



Republic of the Philippines
Department of Agriculture
BUREAU OF FISHERIES AND AQUATIC RESOURCES
BIDS AND AWARDS COMMITTEE OFFICE

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PHILIPPINE BIDDING DOCUMENTS

Government of the Republic of the Philippines

Bid Reference. No. 2024 – 13

“IMPROVEMENT OF JAPTC SUPPORT FACILITIES-POWER HOUSE & POWER SUPPLY LINE AND BLOWER/PUMP HOUSE”

P.R.NO.	Lot No.	Approved Budget for the Contract (ABC)	End-User
24-02-90	1	PhP 4,021,446.59	MS. ABEGAIL A. ALBALADEJO

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 note 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



INVITATION TO BID:

BID REFERENCE NO. 2024-13

“IMPROVEMENT OF JAPTC SUPPORT FACILITIES-POWER HOUSE & POWER SUPPLY LINE AND BLOWER/PUMP HOUSE”

1. The Department of Agriculture - Bureau of Fisheries and Aquatic Resources (DA-BFAR), through the General Appropriations Act for 2024 intends to apply the sum of **Four Million Twenty-One Thousand Four Hundred Forty-Six Pesos and 59/100 (PhP4,021,446.59)** being the Approved Budget for the Contract (ABC) to payment under the contract for **Bid Reference No. 2043 – 13** entitled **“IMPROVEMENT OF JAPTC SUPPORT FACILITIES-POWER HOUSE & POWER SUPPLY LINE AND BLOWER/PUMP HOUSE”**. Bids received in excess of the ABC shall be automatically rejected at bid opening.

PR No.	Lot No.	Description	Approved Budget for the Contract (ABC) (Php)	Bidding Documents Fee (Php)
24-02-90	1	IMPROVEMENT OF JAPTC SUPPORT FACILITIES-POWER HOUSE & POWER SUPPLY LINE AND BLOWER/PUMP HOUSE	4,021,446.59	5,000.00
TOTAL			4,021,446.59	5,000.00

2. The DA – BFAR now invites bids for the above Procurement Project. Completion of the Works is required within **sixty (60) calendar days** upon receipt of the Notice to Proceed. Bidders should have completed a contract similar to the Project. The description of an eligible bidder is contained in the Bidding Documents, particularly, in Section II (Instructions to Bidders).
3. Bidding will be conducted through open competitive bidding procedures using non-discretionary *“pass/fail”* criterion as specified in the 2016 revised Implementing Rules and Regulations (IRR) of Republic Act (RA) No. 9184.
4. Interested bidders may obtain further information from DA – BFAR BAC Secretariat and inspect the Bidding Documents at the address given below during office hours from **8:00 AM to 5:00 PM, Monday to Friday**.

5. A complete set of Bidding Documents may be acquired by interested bidders starting on **March 1, 2024, 8:00 AM to 5:00 PM** at the **given address and website/s** below and upon payment of the applicable fee for the Bidding Documents, pursuant to the latest Guidelines issued by the GPPB, in the amount stated above. The Procuring Entity shall allow the bidder to present its proof of payment for the fees in person, or through electronic means.
6. The DA – BFAR will hold a Pre-Bid Conference¹ on **March 8, 2024, Friday at 1:30 PM** through videoconferencing/webcasting via **“Zoom”** application, which shall be open to prospective bidders who have successfully completed registration one (1) calendar day prior to the Pre-bid Conference using Google Form https://docs.google.com/forms/d/e/1FAIpQLSeApwg4xk3LO5cyoDIHDAWCWylC6Inv8dq745P79mgDII518g/viewform?usp=pp_url and in accordance with the **“Annex A, Bidder’s Kit – I”**.
7. Bids must be duly received by the BAC Secretariat through, the options given below and as indicated in **ITB** Clause 15 of this bidding documents, on or before **March 20, 2024, Wednesday at 1:00 PM**. Late bids shall not be accepted:
 - (i) manual submission at the office address: **2/F – BAC Office, Fisheries Building Complex, BPI Compound, Visayas Avenue, Diliman, Quezon City; or**
 - (ii) both (manual and electronic submission at bac.eps@bfar.da.gov.ph through BFAR – BAC Online Bidding Procedure).
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 **March 20, 2024, Wednesday at 1:30 PM** through video conferencing or webcasting via **“Zoom”** application. Bids will be opened in the presence of the bidders’ representatives who choose to attend the activity and in accordance with the BFAR – BAC procedure for online bidding as stated in the **“Annex A, Bidder’s kit VII”**.
10. The DA – BFAR 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:

BFAR – BAC Secretariat
2nd Floor – BAC Office, Fisheries Building Complex, BPI Compound,
Visayas Avenue, Diliman, Quezon City.
bac.eps@bfar.da.gov.ph
(02) 8332-4661

12. You may visit the following websites:

For downloading of Bidding Documents: **www.bfar.da.gov.ph**

For online bid submission:

<https://docs.google.com/forms/d/1nwrEE7tqRE46Vc5QyL6badizDBGovj-8Frp14H0QRw/prefill>

Issued this 29th day of February 2024.

Original Signed

ATTY. MICHAEL S. ANDAYOG

Chairperson, Bids and Awards Committee

Section II. Instructions to Bidders

1. **Scope of Bid**

The Procuring Entity, DA – BFAR invites Bids for the **“IMPROVEMENT OF JAPTC SUPPORT FACILITIES-POWER HOUSE & POWER SUPPLY LINE AND BLOWER/PUMP HOUSE”**, with Project Identification Number **2024-13**.

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

2. **Funding Information**

2.1. The GOP through the source of funding as indicated below for **FY 2024** in the amount of **Four Million Twenty-One Thousand Four Hundred Forty-Six Pesos and 59/100 (PhP4,021,446.59)**.

2.2. The source of funding is General Appropriations Act.

3. **Bidding Requirements**

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

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

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

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

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

5. Eligible Bidders

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

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

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

6. Origin of Associated Goods

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

7. Subcontracts

- 7.1. The 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. The Bidder must submit together with its Bid the documentary requirements of the subcontractor(s) complying with the eligibility criteria 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. 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 through video conferencing or webcasting via "**Zoom**" application as indicated in paragraph 6 of the **IB**.

9. Clarification and Amendment of Bidding Documents

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

10. Documents Comprising the Bid: Eligibility and Technical Components

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

provided. These key personnel must meet the required minimum years of experience set in the **BDS**.

- 10.5. A List of Contractor's major equipment units, which are owned, leased, and/or under purchase agreements, supported by proof of ownership, certification of availability of equipment from the equipment lessor/vendor for the duration of the project, as the case may be, must meet the minimum requirements for the contract set in the **BDS**.

11. Documents Comprising the Bid: Financial Component

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

12. Alternative Bids

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

13. Bid Prices

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

14. Bid and Payment Currencies

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

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

15. Bid Security

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

16. Sealing and Marking of Bids

Each Bidder shall submit bids in accordance with **Section III – Bid Data Sheet, ITB Clause 16**.

17. Deadline for Submission of Bids

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

18. Opening and Preliminary Examination of Bids

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

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

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

19. Detailed Evaluation and Comparison of Bids

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

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

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

20. Post Qualification

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

21. Signing of the Contract

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

Section III. Bid Data Sheet

Bid Data Sheet

ITB Clause																
5.2	<p>For this purpose, contracts similar to the Project refer to contracts which have the same major categories of work, which shall be:</p> <ul style="list-style-type: none"> a. Improvement/Construction of Building Facility b. The bidder must have completed a single contract that is similar to the Project, equivalent to at least fifty percent (50%) of the ABC within five (5) years prior to the deadline for the submission and receipt of bids. 															
7.1	<i>Subcontracting is not allowed.</i>															
10.3	<p>A valid and current Philippine Contractors Accreditation Board (PCAB) License requirement shall be:</p> <p>Size Range: at least Small B License Category: C & D Principal Classification: General Building</p>															
10.4	<p>The key personnel must meet the required minimum years of experience set below:</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;"><u>Key Personnel</u></th> <th style="text-align: center;"><u>General Experience</u></th> <th style="text-align: center;"><u>Relevant Experience</u></th> </tr> </thead> <tbody> <tr> <td>Project Engineer</td> <td style="text-align: center;">7 years</td> <td style="text-align: center;">5 years</td> </tr> <tr> <td>Electrical Engineer</td> <td style="text-align: center;">5 years</td> <td style="text-align: center;">3 years</td> </tr> <tr> <td>Mechanical Engineer</td> <td style="text-align: center;">5 years</td> <td style="text-align: center;">3 years</td> </tr> <tr> <td>General Foreman</td> <td style="text-align: center;">5 years</td> <td style="text-align: center;">3 years</td> </tr> </tbody> </table>	<u>Key Personnel</u>	<u>General Experience</u>	<u>Relevant Experience</u>	Project Engineer	7 years	5 years	Electrical Engineer	5 years	3 years	Mechanical Engineer	5 years	3 years	General Foreman	5 years	3 years
<u>Key Personnel</u>	<u>General Experience</u>	<u>Relevant Experience</u>														
Project Engineer	7 years	5 years														
Electrical Engineer	5 years	3 years														
Mechanical Engineer	5 years	3 years														
General Foreman	5 years	3 years														
10.5	<p>The minimum major equipment requirements are the following:</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;">Number of Units</th> <th style="text-align: center;">Equipment</th> <th></th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">1</td> <td>One-Bagger Mixer</td> <td rowspan="2" style="vertical-align: top;">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.</td> </tr> <tr> <td style="text-align: center;">1</td> <td>Elf Truck</td> </tr> </tbody> </table>	Number of Units	Equipment		1	One-Bagger Mixer	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.	1	Elf Truck							
Number of Units	Equipment															
1	One-Bagger Mixer	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.														
1	Elf Truck															
12	<i>No further instructions.</i>															
15.1	<p>The bid security shall be in the form of a Bid Securing Declaration or any of the following forms and amounts:</p> <ul style="list-style-type: none"> a. The amount of not less than PhP80,428.93 <i>two percent (2%) of ABC</i>, if bid security is in cash, cashier's/manager's check, bank draft/guarantee or irrevocable letter of credit; b. The amount of not less than PhP201,072.33 <i>five percent (5%) of ABC</i> if bid security is in Surety Bond. 															
16	Participating bidders/suppliers may submit their bidding documents through either of the following forms:															

1. Hard Copy/Physical Document

- Submitted directly through the BAC Office Address:

Bids and Awards Committee (BAC) Office

Bureau of Fisheries and Aquatic Resources

Fisheries Building Complex, BPI Compound, Visayas Ave, Diliman,

Quezon City

Note: If the participating bidders/suppliers only submits a hardcopy of the document, and the same is discovered to be damaged or the entries thereof are not readable during the opening thereof, said participating bidders/suppliers loses his privilege to participate in the bidding.

2. Electronic and Hard Copy Document

- The hard copy/physical document shall be scanned and encrypted with password (refer to Annexes – BFAR-BAC Online bidding Procedure).
- The scanned document will be sent via email at **bac.eps@bfar.da.gov.ph**

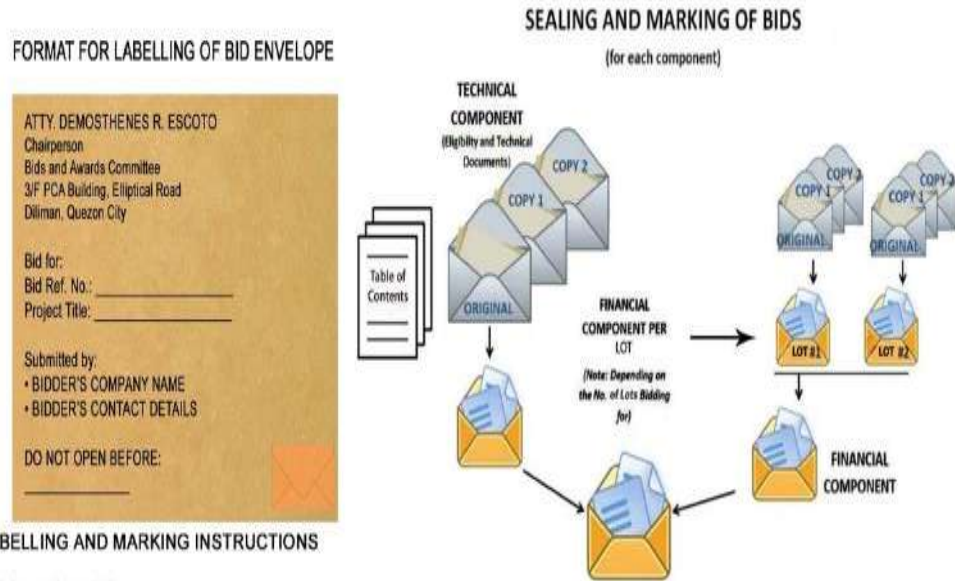
Bidders/suppliers may opt to submit both electronic and hardcopy in compliance with the abovementioned details.

Note: In case the electronic copy is discovered corrupted during opening, the back-up hardcopy will be opened as alternative option. However, in the event that both electronic copy and hardcopy are corrupted and/or not readable participating bidders/suppliers loses his privilege to participate in the bidding.

A. GUIDELINES ON LABELING AND MARKING OF BID ENVELOPE FOR THE SUBMISSION OF HARD COPIES:

1. Main envelope shall:
 - a) bear addressed to the Procuring Entity's BAC;
 - b) bear the specific identification/Bid ref. no. of this bidding;
 - c) contain the name of the contract/Project Title to be bid;
 - d) bear the Company Name, Company Address and Contact details of the Bidder; and
 - e) bear a warning "DO NOT OPEN BEFORE" (the date and time of opening of Bids);
2. Bidders shall enclose the First component (Eligibility and Technical documents) and Second components (Financial documents) of their bid;
3. Each Bidder shall submit one (1) original and two (2) copies of the first and second components of its bid;

4. The inner envelopes of the first and second component shall be similarly sealed and duly marked as Original, Copy 1 and Copy 2; and
5. Each component must contain Table of Contents and all documents attached should be properly tabbed and bound; and
6. All pages should be signed by the bidder's authorized representative.



Important: DA-BFAR will assume that the submitted electronic copies must be the same as the printed copies.

B. GUIDELINES ON ELECTRONIC/ONLINE SUBMISSION AND RECEIPT OF BIDS:

Please see BFAR BAC Online Procedure, Annex A to C

19.2	<i>No further instruction.</i>
20	<i>No further instruction.</i>
21	<p>Additional contract documents relevant to the Project that may be required by existing laws and/or the Procuring Entity, such as construction schedule and S-curve, manpower schedule, construction methods, equipment utilization schedule, construction safety and health program approved by the DOLE, and other acceptable tools of project scheduling.</p> <p>NOTE: The Construction Safety and Health Program approved by the Department of Labor and Employment (DOLE) shall be submitted within sixty (60) calendar days from receipt of Notice to Proceed.</p>

Section IV. General Conditions of Contract

1. Scope of Contract

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

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

2. Sectional Completion of Works

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

3. Possession of Site

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

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

4. The Contractor's Obligations

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

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

5. Performance Security

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

6. Site Investigation Reports

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

7. Warranty

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

8. Liability of the Contractor

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

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

9. Termination for Other Causes

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

10. Dayworks

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

11. Program of Work

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

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

12. Instructions, Inspections and Audits

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

13. Advance Payment

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

14. Progress Payments

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

15. Operating and Maintenance Manuals

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

Section V. Special Conditions of Contract

Special Conditions of Contract

GCC Clause	
2	The Intended Completion Dates shall be within <i>Sixty (60) Calendar days</i> upon receipt of the Notice to Proceed;
4.1	The DA – BFAR shall give temporary possession of all necessary parts of the Site to the Contractor from the date of the effectivity of contract until the date of its termination and/or project completion.
6	The site investigation reports are: Site Inspection should be conducted prior to the conduct of Bid Opening Conference to enable the bidder/contractor to submit their queries/issues on the project, and the bidder/contractor must have a Certificate of Site Inspection issued by Mr. Rowvic Docena /09261670789
7.2	<i>One (1) year warranty.</i>
10	No dayworks are applicable to the contract.
11.1	The Contractor shall submit the Program of Work to the Procuring Entity’s Representative within <i>five (5)</i> calendar days of delivery of the Notice of Award.
11.2	<i>No further instruction.</i>
13	The amount of the advance payment <i>shall not exceed 15% of the total contract price and schedule of payment.</i>
14	<i>No further instruction.</i>
15.1	<i>No further instruction.</i>
15.2	No final payment shall be made by the DA-BFAR unless the Contractor prepares and submits the required as-built plans/drawings and/or operating and maintenance manuals.

Section VI. Specifications

“IMPROVEMENT OF JAPTC SUPPORT FACILITIES-POWER HOUSE & POWER SUPPLY LINE AND BLOWER/PUMP HOUSE”

Approved Budget for the Contract (ABC) : PhP4,021,446.59

QUANTITY UNIT ITEM DESCRIPTION			Statement of Compliance
I. GENERAL REQUIREMENTS			<i>[Bidders must state here either “Comply” or “Not Comply” against each of the individual parameters of each Specification stating the corresponding performance parameter of the equipment offered. Statements of “Comply” or “Not Comply” must be supported by evidence in a Bidders Bid and cross-referenced to that evidence. Evidence shall be in the form of manufacturer’s un-amended sales literature, unconditional statements of specification and compliance issued by the manufacturer, samples, independent test data etc., as appropriate. A statement that is not supported by evidence or is</i>
1	lot	Mobilization & Demobilization	
1	lot	Temporary Facilities	
1	lot	Application of Necessary Permits	
1	lot	Construction Safety	
1	lot	Project Signage	
II. SUPPORT FACILITIES			
1	lot	Construction of Power House & JAPTC Power Supply	
1	lot	Construction of Pump/Blower House	
<u>TERMS OF REFERENCE</u>			
I. INTRODUCTION			
<p>The work shall include labor, materials, tools, demolition, clearing, restoration, inspection, and all necessary general conditions, that may be reasonably inferred from the contract documents to provide construction of the abovementioned project.</p> <p>The completion period for the aforementioned project is:</p> <ul style="list-style-type: none"> • Sixty (60 CD) Calendar days for the completion of project. 			
II. TECHNICAL SPECIFICATIONS			
<p>The said project shall be of IMPROVEMENT OF JAPTC SUPPORT FACILITIES – POWER HOUSE & POWER SUPPLY LINE, AND BLOWER/PUMP HOUSE. It must be complete with all necessary construction supply needed to complete the project.</p>			
A. POWER HOUSE			
a. SITE WORKS			
<ul style="list-style-type: none"> • Hauling of materials and debris including all necessary works. 			

<ul style="list-style-type: none"> • All embedded service connections must be verified by the contractor and all relocations and repairs of such items must be at the expense of the contractor. • Construction of temporary facilities will be provided by the contractor. <p>b. ARCHITECTURAL REQUIREMENTS</p> <ul style="list-style-type: none"> • Supply and Installation of Rubberized Floor Finished for Slab and Plain Concrete Finished at pavement area • Supply and installation of Steel Louvered Doors including all necessary works (see attached dwg. for reference) • Supply and installation of Steel Window including all necessary works (see attached dwg. for reference) • Supply and installation of Metal Spandrel and Hardiflex Ceiling including all necessary works provide manhole for maintenance purposes (see attached dwg. for reference) • Painting Works for Interior and Exterior Walls. <p>c. STRUCTURAL REQUIREMENTS</p> <ul style="list-style-type: none"> • Supply and Installation of concrete 21mpa include footing, column, roof beam, slab on grade and Wall footing for Power House. • Supply and installation of Reinforcements Grade 40 • Supply and Installation of Masonry wall CHB 6” for Exterior Walls and 4” for Interior Walls • Excavation must cover the area of the isolated footing and footing tie beam of the building mentioned. • Backfilling must be done in layers in thickness not more than 40cm and must be watered (to achieve optimum water ratio) before compaction. After the forms are removed, all trash, wood chips and other debris shall be removed from areas to be backfilled. Backfill materials shall consist of approved site excavated materials which would be detrimental to compaction requirements. <p>d. ELECTRICAL REQUIREMENTS</p> <ul style="list-style-type: none"> • Supply and installation of Panel Box and Cabling (Manual Transfer Switch- MTS) (see attached dwg. for reference). • Supply and installation of Panel Box and Cabling (Main Distribution Panel – MDP) (see attached dwg. for reference). • Supply and installation of Panel Box and Cabling (PPG) (see attached dwg. for reference). • Supply and installation of Led recessed pin lights, wiring, switches including all necessary works (see attached dwg. for reference). • Supply and installation of outlets, wirings including all necessary works (see attached dwg. for reference). • Supply, Delivery and installation of 25kVA, 3-Phase Diesel Generator set (Silent Type). <p>B. BLOWER/PUMP HOUSE</p>	<p><i>subsequently found to be contradicted by the evidence presented will render the Bid under evaluation liable for rejection. A statement either in the Bidder's statement of compliance or the supporting evidence that is found to be false either during Bid evaluation, post-qualification or the execution of the Contract may be regarded as fraudulent and render the Bidder or supplier liable for prosecution subject to the applicable laws and issuances.]</i></p>
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a. SITE WORKS

- Hauling of materials and debris including all necessary works.
- All embedded service connections must be verified by the contractor and all relocations and repairs of such items must be at the expense of the contractor.

b. ARCHITECTURAL REQUIREMENTS

- Supply and Installation of Rubberized Floor Finished for Slab and Plain Concrete Finished at pavement area.
- Supply and installation of Steel Louvered Doors including all necessary works (see attached dwg. for reference)
- Supply and installation of Steel Window including all necessary works (see attached dwg. for reference)
- Supply and installation of Metal Spandrel and Hardiflex Ceiling including all necessary works provide manhole for maintenance purposes (see attached dwg. for reference)
- Painting Works for Interior and Exterior Walls.

c. STRUCTURAL REQUIREMENTS

- Supply and Installation of concrete 21mpa include footing, column, roof beam, slab on grade and wall footing for power house.
- Supply and installation of Reinforcements Grade 40
- Supply and Installation of Masonry wall CHB 6" for Exterior Walls and 4" for Interior Walls
- Excavation must cover the area of the isolated footing and footing tie beam of the building mentioned.
- Backfilling must be done in layers in thickness not more than 40cm and must be watered (to achieve optimum water ratio) before compaction. After the forms are removed, all trash, wood chips and other debris shall be removed from areas to be backfilled. Backfill materials shall consist of approved site excavated materials which would be detrimental to compaction requirements.

d. ELECTRICAL REQUIREMENTS

- Supply and installation of Panel Box and Cabling (Power Panel - PP) (see attached dwg. for reference).
- Supply and installation of Led recessed pin lights, wiring, switches including all necessary works (see attached dwg. for reference).
- Supply and installation of outlets, wirings including all necessary works (see attached dwg. for reference).

I hereby certify that the statement of compliance to the foregoing technical specifications are true and correct, otherwise, if found to be false either during bid evaluation or post qualification, the same shall give rise to automatic disqualification of our bid.

Name of Company

**Signature over Printed Name of
Authorized Representative**

Date

Section VII. Drawings

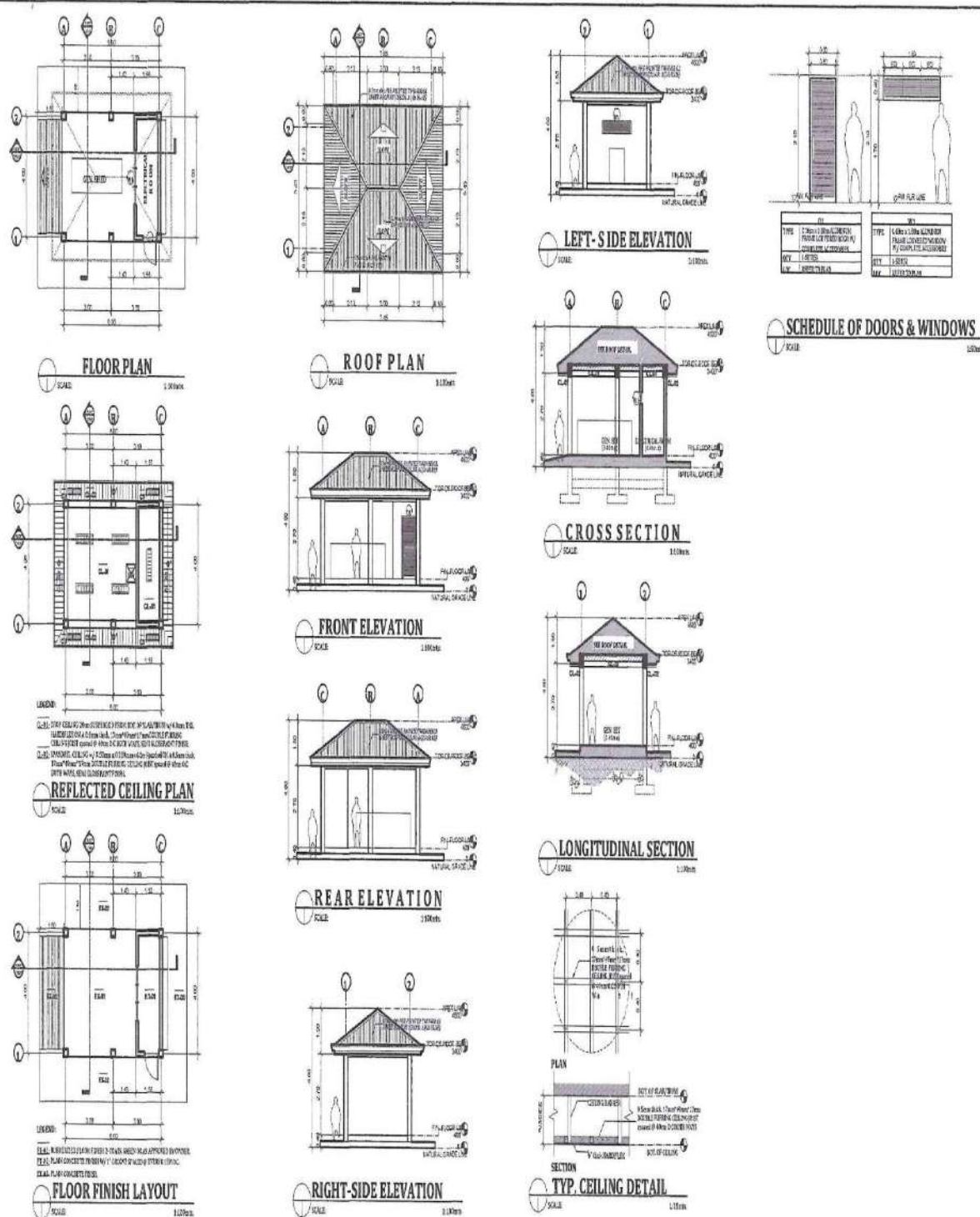


PERSPECTIVE
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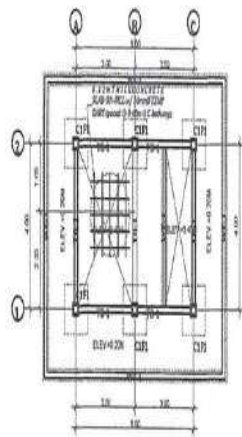


SITE DEVELOPMENT PLAN
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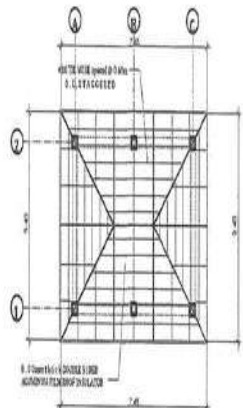
 <p>DEPARTMENT OF AGRICULTURE BUREAU OF FISHERIES AND AQUATIC RESOURCES</p> <p>PHILIPPINE AGRICULTURAL COMPLEX, P.O. BOX 750, BARANGAY, VISAYAS AVENUE, QUEZON CITY</p>	PROJECT TITLE	PREPARED BY	SHEET CONTENTS	RECOMMENDING APPROVAL	APPROVED	SHEET NO.
	CONSTRUCTION OF POWER HOUSE	 M. S. S. S. S. S. BUREAU OF FISHERIES AND AQUATIC RESOURCES DIVISION OF FISHERIES MANAGEMENT	PERSPECTIVE SITE DEVELOPMENT PLAN	 MARIA AZEAL A. ALMADEC CHIEF, PED	 ATTY. CRISPINAVER R. EDO NATIONAL DIRECTOR, BFA	A-1
	LOCATION: JAFIC JABONG SAHAR	CHECKED & VERIFIED  M. S. S. S. S. BUREAU OF FISHERIES AND AQUATIC RESOURCES DIVISION OF FISHERIES MANAGEMENT				1 OF 2



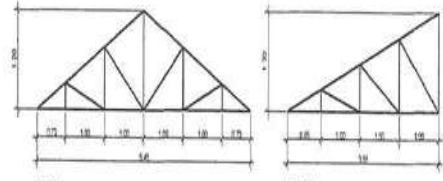
<p>DEPARTMENT OF AGRICULTURE BUREAU OF FISHERIES AND AQUATIC RESOURCES</p> <p>FISHERIES COMPLEX, 3RD FLOOR, BLDG. 7000, MARINA AVE., QUEZON CITY</p>	PROJECT TITLE: CONSTRUCTION OF POWER HOUSE	PREPARED BY: [Signature] CHECKED BY: [Signature] [Signature]	SHEET CONTENTS: FLOOR PLAN FRONT ELEVATION REAR ELEVATION LEFT SIDE ELEVATION RIGHT SIDE ELEVATION FLOOR FINISH LAYOUT REFLECTED CEILING PLAN	ECONOMIC APPROVAL: [Signature] MARIA ARGENTI A. ALBAÑO CHIEF, PED	APPROVED: [Signature] ATTY. DONATO REBER R. ESCOTO NATIONAL DIRECTOR, BAR	SHEET NO.: A-2 2025
	LOCATION: LUPIC, BANGAL, SAMAR	ENGINEER: [Signature] ARCHITECT: [Signature]	[Signature]	[Signature]	[Signature]	[Signature]



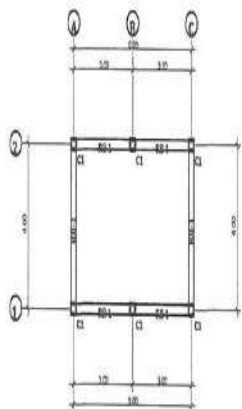
FOUNDATION PLAN
SCALE 1:100mm



ROOF INSULATION LAYOUT
SCALE 1:100mm



TRUSS DIAGRAM
SCALE 1:20mm



ROOF BEAM LAYOUT
SCALE 1:100mm

SCHEDULE OF BEAMS:

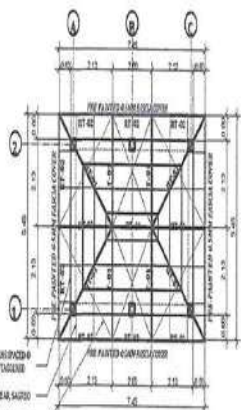
DIMENSION	DIAGRAM	DIAGRAM	DIAGRAM	DIAGRAM
	TS1	RS1	RAISED BEAM	COLU
MAIN @ SUPPORT	2.5mm x 4.5mm	4.5mm x 3.0mm	1.5mm	MAIN REIN. 4-16mm
MAIN @ JOINT	2.5mm x 2.5mm	2.5mm x 2.5mm	1.5mm	75mm @ spaced @ 30mm
	2.5mm x 2.5mm	4.5mm x 2.5mm	1.5mm	24.1m, 34.1m, and @ 30mm
	2.5mm x 2.5mm	4.5mm x 2.5mm	1.5mm	0.2m

SCHEDULE OF TRUSSES:

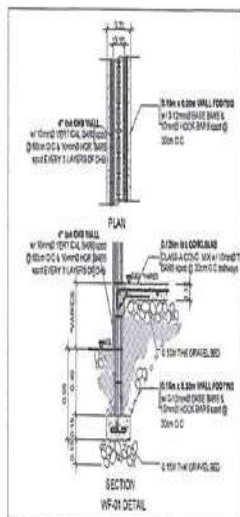
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T-01	1.5" x 1.5" ANGLE BAR	5.0mm	1.5" x 1.5" ANGLE BAR	5.0mm	1.5" x 1.5" ANGLE BAR	5.0mm	YES
HT-01	1.5" x 1.5" ANGLE BAR	5.0mm	1.5" x 1.5" ANGLE BAR	5.0mm	1.5" x 1.5" ANGLE BAR	5.0mm	YES
HT-02	1.5" x 1.5" ANGLE BAR	5.0mm	1.5" x 1.5" ANGLE BAR	5.0mm	1.5" x 1.5" ANGLE BAR	5.0mm	YES
RT-01	1.5" x 1.5" ANGLE BAR	5.0mm	1.5" x 1.5" ANGLE BAR	5.0mm	1.5" x 1.5" ANGLE BAR	5.0mm	NO
RT-02	1" x 1" ANGLE BAR	4.0mm	1" x 1" ANGLE BAR	4.0mm	1" x 1" ANGLE BAR	4.0mm	NO

SCHEDULE OF FOOTINGS:

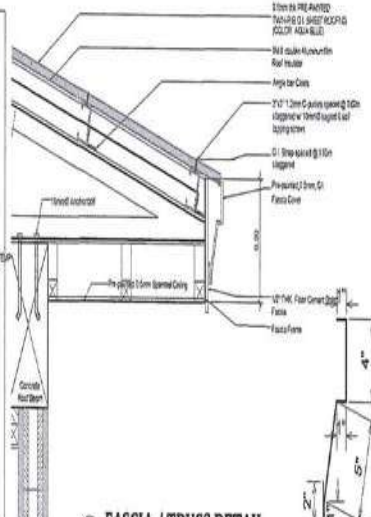
FOOTING	X (mm)	Y (mm)	THICKNESS (mm)	DEPTH (mm)	REIN @ X	REIN @ Y	REMARKS
F1	150	150	350	200	11-16mm @ spaced @ 110mm	11-16mm @ spaced @ 110mm	ISOLATED FOOTING



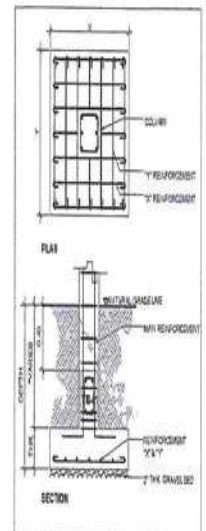
ROOF FRAMING LAYOUT
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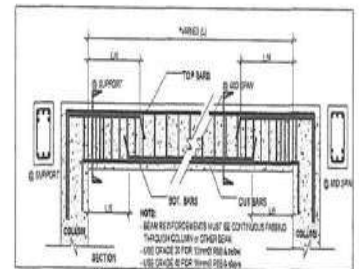
WF-01 DETAIL
SCALE 1:50mm




FASCIA / TRUSS DETAIL
SCALE 1:50mm



TYP. COLUMN DETAIL
SCALE 1:20mm



TYP. BEAM DETAIL
SCALE 1:50mm

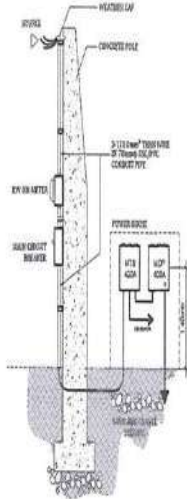
 <p>DEPARTMENT OF AGRICULTURE BUREAU OF FISHERIES AND AQUATIC RESOURCES</p>	<p>PROJECT TITLE CONSTRUCTION OF POWER HOUSE</p>	<p>PREPARED BY: ENGR. ERWIN L. LAPARDO BIR-ENGINEERING UNIT</p>	<p>SHEET CONTENTS FOUNDATION PLAN ROOF BEAM LAYOUT ROOF FRAMING LAYOUT ROOF INSULATION LAYOUT TRUSS DIAGRAM FASCIA / TRUSS DETAIL</p>	<p>RECOMMENDING APPROVAL: [Signature]</p>	<p>APPROVED: [Signature]</p>	<p>SHEET NO.: S-2 2 OF 2</p>
	<p>CHECKED & VERIFIED: ENGR. [Signature] BIR-ENGINEERING UNIT</p>	<p>ENGR. ARYOD M. NORRIP P.C. CONSULTING UNIT</p>	<p>[Signature] MAYOR ABDUL A. ALBAKAR Chief, PSC</p>	<p>[Signature] MTI. DENOVINES R. ESCOTO NATIONAL DIRECTOR, BIR</p>		

GENERAL NOTES:

- THE ELECTRICAL INSTALLATION WORK SHALL BE DONE IN ACCORDANCE WITH PROVISIONS OF THE LATEST EDITION OF THE PHILIPPINE ELECTRICAL CODE, THE LOCAL RULES AND REGULATIONS AND THE REQUIREMENTS OF THE UTILITY COMPANY.
- ALL ELECTRICAL WORKS MUST BE SUPERVISED BY AN EXPERIENCED AND SKILLED PERSONNEL UNDER THE SUPERVISION OF A DULY LICENSED ELECTRICAL ENGINEER. WORKS SHALL BE NEATLY, SECURELY AND PROPERLY FINISHED.
- SERVICE ENTRANCE SHALL BE THREE - PHASE, THREE - WIRE PLUS GROUND, 13.8 KV, 60HZ. DISTRIBUTION SYSTEM VOLTAGE IS 400V, 3Ø, 3-WIRE PLUS GROUND.
- MATERIALS SHALL BE NEW AND SHALL CONFORM WITH THE LATEST PROVISIONS OF THE UNDERWRITERS LABORATORIES INC., IN EVERY CASE WHERE SUCH A STANDARD HAS BEEN ESTABLISHED.
- ALL EXPOSED CONDUITS SHALL BE PVC, AND ALL CONCEALED CONDUITS SHALL BE MC OR EMT WITH COMPRESSION TYPE FITTINGS FOR SERVICE ENTRANCE SHALL BE PVC.
- ELECTRICAL TRAILER SIZE SHALL BE USED, A MAXIMUM OF 15mm FOR CONDUITS AND IN NO CASE SHALL BE MORE THAN THE EQUIVALENT OF FOUR QUARTER BENDS IN ANY ONE RUN.
- CONDUITS SHALL BE PROTECTED AGAINST DAMAGE DURING CONSTRUCTION. ALL ENDS OF CONDUITS SHALL BE PLUGGED TO PREVENT WATER INGRESS AND PREVENT OF MOISTURE AND FOREIGN MATTER AFTER INSTALLATION.
- MINIMUM SIZE OF CONDUCTORS TO BE USED FOR LIGHTING AND POWER OUTLET SHALL BE 3.0mm THW/THN.
- THE FOLLOWING TESTS SHALL BE PERFORMED INCLUSIVE OF THE INSTALLATION TO BE SUBMITTED IN DETAILS:
A. INSULATION RESISTANCE TEST (500V)
B. GROUND RESISTANCE TEST (5 OHMS)
C. OPERATIONAL TEST
D. PHASE SEQUENCE TEST
E. SYSTEM TEST
- COLOR CODING OF WIRES SHALL BE AS FOLLOWS:
LINE 1 - BLACK GROUND - GREEN
LINE 2 - RED COLOUR - WHITE
LINE 3 - YELLOW CONTROL - BLUE
- THE MINIMUM NUMBER OF CONDUCTORS IN TRAILER SIZES OF CONDUITS SHALL BE AS FOLLOWS:

CABLE SIZE	MINIMUM NUMBER OF CONDUCTORS IN CONDUIT	MINIMUM NUMBER OF CONDUCTORS IN CONDUIT			
		25mm PVC	25mm PVC	25mm PVC	25mm PVC
1.6	2.0	4	6	10	16
2.0	3.5	3	5	8	15
2.6	5.5	1	4	7	13
	8.0	1	3	4	7
	14	1	1	3	4

- ALL BRANCH CIRCUIT FEEDERS SHALL BE PROVIDED WITH ADDITIONAL GROUND WIRE IN ACCORDANCE WITH THE PHILIPPINE ELECTRICAL CODE TABLE 2.0.6.1.3 IEC 2017 PART 1 VOL. 1, EVEN WHERE IT IS NOT SHOWN. SPECIAL SYSTEMS, INCLUDING WIRING FROM CONTROLLER TO THE EQUIPMENT.
- TRAILER CONTRACTORS SHALL PROVIDE CONTROLLERS FOR ELECTRICALLY OPERATED EQUIPMENT I.E. FIRE PROTECTION AND SANITARY SYSTEM AND OTHER SPECIAL SYSTEMS, INCLUDING WIRING FROM CONTROLLER TO THE EQUIPMENT.
- ALL RACKINGS, WALL AND FLOOR PENETRATIONS SHALL BE PROVIDED WITH FIRE BARRIER OR FIRE RATED SEALANT.
- ALL EXPOSED BOXES SHALL BE WEATHERPROOF TYPE ENCLOSURE.
- A PLASTIC HOLDER OR JACKET DIRECTORY SHALL BE PROVIDED FOR EACH PANELBOARD INDICATING SINGLE LINE DIAGRAM AND LOAD SCHEDULES.
- ALL ELECTRICAL CIRCUITS SHALL BE WIRED ACCORDING TO THE LOAD SCHEDULE / SINGLE LINE DIAGRAM.
- ALL RECEPTACLE OUTLETS SHALL BE OF GROUNDING TYPE.
- ALL EXIT LIGHTS AND EMERGENCY LIGHTS SHALL BE WIRED IN AHEAD OF THE LOCAL SWITCH AND WITH GROUNDING TYPE.
- SURFACE MOUNTED CONDUITS SHALL BE SUPPORTED AND SECURED BY C-DIMANETS, CLAMP OR U-BOLT.
- SMOKERS SHALL BE RATED 15 AMP, 120 VOLTS AND CONVENIENCE OUTLET SHALL BE GROUNDING AND WITH QUICK CONNECT TYPE.
- CONNECTION SHALL BE MADE USING 3Ø SPRING CONNECTIONS OR EQUIVALENT FOR SPINDING OF WIRES (LIGHTING AND POWER OUTLET).
- PULLBOXES SHALL HAVE DEDICATED BRANCH CIRCUIT RUNS & NOT TO SHARE WITH OTHER CIRCUITS.
- IN CASE OF CONDUIT RUNS THAT HAS MORE THAN FOUR QUARTER BENDS, PROVIDE PULLBOX.



POWER RISER DIAGRAM
SCALE

PPG - PUMPBLOWER HOUSE POWER PANEL ELECTRICAL LOAD SCHEDULE & COMPUTATION:

CIRCUIT NO.	DESCRIPTION	P	VA	AMPS				WIRE SIZE	CONDUIT SIZE	BIPOLAR WIRE	NO. WIRE	WIRING CODE
				LL	LN	LS	LSL					
1	TRANSFORMER	220	880	4.41				3.0mm ² THW/THN	25x25	2	2	NEW SERVICE CONDUCTOR
2	1Ø PUMP	750	340	3.40	3.40	3.40		3.0mm ² THW/THN	25x25	2	1	USE 3.0mm ² THW/THN
3	1Ø PUMP	750	340	3.40	3.40	3.40		3.0mm ² THW/THN	25x25	2	1	USE 3.0mm ² THW/THN
4	1Ø PUMP	750	340	3.40	3.40	3.40		3.0mm ² THW/THN	25x25	2	1	USE 3.0mm ² THW/THN
5	1Ø PUMP	750	340	3.40	3.40	3.40		3.0mm ² THW/THN	25x25	2	1	USE 3.0mm ² THW/THN
6	1Ø PUMP	3000	1320	13.20	13.20	13.20		3.0mm ² THW/THN	40x40	2	1	USE 3.0mm ² THW/THN
7	1Ø PUMP	3000	1320	13.20	13.20	13.20		3.0mm ² THW/THN	40x40	2	1	USE 3.0mm ² THW/THN
8	1Ø PUMP	3000	1320	13.20	13.20	13.20		3.0mm ² THW/THN	40x40	2	1	USE 3.0mm ² THW/THN
9	1Ø PUMP	3000	1320	13.20	13.20	13.20		3.0mm ² THW/THN	40x40	2	1	USE 3.0mm ² THW/THN
10	1Ø PUMP											USE 3.0mm ² THW/THN
TOTAL		220	3880	38.80	38.80	38.80						

PP - POWER HOUSE PANEL ELECTRICAL LOAD SCHEDULE & COMPUTATION:

CIRCUIT NO.	DESCRIPTION	P	VA	AMPS				WIRE SIZE	CONDUIT SIZE	BIPOLAR WIRE	NO. WIRE	WIRING CODE
				LL	LN	LS	LSL					
1	TRANSFORMER	220	880	4.41				3.0mm ² THW/THN	25x25	2	2	NEW SERVICE CONDUCTOR
2	1Ø PUMP											USE 3.0mm ² THW/THN
3	1Ø PUMP											USE 3.0mm ² THW/THN
4	1Ø PUMP											USE 3.0mm ² THW/THN
5	1Ø PUMP											USE 3.0mm ² THW/THN
6	1Ø PUMP											USE 3.0mm ² THW/THN
TOTAL		220	880	4.41								

NDP ELECTRICAL LOAD SCHEDULE & COMPUTATION:

CIRCUIT NO.	DESCRIPTION	P	VA	AMPS				WIRE SIZE	CONDUIT SIZE	BIPOLAR WIRE	NO. WIRE	WIRING CODE
				LL	LN	LS	LSL					
1	TRANSFORMER	220	3440	42.07	42.07	42.07		3.0mm ² THW/THN	30x30	2	2	NEW SERVICE CONDUCTOR
2	1Ø PUMP	3000	1320	13.20	13.20	13.20		3.0mm ² THW/THN	30x30	2	1	USE 3.0mm ² THW/THN
3	1Ø PUMP	3000	1320	13.20	13.20	13.20		3.0mm ² THW/THN	30x30	2	1	USE 3.0mm ² THW/THN
4	1Ø PUMP											USE 3.0mm ² THW/THN
5	1Ø PUMP											USE 3.0mm ² THW/THN
6	1Ø PUMP											USE 3.0mm ² THW/THN
TOTAL		220	5112	68.98	68.98	68.98						

SIGNAL NET LOAD: 200000

MAIN SERVICE ENTRANCE CONDUCTOR

+ 3000.00 / (0.759 * 0.8)

+ 80.708 / (0.759 * 0.8)

+ 462.624 / (0.759 * 0.8)

+ 462.624 / (0.759 * 0.8)

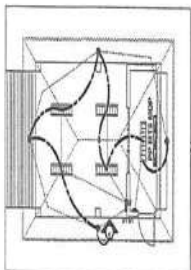
+ 462.624 / (0.759 * 0.8)

+ 462.624 / (0.759 * 0.8)

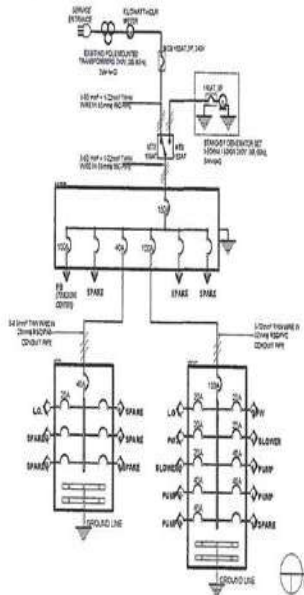
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+ 462.624 / (0.759 * 0.8)

+ 462.624 / (0.759 * 0.8)

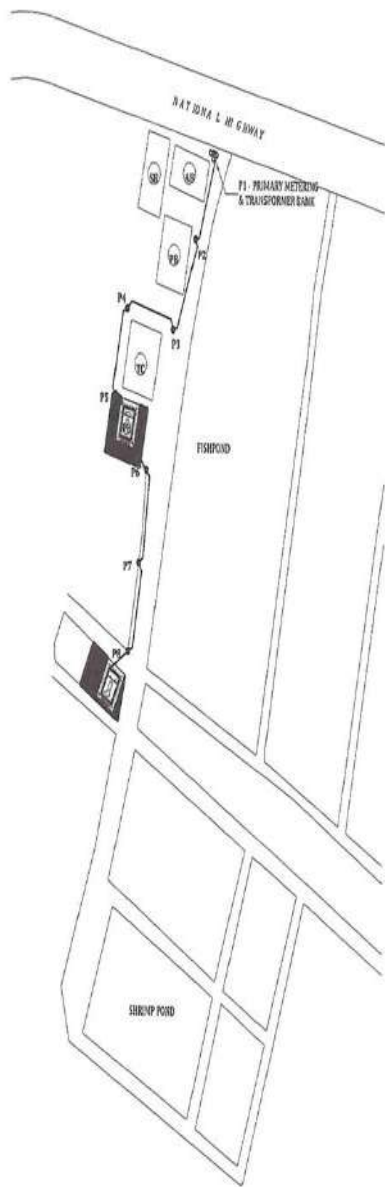


LIGHTING OUTLET LAYOUT
SCALE

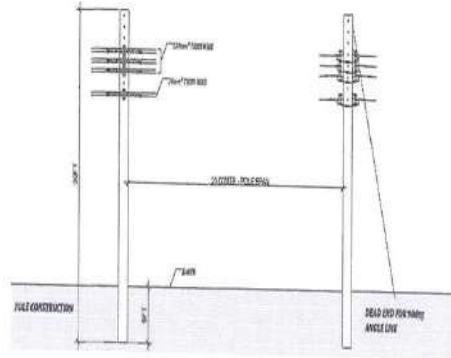


POWER PANEL DIAGRAM
SCALE

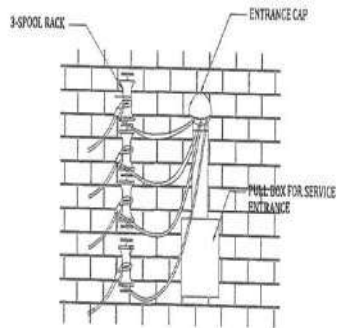
	PROJECT TITLE:	PREPARED BY:	SHEET CONTENTS:	RECOMMENDING APPROVAL:	APPROVED:	SHEET NO:
	CONSTRUCTION OF POWER HOUSE	ENGR. BARTOLINO TORAGA BSA-B ENGINEERING UNIT				
DEPARTMENT OF AGRICULTURE BUREAU OF FISHERIES AND AQUATIC RESOURCES FERRER BLDG. COMPLEX, BINI, CAYTANAN, MARIKINA CITY		CHECKED & REVISION: ENGR. WALTER C. CARPO ENGR. R. MARICOR BSA-B ENGINEERING UNIT	ENGR. ANDREW TORAGA ENGR. GREGORIO TORAGA BSA-B ENGINEERING UNIT			1 OF 1



VICINITY MAP - TAPPING POINT
SCALE: 1:75



POLE DIAGRAM
SCALE: 1:75



SERVICE ENTRANCE
SCALE: 1:75

<p>DEPARTMENT OF AGRICULTURE BUREAU OF FISHERIES AND AQUATIC RESOURCES</p> <p>FISHERIES BLDG. COMPLEX, 8th FLOOR, BDOY. YAKSA, VISAYAS AVE., QUEZON CITY</p>	PROJECT TITLE	PREPARED BY:	SHEET CONTENT:	RECOMMENDING APPROVAL:	APPROVED:	SHEET NO.:
	CONSTRUCTION OF POWER HOUSE	<p>ENG. RAFFAELLA TERESA CA SENIOR ENGINEERING UNIT</p> <p>CHECKED & VISITED:</p> <p>ENGR. MARCEL T. CARPIO ENGR. IL B. REYES SENIOR ENGINEERING UNIT</p>	<p>POLE DIAGRAM</p> <p>SERVICE ENTRANCE</p> <p>VICINITY MAP - TAPPING POINT</p>	<p>MARIA ABEDAL A. ALBALADEJO CHIEF P.E.D.</p>	<p>ATTY. FRANCIS BERNARD R. ESCOBAR NATIONAL DIRECTOR, BFAR</p>	E-2
LOCATION: JAFFA, JABONG, LAMAR	ENGR. MARCEL T. CARPIO ENGR. IL B. REYES SENIOR ENGINEERING UNIT	ENGR. RAFFAELLA TERESA CA SENIOR ENGINEERING UNIT				(OF 1)

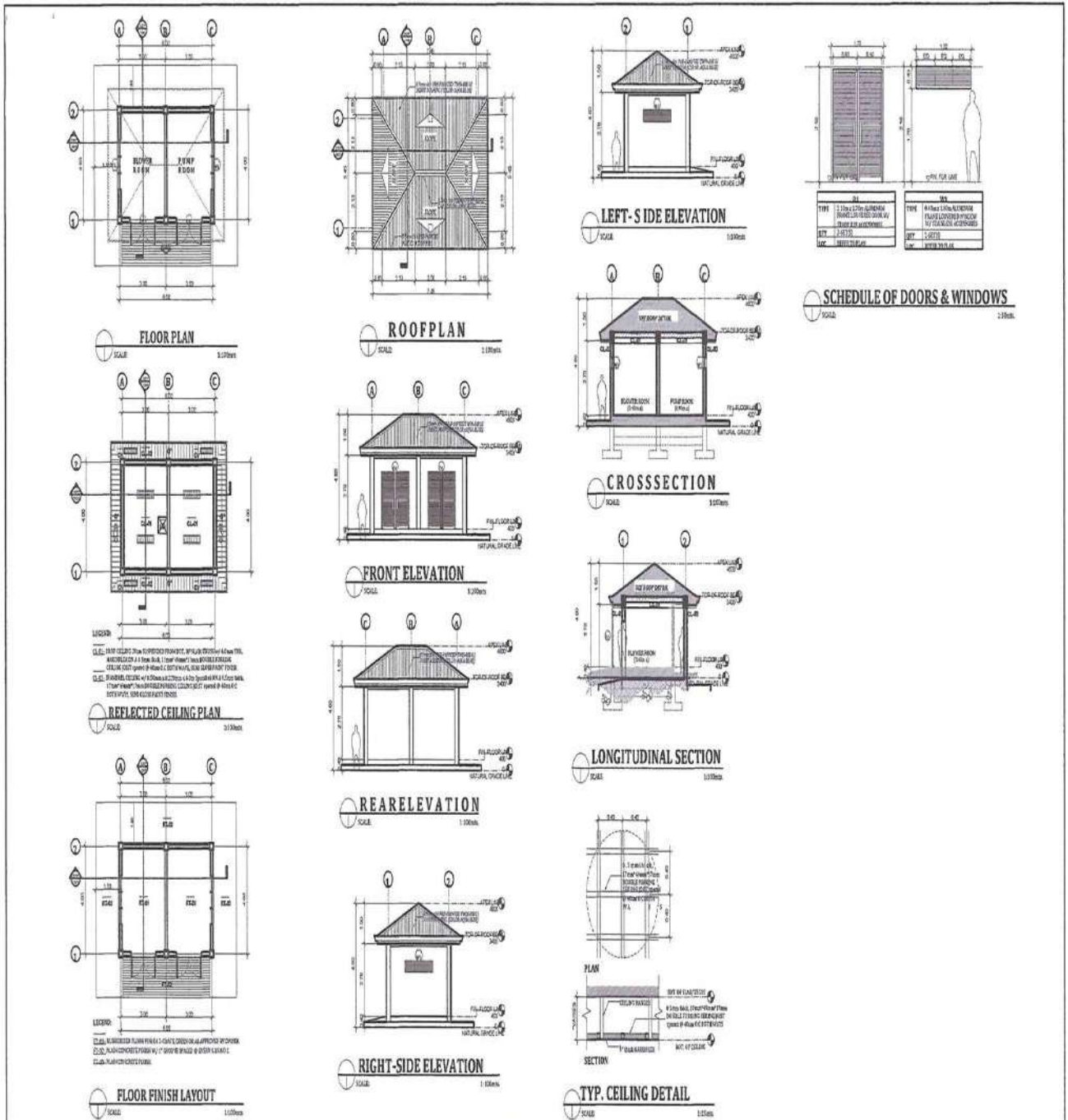


PERSPECTIVE
SCALE: 1/25



SITE DEVELOPMENT PLAN
SCALE: 1/25

 <p>DEPARTMENT OF AGRICULTURE BUREAU OF FISHERIES AND AQUATIC RESOURCES</p> <p>10 HORSE SHOE COMPLEX, 8th CAVED, 1801L, VASRA, VERASAS AVE., QUEZON CITY</p>	PROJECT TITLE:	PREPARED BY:	SHEET CONTENTS:	RECOMMENDED APPROVAL:	APPROVED:	SHEET NO.:
	CONSTRUCTION OF PUMP AND BLOWER HOUSE	<p>APRILYN D. S. SAGANIA ENR. CIVIL ENGINEERING UNIT</p> <p>CHECKED & VERIFIED:</p> <p>ENGR. NICHOLAS S. ESPRITO ENGR. II. MARIBEN C. KEATING UNIT</p> <p>ENGR. ERIC JOSE SI. ALONSO ENGR. CIVIL ENGINEERING UNIT</p>	<p>PERSPECTIVE</p> <p>SITE DEVELOPMENT PLAN</p>	<p>MARIA ABREGAL A. ALBALADEJO Chief, PPSO</p>	<p>ATTY. GERARDINER P. ESCOTO NATIONAL DIRECTOR, BFAR</p>	<p>A-1</p> <p>1 OF 2</p>



 <p>DEPARTMENT OF AGRICULTURE BUREAU OF FISHERIES AND AQUATIC RESOURCES</p> <p>1588ND BLDG. COY. PUS. 8P. DAMP. 8ND1. YAPUN. VISAYAS AVE. QUEZON CITY</p>	PROJECT TITLE	PREPARED BY	SHEET CONTENT	RECOMMENDED APPROVAL	APPROVED	SHEET NO.
	CONSTRUCTION OF PUMP AND BLOWER HOUSE	 ENGR. E. B. SERRANO CHIEF ENGINEER	FLOOR PLAN FRONT ELEVATION REAR ELEVATION LEFT SIDE ELEVATION RIGHT SIDE ELEVATION FLOOR FINISH LAYOUT REFLECTED CEILING PLAN	 MARK ASCAR A. ALBAKED CHIEF PWD	 ATTY. MACOTHEN P. ESCOTO NATIONAL DIRECTOR BAR	A-2
	LOCATION: JAPIC, BANGAL, DAVAO	CHECKED & VISUED				2 OF 2

GENERAL NOTES:

1.0 GENERAL:

- 1.1 ALL DIMENSIONS ARE GIVEN IN MILLIMETERS, UNLESS NOTED OTHERWISE.
- 1.2 THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS AT THE SITE AND SHALL NOTIFY THE ENGINEER IMMEDIATELY BEFORE COMMENCING WORK WITH THE WORK. THIS SHALL INCLUDE THE LOCATION AND DIMENSIONS OF EXISTING PIPES, ETC. REFER TO ARCHITECTURAL, MECHANICAL, ELECTRICAL AND PLUMBING ALL RELEVANT DIMENSIONS SHALL BE PRECEDENCE OVER SMALL SHOWN ON PLANS AND SECTIONS.
- 1.3 SECTIONS ON DETAILS SPECIFIC NOTES AND DETAILS ON DRAWINGS SHALL TAKE PRECEDENCE OVER GENERAL NOTES AND TYPICAL DETAILS.
- 1.4 THE CONTRACT STRUCTURAL DRAWINGS AND SPECIFICATIONS REPRESENT THE INTENTED STRUCTURE. THEY DO NOT ADDRESS THE METHOD OF CONSTRUCTION UNLESS SO STATED. THE CONTRACTOR SHALL PROVIDE ALL NECESSARY MEASURES TO PREVENT THE STRUCTURE, JOINTS, PROPERTIES, WORKMAN AND OTHER REPAIRS DURING ALL PHASES OF CONSTRUCTION.
- 1.5 THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE OWNER AND / OR THE ENGINEER OF ANY CONDITION WHICH MAY AFFECT THE DESIGN AND / OR THE STABILITY OF THE STRUCTURE OR CAUSE CONFLICTS IN THE STRUCTURE.
- 1.6 CONSTRUCTION MATERIALS SHALL NOT BE STORED ON FINISHED FLOORS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT THE SUB-CONTRACTORS ARE AWARE AND DO NOT VIOLATE THIS IMPORTANT REQUIREMENT.
- 1.7 THE CONTRACTOR SHALL PROVIDE TEMPORARY CREATION BRACINGS AND SHORINGS FOR ALL THE STRUCTURAL MEMBERS AS REQUIRED FOR STRUCTURE STABILITY DURING ALL PHASES OF CONSTRUCTION.
- 1.8 THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PREVENT THE PROGRESS OF THE STRUCTURE BEING DELAYED BY THE INSTALLATION OF ALL STRUCTURAL AND FINISH MATERIALS UNLESS OTHERWISE SHOWN ON THE DRAWINGS.
- 1.9 TYPICAL DETAILS AND GENERAL NOTES ON 4-1 AND 4-2 APPLY TO ALL PARTS OF THE WORK UNLESS OTHERWISE SHOWN ON THE DRAWINGS.

2.0 STANDARDS AND REFERENCES:

- 2.1 THE FOLLOWING SHALL GOVERN THE DESIGN, FABRICATION AND CONSTRUCTION OF THE PROJECT:
- 2.2 AMERICAN CONCRETE INSTITUTE (ACI) PUBLICATIONS:
 - ACI 308-108 BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE AND 308-109 MANUAL OF STANDARD PRACTICE FOR BEHAVIOR AND DETAILS OF CONCRETE REINFORCEMENT
 - AMERICAN INSTITUTE OF STEEL CONSTRUCTION INC. PUBLICATION MANUAL OF STEEL CONSTRUCTION, 13TH EDITION "ALLOWABLE STRESS DESIGN (ASD)"
 - AMERICAN WELDING SOCIETY (AWS) PUBLICATION D1.1-2003
 - AMERICAN SOCIETY FOR TESTING MATERIALS (ASTM)
 - NATIONAL STRUCTURAL CODE OF THE PHILIPPINES (NSCP) VOL. I, SIXTH EDITION 2001
 - ASSOCIATION OF STRUCTURAL ENGINEERS OF THE PHILIPPINES (ASEP) HANDBOOK OF STRUCTURAL STEEL DESIGN AND DETAILS, 1987
 - UNIFORM BUILDING CODE (UBC) VOL. 2 1997 EDITION

3.0 BASIC DESIGN LOADS:

- 3.1 DESIGN LOADS (DL):
 - 3.1.1 CONCRETE 2400 kN/m²
 - 3.1.2 STRUCTURAL STEEL 7.50 kN/m²
 - 3.1.3 CEILING 0.20 kPa
 - 3.1.4 FLOOR FINISH 1.20 kPa
 - 3.1.5 100MM THICK CLF WALL 3.11 kPa
 - 3.1.6 100MM THICK WALL 2.73 kPa
- 3.2 LIVE LOADS (LL):
 - 3.2.1 RESIDENTIAL 1.90 kPa
 - 3.2.2 OFFICE/WORKSHOP 2.40 kPa
 - 3.2.3 STOCK LEVEL 5.00 kPa
 - 3.2.4 FUNCTION AREA 4.80 kPa
 - 3.2.5 ROOF DECK 4.80 kPa
- 3.3 WIND LOAD (WL)

THE WIND LOAD ON STRUCTURE AND BUILDING SHALL BE DETERMINED BASED ON NATIONAL STRUCTURAL CODE OF THE PHILIPPINES, CONSIDERING WIND SPEED (1 SECOND RETURN PERIOD) EQUALS TO 41.0 m/sec.

 - 60K WIND SPEED V = 200 km/hr
 - 85KM/H CATEGORY W = 8
 - WIND EXPOSURE FACTOR K_z = 1.0
 - WIND PROTECTION COEFFICIENT Q = 0.8

WIND VELOCITY AT HEIGHT Z, V = 47.34 m/sec
 WHERE V IN HANDBOOK ACI = TOPWIND VELOCITY (M/S)
 K_z = EXPOSURE COEFFICIENT = 2.01K_Z / 30.0
 Z = EXPOSURE HEIGHT = 28.5M AND Z = 7
 Q = 0.613(1 + 2.01K_Z / 30.0)
 THE WIND VELOCITY SHALL BE USED ALONG WITH FORCE COEFFICIENTS TO CALCULATE WIND LOAD ON SPECIFIC STRUCTURE.

3.4 SEISMIC LOADS: SEISMIC LOADS FOR BUILDING STRUCTURES ARE CALCULATED BASED ON THE FOLLOWING:
 $E = I_0 S_a + I_1$
 $I_0 = I_1$
 WHERE:
 E = LATERAL LOAD ON THE STRUCTURE
 I₀ = THE EARTHQUAKE LOAD DUE TO THE SEISMIC FORCE, V, OR THE LATERAL FORCE, F_L
 I₁ = THE ESTIMATED MAXIMUM EARTHQUAKE FORCE THAT CAN BE DEVELOPED IN THE STRUCTURE
 S_a = THE LOAD EFFECT RESULTING FROM THE HORIZONTAL COMPONENT OF THE EARTHQUAKE SHAKING AND IS EQUAL TO AN ACCELERATION OF 0.24 G₀ IN U TO THE SEISMIC LOAD EFFECT. A TOP DESIGNER DESIGN AND MAY BE TAKEN AS ZERO FOR A COMBINED SEISMIC FORCE
 W = THE SEISMIC FORCE AMPLIFICATION FACTOR THAT IS REQUIRED TO ACCOUNT FOR STRUCTURAL OVERSTRESSING
 R = RELIABILITY/REDUNDANCY FACTOR WHICH SHALL NOT BE TAKEN LESS THAN 1.0 AND GREATER THAN 1.8. IS GIVEN BY THE FOLLOWING FORMULA:
 $R = 1.2 \frac{W}{W_0}$
 WHERE:
 W = THE MAXIMUM ELEMENT-STORY SHEAR FORCE FOR A GIVEN DIRECTION OF LOADING. THE ELEMENT-STORY SHEAR FORCE IS THE AREA OF THE DESIGN BY STORY SHEAR IN THE MAXIMALLY LOADED STORY ELEMENT DIVIDED BY THE TOTAL DESIGN STORY SHEAR.

FOR MOMENT FRAMES, IT SHALL BE TAKEN AS THE MAXIMUM OF THE SUM OF THE SHEARS IN ANY TWO ADJACENT COLUMNS IN A MOMENT FRAME BY DESIGN BY STORY SHEAR. THE COLUMN MOMENT TO TWO TIMES THE PERCENT OF THE SHEAR IN THAT COLUMN MAY BE USED IN THE COLUMN DESIGN SUMMARY.

q_u = THE DESIGN FLOOR AREA OF THE STRUCTURE
 q_u = THE TOTAL DESIGN BASE SHEAR IN A GIVEN DIRECTION SHALL BE DETERMINED FROM THE FOLLOWING FORMULA:
 $V_u = \frac{E}{R T}$
 AND NEED NOT EXCEED THE FOLLOWING:
 $V_u \leq 2.5 \text{ G}_0 I_0 W$
 BUT SHALL NOT BE LESS THAN THE FOLLOWING:
 $V_u \geq 0.11 \text{ G}_0 I_0 W$
 IN ADDITION FOR SEISMIC ZONE 4, THE TOTAL BASE SHEAR SHALL ALSO BE NOT LESS THAN THE FOLLOWING:
 $V_u \geq 0.5 \text{ G}_0 I_0 W$

- 4.0 MATERIALS:
 - 4.1 NORMAL WEIGHT CONCRETE:
 - 4.1.1 CONCRETE USED IN THIS WORK SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH f'_c 30 MPAS AS FOLLOWS:
 FOUNDATION & BEAMS & SUSPENDED SLAB: $f'_c = 30$ MPAS (3000 PSI)
 30% FLOOR TO ROOF:
 COLUMN & BEAMS & SUSPENDED SLAB: $f'_c = 28$ MPAS (4000 PSI)
 FOOTING, POSTING TO BEAMS, & SLAB ON GRADE: $f'_c = 20$ MPAS (3000 PSI)
 4.1.2 ALL CONCRETE SHALL BE DEPOSITED, MIXED AND CURED IN ACCORDANCE WITH ACS STANDARD 318-10
 4.1.3 MINIMUM CONCRETE COVER FOR REINFORCING BARS SHALL BE AS FOLLOWS:
 - CONCRETE COVER FACTOR C = 40
 - IMPORTANT FACTOR I = 1.0
 - EXPOSURE FACILITY FACTOR E = 8.5 (NORMAL)
 - SEISMIC FORCE OVERSTRESSING FACTOR S = 2.0
 - SEISMIC SOURCE TYPE A = A
 - NEAR - SOURCE FACTOR N_s = 1.0
 - NEAR - SOURCE TYPE T_s = 1.0

4. FOOTINGS & NOT OF FOOTING TO BEAM = 75MM (NEAR REINFORCING BARS)
4. BEAMS AND WALLS TO BEAM = 50MM (NEAR REINFORCING BARS)
4. BEAMS AND WALLS TO BEAM = 50MM (NEAR REINFORCING BARS)
4. SLABS AND WALLS TO BEAM = 50MM (NEAR REINFORCING BARS)
- 4.1.4 BEFORE CONCRETE IS PLACED, CHECK WITH ALL TRENDS TO ENSURE PROPER PLACEMENT OF ALL REINFORCING, SHELVE, CURBS, CHAIRS, ETC. RELATIVE TO THE WORK.
- 4.1.5 REINFORCING BARS SHALL BE EXPOSED TO ORIGINAL SURFACES OF CHAIRS IN BEAMS, SUCH AS BEAMS, SLABS, BRACKETS, BRACES, CURBS, ETC. FROM THESE SURFACES. CONCRETE MUST BE PROPORTIONED TO SATISFY THE SPECIAL EXPOSURE REQUIREMENTS OF ACI 318-10.
- 4.2 REINFORCING BARS:
 - 4.2.1 UNLESS OTHERWISE SPECIFIED ON PLANS, ALL REINFORCING BARS SHALL BE DEVELOPED WITH A MINIMUM YIELD STRENGTH, $f_y = 414$ MPAS (60000 PSI)
 - 4.2.2 ALL REINFORCING BARS SHALL BE CLEANED OF RUST, OIL, GRASS OR OTHER MATERIALS WHICH TEND TO HINDER BOND.
 - 4.2.3 ALL REINFORCING BARS SHALL BE ACCURATELY AND SECURELY PLACED BEFORE POURING CONCRETE OR APPLYING FORMS OR SHUT.
 - 4.2.4 LAPTED SPICES SHALL BE STaggered WHEN POSSIBLE
 - 4.2.5 UNLESS INDICATED OTHERWISE, SPACING OF REINFORCEMENT SHALL BE IN ACCORDANCE WITH ACI 318-10C2
 - 4.2.6 UNLESS SHOWN OTHERWISE ON PLANS, SPICES SHALL BE AS FOLLOWS:
 - A. BEAMS AND FOOTING TO BEAM: TOP AND BOTTOM BARS SHALL NOT BE SPACED WITHIN THE COLUMN OR WITHIN A DISTANCE OF THREE TIMES THE COLUMN DIAMETER FROM THE FACE OF THE COLUMN. AT LEAST TWO CROSS-BARS - BARS SHALL BE PROVIDED AT ALL SPICES. THE SPICE LENGTH SHALL NOT BE LESS THAN THE LENGTH IN FEET ALSO BELOW.
 - B. COLUMNS: SPICES WHEN REMITTED SHALL BE MADE WITHIN THE CENTER HALF OF COLUMN HEIGHT. NO LAP SPICES SHALL BE LESS THAN 10 BAR DIAMETERS. THE USE OF APPROVED MECHANICAL JOINTS MAY BE PERMITTED PROVIDED THAT NOT MORE THAN ALTERNATE BARS ARE SPACED AT ANY LEVEL AND THE MINIMUM VERTICAL SPACING BETWEEN TWO ALTERNATE BAR SPICES SHALL BE 300MM
 - C. WALLS: VERTICAL BARS SHALL BE SPACED AT THE TOP OF WALL FOOTING OR THE BEAM AND AT THE BOTTOM OF 90 DEGREE CORNER OR BEAMS. SPICE LENGTH SHALL BE 300MM MAX
 - 4.2.7 UNLESS INDICATED OTHERWISE ALL BEAMS TERMINATING AT THE COLUMN SHALL HAVE TOP AND BOTTOM BARS EXTENDING TO THE FAR FACE OF THE COLUMN, TERMINATING IN A STANCHION AT MINIMUM LENGTH OF PROVISION NOT LESS THAN 300MM
 - 4.2.8 SHOP DRAWINGS FOR BEAMING AND CHAIRS OF REINFORCEMENT SHALL BE SUBMITTED FOR APPROVAL TO THE ARCHITECT PRIOR TO FABRICATION.
 - 4.2.9 SPICE LENGTH OF REINFORCING BARS SHALL BE AS SHOWN IN THE TABLE BELOW.

6.0 NOTES ON BEAMS AND COLUMNS:

- 6.1 UNLESS OTHERWISE NOTED IN PLANS OR SPECIFICATIONS, CHAIRS ALL BEAMS AND COLUMNS FOR EVERY 4.50M OF SPAN EXCEPT CORNERS. TOP WHEN THE CHAIRS SHALL BE AS NOTED IN THE PLANS OR AS SHOWN IN THE DETAILS. BUT IN NO CASE LESS THAN 10MM FOR EVERY 3.00M OF FREE SPAN
- 6.2 IF THERE ARE TWO OR MORE LAYERS OF REINFORCING BARS, THE SPACING OF STEEL MAY BE LESS THAN 20MM BARS SPACED ABOVE 150MM ON CENTER AND PLACED RANDOMLY. IN NO CASE SHALL THERE BE LESS THAN SIX REINFORCING BEARING LAYERS OF BARS
- 6.3 WHEN A BEAM CROSSES A COLUMN, REINFORCING BARS ON TOP OF COLUMN SHALL BE PLACED SYMMETRICALLY ABOUT THE CENTER LINE. WHENEVER POSSIBLE, LOWER LAYERS SHALL BE PLACED DIRECTLY ABOVE THOSE IN THE BOTTOM LAYER. SPACING OF BARS IN LOWER SHALL NOT BE LESS THAN 8.000MM AND ONE BAR DIAMETER
- 6.4 GENERALLY, NO SPICES SHALL BE PERMITTED ON BEAM AT POINT WHERE CRITICAL REINFORCING STEELS DEVELOP SPICES SHALL DEVELOP IN TENSION AT LEAST 175% OF THE SPECIFIED STRENGTH OF THE BARS, NOT MORE THAN ONE OF THE BARS AT ANY ONE SECTION SHALL BE ALLOWED TO BE SPACED THEREIN
- 6.5 FOR BAR TERMINATING AT TOP BARS AT SUPPORT AND BOTTOM BARS, CUT-OFF ONLY TWO BARS AT EVERY 0.5M INTERVAL UNLESS OTHERWISE SPECIFIED, OR NOTED OTHERWISE

7.0 FOUNDATIONS:

- 7.1 FOOTINGS ARE DESIGNED USING AN ALLOWABLE SOIL BEARING CAPACITY OF 125 KPA (10.5 TON/MT) AT DEPTHS INDICATED IN THE DRAWING. COOPERATION OF ACTUAL SOIL BEARING CAPACITY SHALL BE DONE PRIOR TO CONSTRUCTION OF FOUNDATION. INCREASE OF FOUNDATION SIZE SHALL BE DONE WHEN ACTUAL SOIL BEARING CAPACITY, COMPARED DURING EXCAVATION, WARRANTS REDUCTION OF FOUNDATION SIZES.
- 7.2 WHERE LOOSE/SOFT MATERIAL IS ENCOUNTERED AT DEPTH OF FOOTING/FOUNDATION INDICATED, DISMANTLE TO FIRM LAYER AND REPLACE LOOSE/SOFT MATERIALS UNDERNEATH THE FOOTING WITHIN THE FOOTING AREA PLUS 1/2 DEPTH OF SOIL MATERIAL ON ALL SIDES WHEN SELECTED BACKFILL. COMPACT SELECTED BACKFILL TO 95% MINIMUM AIR DENSITY (ASTM D1557)
- 7.3 ALL COLUMN FOOTINGS SHALL REST ON SOFT TAMPED COMPACTED SAND FILL COURSE UNLESS OTHERWISE STATED
- 7.4 FILL BACKFILL SHALL BE PLACED IN 300 MM LAYERS AND EACH LAYER SHALL BE COMPACTED TO 95% MINIMUM AIR DENSITY BEFORE SUBSEQUENT LAYERS ARE TO BE LAID

LAP SPICE & ANCHORAGE TABLE

BAR DIAMETER (MM)	INCLUSIVE LENGTH (M)	LAP SPICE (M)				MIN. LAP LENGTH OF COLUMN, BEAM, OR WALL (M)
		TOP BAR	BOTTOM BAR	OTHERS	OTHERS	
10	0.50	0.15	0.15	0.10	0.42	0.30
12	0.50	0.20	0.15	0.10	0.49	0.32
16	0.50	0.25	0.18	0.14	0.51	0.41
20	0.50	0.30	0.20	0.21	0.61	0.50
25	0.50	0.40	0.28	0.28	1.15	0.62
28	0.50	0.40	0.30	-	1.45	1.03
32	0.50	0.50	0.43	-	1.24	1.30
36	1.42	0.81	0.48	-	2.02	1.40

NOTES:

1. NO SECTION 13.4 STATES THAT DEVELOPMENT LENGTH OF INDEPENDENT BARS WITH A BUNDLE, IN TENSION OR COMPRESSION, SHALL BE THAT FOR THE INDEPENDENT BAR. INCREASE SIZE FOR THESE BAR BUNDLE AND USE FOR FOUR BAR BUNDLE.
2. FOR COLUMNS, AT ANY LEVEL, NO MORE THAN ALTERNATE BARS SHOULD BE SPACED AT ANY LEVEL. THE USE OF THE BARS SHALL BE SPACED WITH THE REQUIRED LAP LENGTH. MINIMUM SPACING BETWEEN TWO ALTERNATE BAR SPICES SHALL BE 300MM
3. TOP BARS AND BOTTOM BARS WITH MORE THAN 300MM DEPTH OF CONCRETE CUT-BELOW THE REINFORCEMENT
4. AS MUCH AS POSSIBLE, SPICES SUBJECT TO TORSION STRESSES ARE DISTINGUISH, THESE SHOULD BE HAZED OR PROVIDED BY STANDARD DETAILS

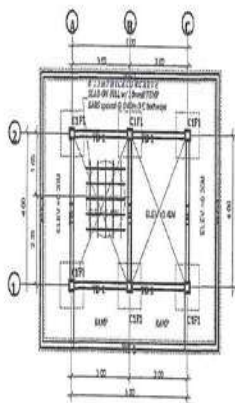
**DEPARTMENT OF AGRICULTURE
BUREAU OF FISHERIES AND
AQUATIC RESOURCES**

FISHERY BLDG. COMPLEX, BR. CANTO, 2ND, YAGA, VISAYAS AVE., CUSON CITY

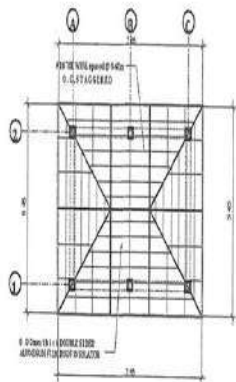
PROJECT TITLE: CONSTRUCTION OF PUMP AND BLOWER HOUSE	PREPARED BY: ENGR. LEVIN L. IPARDO BAR-ENGINEERING UNIT	SHEET CONTENT: GENERAL NOTES	RECOMMENDING APPROVAL: (Signature)
CHECKED & VERIFIED: (Signature)	ENGR. ANTONIO D. MACULES D.C. CONSULTING UNIT		APPROVED: (Signature) ATTY. SANDI BENIG S. BECITO NATIONAL DIRECTOR, BAR

SHEET NO. **S-1**

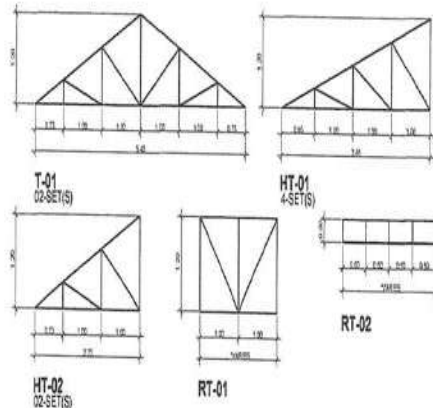
1 OF 2



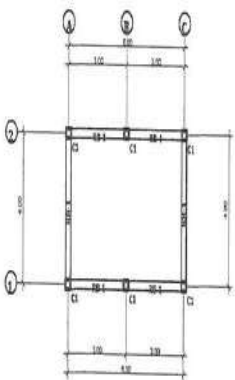
FOUNDATION PLAN
SCALE: 1:200



ROOF INSULATION LAYOUT
SCALE: 1:200



TRUSS DIAGRAM
SCALE: 1:50



ROOF BEAM LAYOUT
SCALE: 1:200

SCHEDULE OF BEAMS:

DIAGRAM	SECTION	SECTION	SECTION
BEAM	T-01	RH	WELT BEAM
REIN @ SUPPORT	2.00mm @ 2.00mm	4.00mm @ 2.00mm	1.00mm @ 2.00mm
REIN @ JOINT	2.00mm @ 2.00mm	2.00mm @ 2.00mm	1.00mm @ 2.00mm
TIES	10mm @ spaced @ 300mm	10mm @ spaced @ 300mm	10mm @ spaced @ 300mm

SCHEDULE OF COLUMNS:

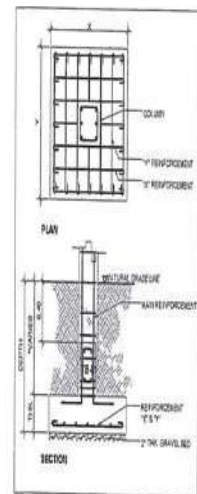
DIAGRAM	SECTION
COLUMN	C1
MAIN REIN	4-10mm @
TIES	10mm @ spaced @ 300mm
SECONDARY TIE	10mm @ spaced @ 300mm

SCHEDULE OF TRUSSES:

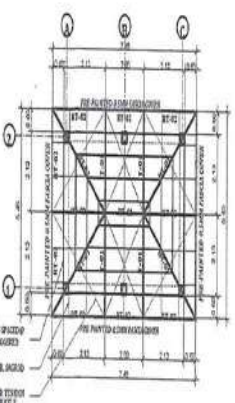
CODE	TOP CHORD	THICKNESS	BOT. CHORD	THICKNESS	WEB	THICKNESS	DOUBLE
T-01	1.5" x 1.5" ANGLE BAR	50mm	1.5" x 1.5" ANGLE BAR	50mm	1.5" x 1.5" ANGLE BAR	50mm	YES
HT-01	1.5" x 1.5" ANGLE BAR	50mm	1.5" x 1.5" ANGLE BAR	50mm	1.5" x 1.5" ANGLE BAR	50mm	YES
HT-02	1.5" x 1.5" ANGLE BAR	50mm	1.5" x 1.5" ANGLE BAR	50mm	1.5" x 1.5" ANGLE BAR	50mm	YES
RT-01	1.5" x 1.5" ANGLE BAR	50mm	1.5" x 1.5" ANGLE BAR	50mm	1.5" x 1.5" ANGLE BAR	50mm	NO
RT-02	1" x 1" ANGLE BAR	40mm	1" x 1" ANGLE BAR	40mm	1" x 1" ANGLE BAR	40mm	NO

SCHEDULE OF FOOTINGS:

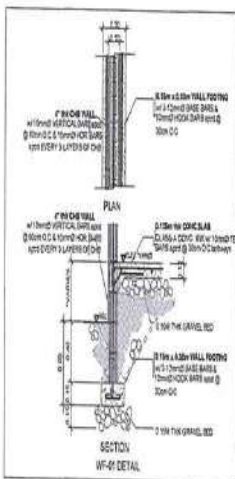
FOOTING	X (mm)	Y (mm)	THICKNESS	DEPTH	REIN @ X	REIN @ Y	REMARKS
F1	1000	1000	300	200	10-10mm @ spaced @ 200mm	10-10mm @ spaced @ 200mm	ISOLATED FOOTING



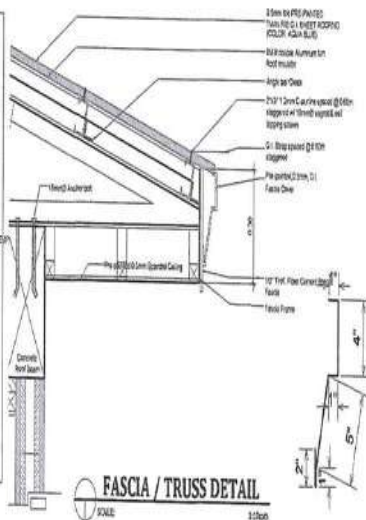
TYP. COLUMN DETAIL
SCALE: 1:50



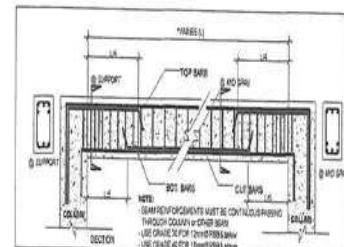
ROOF FRAMING LAYOUT
SCALE: 1:200



WF-01 DETAIL
SCALE: 1:50



FASCIA / TRUSS DETAIL
SCALE: 1:50



TYP. BEAM DETAIL
SCALE: 1:50

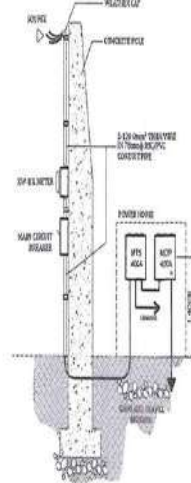
<p>DEPARTMENT OF AGRICULTURE BUREAU OF FISHERIES AND AQUATIC RESOURCES</p>	PROJECT TITLE: CONSTRUCTION OF PUMP AND BLOWER HOUSE	PREPARED BY: ENGR. BRUNO L. PALEO SAB-ENGINEERING UNIT	SHEET CONTROL: FOUNDATION PLAN ROOF BEAM LAYOUT ROOF FRAMING LAYOUT ROOF INSULATION LAYOUT TRUSS DIAGRAM FASCIA/TRUSS DETAIL	RECOMMENDING APPROVAL: ENGR. ARDAN A. ALBAHIGOS Chief, PFD	APPROVED: ATY. DOMENICO P. ESCOTO NATIONAL DIRECTOR, BFAR	SHEET NO.: S-2
	LOCATION: JAPIC, JASONG, SAMAR	CHECKED & VERIFIED: ENGR. JUAN P. ESPINOSA ENGR. N. B. S. SORIANO	ENGR. ANTONIO M. MORALES SAB-ENGINEERING UNIT			3 OF 2

GENERAL NOTES:

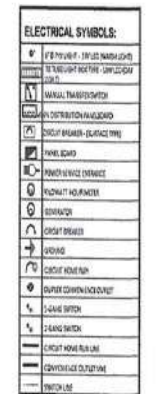
- THE ELECTRICAL INSTALLATION SHALL BE DONE IN ACCORDANCE WITH PROVISIONS OF THE LATEST EDITION OF THE PHILIPPINE ELECTRICAL CODE, THE LOCAL RULES AND REGULATIONS AND THE REQUIREMENTS OF THE JULY COMPANY.
- ALL ELECTRICAL WORKS HEREIN SHALL BE IMPLEMENTED BY EXPERIENCED AND SKILLED PERSONNEL UNDER THE SUPERVISION OF A DULY LICENSED ELECTRICAL ENGINEER. WORKS SHALL BE NEATLY, SECURELY AND PROPERLY WIRING.
- SERVICE ENTRANCE SHALL BE THREE - PHASE, THREE - WIRE PLUS GROUND 13.8KV 3PH 3W GND DISTRIBUTION SYSTEM VOLTAGE IS 400V, 24 3-WIRE PLUS GROUND.
- MATERIALS SHALL BE NEW AND SHALL CONFORM WITH THE LATEST PROVISIONS OF THE LABORERS LABORATORIES INC. IN EVERY CASE WHOSE SUCH A STANDARD HAS BEEN ESTABLISHED.
- ALL EMBEDED CONDUITS SHALL BE PVC AND ALL EXPOSED CONDUITS SHALL BE MC OR DRI WITH COMPRESSION TYPE FITTINGS FOR SERVICE ENTRANCE SHALL BE RSC.
- ELECTRICAL TRUNK SIZE SHALL BE A MINIMUM OF 15mm FOR CONDUITS AND IN NO CASE SHALL BE MORE THAN THE EQUIVALENT OF FOUR QUARTER BENDS IN ANY ONE RUN.
- CONDUITS SHALL BE PROTECTED AGAINST DAMAGE DURING CONSTRUCTION. ALL ENDS OF CONDUITS SHALL BE PLUGGED TO PREVENT WATER INGRESS AND PREVENT OF MOISTURE AND FOREIGN WATER AFTER INSTALLATION.
- MINIMUM SIZE OF CONDUCTORS TO BE USED FOR LIGHTING AND POWER OUTLET SHALL BE 1.5mm THHN/THWN.
- THE FOLLOWING TESTS SHALL BE PERFORMED INCLUSIVE OF THE INSTALLATION TO BE SUBMITTED IN SCHEDULE:
 - INSULATION RESISTANCE TEST (500VDC)
 - GROUND RESISTANCE TEST (5 OHMS)
 - OPERATIONAL TEST
 - PHASE SEQUENCE TEST
 - SYSTEM TEST
- COLOR CODING OF WIRES SHALL BE AS FOLLOWS:
 - BLACK - GROUND - (ZERO)
 - RED - CONTROL 1 - WHITE
 - YELLOW - CONTROL 2 - BLUE
- THE MINIMUM NUMBER OF CONDUCTORS IN TRUNK SIZES OF CONDUITS SHALL BE AS FOLLOWS:

CABLE SIZE	MAXIMUM NUMBER OF CONDUCTORS IN CONDUIT				
	15mm	20mm	25mm	32mm	40mm
1.5	2.0	4	6	10	18
2.0	3.0	5	8	13	21
2.5	4.0	7	11	17	27
3.0	5.0	9	14	21	33
4.0	7.0	12	18	27	42
5.0	9.0	15	22	33	51

- ALL FERRON CIRCUIT BREAKERS SHALL BE PROVIDED WITH ADDITIONAL GROUND WIRE IN ACCORDANCE WITH THE PHILIPPINE ELECTRICAL CODE TABLE 2-5.4.1.3 PER 1001 PART 1 VOL. 1. EVEN WHERE IT IS NOT SHOWN SPECIAL SYSTEMS, INCLUDING WIRING FROM CONTROLLER TO THE EQUIPMENT.
- TRUCK CONTRACTORS SHALL PROVIDE CONTROLLERS FOR ELECTRICALLY OPERATED EQUIPMENT E.G. FIRE PROTECTION AND SANITARY SYSTEM AND OTHER SPECIAL SYSTEMS, INCLUDING WIRING FROM CONTROLLER TO THE EQUIPMENT.
- ALL BALCONY, HALL AND FLOOR PENETRATIONS SHALL BE PROVIDED WITH FIRE STOPPER OR FIRE RATED SEALANT.
- ALL EXPOSED BONES SHALL BE WEATHERPROOF TYPE ENCLOSURE.
- A PLASTIC HOLDER OR JACKET DIRECTORY SHALL BE PROVIDED FOR EACH PANELBOARD'S INDICATION SINGLE LINE DIAGRAMS AND LOAD SCHEDULES.
- ALL ELECTRICAL CIRCUITS SHALL BE WIRED ACCORDING TO THE LOAD SCHEDULE / SINGLE LINE DIAGRAM.
- ALL RECEPTACLE OUTLETS SHALL BE OF GROUNDING TYPE.
- ALL EXIT LIGHTS AND EMERGENCY LIGHTS SHALL BE WIRED AHEAD OF THE LOCAL SWITCH AND WITH GROUNDING TYPE.
- SURFACE MOUNTED CONDUITS SHALL BE SUPPORTED AND SECURED BY C-CHANNELS, CLAMP OR B-SOLT.
- SWITCHES SHALL BE RATED 15 AMPS, 250 VOLTS AND CONVENIENCE OUTLET SHALL BE GROUNDING AND WITH QUICK CONNECT TYPE.
- CONNECTION SHALL BE MADE USING IN SPRING CONNECTORS OR EQUIVALENT FOR SPlicing OF WIRES, LIGHTING AND POWER OUTLET.
- PULLBOXES SHALL HAVE DECORATED BRANCH CIRCUIT RUNS & NOT TO SHARE WITH OTHER CIRCUITS.
- IN CASE OF CONDUIT RUNS THAT HAS MORE THAN FOUR QUARTER BENDS, PROVIDE PULLBOX.



POWER RISER DIAGRAM
SCALE



PS-POWER HOUSE ELECTRICAL LOAD SCHEDULE & COMPUTATION:

SCHED. NO.	LOAD DESCRIPTION	P	KVA	AMPERE					REMARKS	CIRCUIT BREAKER	WIRING METHOD	NO. OF PANELS	NO. OF CIRCUITS	WARRANTY PERIOD AND PROVISIONS FOR TESTING
				PH	3P	1P	2P	3P						
1	GENERAL LIGHTING	200	220.0	0.74					1500V 1P/2P	30'AT	2mm x 2 P.C.	1	1	FOR SERVICE CONDUCTOR
2	EMERGENCY LIGHT	1	5.1764	22.52					1500V 1P/2P	30'AT	2mm x 2 P.C.	1	1	USE 3/4" x 1/2" PANEL
3	SWH													FOR SERVICE EQUIPMENT
4	SWH													USE 3/4" x 1/2" PANEL
5	SWH													USE 3/4" x 1/2" PANEL
6	SWH													USE 3/4" x 1/2" PANEL
7	SWH													USE 3/4" x 1/2" PANEL
8	SWH													USE 3/4" x 1/2" PANEL
TOTAL		201	225.1764	0.74										

PS-PUMP/BLOWER HOUSE ELECTRICAL LOAD SCHEDULE & COMPUTATION:

SCHED. NO.	LOAD DESCRIPTION	P	KVA	AMPERE					REMARKS	CIRCUIT BREAKER	WIRING METHOD	NO. OF PANELS	NO. OF CIRCUITS	WARRANTY PERIOD AND PROVISIONS FOR TESTING
				PH	3P	1P	2P	3P						
1	GENERAL LIGHTING	200	220.0	0.74					1500V 1P/2P	30'AT	2mm x 2 P.C.	1	1	FOR SERVICE CONDUCTOR
2	EMERGENCY LIGHT	1	5.1764	22.52					1500V 1P/2P	30'AT	2mm x 2 P.C.	1	1	USE 3/4" x 1/2" PANEL
3	EMERGENCY LIGHT	1	5.1764	22.52					1500V 1P/2P	30'AT	2mm x 2 P.C.	1	1	USE 3/4" x 1/2" PANEL
4	EMERGENCY LIGHT	1	5.1764	22.52					1500V 1P/2P	30'AT	2mm x 2 P.C.	1	1	USE 3/4" x 1/2" PANEL
5	EMERGENCY LIGHT	1	5.1764	22.52					1500V 1P/2P	30'AT	2mm x 2 P.C.	1	1	USE 3/4" x 1/2" PANEL
6	EMERGENCY LIGHT	1	5.1764	22.52					1500V 1P/2P	30'AT	2mm x 2 P.C.	1	1	USE 3/4" x 1/2" PANEL
7	EMERGENCY LIGHT	1	5.1764	22.52					1500V 1P/2P	30'AT	2mm x 2 P.C.	1	1	USE 3/4" x 1/2" PANEL
8	EMERGENCY LIGHT	1	5.1764	22.52					1500V 1P/2P	30'AT	2mm x 2 P.C.	1	1	USE 3/4" x 1/2" PANEL
9	EMERGENCY LIGHT	1	5.1764	22.52					1500V 1P/2P	30'AT	2mm x 2 P.C.	1	1	USE 3/4" x 1/2" PANEL
10	EMERGENCY LIGHT	1	5.1764	22.52					1500V 1P/2P	30'AT	2mm x 2 P.C.	1	1	USE 3/4" x 1/2" PANEL
11	EMERGENCY LIGHT	1	5.1764	22.52					1500V 1P/2P	30'AT	2mm x 2 P.C.	1	1	USE 3/4" x 1/2" PANEL
12	EMERGENCY LIGHT	1	5.1764	22.52					1500V 1P/2P	30'AT	2mm x 2 P.C.	1	1	USE 3/4" x 1/2" PANEL
13	EMERGENCY LIGHT	1	5.1764	22.52					1500V 1P/2P	30'AT	2mm x 2 P.C.	1	1	USE 3/4" x 1/2" PANEL
14	EMERGENCY LIGHT	1	5.1764	22.52					1500V 1P/2P	30'AT	2mm x 2 P.C.	1	1	USE 3/4" x 1/2" PANEL
TOTAL		201	225.1764	0.74										

MPP ELECTRICAL LOAD SCHEDULE & COMPUTATION:

SCHED. NO.	LOAD DESCRIPTION	P	KVA	AMPERE					REMARKS	CIRCUIT BREAKER	WIRING METHOD	NO. OF PANELS	NO. OF CIRCUITS	WARRANTY PERIOD AND PROVISIONS FOR TESTING
				PH	3P	1P	2P	3P						
1	GENERAL LIGHTING	200	220.0	0.74					1500V 1P/2P	30'AT	2mm x 2 P.C.	1	1	FOR SERVICE CONDUCTOR
2	EMERGENCY LIGHT	1	5.1764	22.52					1500V 1P/2P	30'AT	2mm x 2 P.C.	1	1	USE 3/4" x 1/2" PANEL
3	EMERGENCY LIGHT	1	5.1764	22.52					1500V 1P/2P	30'AT	2mm x 2 P.C.	1	1	USE 3/4" x 1/2" PANEL
4	EMERGENCY LIGHT	1	5.1764	22.52					1500V 1P/2P	30'AT	2mm x 2 P.C.	1	1	USE 3/4" x 1/2" PANEL
5	EMERGENCY LIGHT	1	5.1764	22.52					1500V 1P/2P	30'AT	2mm x 2 P.C.	1	1	USE 3/4" x 1/2" PANEL
6	EMERGENCY LIGHT	1	5.1764	22.52					1500V 1P/2P	30'AT	2mm x 2 P.C.	1	1	USE 3/4" x 1/2" PANEL
7	EMERGENCY LIGHT	1	5.1764	22.52					1500V 1P/2P	30'AT	2mm x 2 P.C.	1	1	USE 3/4" x 1/2" PANEL
8	EMERGENCY LIGHT	1	5.1764	22.52					1500V 1P/2P	30'AT	2mm x 2 P.C.	1	1	USE 3/4" x 1/2" PANEL
TOTAL		201	225.1764	0.74										

TOTAL NET LOAD: 1400.00 KVA

TRANSFORMER RATING:
 $1.25 \times (1400.00 \text{ KVA} + (2000 \times 1000 \times 1000) \times 0.25)$
 $= 1750.00 \text{ KVA}$
 + 42.44

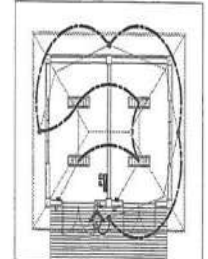
USE: 3 - SERVICE SINGLE PHASE TRANSFORMER

FEEDER CONDUCTOR SCHEDULE & COMPUTATION:
 $1.25 \times (1400.00 \text{ KVA} + (2000 \times 1000 \times 1000) \times 0.25) \times 1.25 \times 1.25$
 $= 1750.00 \text{ KVA} \times 1.5625$
 $= 2734.375 \text{ KVA}$
 $= 2734.375 \text{ KVA}$

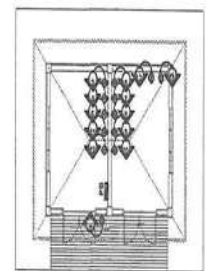
USE: 480.41 3-PHASE THREE PHASE CABLE

FEEDER CONDUIT:
 $1.25 \times (1400.00 \text{ KVA} + (2000 \times 1000 \times 1000) \times 0.25) \times 1.25$
 $= 1750.00 \text{ KVA} \times 1.5625$
 $= 2734.375 \text{ KVA}$
 $= 2734.375 \text{ KVA}$

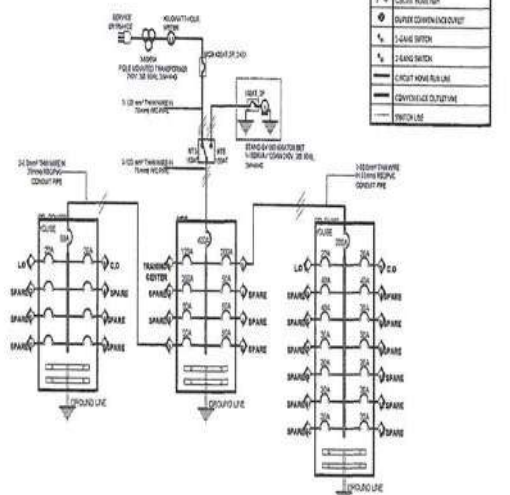
USE: 480.41 3-PHASE THREE PHASE CABLE



LIGHTING OUTLET LAYOUT
SCALE

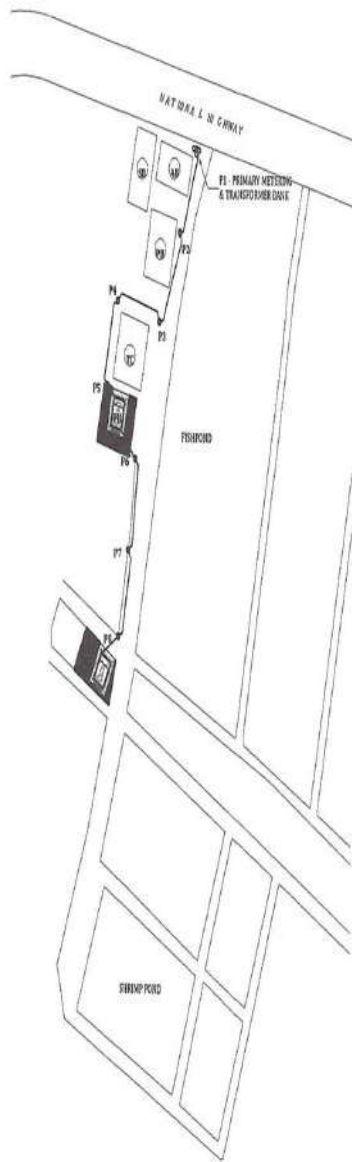


CONVENIENCE OUTLET LAYOUT
SCALE

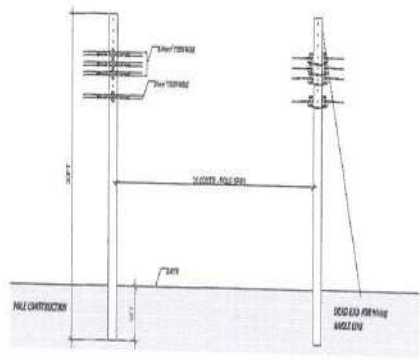


POWER PANEL DIAGRAM
SCALE

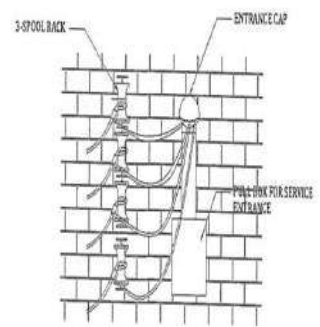
<p>DEPARTMENT OF AGRICULTURE BUREAU OF FISHERIES AND AQUATIC RESOURCES</p> <p>REGIONAL OFFICE - CAGAYAN VALLEY PUNING BLDG., COMPLEX, BR. CAYO, 1101, VASRA, VEGAS AVE., QUEZON CITY</p>	PROJECT TITLE: CONSTRUCTION OF PUMP AND BLOWER HOUSE	PREPARED BY: ENGR. JAMES ADRIAN TORALAGA ELECTRICAL ENGINEERING UNIT	SHEET CONTENTS: GENERAL NOTES POWER RISER DIAGRAM POWER PANEL DIAGRAM LIGHTING OUTLET LAYOUT SCHEDULE OF ELECTRICAL LOADS	RECOMMENDING APPROVAL: <i>[Signature]</i> WARA ABEJAN A. ALBAJAN CHIEF, PFD	APPROVED: <i>[Signature]</i> ATTY. BENEDICTO B. BOGOSO NATIONAL DIRECTOR, BAR	SHEET NO. E-1
	LOCATION: JALIC, JIM BEING, SAGAY	CHECKED & REVIEWED: ENGR. MARCEL P. CAYO ENGR. JIM BEING TORALAGA ELECTRICAL ENGINEERING UNIT	ENGR. ANTONIO M. MORALIS CHIEF, ELECTRICAL UNIT			1 OF 2



VICINITY MAP - TAPPING POINT
SCALE 1/8" = 1'-0"



POLE DIAGRAM
SCALE 1/8" = 1'-0"



SERVICE ENTRANCE
SCALE 1/8" = 1'-0"

<p>DEPARTMENT OF AGRICULTURE BUREAU OF FISHERIES AND AQUATIC RESOURCES</p> <p>168882 BLDG. COMPLEX, 8th FLOOR, HIGHWAY 9, PASAY CITY, QUEZON CITY</p>	PROJECT TITLE	PREPARED BY	SHEET CONTENTS	RECOMMENDING APPROVAL	APPROVED	SHEET NO.
	CONSTRUCTION OF PUMP AND BLOWER HOUSE	<p>ENGR. RAJAH AGUIRRE/ENGR. AGA BIA-B ENGINEERING UNIT</p> <p>CHECKED & VERIFIED:</p> <p>ENGR. MARVIN T. CARPIO ENGR. L. BRAR/ENGR. SPENDING UNIT</p> <p>ENGR. ARNOLD M. MORALIS ENGR. CESAR/ENGR. UNIT</p>				
	LOCATION: JAPIC, JASONG, TAMAR					2012

Section VIII. Bill of Quantities

**“IMPROVEMENT OF JAPTC SUPPORT FACILITIES – POWER HOUSE & POWER SUPPLY LINE,
AND BLOWER/PUMP HOUSE”**

Approved Budget for the Contract (ABC) : PhP4,021,446.59

CONSTRUCTION OF POWER HOUSE & JAPTC POWER SUPPLY LINE			
Item No.	Item Description	Quantity	Unit
I.	GENERAL REQUIREMENTS		
A.	Site Clearing and Preparation	1.00	l.s.
II.	CIVIL AND ARCHITECTURAL WORKS		
A.	EARTHWORKS		
1.	Excavation	49.32	cu.m.
	Column Footing	27.00	cu.m.
	Wall Footing	13.68	cu.m.
	Tie Beam	8.64	cu.m.
2.	Gravel Bedding	12.80	cu.m.
	Column Footing	1.35	cu.m.
	Wall Footing	2.28	cu.m.
	Tie Beam	1.44	cu.m.
	Floor Slab	7.13	cu.m.
	Ramp	0.60	cu.m.
3.	Reclamation		
	Reclamation (with 25% Shrinkage)	140.63	cu.m.
4.	Backfill and Compaction	34.28	cu.m.
	Column Footing	22.28	cu.m.
	Wall Footing	9.12	cu.m.
	Tie Beam	2.88	cu.m.
B.	CONCRETE WORKS		
1.	Columns, C1	1.84	cu.m.
	Portland Cement	17.00	bags

	G3/4 Gravel	2.02	cu.m.
	Coarse Sand	0.88	cu.m.
2.	Beams		
	Tb-01	1.75	cu.m.
	Portland Cement	16.00	bags
	G3/4 Gravel	1.75	cu.m.
	Coarse Sand	0.88	cu.m.
	Rb-01	2.25	cu.m.
	Portland Cement	21.00	bags
	G3/4 Gravel	2.25	cu.m.
	Coarse Sand	1.13	cu.m.
	Lintel Beam	0.12	cu.m.
	Portland Cement	2.00	bags
	G3/4 Gravel	0.12	cu.m.
	Coarse Sand	0.06	cu.m.
3.	Slabs		
	Floor Slab	7.13	cu.m.
	Portland Cement	65.00	bags
	G3/4 Gravel	7.13	cu.m.
	Coarse Sand	3.56	cu.m.
	Ramp	0.60	cu.m.
	Portland Cement	6.00	bags
	G3/4 Gravel	0.60	cu.m.
	Coarse Sand	0.30	cu.m.
4.	Stiffeners	0.15	cu.m.
	Portland Cement	2.00	bags
	G3/4 Gravel	0.15	cu.m.
	Coarse Sand	0.08	cu.m.
5.	Steps	0.10	cu.m.
	Portland Cement	1.00	bags

	G3/4 Gravel	0.10	cu.m.
	Coarse Sand	0.05	cu.m.
6.	Footings		
	F-1	4.05	cu.m.
	Portland Cement	37.00	bags
	G3/4 Gravel	4.05	cu.m.
	Coarse Sand	2.03	cu.m.
	WF-1	2.28	cu.m.
	Portland Cement	21.00	bags
	G3/4 Gravel	2.28	cu.m.
	Coarse Sand	1.14	cu.m.
C.	REINFORCEMENTS		
1.	Columns, C1	376.32	kgs.
	16mmø x 6.0m Def Bar	24.00	pcs.
	10mmø x 6.0m Def Bar	40.00	pcs.
	#16 G.I. Tiewire	5.00	kgs.
2.	Beams		
	TB-01	274.44	kgs.
	16mmø x 6.0m Def Bar	16.00	pcs.
	10mmø x 6.0m Def Bar	33.00	pcs.
	#16 G.I. Tiewire	4.00	kgs.
	RB-01	444.72	kgs.
	16mmø x 6.0m Def Bar	32.00	pcs.
	10mmø x 6.0m Def Bar	38.00	pcs.
	#16 G.I. Tiewire	7.00	kgs.
	Lintel Beam	18.12	kgs.
	12mmø x 6.0m Def Bar	2.00	pcs.
	10mmø x 6.0m Def Bar	2.00	pcs.

	#16 G.I. Tiewire	1.00	kgs.
3.	Slabs		
	Floor Slab	373.80	kgs.
	12mmø x 6.0m Def Bar	70.00	pcs.
	#16 G.I. Tiewire	4.00	kgs.
	Ramp	48.06	kgs.
	12mmø x 6.0m Def Bar	9.00	pcs.
	#16 G.I. Tiewire	1.00	kgs.
4.	Stiffeners	27.18	kgs.
	12mmø x 6.0m Def Bar	3.00	pcs.
	10mmø x 6.0m Def Bar	3.00	pcs.
	#16 G.I. Tiewire	1.00	kgs.
5.	Steps	21.36	kgs.
	12mmø x 6.0m Def Bar	4.00	pcs.
	#16 G.I. Tiewire	1.00	kgs.
6.	Footings		
	F-1	218.04	kgs.
	16mmø x 6.0m Def Bar	23.00	pcs.
	#16 G.I. Tiewire	5.00	kgs.
	WF-1	186.90	kgs.
	12mmø x 6.0m Def Bar	35.00	pcs.
	#16 G.I. Tiewire	4.00	kgs.
D.	MASONRY WORKS		
1.	CHB Laying and Mortar		
	Partition Walls	60.08	sq.m.
	4" x 8" x 16" Concrete Hollow Blocks (Class-A)	577.00	pcs.

	6" x 8" x 16" Concrete Hollow Blocks (Class-A)	174.00	pcs.
	Masonry Cement	39.00	bags
	Fine Sand	4.00	cu.m.
2.	Platering		
	Columns, C-1	48.00	sq.m.
	Cement	11.00	bags
	Fine Sand	2.00	cu.m.
	Beams, RB-01	23.00	sq.m.
	Cement	6.00	bags
	Fine Sand	1.00	cu.m.
	Lintel Beam	1.60	sq.m.
	Cement	1.00	bag
	Fine Sand	1.00	cu.m.
	Walls (Partition Walls)	120.16	sq.m.
	Cement	28.00	bags
	Fine Sand	4.00	cu.m.
	Stiffeners	2.04	sq.m.
	Cement	1.00	bag
	Fine Sand	1.00	cu.m.
	Steps	9.60	sq.m.
	Cement	3.00	bag
	Fine Sand	1.00	cu.m.
E.	FORMWORKS & SCAFFOLDINGS		
	Coco Lumber, Assorted	1,000.00	bd.ft.
	Ordinary Plywood, 1/4 " x 4' x 8'	15.00	pcs.
	CWN Assorted	4.00	boxes

F.	OPENINGS		
1.	Doors		
	D1 - 0.80mW x 2.10mH Single Swing Steel Louvered Door	1.00	set
2.	Windows		
	W1 - 1.80mW x 0.40mH Steel Frame Louvered Window	1.00	set
3.	Locksets & Accessories		
	Stainless Steel Door Knob	1.00	pc.
	4"x 4" Stainless Hinge (2pcs/set)	1.00	pc.
G.	CEILING WORKS	41.25	sq.m.
	Double Furring, 19mm x 50mm x 0.5mm x 5.0m	64.00	pcs.
	Wall Angle, 25mm x 25mm x 0.5mm x 5.0m	11.00	pcs.
	Carrying Channel, 12mm x 38mm x 0.8mm x 5.0m	16.00	pcs.
	Fiber Cement Board, 4' x 8' x 5mm thk	16.00	pcs.
	Blind Rivets, 1/8" x 1/2" (500pcs/Box)	5.00	box
	Aluminum Ceiling Vent, 80 x 500	4.00	pcs.
	Aluminum Ceiling Vent, 80 x 500	1.00	pc.
H.	PAINTING WORKS		
1.	Columns	48.00	sq.m.
	Skim Coat, 25kg	7.00	bags
	Acritex Primer	2.00	gals
	Elastomeric Paint	3.00	gals
	Sand Paper, #120	12.00	pcs.
	Sand Paper, #220	12.00	pcs.
	Baby Roller Brush	2.00	pcs.
	Paint brush, 4"	1.00	pc.
	Rolling Pan	1.00	pc.
	Laquer Thinner	1.00	gal
2.	Beams	24.60	sq.m.

	Skim Coat, 25kg	4.00	bags
	Acritex Primer	1.00	gal
	Elastomeric Paint	2.00	gals
	Sand Paper, #120	7.00	pcs.
	Sand Paper, #220	7.00	pcs.
	Baby Roller Brush	1.00	pc.
	Paint brush, 4"	1.00	pc.
	Rolling Pan	1.00	pc.
	Laquer Thinner	1.00	gal
3.	Walls	131.80	sq.m.
	Skim Coat, 25kg	19.00	bags
	Acritex Primer	5.00	gals
	Elastomeric Paint	7.00	gals
	Sand Paper, #120	33.00	pcs.
	Sand Paper, #220	33.00	pcs.
	Baby Roller Brush	3.00	pcs.
	Paint brush, 1-1/2"	1.00	pc.
	Paint brush, 4"	2.00	pcs.
	Rolling Pan	1.00	pc.
	Masking Tape, 1"	1.00	pc.
	Laquer Thinner	2.00	gals
4.	Ceiling	41.25	sq.m.
	Skim Coat, 25kg	3.00	bags
	Marine Epoxy	3.00	gals
	Acritex Primer	2.00	gals
	Elastomeric Paint	3.00	gals
	Sand Paper, #120	11.00	pcs.
	Sand Paper, #220	11.00	pcs.
	Baby Roller Brush	2.00	pcs.
	Paint brush, 1-1/2"	1.00	pc.
	Paint brush, 4"	1.00	pc.

	Rolling Pan	1.00	pc.
	Masking Tape, 1"	1.00	pc.
	Laquer Thinner	1.00	gal

5.	Floor	27.00	sq.m.
	Acritex Primer	1.00	gal
	Rubberized Floor Paint	3.00	gals
	Sand Paper, #120	7.00	pcs.
	Sand Paper, #220	7.00	pcs.
	Baby Roller Brush	1.00	pc.
	Paint brush, 1-1/2"	1.00	pc.
	Paint brush, 4"	1.00	pc.
	Rolling Pan	1.00	pc.
	Masking Tape, 1"	1.00	pc.
	Laquer Thinner	1.00	gal

I. ROOFING WORKS

1.	Trusses & Rafters Fabrication		
	T-01	279.72	kgs.
	Angle Bar, 1.5" x 1.5" x 5.0mm thk	14.00	pcs.
	Welding Rod, 2.5kg/box	6.00	box
	Consumables	1.00	l.s
	HT-01	359.64	kgs.
	Angle Bar, 1.5" x 1.5" x 5.0mm thk	18.00	pcs.
	Welding Rod, 2.5kg/box	8.00	box
	Consumables	1.00	l.s
	HT-02	139.86	kgs.
	Angle Bar, 1.5" x 1.5" x 5.0mm thk	7.00	pcs.
	Welding Rod, 2.5kg/box	3.00	box
	Consumables	1.00	l.s

	RT-01	39.96	kgs.
	Angle Bar, 1.5" x 1.5" x 5.0mm thk	2.00	pcs.
	Welding Rod, 2.5kg/box	1.00	box
	Consumables	1.00	l.s

	RT-02	219.78	kgs.
	Angle Bar, 1" x 1" x 5.0mm thk	11.00	pcs.
	Welding Rod, 2.5kg/box	5.00	box
	Consumables	1.00	l.s

2.	Purlins Installation		
	C-Purlins, 2" x 4" x 6m	21.00	pcs.
	Angle Bar, 1.5 x 1.5	1.00	pc.
	Round bar, 10mm dia.	7.00	pcs.
	Welding Rod, 2.5kg/box	1.00	box
	Consumables	1.00	l.s

3.	Roof Coverings & Insulation	81.60	sq.m.
	Pre-painted G.I. Roof, 0.5mm thk	68.00	mtrs
	Metal Tex Screw, 75mm	1,155.00	pcs.
	Roof Insulation, 8mm (50mtr/roll)	2.00	rolls
	Consumables	1.00	l.s

4.	Bended Accessories		
	Pre-painted Ridge Cap, 0.50mm x 0.305mm x 2.44m	10.00	pcs.
	Pre-painted Fascia Cover, 0.50mm x 0.305mm x 2.44m	12.00	pcs.
	Consumables	1.00	l.s

5.	Ceiling Panels	21.98	sq.m.
	Spandrel, 0.40mm x 0.229mm x 6.0m	16.00	pcs.
	Moulding, 0.40mm x 0.076mm x 2.44m	24.00	pcs.
	Double Furring, 19mm x 50mm x 0.5mm x 5.0m	19.00	pcs.

	Plastic Ventilation	4.00	pcs.
6.	Metal Primer		
	Epoxy Primer, Gray	3.00	gals
	Paint brush, 1-1/2"	2.00	pcs.
	Paint brush, 4"	2.00	pcs.
II.	ELECTRICAL WORKS		
A.	Electrical Layout		
	Panel Board, Bolt-on, Recessed Type, 3 Phase, 6-branches with Main Breaker	2.00	sets

	150 Amp Circuit Breaker, Bolt-on, 3-Pole	2.00	pcs.
	100 Amp Circuit Breaker, Bolt-on, 3-Pole	2.00	pcs.
	40 Amp Circuit Breaker, Bolt-on, 3-Pole	2.00	pcs.
	20 Amp Circuit Breaker, Bolt-on, 3-Pole	1.00	pc.
	3.5mm ² THHN Wire Stranded Copper Conductor	60.00	mtrs
	5.5mm ² THHN Wire Stranded Copper Conductor	10.00	mtrs
	8.0mm ² THHN Wire Stranded Copper Conductor	20.00	mtrs
	14.0mm ² THHN Stranded Copper Conductor	20.00	mtrs
	22.0mm ² THHN Stranded Copper Conductor	10.00	mtrs
	30.0mm ² THHN Stranded Copper Conductor	36.00	mtrs
	60.0mm ² THHN Stranded Copper Conductor	20.00	mtrs
	20 mm PVC Electrical Pipe	10.00	pcs.
	25 mm PVC Electrical Pipe	4.00	pcs.
	32 mm PVC Electrical Pipe	6.00	pcs.
	65 mm IMC Pipe	4.00	pcs.
	20 mm Electrical Flexible Hose	3.00	mtrs
	20 mm PVC Electrical Long Elbow	10.00	pcs.
	25 mm PVC Electrical Long Elbow	4.00	pcs.
	32 mm PVC Electrical Long Elbow	6.00	pcs.
	65 mm IMC Elbow	3.00	pcs.
	65 mm IMC Coupling	4.00	pcs.

	65 mm IMC Locknut	4.00	pcs.
	65 mm IMC Bushing	4.00	pcs.
	65 mm IMC L&B	2.00	pcs.
	20 mm PVC Adaptor with Locknut	7.00	pcs.
	25 mm PVC Adaptor with Locknut	3.00	pcs.
	32 mm PVC Adaptor with Locknut	4.00	pcs.
	20 mm Flexible Hose Connector	2.00	pcs.
	65 mm Entrance Cap with Adaptor	1.00	set
	Secondary Rack Three Spool	1.00	set
	Junction Box	18.00	pcs.
	Utility Box	5.00	pcs.
	Square Box 5"x5"x4"	4.00	pcs.
	Electrical Tape	20.00	pcs.
	Rubber Tape	10.00	pcs.
	PVC Solvent Cement 100cc	4.00	can
	1-Gang Switch Recessed Type	2.00	sets
	2-Gang Switch Recessed Type	1.00	set
B.	Electrical Fixtures		
	4" Recessed Pinlight Socket	4.00	pcs.
	7W LED Bulb, Cool White	4.00	pcs.
	T8 Lighting - Recessed Type	5.00	pcs.
	T8 LED	5.00	pcs.
C.	Electrical Post 30FT		
	Electrical Post	4.00	units
D.	Manual Transfer Switch		
	2-150 Amp CB, 3-Pole, Manual Transfer Switch (MTS)	1.00	unit
E.	Line Hardwares		
	Secondary Rack, Four Spool	5.00	pcs.

	Spool Insulator 3", ANSI, Class 53-2	44.00	pcs.
	5/8 x 10" machine bolt	88.00	pcs.
	Wire, Guy, Steel, 3/8", 7 strand	350.00	l.m.
	5/8 x 8" Machine Bolt	10.00	pcs.
	5/8 Locknut	20.00	pcs.
	3/16" x 2 1/4" - 13/16" Dia.hole	30.00	pcs.
	Guy Attachment	12.00	pcs.
	Parallel Groove Compression Connector	24.00	pcs.
	Clamp, Guy Straight, 3 Bolt, Heavy Duty Steel	24.00	pcs.
	Square Washer, Flat 2-1/4" x 2-1/4", 3/16" - 13/16" Dia. hole	48.00	pcs.
	Square Washer, 4" x 4" x 1/2" - 7/8" Dia. hole	48.00	pcs.
	Wire, Grounding, Aluminum Alloy, 3 Strand, # 4 AWG	40.00	l.m.
	Nut, Lock, MF Type, 5/8"	48.00	pcs.
	Anchor, Screw Thimble eye, 1" x 8', Dia. 10	10.00	pcs.
	Anchor expanding type	10.00	pcs.
	Wire Grip, Preformed, # 6 ACSR	20.00	pcs.
	Wire Grip, Preformed, # 4 ACSR	20.00	pcs.
	Solderless 2-Bolt Copper Connector (250 mcm min.)	3.00	pcs.
	60.0mm2 THHN Stranded Copper Conductor	300.00	l.m.
	22.0mm2 TW Stranded Copper Conductor (Grnd)	100.00	l.m.
	Grounding rod, HD Copper, 5/8" x 10'	1.00	l.m.
F.	Supply, Delivery and Installation of Generator Set 25 kVA, Three Phase, Diesel, Silent Type	1.00	l.s
G.	Testing and Commissioning	1.00	l.s

CONSTRUCTION OF PUMP/ BLOWER HOUSE			
Item No.	Item Description	Quantity	Unit
I.	GENERAL REQUIREMENTS		
A.	Site Clearing and Preparation	1.00	l.s.
II.	CIVIL AND ARCHITECTURAL WORKS		
A.	EARTHWORKS		
1.	Excavation	53.76	cu.m.
	Column Footing	18.00	cu.m.
	Wall Footing	35.76	cu.m.
2.	Gravel Bedding, G1	37.04	cu.m.
	Column Footing	0.90	cu.m.
	Wall Footing	30.96	cu.m.
	Floor Slab	5.18	cu.m.
3.	Reclamation		
	Reclamation (with 25% Shrinkage)	202.50	cu.m.
4.	Backfill and Compaction	52.08	cu.m.
	Column Footing	19.20	cu.m.
	Wall Footing	32.88	cu.m.
B.	CONCRETE WORKS		
1.	Columns, C1	0.85	cu.m.
	Portland Cement	8.00	bags
	G3/4 Gravel	0.94	cu.m.
	Coarse Sand	0.43	cu.m.
2.	Beams		
	Rb-01	1.80	cu.m.

	Portland Cement	17.00	bags
	G3/4 Gravel	1.80	cu.m.
	Coarse Sand	0.90	cu.m.
	Lintel Beam	0.18	cu.m.
	Portland Cement	2.00	bags
	G3/4 Gravel	0.18	cu.m.
	Coarse Sand	0.09	cu.m.
3.	Slabs		
	Ground Floor Slab	5.26	cu.m.
	Portland Cement	48.00	bags
	G3/4 Gravel	5.26	cu.m.
	Coarse Sand	2.63	cu.m.
4.	Ramp	0.09	cu.m.
	Portland Cement	1.00	bags
	G3/4 Gravel	0.09	cu.m.
	Coarse Sand	0.05	cu.m.
5.	Footings		
	F-1	3.15	cu.m.
	Portland Cement	29.00	bags
	G3/4 Gravel	3.15	cu.m.
	Coarse Sand	1.58	cu.m.
	WF-1	30.96	cu.m.
	Portland Cement	279.00	bags
	G3/4 Gravel	30.96	cu.m.
	Coarse Sand	15.48	cu.m.
C.	REINFORCEMENTS		
1.	Columns, C1	223.68	kgs.
	16mmø x 6.0m Def Bar	13.00	pcs.
	10mmø x 6.0m Def Bar	27.00	pcs.

	#16 G.I. Tiewire	11.00	kgs.
2.	Beams		
	RB-01	361.80	kgs.
	16mmø x 6.0m Def Bar	26.00	pcs.
	10mmø x 6.0m Def Bar	31.00	pcs.
	#16 G.I. Tiewire	5.00	kgs.
	Lintel Beam	23.46	kgs.
	12mmø x 6.0m Def Bar	3.00	pcs.
	10mmø x 6.0m Def Bar	2.00	pcs.
	#16 G.I. Tiewire	1.00	kgs.
3.	Slabs		
	Ground Floor Slab	288.36	kgs.
	12mmø x 6.0m Def Bar	54.00	pcs.
	#16 G.I. Tiewire	1.00	kgs.
4.	Walls		
	Partition Walls (Ground Floor)	204.60	kgs.
	10mmø x 6.0m Def Bar	55.00	pcs.
	#16 G.I. Tiewire	2.00	kg.
5.	Ramp	26.70	kgs.
	12mmø x 6.0m Def Bar	5.00	pcs.
	#16 G.I. Tiewire	1.00	kg
6.	Footings		
	F-1	151.68	kgs.
	16mmø x 6.0m Def Bar	16.00	pcs.
	#16 G.I. Tiewire	3.00	kgs.
	WF-1	197.58	kgs.
	12mmø x 6.0m Def Bar	37.00	pcs.

	#16 G.I. Tiewire	1.00	kgs.
D.	MASONRY WORKS		
1.	CHB Laying and Mortar		
	Walls	87.36	sq.m.
	4" x 8" x 16" Concrete Hollow Blocks (Class-A)	816.00	pcs.
	6" x 8" x 16" Concrete Hollow Blocks (Class-A)	276.00	pcs.
	Masonry Cement	57.00	bags
	Fine Sand	5.00	cu.m.
2.	Plating		
	Columns, C-1	13.60	sq.m.
	Cement	4.00	bags
	Fine Sand	1.00	cu.m.
	Beams, RB-01	18.40	sq.m.
	Cement	5.00	bags
	Fine Sand	1.00	cu.m.
	Lintel Beam	2.40	sq.m.
	Cement	1.00	bag
	Fine Sand	1.00	cu.m.
	Walls	174.72	sq.m.
	Cement	40.00	bags
	Fine Sand	5.00	cu.m.
E.	FORMWORKS & SCAFFOLDINGS		
	Coco Lumber, Assorted	700	bd.ft.
	Ordinary Plywood, 1/4 " x 4' x 8'	8.00	pcs.
	CWN Assorted	3.00	boxes
F.	OPENINGS		
1.	Doors		
	D1 - 0.80mW x 2.10mH Single Swing Steel Louvered Door	2.00	sets
2.	Windows		

	W1 - 1.80mW x 0.40mH Steel Frame Louvered Window	2.00	sets
3.	Locksets & Accessories		
	Stainless Steel Door Knob	1.00	pc.
	4"x 4" Stainless Hinge (2pcs/set)	2.00	sets
G.	CEILING WORKS	20.25	sq.m.
	Double Furring, 19mm x 50mm x 0.5mm x 5.0m	31.00	pcs.
	Wall Angle, 25mm x 25mm x 0.5mm x 5.0m	6.00	pcs.
	Carrying Channel, 12mm x 38mm x 0.8mm x 5.0m	8.00	pcs.
	Fiber Cement Board, 4' x 8' x 5mm thk	9.00	pcs.
	Blind Rivets, 1/8" x 1/2" (500pcs/Box)	2.00	box
	Aluminum Ceiling Vent, 80 x 500	4.00	pcs.
	Aluminum Manhole, 60x60	1.00	pc.
H.	PAINTING WORKS		
1.	Columns	13.60	sq.m.
	Skim Coat, 25kg	2.00	bags
	Acritex Primer	1.00	gal
	Elastomeric Paint	1.00	gal
	Sand Paper, #120	4.00	pcs.
	Sand Paper, #220	4.00	pcs.
	Baby Roller Brush	1.00	pc.
	Paint brush, 4"	1.00	pc.
	Rolling Pan	1.00	pc.
	Laquer Thinner	1.00	gal
2.	Beams	20.80	sq.m.
	Skim Coat, 25kg	3.00	bags
	Acritex Primer	1.00	gal
	Elastomeric Paint	2.00	gals
	Sand Paper, #120	6.00	pcs.
	Sand Paper, #220	6.00	pcs.
	Baby Roller Brush	1.00	pc.

	Paint brush, 4"	1.00	pc.
	Rolling Pan	1.00	pc.
	Laquer Thinner	1.00	gal
3.	Walls	174.22	sq.m.
	Skim Coat, 25kg	25.00	bags
	Acritex Primer	6.00	gals
	Elastomeric Paint	9.00	gals
	Sand Paper, #120	44.00	pcs.
	Sand Paper, #220	44.00	pcs.
	Baby Roller Brush	4.00	pcs.
	Paint brush, 1-1/2"	1.00	pc.
	Paint brush, 4"	2.00	pcs.
	Rolling Pan	1.00	pc.
	Masking Tape, 1"	1.00	pc.
	Laquer Thinner	2.00	gals
4.	Ceiling	20.25	sq.m.
	Skim Coat, 25kg	2.00	bags
	Marine Epoxy	2.00	gals
	Acritex Primer	1.00	gals
	Elastomeric Paint	2.00	gals
	Sand Paper, #120	6.00	pcs.
	Sand Paper, #220	6.00	pcs.
	Baby Roller Brush	1.00	pcs.
	Paint brush, 1-1/2"	1.00	pc.
	Paint brush, 4"	1.00	pc.
	Rolling Pan	1.00	pc.
	Masking Tape, 1"	1.00	pc.
	Laquer Thinner	1.00	gal
5.	Floor	20.25	sq.m.
	Acritex Primer	1.00	gal

	Rubberized Floor Paint	3.00	gals
	Sand Paper, #120	6.00	pcs.
	Sand Paper, #220	6.00	pcs.
	Baby Roller Brush	1.00	pc.
	Paint brush, 1-1/2"	1.00	pc.
	Paint Brush, 4"	1.00	pc.
	Rolling Pan	1.00	pc.
	Making Tape, 1"	1.00	pc.
	Laquer Thinner	1.00	pc.

I.	ROOFING WORKS		
1.	Trusses & Rafters Fabrication		
	T-01	139.86	kgs.
	Angle Bar, 1.5" x 1.5" x 5.0mm thk	7.00	pcs.
	Welding Rod, 2.5kg/box	3.00	box
	Consumables	1.00	l.s
	HT-01	179.82	kgs.
	Angle Bar, 1.5" x 1.5" x 5.0mm thk	9.00	pcs.
	Welding Rod, 2.5kg/box	4.00	box
	Consumables	1.00	l.s
	Fascia Rafter	179.82	kgs.
	Angle Bar, 1" x 1" x 4.0mm thk	9.00	pcs.
	Welding Rod, 2.5kg/box	4.00	box
	Consumables	1.00	l.s

2.	Purlins Installation		
	C-Purlins, 2" x 4" x 6m	11.00	pcs.
	Angle Bar, 1.5 x 1.5	1.00	pc.
	Round bar, 10mm dia.	4.00	pcs.
	Welding Rod, 2.5kg/box	1.00	box

	Consumables	1.00	l.s
3.	Roof Coverings & Insulation	45.60	sq.m.
	Pre-painted G.I. Roof, 0.5mm thk	38.00	mtrs
	Metal Tex Screw, 75mm	605.00	pcs.
	Roof Insulation, 8mm (50mtr/roll)	1.00	rolls
	Consumables	1.00	l.s
4.	Bended Accessories		
	Pre-painted Ridge Cap, 0.50mm x 0.305mm x 2.44m	8.00	pcs.
	Pre-painted Fascia Cover, 0.50mm x 0.305mm x 2.44m	10.00	pcs.
	Consumables	1.00	l.s
5.	Ceiling Panels	15.11	sq.m.
	Spandrel, 0.40mm x 0.229mm x 6.0m	11.00	pcs.
	Moulding, 0.40mm x 0.076mm x 2.44m	19.00	pcs.
	Double Furring, 19mm x 50mm x 0.5mm x 5.0m	15.00	pcs.
6.	Metal Primer		
	Epoxy Primer, Gray	2.00	gals
	Paint brush, 1-1/2"	1.00	pc.
	Paint brush, 4"	1.00	pc.
II.	ELECTRICAL WORKS		
A.	Electrical Layout		
	Panel Board, Bolt-on, Recessed Type, 3 Phase, 6-branches with Main Breaker	2.00	sets
	100 Amp Circuit Breaker, Bolt-on, 3-Pole	1.00	pc.
	40 Amp Circuit Breaker, Bolt-on, 3-Pole	4.00	pcs.
	20 Amp Circuit Breaker, Bolt-on, 3-Pole	5.00	pc.
	3.5mm THHN Wire Stranded	150.00	mtrs

	8.0mm THHN Wire Stranded	90.00	mtrs
	22mm THHN Stranded	70.00	mtrs
	30mm THHN Stranded	200.00	mtrs
	20 mm PVC Electrical Pipe	25.00	pcs.
	25 mm PVC Electrical Pipe	15.00	pcs.
	32 mm PVC Electrical Pipe	34.00	pcs.
	20 mm Electrical Flexible Hose	7.00	mtrs
	20 mm PVC Electrical Long Elbow	25.00	pcs.
	25 mm PVC Electrical Long Elbow	15.00	pcs.
	32 mm PVC Electrical Long Elbow	34.00	pcs.
	20 mm PVC Adaptor with Locknut	17.00	pcs.
	25 mm PVC Adaptor with Locknut	10.00	pcs.
	32 mm PVC Adaptor with Locknut	23.00	pcs.
	20 mm Flexible Hose Connector	5.00	pcs.
	Secondary Rack Three Spool	1.00	set
	Junction Box	6.00	pcs.
	Utility Box	9.00	pcs.
	Square Box 5"x5"x4"	2.00	pcs.
	Electrical Tape	20.00	pcs.
	Rubber Tape	10.00	pcs.
	PVC Solvent Cement 100cc	4.00	can
	2-Gang Switch Recessed Type	8.00	set
B.	Electrical Fixtures		
	4" Recessed Pinlight Socket	1.00	pc.
	7W LED Bulb, Cool White	1.00	pc.
	T8 Lighting - Recessed Type	2.00	pcs.
	T8 LED	2.00	pcs.

Duration: 60 calendar days

Submitted by:

Name and Signature of Bidder's Representative: _____

Position: _____

Name of Company: _____

Date: _____

Section IX. Checklist of Technical and Financial Documents

Checklist of Technical and Financial Documents

I. TECHNICAL COMPONENT ENVELOPE

Class "A" Documents

Legal Documents

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

Technical Documents

- (b) Statement of the prospective bidder of all its ongoing government and private contracts, including contracts awarded but not yet started, if any, whether similar or not similar in nature and complexity to the contract to be bid (*attached prescribed format*); **and**

- (c) Statement of the bidder's Single Largest Completed Contract (SLCC) similar to the contract to be bid, except under conditions provided under the rules (*attached prescribed format*); **and**

- (d) Special PCAB License in case of Joint Ventures; **and** registration for the type and cost of the contract to be bid; **and**
A valid and current Philippine Contractors Accreditation Board (PCAB) License requirement shall be:

Size Range: at least Small B

License Category: C & D

Principal Classification: General Engineering; **and**

- (e) Original copy of Bid Security. If in the form of a Surety Bond, submit also a certification issued by the Insurance Commission; **or** Original copy of Notarized Bid Securing Declaration; **and**

- (f) Project Requirements, which shall include the following:

- a. Organizational chart for the contract to be bid;
- b. List of contractor's key personnel (*e.g.*, Project Engineers, Electrical Engineer, Mechanical Engineer and General Foreman), to be assigned to the contract to be bid, with their complete qualification and experience data;
- c. List of contractor's major equipment units, which are owned, leased, and/or under purchase agreements, supported by proof of ownership or certification of availability of equipment from the equipment lessor/vendor for the duration of the project, as the case may be;
- d. Certificate of Site Inspection issued by Mr. Rowvic Docena/09261670789
- e. Project Evaluation and Review Technique (PERT) and Critical Path

Method (CPM) signed by Contractor's Project Engineer;

- (g) Original duly signed Omnibus Sworn Statement (OSS); **and** if applicable, Original Notarized Secretary's Certificate in case of a corporation, partnership, or cooperative; or Original Special Power of Attorney of all members of the joint venture giving full power and authority to its officer to sign the OSS and do acts to represent the Bidder.

Financial Documents

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

Class "B" Documents

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

II. FINANCIAL COMPONENT ENVELOPE

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

Other documentary requirements under RA No. 9184

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

The following templates are provided for easy reference, which may also be accessed through this link: <https://www.gppb.gov.ph/downloadable-forms/#tab-61412>

- Contract Agreement Form for the Procurement of Infrastructure Projects;
- Omnibus Sworn Statement;
- Performance Securing Declaration;
- Bid Form for the Procurement of Infrastructure Projects; and
- Bid Securing Declaration

Statement of All Ongoing Government & Private Contracts including contracts awarded but not yet started

Business Name : _____

Business Address : _____

a. Name of Contract b. Amount of the Contract	a. Owner's Name b. Address c. Telephone Nos.	Nature of Work / Kind of Goods	Bidder's Role		a. Date Awarded b. Date Started c. Date of Completion	% of Accomplishment		Value of Outstanding Works/ Undelivered Portion
			Description	%		Planned	Actual	
<u>Government</u>								
<u>Private</u>								
*Continue in separate sheet if necessary						Total Cost		

Note: (In case of no ongoing contract, the bidder shall submit this duly signed form and indicate "No ongoing contracts" or "None" or "Not Applicable (N/A)" under the Column for Name of Contract and Project Cost (first column from left)

This statement shall be supported with:

For Government Contract:

1. Notice of award and/or Contract Agreement and/or Notice to Proceed

For Private:

2. Job order or Purchase Order or any corresponding documents reflecting the Project name and project cost.

Submitted by : _____

(Printed Name and Signature of Authorized Representative)

Designation : _____

Date : _____

Statement Identifying the Single Largest Completed Contract

Business Name : _____
 Business Address : _____

Name of Contract	a. Owner's Name b. Address c. Telephone Nos.	Nature of Work / Kind of Goods	Bidder's Role		a. Amount at Award b. Amount at Completion	a. Date Awarded b. Contract Effectivity c. Date Completed
			Description	%		
<u>Government</u>						
<u>Private</u>						

Note: This statement shall be supported with:

For Government Contract:

1. Notice of award (NOA) and/or Contract Agreement and/or Notice to Proceed (NTP)
2. Certificate of Completion of Delivery (CCDs) issued by the Owner or Certificate of Final Acceptance (CFAs) or duly signed Delivery Receipt (DRs) or Official receipt or Sales Invoice or duly accomplished Inspection and Acceptance Reports.
3. Owner's Certificate of Final Acceptance issued by the project owner other than the contractor or a final rating of at least Satisfactory in the Constructors Performance Evaluation System (CPES).

For Private:

1. Job order or Purchase Order or Purchase Request
2. Certificate of Completion of Delivery (CCDs) issued by the Owner or Certificate of Final Acceptance (CFAs) or duly signed Delivery Receipt (DRs) or Official receipt or Sales Invoice
3. Owner's Certificate of Final Acceptance issued by the project owner other than the contractor or a final rating of at least Satisfactory in the Constructors Performance Evaluation System (CPES).

Submitted by : _____
 (Printed Name and Signature of Authorized Representative)
 Designation : _____
 Date : _____

Important Reminders

- *The bidders are encouraged to consult this checklist before submitting their Bid Envelopes on the deadline for the submission and the receipt of Bids. However, this is **by no means exclusive** Bidders must still familiarize themselves with other bid requirements not otherwise included herein such as, but not limited to those in the TOR, Bid Bulletin, Pertinent GPPB guidelines, rules, etc.*
- *All Bidders must submit their bid envelopes in accordance with the ITB Clause No. 15 and BFAR-BAC Online Bidding Procedure.*
- *All documents shall be current and updated and any missing document in the above-mentioned Checklist is a ground for outright rejection of the bid.*
- *All Pages of the documents shall be signed/initialed by the bidder or by his/her authorized representative.*
- *To facilitate the evaluation of the bids, bidders are advised to follow the arrangement in the above-mentioned checklist when placed in an envelope, with documents tabbed and labeled.*

ANNEXES

BFAR – BAC ONLINE BIDDING PROCEDURE

ANNEX A.....Bidder's Kit

ANNEX B.....Adding a password to a .PDF file using Adobe Acrobat Reader DC.

ANNEX C.....Procedure of Accessing the BFAR BAC Online Submission of
Bidding Documents via Google Forms.

“ANNEX A”

BIDDER’S KIT FOR BFAR PROCUREMENT GUIDELINES IN ADOPTING ELECTRONIC SUBMISSION OF BIDS.

(GPPB Resolution No. 09-2020)

I. PRE-REGISTRATION & PRE-BID CONFERENCE

Step 1: Register by completing the information required in the **Google Form** which can be accessed here: <https://forms.gle/9PassK7oCipk8iXD6>

Once completed, submit the form to the Secretariat and wait for an acknowledgement by e-mail.

Step 2: Join the scheduled Pre-Bid Conference by clicking the link provided by the Secretariat through e-mail using **Zoom**. Please make sure that you allow access to the microphone and the camera.

Step 3: Kindly wait for the Secretariat to confirm your entry through Zoom to participate in the pre-bid conference.

Step 4: See attached file as “Annex A” for the House Rules to be observed during the conduct of procurement activities.

II. PREPARATION OF BID (SOFT COPY)

Step 1: Prepare a final scanned copy of your Bid which is divided into two different PDF files:

1. Eligibility Documents & Technical Documents; and
2. Financial Documents
- 3.

Step 2: Set a password for the scanned copy of the Eligibility Documents & Technical Documents and Financial Documents and save as a .PDF file.

Step 3: Compress the file, save the password-protected .PDF file to a ZIP file. Set another password on the ZIP file.

Important: Passwords must be 8-16 characters and contain both numbers and letters/special characters. The bidder is required setting a unique combination for each file and folder. Same passwords for all files are not

allowed. For details on how to set passwords in .PDF file and ZIP file, please see file attached as “Annex B”.

Step 4: For effective documentation of the submitted files, you must comply with the label format below:

1. Both ZIP folder and .PDF file shall be assigned file name
“BFAR Bid Reference No._____ (Company Name); Legal & Technical Documents”
2. Both ZIP folder and .PDF file shall be assigned file name
BFAR Bid Reference No._____ (Company Name); Financial Documents”

III. REGISTRATION FOR ONLINE SUBMISSION

Step 1: Register through Google Form, a link will be provided upon request to the BAC Secretariat’s e-mail address: bac.eps@bfar.da.gov.ph at any time before the closing date and time specified in the Bidding Documents by disclosing the following information:

- a) Email Address
- b) Company Name
- c) Company Address
- d) Authorized Representative
- e) Contact No.
- f) Bid Reference
- g) Bid Title
- h) Official Receipt (OR) No.

Upon verification of the Official Receipt (OR), the BAC Secretariat will send the Public Bidding Documents through the given email or shall provide a hard copy upon request. It may also be downloaded free of charge from the website of the Philippine Government Electronic Procurement System (PhilGEPS) and the website of the Procuring Entity, provided that Bidders shall pay the applicable fee for the Bidding Documents not later than the submission of their bids.

Step 2: The BAC Secretariat will send another Google Form link to the bidder, who already purchased the bidding documents, through the given email directing to the “Online Submission of the Bid”

IV. ACCESSING THE GOOGLE FORMS

Step 1: Upon successful login to your email address account. You will now open the Google Form link sent through BAC Secretariat's e-mail address given above.

Step 2: Click the **FILL OUT FORM** button. *(See attached "Annex C")*

V. SUBMISSION OF BID

Step 1: Submit your Bids through Google Form at any time before the closing date and time specified in the Bidding Documents.

Step 2: Upon preparation and finalization of the compressed and password-protected files Eligibility & Technical and Financial Documents, a Google Form link will direct you to the page where they can now upload the said requirements. *(See attached "Annex C, Figure 10.1")*

Step 3: After submission, a copy of the response will be automatically emailed to the address provided by you which can be saved or printed, as proof of the official time of the submission and receipt of bids. *(See attached "Annex C, Figure 11.2")*

VI. RECEIVING OF THE SUBMITTED BID

The BAC Secretariat will receive the submitted information through Google Forms and will generate a Bid Receipt page for the official time of submission of all bidders, which can be saved or printed.

Bidders may modify their Bid at any time before the deadline for the submission and receipt of bids. Bidders shall send another Bid equally secured, properly identified, and labelled as a "**modification**" of the previously submitted. The time indicated in the latest Bid receipt page generated shall be the official time of submission. Bids submitted after the deadline shall not be accepted.

The BAC Secretariat will not be able to access the documents until the day of the Bid Opening.

VII. BID OPENING PROCESS

The BAC, with the assistance of the Secretariat and Technical Working Group (TWG), shall conduct bid opening via Zoom. Bidders are encouraged to attend the bid opening online. The passwords for the folders (ZIP) and the files (.PDF) shall be disclosed by the bidders only during actual bid opening which may be done via Zoom.

The Secretariat will ask the bidder, who choose to attend via Zoom, the corresponding password of their Bid during the bid opening itself. The official representative of the bidder shall respond promptly in the same chat box with the passwords when prompted. Bidders are given within five (5) minutes to respond with the passwords. If the bidder does not provide or respond with the password within five (5) minutes, from prompting, it will result in disqualification and the BAC shall move on to the next bid, if any.

The bidder shall first disclose the password for the compressed folder (ZIP file) containing the Eligibility & Technical documents, second disclose the password for the Eligibility & Technical document (.PDF file). The Secretariat will share the screen via Zoom during accessing the submitted Bid.

If the bidder **passed** the Eligibility & Technical requirements, the second password-protected compressed folder containing the Financial Documents and the files contained therein shall be opened in the same manner as the password of the eligibility documents as described above. In no case will a bidder disclose the passwords for the financial folder and the files prior to being declared eligible based on the evaluation of the eligibility documents.

The bidder is given only three (3) attempts to disclose the password per compressed folder (ZIP) and .PDF file to open the documents. If the bidder fails to provide the correct password after the third attempt, their Bid will no longer be considered. The Secretariat shall take and print a screenshot of such inquiries and responses to form part of the records and all incidents should be recorded in the minutes.

In the event that the electronic copy cannot be submitted, opened or is corrupted, the BAC will proceed with the opening of the submitted original hard copy.

Basic House Rules to be observed during BAC Meetings

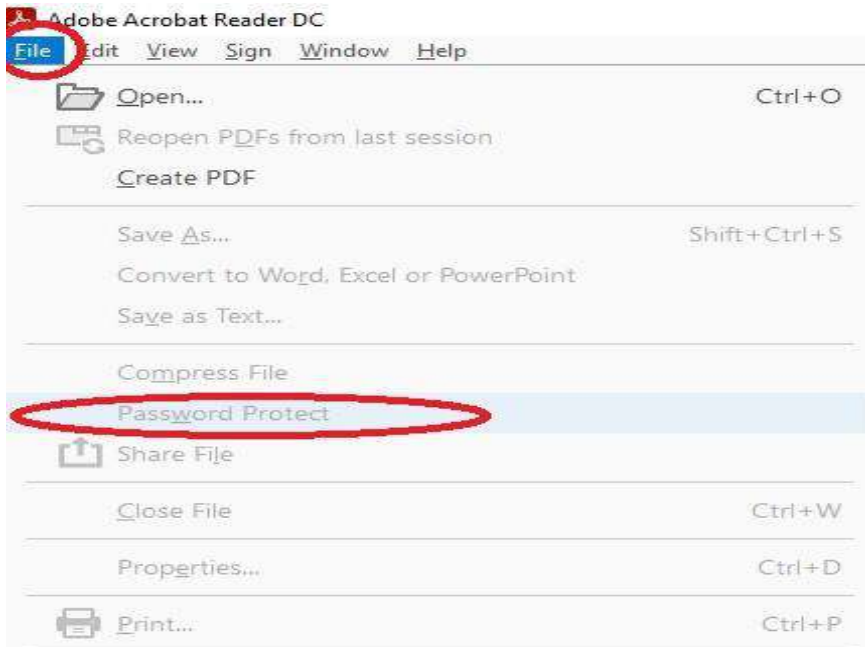
1. Kindly place your microphone on mute when not speaking.
2. Please raise your hand, and wait to be recognized before you speak (remember to toggle off mute).
3. Turn on video for confirmation of your identity.
4. Meeting will start on time. You are advised to enter the VTC room 30 minutes to resolve technical issue, if any.

“ANNEX B”

Adding a password to a .PDF file using Adobe Acrobat Reader DC.

One-click option to protect a PDF with a password

1. Open the PDFfile
2. Choose **File > Protect Using Password.**



3. Select to set the password for Viewing thePDF.

Protect Using Password

Requires user to enter a password for:

Viewing
 Editing

Type Password
 ✔ Strong Password

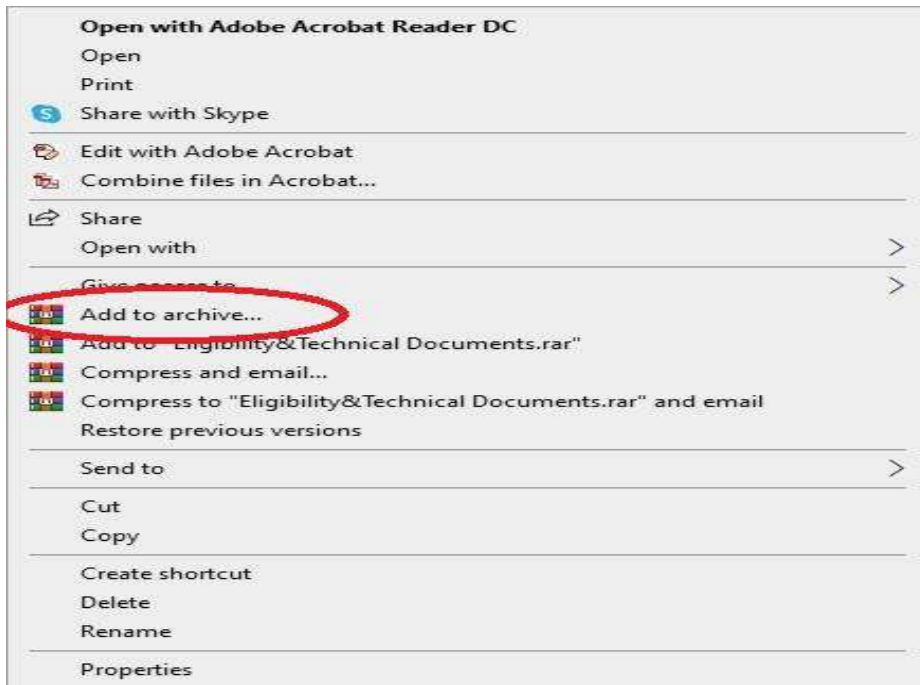
Re-type Password

More Options ▾ Cancel Apply

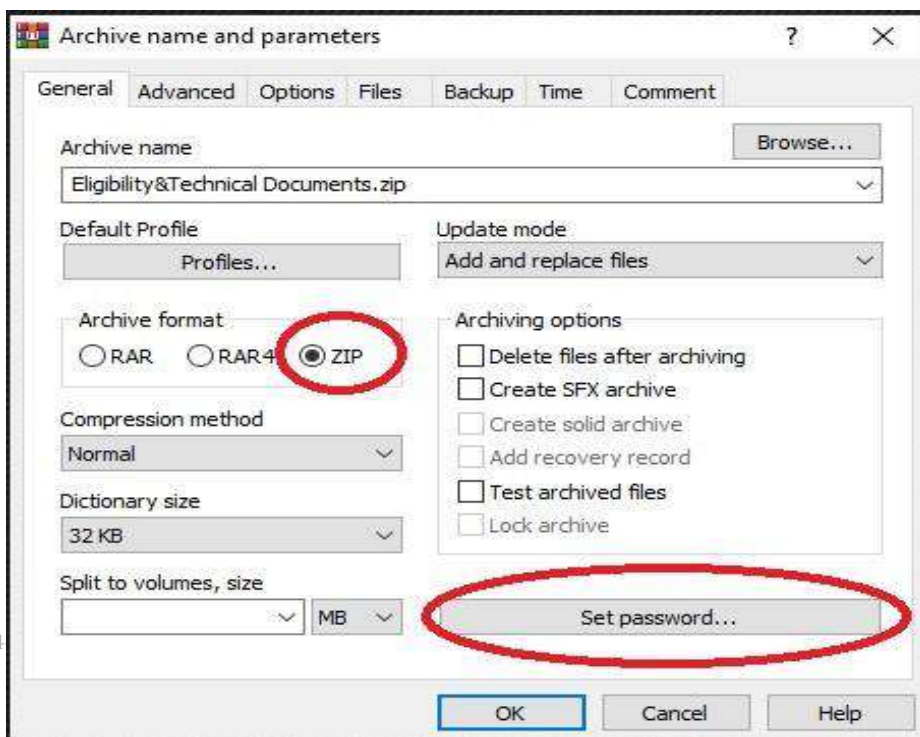
4. Type and retype your password. The password strength is displayed next to your password to indicate whether the chosen password is weak, medium, strong, or best
5. Click **Apply**

File Archiving and Compression using WinRAR application

1. Right Click the password protected .PDFfile
2. Select **“Add to archive.”**



3. In the Archive name and parameters dialog box, select **“Radio button ZIP”** and click **“Set password”**



4. Type your password and Click **“OK button.”**



“ANNEX C”

Procedure of Accessing the BFAR BAC Online Submission of Bidding Documents via Google Forms.

Step 1. BAC Secretariat will send the Invitation link of Registration Form.

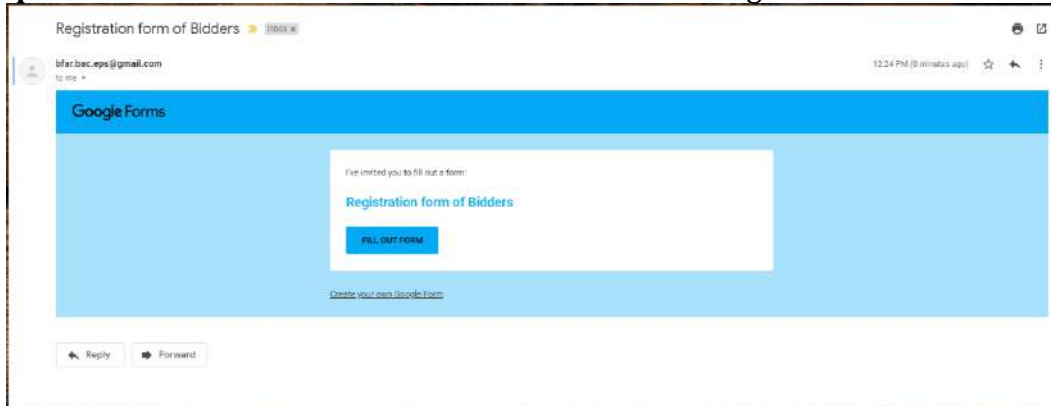
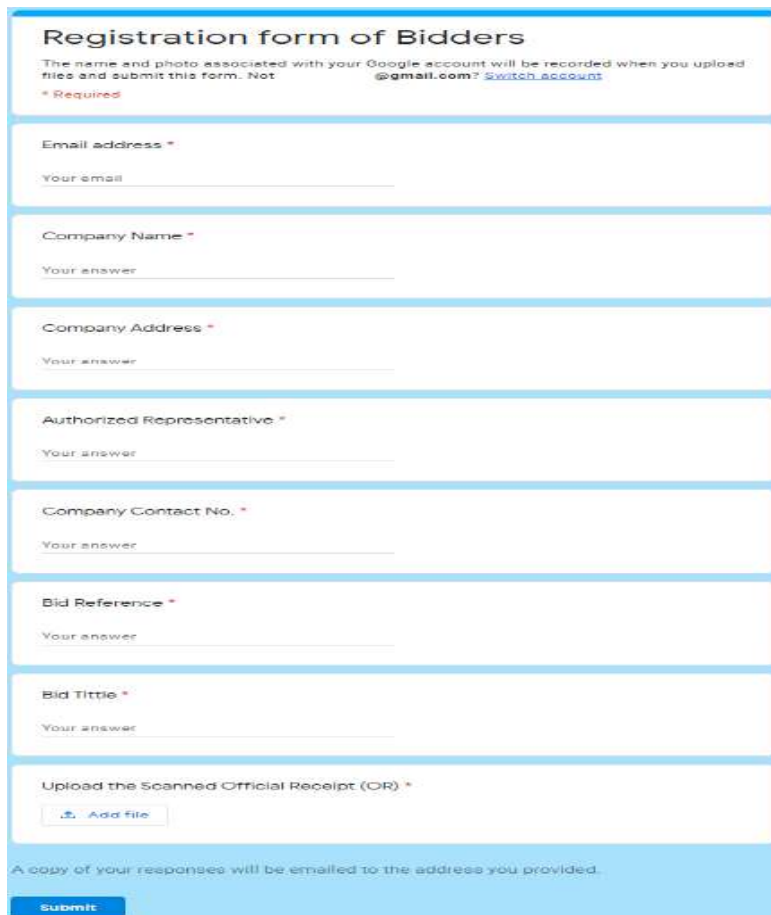


Figure 1.1

Step 2. Upon received, click the **FILL OUT FORM.**

Step 3. Bidder must fill in the following required information

A screenshot of a Google Form titled 'Registration form of Bidders'. The form includes a disclaimer: 'The name and photo associated with your Google account will be recorded when you upload files and submit this form. Not @gmail.com? Switch account'. Below this, there are several required fields marked with an asterisk: 'Email address', 'Company Name', 'Company Address', 'Authorized Representative', 'Company Contact No.', 'Bid Reference', and 'Bid Title'. Each field has a 'Your answer' label and a text input area. At the bottom, there is a file upload section for 'Upload the Scanned Official Receipt (OR)' with an 'Add file' button. A 'Submit' button is located at the very bottom of the form. A footer note states: 'A copy of your responses will be emailed to the address you provided.'

Step 4. Click the **Add file** to upload Scanned Copy of Official Receipt (OR).

Step 5. After uploading of the Scanned Copy of OR, the bidder shall click the **Submit** button to complete the process and BAC Secretariat shall verify the submitted Official Receipt (OR).

The image shows a Gmail interface with an email titled "Registration form of Bidders". The email content is a Google Form with the following fields and values:

- Registration form of Bidders** (Form Title)
- Email address ***: @gmail.com
- Company Name ***: Glue
- Company Address ***: Navotas
- Company Contact No. ***: 0929788498489
- Bid Reference ***: 2020-26
- Bid Title ***: White Glue
- Upload the Scanned Official Receipt (OR) ***: Submitted files: Registration - BFAR BAC.PNG

Figure 5.1

Step 6. A copy of the response will be automatically emailed to the address provided by the bidders.

Step 7. Upon verification of the Official Receipt (OR), the BAC Secretariat shall send the Public Bidding Documents through the given email or shall provide a hard copy upon request. It may also be downloaded free of charge from the website of the Philippine Government Electronic Procurement System (PhilGEPS) and the website of the Procuring Entity, provided that Bidders shall pay the applicable fee for the Bidding Documents not later than the submission of their bids.

Step 8. The BAC Secretariat will send another Google Form link to the bidder, who already purchased the bidding documents, through email directing to the “Online Submission of the Bid”.

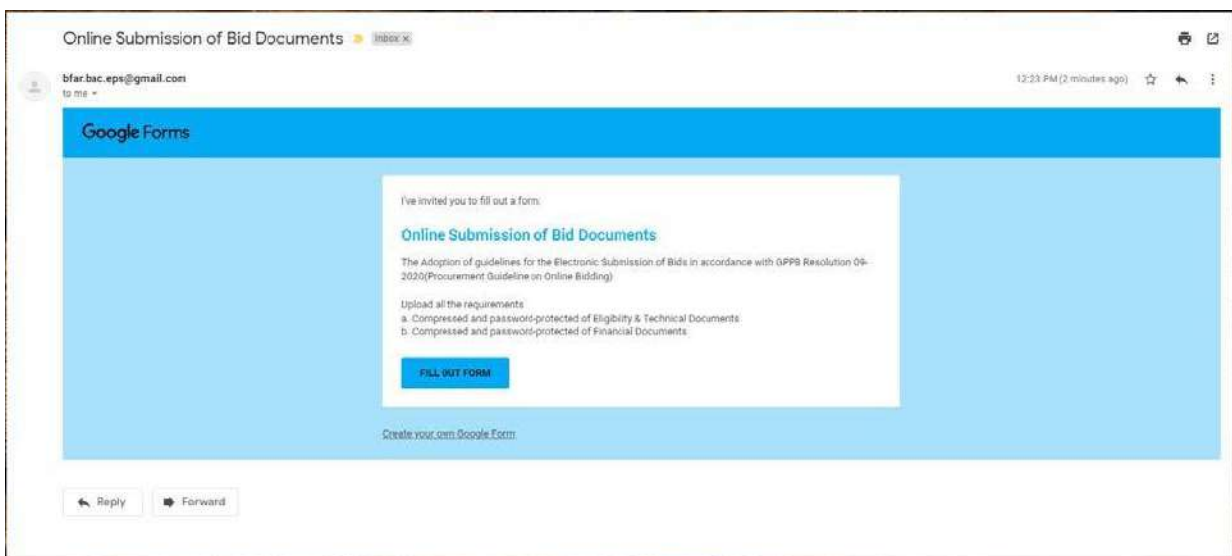


Figure 8.1

Step 9. Upon received, click the **FILL OUT FORM.**

Step 10. Click the **Add file** button to upload the compressed and password-protected files of Eligibility & Technical and Financial Documents

Online Submission of Bid Documents

The Adoption of guidelines for the Electronic Submission of Bids in accordance with GPPB Resolution 09-2020(Procurement Guideline on Online Bidding)

Upload all the requirements

- a. Compressed and password-protected of Eligibility & Technical Documents
- b. Compressed and password-protected of Financial Documents

The name and photo associated with your Google account will be recorded when you upload files and submit this form. Not [@gmail.com?](#) [Switch account](#)

* Required

Email address *

Your email _____

Eligibility & Technical Documents *

[Add file](#)

Financial Documents *

[Add file](#)

A copy of your responses will be emailed to the address you provided.

Submit

Figure 10.1

Step 11. Click the **Submit** button to complete the process. A copy of the response will be automatically emailed to the address provided by the bidder which can be saved or printed by the bidder, as proof of the official time of the submission and receipt of bids.



Figure 11.1

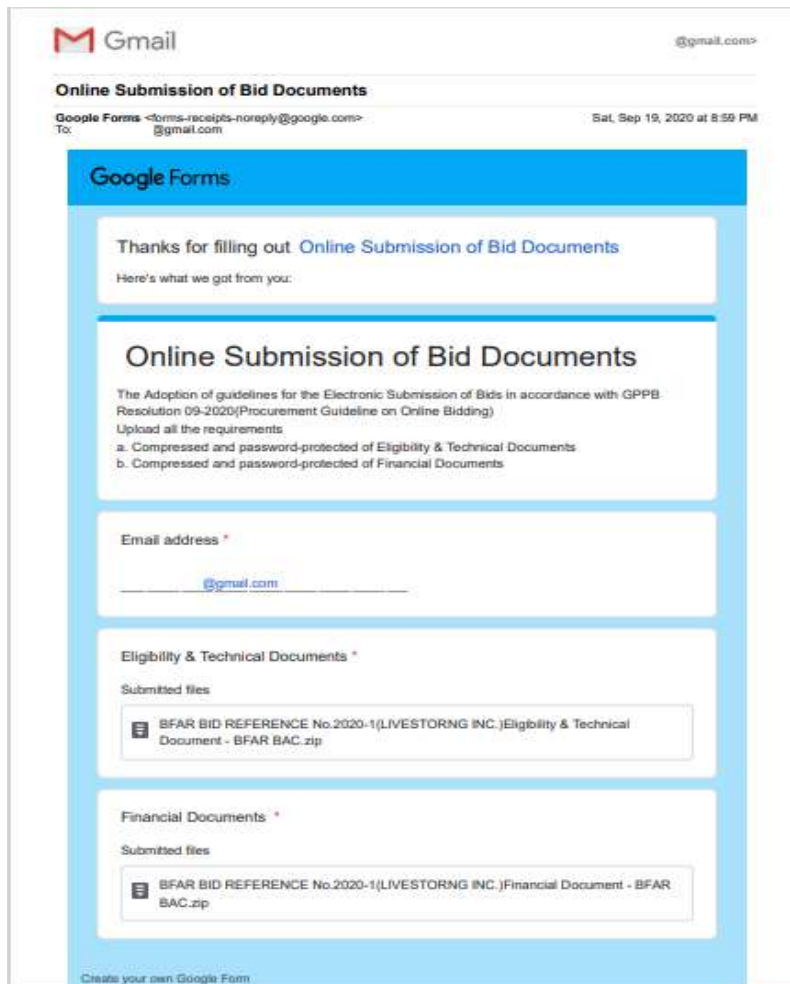


Figure 11.2

