insert Name and Signature] [Insert Name and Signature]*

*[Insert Signatory's Legal Capacity] [Insert Signatory's Legal Capacity]*

*for: for:*

*[Insert Procuring Entity] [Insert Name of Supplier]*

**Acknowledgment**

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

## Performance Securing Declaration (Revised)

*[if used as an alternative performance security but it is not required to be submitted with the Bid, as it shall be submitted within ten (10) days after receiving the Notice of Award]*

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REPUBLIC OF THE PHILIPPINES)  
CITY OF \_\_\_\_\_ ) S.S.

### PERFORMANCE SECURING DECLARATION

Invitation to Bid: [Insert Reference Number indicated in the Bidding Documents] To:  
[Insert name and address of the Procuring Entity]

I/We, the undersigned, declare that:

1. I/We understand that, according to your conditions, to guarantee the faithful performance by the supplier/distributor/manufacturee/contractor/consultant of its obligations under the Contract, I/we shall submit a Performance Securing Declaration within a maximum period of ten (10) calendar days from the receipt of the Notice of Award prior to the signing of the Contract.
2. I/We accept that: I/we will be automatically disqualified from bidding for any procurement contract with any procuring entity for a period of one (1) year for the first offense, or two (2) years **for the second offense**, upon receipt of your Blacklisting Order if I/We have violated my/our obligations under the Contract;
3. I/We understand that this Performance Securing Declaration shall cease to be valid upon:
  - a. issuance by the Procuring Entity of the Certificate of Final Acceptance, subject to the following conditions:
    - i. Procuring Entity has no claims filed against the contract awardee;
    - ii. It has no claims for labor and materials filed against the contractor; and
    - iii. Other terms of the contract; or
  - b. replacement by the winning bidder of the submitted PSD with a performance security in any of the prescribed forms under Section 39.2 of the 2016 revised IRR of RA No. 9184 as required by the end-user.

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

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

**[Jurat]**

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





**LIST OF ALL AWARDED BUT NOT YET STARTED GOVERNMENT AND PRIVATE CONTRACTS OF THE BIDDER**

**NAME OF CONTRACTOR:** \_\_\_\_\_

**PROJECT TITLE:** \_\_\_\_\_

| PROJECT TITLE & EXACT LOCATION | MAJOR SCOPE OF WORKS & DATE STARTED | NAME AND ADDRESS OF PROJECT OWNER | CONTRACT PRICE (PHP) AS AWARDED | DATE OF SCHEDULED COMPLETION | ROLE OF BIDDER IN THE <u>CONTRACT</u> <u>SOLE CONTRACTOR / SUB-CONTRACTOR/PARTNER IN A</u> |
|--------------------------------|-------------------------------------|-----------------------------------|---------------------------------|------------------------------|--|
|                                |                                     |                                   |                                 |                              |  |
|                                | TOTAL AMOUNT OF CONTRACT (Php)      |                                   |                                 |                              |  |

**SINGLE LARGEST COMPLETED CONTRACT SIMILAR TO THE CONTRACT TO BE BID**

**NAME OF CONTRACTOR:** \_\_\_\_\_

**PROJECT TITLE:** \_\_\_\_\_

| PROJECT TITLE<br>(Name of the Contract)<br>& EXACT PROJECT LOCATION | DATE OF<br>CONTRACT | CONTRACT<br>DURATION | PROJECT OWNER & POSTAL<br>ADDRESS | NATURE OF WORK | CONTRACTOR'S ROLE<br>(SOLE CONTRACTOR, SUBCONTRACTOR,<br>PARTNER IN A JV)<br>and PERCENTAGE OF<br>PARTICIPATION | TOTAL<br>CONTRACT<br>VALUE AT<br>AWARD | DATE OF<br>COMPLETION or<br>ESTIMATED<br>COMPLETION TIME | TOTAL<br>CONTRACT<br>VALUE AT<br>COMPLETION<br>IF APPLICABLE |
|---|---------------------|----------------------|-----------------------------------|----------------|---|--|--|--|
|   |                     |                      |                                   |                |   |  |  |  |

PHOTOCOPY ADDITIONAL FORMS, IF NECESSARY

Page \_\_\_\_\_ of \_\_\_\_\_

**LIST OF MAJOR EQUIPMENT TO BE USED FOR THE PROJECT**

**NAME OF CONTRACTOR:** \_\_\_\_\_

**PROJECT TITLE:** \_\_\_\_\_

| TYPE | DESCRIPTION / CAPACITY | SERIAL NO. | YEAR ACQUIRED | PRESENT LOCATION (SPECIFIC ADDRESS) | STATUS OF AVAILABILITY (OWNED/LEASED) |
|------|------------------------|------------|---------------|-------------------------------------|---------------------------------------|
|      |                        |            |               |                                     |                                       |

**A. LIST OF KEY CONSTRUCTION PERSONNEL TO BE ASSIGNED TO THE PROJECT**

NAME OF CONTRACTOR: \_\_\_\_\_

PROJECT TITLE: \_\_\_\_\_

| NAME | POSITION | AGE | EDUCATIONAL<br>ATTAINMENT | TYPE OF<br>CONSTRUCTION<br>EXPERIENCE | NO.OF YEARS<br>WITH THE<br>CONTRACTOR | PROFESSION | PRC NO. |
|------|----------|-----|---------------------------|---------------------------------------|---------------------------------------|------------|---------|
|      |          |     |                           |                                       |                                       |            |         |

## COMPUTATION OF NET FINANCIAL CONTRACTING CAPACITY (NFCC)

NAME OF BIDDER: \_\_\_\_\_

|  |        |     |       |
|--|--------|-----|-------|
| CURRENT ASSETS*  |        | PHP | _____ |
| (LESS) CURRENT LIABILITIES*  | (LESS) | PHP | _____ |
| NETWORTH   |        | PHP | _____ |
| NETWORTH x 15  | x 15   | PHP | _____ |
| (LESS) VALUE OF ALL OUTSTANDING ON-GOING CONTRACTS**                   | (LESS) | PHP | _____ |
| (LESS) VALUE OF ALL AWARDED BUT NOT YET STARTED CONTRACTS AS OF DATE** | (LESS) | PHP | _____ |
| <b>NET FINANCIAL CONTRACTING CAPACITY</b>                              |        | PHP | _____ |

NOTES: \* CURRENT ASSETS AND LIABILITIES BASED ON AUDITED FINANCIAL STATEMENT FOR THE PRECEDING CALENDAR YEAR SUBMITTED TO B.I.R.

\*\* BASED ON LIST OF ON-GOING AND AWARDED BUT NOT YET STARTED CONTRACTS SUBMITTED

REPUBLIC OF THE PHILIPPINES)

\_\_\_\_\_ ) S.S.

### AFFIDAVIT OF UNDERTAKING

I, \_\_\_\_\_ of legal age, Filipino, \_\_\_\_\_ [OFFICER OR REPRESENTATIVE]

with office address at \_\_\_\_\_ after having been duly sworn to in accordance with law, hereby voluntary depose and state:

That I am duly authorized representative of the [Name of Bidder] to execute this undertaking as evidenced by Secretary's Certificate and Board Resolution.

That [Name of Bidder] bidding for the (Name of Project)

That relative to the aforementioned Project, the [Name of Bidder] hereby undertake that the equipment to be use and the key personnel to be assign shall exclusively be used and will only perform to the said project until its completion.

That I am executing this affidavit to attest to the truth of the foregoing and in compliance with the submission of the technical requirements for the public bidding of the said project.

IN WITNESS HEREOF, I have hereunto signed my name below this \_\_\_\_\_ day of \_\_\_\_\_ at \_\_\_\_\_.

AFFIANT FURTHER SAYETH NAUGHT.

\_\_\_\_\_  
Affiant

SUBSCRIBED AND SWORN TO BEFORE ME this \_\_\_\_\_ day of \_\_\_\_\_  
in \_\_\_\_\_

affiant exhibiting to me his/her \_\_\_\_\_ issued at \_\_\_\_\_  
on \_\_\_\_\_

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Series of 2020

\_\_\_\_\_  
Notary Public

