

NATIONAL MEAT INSPECTION SERVICE

No.4 Visayas Avenue, Brgy. Vasra, Quezon City

BIDDING DOCUMENTS

**Construction of El
Salvador City “AA”
Slaughterhouse**

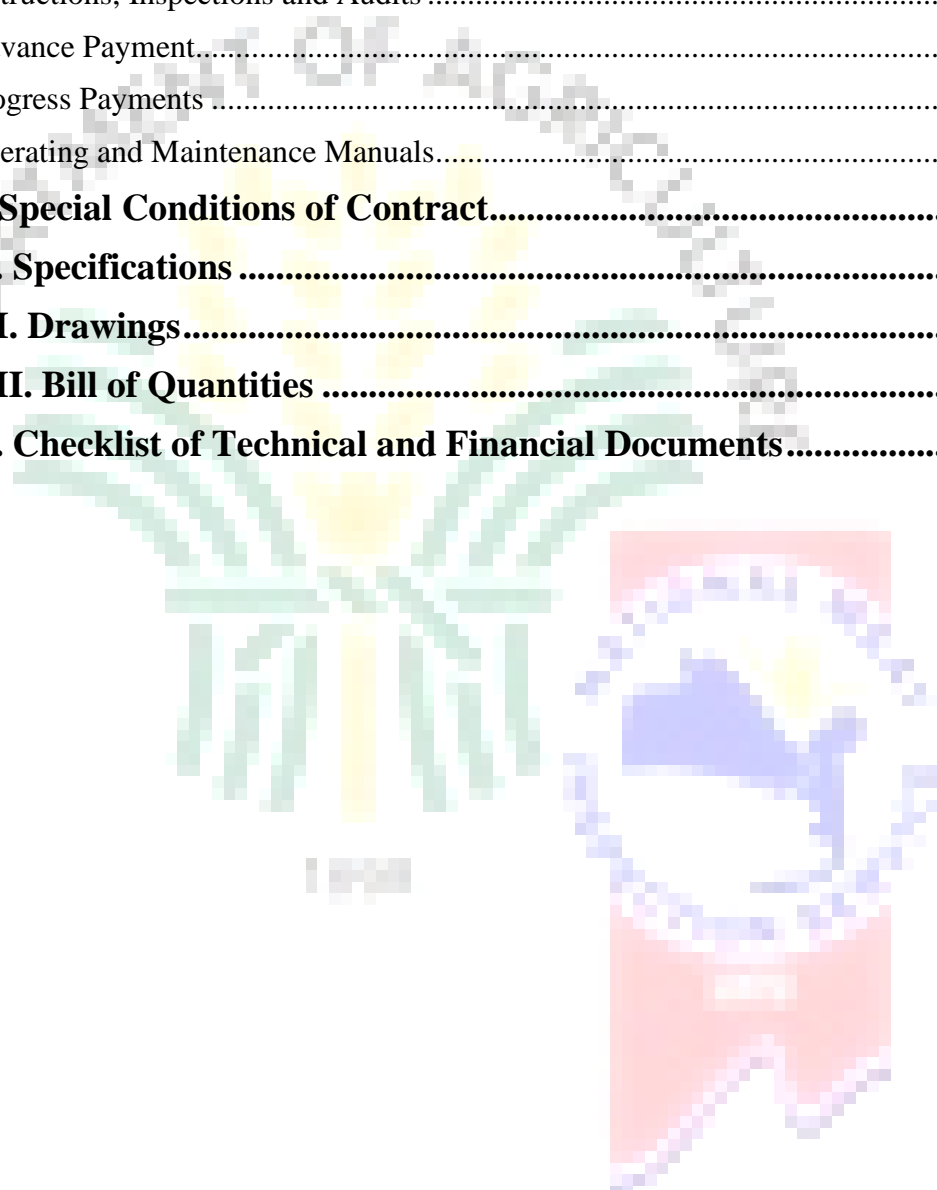
**Sixth Edition
July 2020**



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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





Republic of the Philippines
DEPARTMENT OF AGRICULTURE
NATIONAL MEAT INSPECTION SERVICE
No.4 Visayas Avenue, Brgy. Vasra, Quezon City
Trunk line: (02) 8-924-7980; Telefax: (02) 8-924-7973
www.nmis.gov.ph
[e-mail: nmis@nmis.gov.ph](mailto:nmis@nmis.gov.ph)

Invitation to Bid for the Construction of El Salvador City “AA” Slaughterhouse

1. The *National Meat Inspection Service*, through the *Meat Establishment Improvement Program 2021* fund intends to apply the sum of *Fifteen Million Two Hundred Thousand Pesos (Php15,200,000.00)* being the Approved Budget for the Contract (ABC) to payments under the contract for *NMIS-INF-2021-03: Construction of El Salvador City “AA” Slaughterhouse*. Bids received in excess of the ABC shall be automatically rejected at bid opening.
2. The *National Meat Inspection Service* now invites bids for the above Procurement Project. Completion of the Works is required *One Hundred Twenty Calendar Days (120 C.D.)*. 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 *National Meat Inspection Service* and inspect the Bidding Documents at the address given below from Monday to Friday from 8:00 a.m. to 5:00 p.m.
5. A complete set of Bidding Documents may be acquired by interested bidders on *September 1, 2021* from given address and website(s) below, in the amount of *Twenty-Five Thousand Pesos (Php25,000.00)*.
6. The *National Meat Inspection Service* will hold a Pre-Bid Conference on *September 9, 2021 (Thursday) 9:30 a.m.* at *NMIS Conference Room, No.4 Visayas Avenue, Brgy. Vasra, Quezon City* and/or through videoconferencing/webcasting via *Zoom or Google Meet*, which shall be open to prospective bidders.
7. Bids must be duly received by the BAC Secretariat through manual submission at the office address as indicated below on or before *September 23, 2021 (Thursday) 9:00 a.m.* Late bids shall not be accepted.
8. All bids must be accompanied by a bid security in any of the acceptable forms and in the amount stated in **ITB** Clause 16.
9. Bid opening shall be on *September 23, 2021 (Thursday) 9:30 a.m.* at *NMIS Conference Room, No.4 Visayas Avenue, Brgy. Vasra, Quezon City*. Bids will be opened in the presence of the bidders’ representatives who choose to attend the activity.
10. The *National Meat Inspection Service* 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:

NMIS-BAC SECRETARIAT

BAC Office, 2nd Floor, MITDC Bldg.,

National Meat Inspection Service

No. 4 Visayas Ave., Brgy. Vasra, Quezon City

Telephone No: (02) 8924-7971; 8924-7980 local 227 or 228

Email address: nmisbacsecretariat@gmail.com / nmisbac@yahoo.com.ph

12. You may visit the following websites:

For downloading of Bidding Documents: www.philgeps.gov.ph and www.nmis.gov.ph

August 31, 2021

Date of Issue

(Sgd) Atty. Beata Humilda O. Obsioma, DVM, Ph.D
BAC Chairperson

Section II. Instructions to Bidders



1. Scope of Bid

The Procuring Entity, **National Meat Inspection Service** invites Bids for the **Construction of El Salvador City “AA” Slaughterhouse**, with Project Identification Number **NMIS-INF-2021-03**.

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

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

2. Funding Information

2.1. The GOP through the source of funding as indicated below for **Meat Establishment Improvement Program 2021** in the amount of **Fifteen Million Two Hundred Thousand Pesos (Php15,200,000.00)**.

2.2. The source of funding is:

a. **NGA, the General Appropriations Act or Special Appropriations.**

3. Bidding Requirements

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

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

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

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

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

5. Eligible Bidders

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

A contract is considered to be “similar” to the contract to be bid if it has the major categories of work stated in the **BDS**.
- 5.3. For Foreign-funded Procurement, the Procuring Entity and the foreign government/foreign or international financing institution may agree on another track record requirement, as specified in the Bidding Document prepared for this purpose.
- 5.4. The Bidders shall comply with the eligibility criteria under Section 23.4.2 of the 2016 IRR of RA No. 9184.

6. Origin of Associated Goods

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

7. Subcontracts

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

The Procuring Entity has prescribed that:

a. Subcontracting is not allowed.

- 7.1. *[If Procuring Entity has determined that subcontracting is allowed during the bidding, state:]* The Bidder must submit together with its Bid the documentary requirements of the subcontractor(s) complying with the eligibility criterial stated in **ITB** Clause 5 in accordance with Section 23.4 of the 2016 revised IRR of RA No. 9184 pursuant to Section 23.1 thereof.

- 7.2. *[If subcontracting is allowed during the contract implementation stage, state:]* The Supplier may identify its subcontractor during the contract implementation stage. Subcontractors identified during the bidding may be changed during the implementation of this Contract. Subcontractors must submit the documentary requirements under Section 23.1 of the 2016 revised IRR of RA No. 9184 and comply with the eligibility criteria specified in **ITB** Clause 5 to the implementing or end-user unit.
- 7.3. Subcontracting of any portion of the Project does not relieve the Contractor of any liability or obligation under the Contract. The Supplier will be responsible for the acts, defaults, and negligence of any subcontractor, its agents, servants, or workmen as fully as if these were the Contractor's own acts, defaults, or negligence, or those of its agents, servants, or workmen.

8. **Pre-Bid Conference**

The Procuring Entity will hold a pre-bid conference for this Project on the specified date and time and either at its physical address **NMIS Conference Room, No.4 Visayas Avenue, Brgy. Vasra, Quezon City** and/or through videoconferencing/webcasting} 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 PCAB License is required, and in case of joint ventures, a valid special PCAB License, and registration for the type and cost of the contract for this Project. Any additional type of Contractor license or permit shall be indicated in the **BDS**.

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

11. Documents Comprising the Bid: Financial Component

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

12. Alternative Bids

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

13. Bid Prices

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

14. Bid and Payment Currencies

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

a. Philippine Pesos.

15. Bid Security

- 15.1. The Bidder shall submit a Bid Securing Declaration or any form of Bid Security in the amount indicated in the **BDS**, which shall be not less than the percentage of the ABC in accordance with the schedule in the **BDS**.
- 15.2. The Bid and bid security shall be valid until **January 21, 2022**. Any bid not accompanied by an acceptable bid security shall be rejected by the Procuring Entity as non-responsive.

16. Sealing and Marking of Bids

Each Bidder shall submit one copy of the first and second components of its Bid.

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

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

17. Deadline for Submission of Bids

The Bidders shall submit on the specified date and time and either at its physical address or through online submission as indicated in paragraph 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 | For this purpose, contracts similar to the Project refer to contracts which have the same major categories of work, which shall be: Vertical Structures preferably Meat Establishment | | |
| 7.1 | <i>[Specify the portions of Works and the maximum percentage allowed to be subcontracted, which shall not be significant or material components of the Project as determined by the Procuring Entity.] No further instruction</i> | | |
| 10.3 | General Engineering (Size Range: Small B, License Category: C & D) | | |
| 10.4 | The key personnel must meet the required minimum years of experience set below: | | |
| | <u>Key Personnel</u> | <u>General Experience</u> | <u>Relevant Experience</u> |
| | Civil Engineer | Minimum of 3 years | similar projects |
| | Foreman | Minimum of 1 year | similar projects |
| | Mason | Minimum of 1 year | similar projects |
| | Registered Electrical Engineer | Minimum of 3 years | similar projects |
| | Electrician (TESDA Certified) | Minimum of 2 years | similar projects |
| | Registered Master Plumber | Minimum of 3 years | similar projects |
| | Registered Mechanical Engineer | Minimum of 3 years | similar projects |
| | Skilled Welder (TESDA Certified) | Minimum of 2 years | similar projects |
| | Materials Engineer I or II | None required | None required but with DPWH Certification |
| | <p>Duly signed curriculum vitae of key personnel to be assigned to the project, with their complete qualification and experience, including updated registration with Professional Regulation Commission (certified scanned copy of PRC ID) and/or appropriate regulatory bodies (e.g. TESDA), and valid PTR.</p> | | |

| 10.5 | <p>The minimum major equipment requirements are the following:</p> <table border="1" data-bbox="400 255 1390 831"> <thead> <tr> <th colspan="3">The minimum major equipment requirements are the following:</th> </tr> <tr> <th>EQUIPMENT</th> <th>CAPACITY</th> <th>NUMBER OF UNITS</th> </tr> </thead> <tbody> <tr> <td>Backhoe/Loader</td> <td>1</td> <td>0.6 c.u</td> </tr> <tr> <td>Bagger mixer</td> <td>2</td> <td>1 bagger</td> </tr> <tr> <td>Welding Machine</td> <td>2</td> <td></td> </tr> <tr> <td>Plate Compactor</td> <td>2</td> <td></td> </tr> <tr> <td>Dump Truck</td> <td>1</td> <td></td> </tr> <tr> <td>Oxygen acetylene</td> <td>2</td> <td></td> </tr> <tr> <td>Bar Cutter</td> <td>2</td> <td></td> </tr> <tr> <td>Bender</td> <td>2</td> <td></td> </tr> <tr> <td>Generator set</td> <td>1</td> <td>1.75 kva</td> </tr> <tr> <td>Water Truck</td> <td>1</td> <td>2000 liters</td> </tr> </tbody> </table> | The minimum major equipment requirements are the following: | | | EQUIPMENT | CAPACITY | NUMBER OF UNITS | Backhoe/Loader | 1 | 0.6 c.u | Bagger mixer | 2 | 1 bagger | Welding Machine | 2 | | Plate Compactor | 2 | | Dump Truck | 1 | | Oxygen acetylene | 2 | | Bar Cutter | 2 | | Bender | 2 | | Generator set | 1 | 1.75 kva | Water Truck | 1 | 2000 liters |
|---|---|---|------------------------------|------------------------------------|-------------|----------|-----------------|------------------------------|------------------------------|---------|--------------|---|----------|-----------------|---|--|-----------------|---|--|------------|---|--|------------------|---|--|------------|---|--|--------|---|--|---------------|---|----------|-------------|---|-------------|
| The minimum major equipment requirements are the following: | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| EQUIPMENT | CAPACITY | NUMBER OF UNITS | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Backhoe/Loader | 1 | 0.6 c.u | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bagger mixer | 2 | 1 bagger | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Welding Machine | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Plate Compactor | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Dump Truck | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Oxygen acetylene | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bar Cutter | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bender | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Generator set | 1 | 1.75 kva | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Water Truck | 1 | 2000 liters | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 12 | [Insert Value Engineering clause if allowed.] No further instruction | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 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> <table border="1" data-bbox="408 1095 1380 1249"> <thead> <tr> <th>Lot</th> <th>ABC (in PhP)</th> <th>Cash or cashier's/ manager's check</th> <th>Surety Bond</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>15,200,000.00</td> <td>Php304,000.00 (2% of ABC)</td> <td>Php760,000.00 (5% of ABC)</td> </tr> </tbody> </table> | Lot | ABC (in PhP) | Cash or cashier's/ manager's check | Surety Bond | 1 | 15,200,000.00 | Php304,000.00 (2% of ABC) | Php760,000.00 (5% of ABC) | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Lot | ABC (in PhP) | Cash or cashier's/ manager's check | Surety Bond | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | 15,200,000.00 | Php304,000.00 (2% of ABC) | Php760,000.00 (5% of ABC) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 19.2 | Partial bid is not allowed. The infrastructure project is packaged in a single lot and the lot shall not be divided into sub-lots for the purpose of bidding, evaluation, and contract award. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 20 | [List licenses and permits relevant to the Project and the corresponding law requiring it, e.g. Environmental Compliance Certificate, Certification that the project site is not within a geohazard zone, etc.] None | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 21 | Additional contract documents relevant to the Project that may be required by existing laws and/or the Procuring Entity, such as construction schedule and S-curve, manpower schedule, construction methods, equipment utilization schedule, construction safety and health program approved by the DOLE, and other acceptable tools of project scheduling. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Section IV. General Conditions of Contract



1. Scope of Contract

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

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

2. Sectional Completion of Works

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

3. Possession of Site

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

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

4. The Contractor's Obligations

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

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

5. Performance Security

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

6. Site Investigation Reports

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

7. Warranty

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

8. Liability of the Contractor

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

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

9. Termination for Other Causes

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

10. Dayworks

Subject to the guidelines on Variation Order in Annex “E” of the 2016 revised IRR of RA No. 9184, and if applicable as indicated in the **SCC**, the 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 | <i>[If different dates are specified for completion of the Works by section, i.e. “sectional completion,” these dates should be listed here.] No further instruction</i> |
| 4.1 | <i>[Specify the schedule of delivery of the possession of the site to the Contractor, whether full or in part.] No further instruction</i> |
| 6 | The site investigation reports are: <i>[list here the required site investigation reports.]</i> |
| 7.2 | <i>[Select one, delete the other.]</i> <i>[In case of permanent structures, such as buildings of types 4 and 5 as classified under the National Building Code of the Philippines and other structures made of steel, iron, or concrete which comply with relevant structural codes (e.g., DPWH Standard Specifications), such as, but not limited to, steel/concrete bridges, flyovers, aircraft movement areas, ports, dams, tunnels, filtration and treatment plants, sewerage systems, power plants, transmission and communication towers, railway system, and other similar permanent structures:] Fifteen (15) years.</i> |
| 10 | Dayworks are applicable at the rate shown in the Contractor’s original Bid. |
| 11.1 | The Contractor shall submit the Program of Work to the Procuring Entity’s Representative within <i>seven (7)</i> days of delivery of the Notice of Award. |
| 11.2 | The amount to be withheld for late submission of an updated Program of Work is <i>1/10 of 1% per day of delay.</i> |
| 13 | The amount of the advance payment is <i>15%</i> . |
| 14 | Materials and equipment delivered on the site but not completely put in place shall be included for payment. |
| 15.1 | The date by which operating and maintenance manuals are required is <i>Thirty days after completion.</i> The date by which “as built” drawings are required is <i>Thirty days after completion.</i> |
| 15.2 | The amount to be withheld for failing to produce “as built” drawings and/or operating and maintenance manuals by the date required is <i>[amount in local currency].</i> |

Section VI. Specifications



Specifications

A. GENERAL REQUIREMENTS

TS-1 General

1.1 Provision

The Contractor shall perform all required scope of works for the National Meat Inspection Service (NMIS).

1.2 Drawings and Specification

Drawings and specification are intended to complement each other, so that of anything is shown on the drawings, but not mentioned in the specifications, or vice versa, it is to be furnished and built as though specifically set forth in both. If any discrepancies occur in the drawings or specification, the same shall be referred to the Engineers assigned in the project before proceeding with the work. The Engineer's decision on such discrepancies shall be final provided that the said discrepancies will not incur any additional amount and will not sacrifice the structural integrity of the project.

1.3 Large scale drawings shall have preference over smaller scale drawings and figured dimensions shall have preference over scaled dimensions.

1.4 The Engineer may, during the progress of the work furnish additional drawings, specifications and instructions as may be necessary, for the proper and adequate implementation of the work. In this case, the Contractor shall make his work conform to all such drawings, specifications and instruction. Such drawings specifications and instruction shall be deemed to the part of the Contract Documents.

1.5 Minor Change

The Engineer shall have also authority to direct minor changes in the work provided that there will be no adjustment in the contract cost and the contract schedule. Such changes shall be binding on the Owner and the Contractor.

1.6 Applicable Standard and Codes

The following terms listed or referred herein or indicated in the drawings are to be used for reference and latest edition of the publication to the date of these specifications shall apply.

| | | |
|------|---|--|
| ASTM | - | American Society for Testing and Materials |
| ACI | - | American Concrete Institute |
| AISC | - | American Institute of Steel Construction |
| ANSI | - | American National Standard Institute |
| CRSI | - | Concrete Reinforcing Steel Institute |

AWS - American Welding Society
ASSHTO - American Association of State Highway and
Transportation Office

1.7 The Contractor may use local standards and codes equivalent to those referred in this Technical Specifications.

PS - National Standard
NBC - National Building Code of the Philippines
NSC - National Structural Code of the Philippines
PCP - Plumbing Code of the Philippines
PEC - Philippine Electrical Code

TS-2 Construction Schedule and Execution Plan

The Contractor shall prepare and submit to the Engineer for reference a construction schedule and day to day activity plans of implementation. The contractor shall also submit the list/names of his labor force with their designations.

TS-3 Permit

The Contractor shall, prior to the start of work, ensure that the needed building permit is being process or approve by municipality concerned.

TS-4 As-Built Drawings and Construction Log Book

The Contractor shall prepare and submit the as-built plans of the project he is undertaking including the construction logbook used in the implementation prior to the release of the final payment.

TS-5 Construction Photograph

The contractor shall prepare and submit all require photographs of progress and completion of construction.

TS-6 Sampling and Testing

Sampling and testing of materials shall be done by and at the expense of the contractor. All tests required shall be performed at the approved laboratories. The materials represented by the sample shall not be considered acceptable until the required tests have been performed and the results have been found to conform with the requirements of the plans and specifications.

TS-7 Soil Investigation and Testing

The Contractor shall, prior to start of work conduct soil investigation and testing to determine the allowable bearing capacity. At least two (2) boreholes with a minimum depth of

15.0 meters each shall be done. The specimen shall be tested at the approved laboratories. The Contractor shall furnish the Engineer a copy of the result of the soil testing. If the soil investigation and testing is found unnecessary, the provisional sum in the bill of quantities shall automatically be deducted from the contract price.

B. MASONRY

TS-8 General

The scope of work covers the furnishing of all labor, equipment and materials for the erection of walls made of non load bearing, 100mm and/or 150mm thick concrete hollow blocks.

TS-9 Materials

9.1 All materials supplied under the Contract shall conform to the requirements of the Philippine Standard Association and the National Structural Code of the Philippines, Volume 1.

9.2 Recommended strength of CHB for both external and internal use of the building shall not be less than 450 psi.

9.3 Portland cement mortar for laying concrete hollow blocks shall consist of one (1) part Portland cement, and three (3) parts sand.

9.4 Mortar materials shall accurately measure by volume and thoroughly mixed until evenly distributed throughout the batch. Unless otherwise approved by the Engineer, mixing by batch shall be by mechanical mixer of not less than two (2) minutes per batch.

9.5 Masonry materials shall be handled with care to prevent chipping and breakage. Masonry units shall be stacked on platform and covered or stored in any other approved manner that will protect these materials from contact with the soil and exposure to the weather. Cement shall be stored off the ground under water tight cover and away from sweating walls and other damp surfaces until ready for use. Damage or deteriorated materials shall be removed from the premises.

9.6 All steel reinforcement for masonry works shall be in accordance with the approved plan and details as shown in the drawings.

TS-10 Methods of Construction

10.1 All masonry units shall be laid plumbed, levelled and accurately spaced. Wall intersection shall be toothed alternately. End of walls shall be in vertical line.

10.2 All masonry units shall be wetted before laying. The blocks shall be laid in mortar bedding and such a way that no cracks are formed between the blocks and the mortar at the time the block is placed.

10.3 The blocks shall be adjusted to its final position while mortar is still soft and plastic to insure a good bond.

10.4 The position of the concrete block shall not be shifted after the mortar has stiffened.

10.5 All horizontal and vertical joints must be filled solid with 3/8-inch (9.5mm) thick mortar unless otherwise specified or detailed on the drawings. Any patching necessary to fill the joints should be completed.

10.6 All vertical masonry wall reinforcement shall be anchored to concrete wall footing and roof beam. Likewise horizontal reinforcement should be anchored to column bars and should be tied where it meets any vertical masonry wall reinforcement.

10.7 Filling of CHB shall be carried out in stages not exceeding 3 courses at a time and the concrete properly compacted without disturbing the block-work.

10.8 The filler concrete shall be stopped at a level about thirty six (36) mm (1 ½) below the top of the blocks laid when filling on concreting is to be stopped for more than one (1) hour.

10.9 All the completion of the work, all excess mortar on masonry surfaces and mortar spilled on floor slabs shall be removed.

C. METAL WORKS

TS-11 General

11.1 Steel truss work includes furnishing all materials, tools and equipments and performs labor services required to complete fabrication and erection of all structural steel and miscellaneous steel like structural steel trusses, purlins, structural steel frames and connection system.

11.2 The contractor shall be responsible for the accurate location of all steel work including items used to attach materials to other parts of the work based on plans.

11.3 The contractor shall see to it that any and all items of work which are to be built into works of other trades are installed at the proper time

11.4 The contractor shall notify the Engineer if the steel work shall be fabricated in a shop other than the site, so that arrangements in the inspection of the delivered materials and in the fabrication of the steel work.

11.5 Complete and detail fabricator tolerances and erection including details of all connections and anchorage shall be approved by the Engineer.

TS-12 Materials

12.1 All materials and workmanship should conform to the requirements of the American Institute of Steel Construction (AISC), "Specification for Design, Fabricator and Erection of structural Steel for Buildings", as amended to date or as may be specifically modified by the drawings.

12.2 All mild steel angles, flat bars, square bars, channels, U, and other sections. C purlins that may be used shall be with stiffened flange for built-up, rigid frame roof beam.

12.3 All standard structural grade level rods with turnbuckles shall be used if applicable.

12.4 All structural steel plates and shapes shall conform to ASTM Designation A36 with a specified yield point of 36,000 psi.

12.5 Sizes, shape and design of all mild steel sheets or plates shall be as indicated in the drawings.

12.6 All welding electrode shall conform to E60 series of ASTM Specifications zA-233 and AWS Specifications A5.0 and A5.5

12.7 All bolts to be used shall conform to the specifications for low carbon steel.

12.8 All red lead paint shall be "Boysen" or its approved equivalent.

TS-13 Installation and Methods of Construction

13.1 All welding technique, the appearance and quality of welds mad and methods shall be based to the requirements of the Standard Code for Welding in Building Construction for the American Welding Society (AWS) as adapted by the Department of Public Works and Highways.

13.2 All surfaces to be welded shall be free from loose scale, slag, rust, grease, paint and any other foregoing material except that mild scale which withstands vigorous wire brushing may remain. Joint surfaces shall be free from fins and tears.

13.3 All cut edge shall be subject to substantial stress to have weld metals deposited of them be free from gouges and must be removed grinding.

13.4 Never exceed the separation between laying surfaces of lap joints and butt joints on a backing structure by 1.58mm (1/16 inch).

13.5 Bring the fit of joints at contact surfaces which are not completely sealed by welds, close enough to exclude water painting.

13.6 Distortion and shrinkage in all joining parts of structure or built-up members must be avoided. If possible, avoid high residual stress in the closing welds of a rigid assemble and all welds in compression elements.

13.7 In the fabrication of cover plated beams and build-up members, all shop splices in each component part before such component part shall be welded to the other parts of the member splicing not more than three sub-sections.

13.8 Exposed surfaces of welds shall be reasonably smooth and uniform and shall project not more than 1.58 mm (1/16 inch) above the surfaces joined. No finishing or grinding shall be required except when clearances or fit of other items is required in the drawings.

13.9 All structural members of single rolled shape and built-up members fabricated riveting or welding, unless otherwise specified, be straight within the tolerances allowed by ASTN Specification A6.

13.10 Fabrication shall be performed with special care and necessary straightening to maintain the structural condition of the structures.

13.11 Clean all steel work specified for painting by hand or other methods approved by the Engineer.

13.12 Do not paint any steel work that is to be encased in concrete. Clean all greased or with solvent cleaners. Removed dirt and foreign materials thorough sweeping with a fiber brush. Contact surfaces shall be cleaned but not painted.

13.13 Machine finished surfaces shall be protected against corrosion by a rust-inhibiting coating that can easily be removed prior to erection or which has characteristics that make removal unnecessary to erection.

13.14 The contractor shall use special care in unloading, handling and erecting all the steel to avoid, banding, twisting or otherwise distorting the steel members. The erector shall handle the materials in such a way as to minimize the damage to the shop-coated of paint. The contractor shall plan and execute the erection in such a way so that the close fit and neat appearance of the joints and the structure, as a whole, will not be impaired. If temporary braces or erection clips are employed, care shall be taken to avoid any unsightliness upon removal. Tack welds shall be ground smooth and holes shall be filled with weld metal or Contractor shall submit to the Engineer the sequence of erection for approval.

13.15 The frame of the steel roof framing shall be carried up true and plumb and temporary bracing shall be introduced wherever necessary to take care of loads to which the structure may be subjected, including equipment and the operation of the same. Such bracing shall be left in place as long as may be required for safety. Wherever piles of materials, erection equipments or other loads are varied during erection proper provisions shall be made to take care of stresses resulting from such loads.

13.16 No riveting, permanent bolting or permanent welding shall be done until the structure has stiffened with resulting stresses and properly aligned.

13.17 Any shop paint on surfaces adjacent to joints to be field welded shall be wire brushed, to reduce the paint film to a minimum.

13.18 Structural steel truss members shall be aligned, plumbed straight in fabrication, welding and installation.

13.19 The structural steel shall be fabricated, handled and crated as per specifications and conformity with the American Institute of Steel Construction (AISC) Specification for the design, fabrication and erection of the structure steel for buildings.

13.20 After erection, all unpainted areas including any marred or damaged surfaces shall receive one coat of same inhibitory painting.

D. WOOD WORKS

TS-14 General

14.1 The works consist in furnishing all materials, plant, labor, equipment and all other items specified in the drawings and in the specifications. It also includes all operations necessary for the completions of all carpentry works.

14.2 Lumber shall be of the approved quality, of the respective kinds required for the work, well seasoned, thoroughly dry, straight and free from large, loose or unsound knots, saps, shakes, or other imperfections which may affect its strength, durability and appearance.

14.3 Framing lumber (if applicable) including trusses, rafters, purlins, and girts shall be of the rough dimension shown on the drawings). Any planned lumber supplied shall have a finish size than the rough dimensions specified on the drawings.

14.4 All cutting, faming, fitting and other rough lumbers necessary for the accommodation and completion of the work shall be provided.

TS-15 Protection and Storage

15.1 Shall be protected and kept under cover both in transit and at the job site, and shall be carefully in piled off the ground and be insured of proper drainage, ventilation, and protection from the weather.

15.2 All surface wood framework and other wood members coming in contact with or embedded in concrete shall be paint4d with two (2) coat of asphalt applied hot or coal tar.

15.3 The contractor shall protect all finish woodwork from injury after it has been set in place until the completion and final acceptance of work.

TS-16 Substitution of Lumber

Any lumber intended to be used may be substituted if the substitute belongs to the same group of the kinds specified. However, a deducted may be considered if the unit cost of the substitute is lower than that of the unit cost as stated in the contract. Any substitution must be subject to the approval of the Engineer.

TS-17 Materials

17.1 When the type and kind of materials of lumber for this purpose is not specified in the drawings and details the following shall be used:

- a. Guijo or Apitong – for all door jambs, window jambs, headers and transom bars; wood plates and all other wood coming in contact with concrete or masonry.
- b. Tanguile or Red Lauan - for all ceiling framing, studding and partitions (applicable to project using lumber)
- c. Plywood – shall be 6 mm (1/4 inch) thick for all ceiling, marine type for eaves while ordinary type for inside ceiling. If applicable, 19 mm (3/4 inch) thick shall be used for cabinet and its doors.

TS-18 Methods of Construction

18.1 All framing and other rough carpentry shall be fitted closely and care4fully to the required lines and levels, and shall be secured in place in a rigid substantial manner.

18.2 Door jambs indicated on the drawings, in contact with concrete shall be anchored using 4-inch common wire nails spaced not more than 200 apart, all around the contact surface.

18.3 Fastening, except where bolts are shown on the drawings shall be common wire nails.

18.4 Nails shall be of the proper size, and care shall be taken so as not split the wood members.

18.5 All dimensions shall be verified on the site before fabricating joinery items. All joints shall be accurately and cleanly formed to conform to the required details. All items of work shown on the drawing shall be done by the Contractor in accordance with good workmanship practice and in accordance with the best reasonable interpretation of the plans and related specification. Use Welwood or other approved water-resistant glue for assembly of materials and other joinery.

E. THERMAL AND MOISTURE PROTECTION

TS-19 General

This include the supply all labor, plant, materials, equipments, and other facilities required to complete all roofing work as shown on the drawings and specified herein. Work shall be done by trained and experienced workmen who are completely familiar with the materials and the recommended methods of installation.

TS-20 Materials

20.1 GA. 26, corrugated, manufacturer pre-painted long span G.I. Roofing shall be used and all bended accessories such as ridge rolls, end flashing, side flashings and corner flashings shall be GA. 24. Preformed pre-painted G.I. materials and delivered to site free from any damages.

20.2 Cement from concreting works, chemical solutions, paint, welding sparks, nails and iron tools should not be allowed to drop on, extend to or rust away at the roof since removal or scraping of materials later could damage the roof's coating, roof traffic should be minimized. When crossing the roof area, walking should be conducted along roof frame locations, along overlaps or on wooden planks laid over the roof panels.

TS-21 Methods of Construction

21.1 Roofing sheets shall laid and shoulder start opposite the direction of the prevailing monsoon winds, lay and install the first panel with the female rib (side edge without over-bend) facing the area to be roofed. Overlap the male rib (side edge with over-bend) of the next panel on the female rib of the previous panel. Roofing sheets can be fastened by means of stove bolt with aluminum rubber washers or teks screw with rubber washer. Manufacturers' specification maybe acceptable to as directed by the Engineer.

21.2 Roof mounting strip/connector or tight frame shall be FB2.3 x 30 galvanized steel sheet and shall be fastened to the purlins by full weld or water head teks screw or as directed by the Engineer. Ridge rolls and other flashings shall be attached to the roofing sheets by means of rivets or screw.

F. DOORS AND WINDOWS

TS-22 General

22.1 The work includes the furnishing of materials, equipment, methods and in performing all operation for all wood doors and windows, complete in accordance with the plans and this specification.

- a. All lumbers for door and window frames shall be kiln-dried and approved grade lumber as specified in the technical specifications. All doors and windows shall be of the type done in accordance with the details as shown on the drawings. Refer to the schedule of doors and windows.
- b. The Contractor shall be responsible for the proper execution and exactness of dimensions. Shop drawings shall be presented by the Contractor to the Engineer for review and checking prior to production.

TS-23 Storage and Protection

Wood doors, windows and frames shall be protected against damage and dampness. The horns on doors and window frames should be only at the time of installation. Doors and windows shall be stored under cover in a well-ventilated building where they will not be exposed to extreme changes of humidity.

TS-24 Materials

24.1 Frames shall be of the design, size and thickness indicated on the drawings. Wood and window frames in masonry or concrete walls shall be nailed as indicated on the drawings.

24.2 Door hardware and accessories shall be of the design and patterns that will prevent the infiltration of water through its operating parts.

24.3 Flushed Type Door studs shall be of tanguile. Kiln-dried. Use 6mm (1/4") thick marine plywood covering on both sides of door, and shall be of commercial standard. Design and details shall be as indicated in the drawings.

24.5 Hinged door shall be hung plumb, and fitted accurately allowing three (3) mm clearance at the jambs. Use four (4) butt hinges for each panel or hinged door as shown in the drawings.

24.6 Movable jalousie shall be lever type aluminum frame mechanism. Type and brand shall be subject to the approval of the Consultant. Glass blades for jalousie shall not be less than 6mm (1/4") thick. Glass shall be correctly cut to its net dimension on sides and both ends and shall be free from foam, cracks, deformation and other defects. Edges of the glass shall be well chamfered and other performance as maybe directed by the Engineer.

TS-25 Hardware

25.1 General

- a. The work includes all rough hardware, required for the completion of the work, including nails, bolts, screw, etc. , and shall provide and fit in place all finishing hardware hereinafte4r specified put in the proper manner with screws to match the finishes.

- b. All items of finish hardware shall furnish packaged and labelled in sets as specified. Set numbers are drawn in the schedule together with the type numbers. All items of finish hardware of like kind and purpose shall be of the same manufacturer.
- c. The Contractor shall provide and fit in place all hardware not herein specifically mentioned, but necessary to leave the work complete. All such hardware, should there be any, shall conform in every respect to the balance of hardware specified.

25.2 Submittals

Samples of materials, accessories and all other items shall be submitted to the Engineer for approval prior to placing orders for materials.

The material plate number shall be properly identified to designate the quality, type, design, operation, and finishes required. Any other hardware equally good, maybe substituted and subject to the written approval of the Engineer.

Items hardware shall be delivered to the jobsite in their original individual containers complete with necessary appurtenance including screws, key and instructions. Each individual container shall be marked with the manufacturer's name and catalogue number.

25.3 Materials

Hinges shall be "HANTEX" (4 Nylon Ring) or approved equal butt hinge button tips, brass polished and plated for all exterior doors. Dull brass finished stainless steel pin for other doors.

Lock sets shall be used for all entrance doors and other room door as specified on the drawings equivalent shall be subject to the approval of the Engineer.

All door locks shall be keyed individually and there (3) keys shall be furnished for each lock. Door locks shall be Kwikset or its equivalent.

All locks shall be installed at the same height from the floor as shown on the drawings. Door knobs shall be located so that the center of the knob is 0.90 meter (35 ½ ") from the finished floor or as directed by the Engineer.

Cabinet pulls shall be of chrome plated finish, U.S brand. Design shall be submitted to the Engineer for approval prior to installation.

Nails shall be of the standard wire nails, unless otherwise indicated in the drawings.

Anchor Bolts and Fastener shall be provided as necessary for of the work indicated and specified; shall be zinc-coated regular commercial grade of size and length to suit the purpose.

All entrance doors having an external swing radius shall be provided with door stopper (magnetic type) installed 200mm from finish floor line, rubber tip ends and with a hook & eye catcher. Method of installation, material and type shall be subject to the approval of the Engineer.

25.4 Methods of Installation

All hardware shall be installed in a neat, acceptable manner, following manufacturer's instruction. Except as indicated or specified otherwise, fasteners furnished with the hardware shall be used to fasten hardware in place. After installation, protect hardware from paint, stain, blemishes and other damage until acceptance of the work. All hardware shall be adjusted properly and checked in the presence of the Engineer and hinges, lock and other items shall be operating properly. After all hardware is checked, keys shall be tagged, identified and delivered to the Engineer. All errors in cutting and fitting, and all damage to adjoining work shall be corrected, repaired and finished as directed by the Engineer.

G. FINISHES

TS-26 Plastering

26.1 General

The work includes the furnishing of materials, equipment, method and the labor necessary to complete all plastering in accordance with the drawings and specified herein.

26.2 Materials

All materials specified herein shall be subject to the specification of manufacturers and to the approval of the Engineer.

- a. Portland Cement shall conform to ASTM C-150, Type 1.
- b. Sand shall be hard well washed, clean and free from deleterious materials conforming to ASTM C-40.
- c. Lime shall be hydrated lime with the requirement that calcium oxide (CaO) and the magnesium oxide (MgO) shall not exceed eight (8) percent by weight calculated.
- d. Water shall be potable, clean and free from organic matter, acids and alkalis.

26.3 Delivery and Storage

Manufactured materials shall be delivered in the original unbroken packages and containers bearing the name and brand of the manufacturer. Cement materials shall be kept away from the sweating walls and damp surfaces until ready for use. Damage or deteriorated materials shall be removed from the premises.

26.4 Mixture

Plaster shall be thoroughly mixed with the proper amount of water until uniform in color consistency. Tampering will not permit and all plaster that has begun to stiffen shall be discarded. Cement mortar shall be a three (3) coat application. Each coat shall be proportional as follows: one (1) part Portland Cement, three (3) parts sand and one fifth part lime putty.

26.5 Methods of Construction

- a. Surfaces to receive plaster shall be cleaned of all loose particles, dust, cracks and other foreign matter. Before the plastering work is started, masonry surfaces shall be wetted thoroughly with fog, spray of clean water to produce a uniformly moist

condition. Corner beads, screeds and other accessories shall be checked carefully for alignment before work is started.

- b. The coat shall be applied with sufficient pressure to fill the grooves in hollow blocks or concrete to prevent air pockets and secure a good bond. The coat shall be lightly scratched and broomed. Each coat of cement plaster shall be kept moist for four (4) hours after application and then allowed to dry.
- c. Finish and final coat shall not be applied until the first coat has seasoned for 7 days. Just before the application of the finish coat, the first shall again be evenly moistened with a fog coat; the first shall be floated first to a true and even surface then troweled in a manner that will force the sand particles down into the plaster. Plastered surfaces shall be smooth and free from rough areas, troweled marks, checks and blemishes. Thickness of plaster shall be 9mm (3/8") on vertical concrete and on masonry.
- d. On wall finishing, exterior and interior finishes shall be plain cement plaster finish or whatever is specified on the drawing.
- e. Toilet wall finishes shall be vitrified glazed ceramic tiles wainscoting. (Refer to ceramic tile work for detailed information).
- f. Plastering work shall be finished level, square and true within a tolerance of 5 millimetres in 4.8 meters without cracks, wakes, blisters, pits, projections and other imperfections. Plaster work shall be formed carefully around corners, contours and well-up to screeds. Care shall be taken to prevent sagging and drooping of applications. There shall be no visible junction marks, in the finish coat where one day's work adjoins the other.
- g. Upon completion of the building and when directed, all loose, cracked, damaged, or defective plastering shall be cut out and re-plastered in a satisfactory and approved manner. All pointing and patching of plastered surfaces, and plaster work abutting or adjoining any other finish work, shall be done in neat and acceptable manner. Plaster droppings shall be removed from all surfaces. Exposed plastered surfaces shall be left in a clean unblemished condition ready to receive paint or other finish. Protective covering shall be removed from floors and other surfaces, and all rubbish and debris shall be removed from the building.

TS-27 Materials

27.1 General

Tile work shall not be started until all installation for plumbing and electrical work has been completed and tested.

27.2 Materials

Manufactured materials shall be delivered in the manufacturer's original unbroken packages or containers that are labelled plainly with the names and brands.

- a. Floor tiles at toilets shall be unglazed vitrified ceramic tile, 300mm x 300mm x 6.4mm (12" x 12" x ¼") per piece of tile manufactured by approved brand.
- b. Wall tiles and counter shall be glazed vitrified ceramic tiles, 300mm x 300mm x 6.4mm (12" x 12" x ¼") per piece of tile manufactured by approved brand.
- c. Trimmers and moldings shall be bright mat glazed to fill the sizes and match with the finish of the wall tiles.
- d. Washing counter tiles or science laboratory shall be 300mm x 300mm vitrified glazed tiles and shall be acid resistant manufactured by approved brand.

27.3 Construction Methods

- a. Wall tiles shall cover walls and partitions to nominal height as indicated on the drawings. Finish of wall and wainscot tiles shall be uniform for all toilet rooms.
- b. Mortar for setting wall tile and floor tiles shall consists of one (1) part Portland cement, 1-1/4 part lime putty and three (3) parts sand by volume.
- c. All tile bathes to be thoroughly mixed before placing to balance out any manufacturer's variation in color and texture.
- d. Glazed wall tile shall be thoroughly soaked in clean water before being set.
- e. Tiles shall be firmly secured in placed. Joints shall be well filled, lines kept straight and true, and finished surfaces brought to a true plane. Setting beds of floor tiles shall be thick enough to bring the tops of the tiles to the finish slope or levels indicated. Wall filled tiles shall be set with horizontal and vertical straight line joints, except as indicated otherwise, intersection and returns shall be perfectly formed. Cutting and drilling of tiles shall be neatly done without damaging the surfaces of the Tiles.

TS-28 Floor Hardener

28.1 Properties

Floor Hardener is produced from highly graded granite/quartz aggregates and special chemical additives to provide extremely abrasion resistant surfaces protect the surface from gas, oil and chemical attack and provide non skid, anti-slip properties. Surfaces treated with floor hardener are capable of withstanding high point impacts and stresses.

38.2 Applications

For indoor and outdoor use, Floor Hardener is pre-mixed with Portland cement ex-factory. Surface armoring is achieved by spreading evenly on freshly screeded concrete as follows:

- Light Traffic : 3 kg/sqm
- Medium Traffic : 4 kg/sqm

- Heavy Traffic : 5 kg/sqm

Typical Method of Application:

1. Follow good concreting practice when laying base slab.
2. Smooth and close the surface of concrete with wood float to ensure an even and dense surface. Remove any excess water or laitance from the surface of the slab using a soft broom.
3. Spread aggregate and cement mix in two equal stages evenly over the surface of the concrete. The first application is made as soon as the floor is firm enough so that the aggregates do not sink.
4. Wood float or trowel to compact the first layer.
5. Spread the second layer approximately 1 or 2 hours after the first application.
6. Smooth lightly with a steel trowel taking extra care to ensure that the aggregates are not embedded under the substrate surface.
7. When firm, steel trowel again to bring the surface to a perfect finish again making sure that the aggregates are not buried beneath the surface.
8. To produce a non-slip finish, trowel in a sweeping circular motion to produce slight ridges.

TS-29 Painting

29.1 General

The work under this section of this specification shall include the furnishing of all materials, labor, tools and other facilities necessary to complete all painting of all surfaces throughout the interior and exterior of the building except as otherwise specified.

Before paint application, the contractor shall inspect all surfaces to be painted and all defects shall be remedied. For concrete surfaces all dirty matter shall be removed by scrubbing affected surfaces with a solution of muriatic acid and water (add a half to pint of acid to a gallon of water), and rinse with a clear water to allow to dry thoroughly. All nail holes, cracks or open joints shall be puttied, caulked, or grouted.

29.2 Materials

- a. All paint materials shall be delivered to the jobsite in original containers with seals unbroken and labels intact. Materials that are damaged during delivery shall be replaced by the contractor at his own expense. With the exception of ready-mixed materials in original containers, all mixing shall be done at the jobsite.
- b. All paints shall be applied in accordance with the manufacturer's printed instructions.

- c. All materials called for under this section of specifications shall be as manufactured by “Boysen” or approved equal.

29.3 Color and Samples

- a. Color coordinates and samples shall be submitted by the Contractor to the engineer to review and approval. No painting shall be done without first securing prior approval of submitted color samples, schedule and coordinates.
- b. Tinting or matching of colors shall be done under the supervision of the Engineer. If required, each color and finish shall be prepared in advance, with the materials specifications for the approval of the Engineer. “Off color selected” shall be understood of all colors specified therein.

29.4 Paint Application and Methods

- a. All concrete and masonry and other surfaces shall be in a condition necessary to receive satisfactory paint finish. All nail holes, cracks or open joints shall be puttied, calked, or grouted. Putty, when necessary shall be applied with a knife after a prime coats have been applied.
- b. Scrape off loose mortar surface contaminants, then steel brush to removed chalk, dust, dirt, and surface deposits.
- c. All concrete masonry surface must be thoroughly neutralized either by brush or spray with a solution four (4) pounds of zinc sulphate to each gallon of water. Treated surface shall be treated with litmus paper to ascertain that alkalinity is removed, otherwise a second washing with the solution shall be applied. After drying, all crystals on the neutralized surface must be brushed off before applying the priming coat.
- d. All mill work and other wood works where painting is required shall be sandpapered brush, to remove dust, before application of the primer. Resulting voids mails holes, cracks shall be filled with approved putty. Touch up all knots, pitch streaks and sappy spots with approved sealer.
- e. Scrape off rust from the surface with steel brush and sweep to remove dust, dirt and all surface contaminants. Oil and grease adhering to the surface may be removed by washing affecte4d surface with soap and wate4r. Holes shall be patched-up with soldering lead.
- f. No exterior painting shall be done in rainy, damp weather or until surfaces are thoroughly dry. No interior painting or finishing shall be permitted until building has been thoroughly dried-out.
- g. Finish shall be applied only over the preceding coats which are hard and dry. Finish shall be evenly and smoothly applied in thin but covering coats, and shall be free from runs, sags or crawlings.

h. The use of heavy brush is required. Paints shall be thoroughly stirred so as to have the pigment evenly is supervision while paint is being applied. Except where other is noted or specified, all paint shall be applied in three (3) coats. Wood surfaces:

i. Painted doors, jambs, cabinets, shelves (semi-gloss finish)

1st coat – lacquer primer surface

2nd coat – lacquer primer surface

3rd coat – semi-gloss lacquer surface

ii. Plain painted surfaces such as walls, partitions and ceilings

1st coat – interior sealer and primer

2nd and 3rd coat – flat wall enamel

i. Exterior concrete wall and cement plaster – all exterior concrete shall be painted except as otherwise specified on the drawings.

i. 1st coat –acrytex primer;

ii 2nd and 3rd coat – acrytex topcoat (semi-gloss)

29.5 Cleaning

Upon completion of the work the Contractor shall remove from the building all used materials, debris, and all paint spots on the floor, washing of window glass, hardware fixture, etc. All work performed under this section shall be left clean and acceptable to the Engineer.

29.6 Guarantee

The Contractor shall guarantee his work for a period of one (1) year, when using the materials specified by the Engineer. The Contractor shall repair all defects due to faulty material or workmanship caused by him without any additional compensation for the period specified.

TS-30 Miscellaneous

30.1 General

The work under this section of specification shall include the furnishing of all materials, labor, tools, and other facilities necessary to complete production and installation of the sign and signboards as indicated herein.

30.2 Materials

The materials for the building name plate shall be stainless steel metal sheet 1.587mm (1/16”) thick or its commercial gauge equivalent and shall bear the inscriptions stated per attached sketch. The name plate shall be anchored by an expansion bolt directly to the concrete as directed by the Engineer. The size, dimension and material type shall be subject to the approval of the Owner upon presentation of samples.

The materials for the toilet signs shall be of acrylic plastic sheets 4.762mm (3/16”) thick or its commercial thickness equivalent and shall bear the sign/inscriptions stated as per sketch. The size and dimension shall be as subject to the approval of the Engineer.

H. MECHANICAL WORKS (PLUMBING)

TS-31 General

31.1 The Contractor shall furnish all labor, materials and equipment necessary to complete and make functional the sanitary, drainage and water supply system. The Owner shall provide necessary drilling of water well and shall yield substantial quantity/volume of water needed to have a functional water supply system to project site either in rainy or dry seasons. The Owner shall likewise arrange/secure consent/approval of tapping to existing water line if necessary or requested by authorities concerned.

31.2 All works shall comply with the provisions of the Philippine National Plumbing Code, MWSS regulations, DPWH guidelines and all other codes and ordinances other local authorities having jurisdiction over the project.

31.3 “Roughing-in” for all pipes and fixtures shall be carried along with the building construction. Correct location for the pipes shall be kept in the walls and floor as specified in the plans.

TS-32 Materials

32.1 All materials must bear the trademarks reference of the manufacturers. The Contractor shall furnish the Engineer with the original and copies certified of origin of materials to be used.

32.2 Soil, wasted, Vent Pipes and Fittings shall be made of unplasticised polyvinyl chloride (UPVC) Schedule 40 or whatever indicated in the drawing and shall be manufactured by “Neltex” or it’s approved equivalent in property certificated by Bureau of Product Standard.

32.3 Water pipes and fittings shall be made of galvanized iron pipes (6.1) – schedule 40 or whatever indicated in the drawings and shall be approved equal in property certificated by Bureau of Product Standard. Water pipes requiring installation of PVC or as indicated in the drawings shall use “Modex Blue” or approved equivalent.

32.4 Cleanouts shall be the same as pipe diameter, installed in connection with UPVC hubs and spigot pipes consist of a long sweep quarter extended as indicated in the drawings. An extra heavy cast brass ferrule with countersink trap screw cover caulked into hub if the fittings shall be flushed with the floor.

32.5 Floor drains shall be nickel or chrome plated or approved equal, local manufactured.

32.6 Gate valves shall be brass or bronze solid wedge type with screwed ends, or its equivalent as approved by the Engineer.

32.7 Hose bib shall be brass with male inlet threads hexagonal shoulders and hose connection. Hose bib and faucet shall be of the approved type, locally manufactured.

- 32.8 Plumbing fixtures and equipment shall be properly identified to illustrate the quality and design of fixture that will be required. All fixtures shall have supply line with cut-off valves having chromium finish and shall be as manufactured by Philippine Standards as follows.
- 32.9 Water closet shall be of floor mounted tank type complete with all fittings. Color shall be in White (For handicapped only)
- 32.10 Lavatory shall be complete with necessary fittings. Color is white.
- 32.11 Laboratory sink shall be 100mm thick R.C. slab with glazed ceramic tiles.
- 32.12 Provide traps at every plumbing fixture and other equipment requiring connection to the drainage system.
- 32.13 Lavatory Counters and Cabinets shall be 100mm thick R.C. slab with glazed ceramic tiles counter top.
- 32.14 Adapters shall be used to join pipes, fittings of different types and sizes and different combination approved by the Engineer.

TS-33 Methods of Construction

- 33.1 All work shall be done by skilled worker only under the supervision of a master plumber. Contractor shall perform the work in accordance with good workmanlike practice to the satisfaction and approval of the Engineer.
- 33.2 On completion of the sanitary, drainage and water supply system and plumbing work and upon delivery of the building, the Contractor shall submit the "as-built" drawings of all the plumbing system layouts as actually installed in the building for future reference.

TS-34 Testing

- 34.1 Materials shall be subjected to such standard tests as may be required to ascertain their fitness, and the complete plumbing system shall be tested by anyone of the following methods.
- 34.2 The water shall be applied to the plumbing system in it's entirely or in sections. If applied to the entire system, all openings in the piping system shall be tightly closed except the highest opening and the entire system filled with water to the pint of overflow. All dead ends shall be relieved of air during the process whether the test is by section or it entirely. If the system is tested by sections, each opening of section shall be filled with water.
- 34.3 The air test shall be made by attaching the air compressor or test apparatus to any suitable opening, and closing all other openings of the system, then forcing air into the system until there is a uniform pressure sufficient to balance a column of mercury 0.13 meter in height or 44kg/m. on the entire system. This pressure shall be maintained for ten (10) minutes without any show of loss in the pressure.

TS-35 Disinfection

The entire water distribution shall be thoroughly, flushed and disinfected with a solution containing not less than fifty (50) part per million (50 ppm) of available chloride. The chlorinating materials shall be either liquid chloride or calcium in the system for a period of sixteen (16) hours, during which all valves and faucets shall be opened and closed several times. After disinfection, the solution shall be flushed from the system with clean water until the residual chlorine content is not greater than 0.2 parts per million.

TS-36 Cleaning and Painting

All exposed metal surfaces shall be rid of grease dirt or other foreign materials. Chrome or nickel-plated piping, fittings and trimmings shall be polished upon completion. All equipment, pipes, valves and fittings shall be cleaned of greased and sludge.

- a. Any damages to the building finish or furnishing due to the Contractor's failure to properly clean the piping system shall be repaired by the Contractor at his expense.
- b. All exterior surfaces of piping to be installed in or through concrete, tile floors and underground shall be given one coat of acid-resisting paint with a bituminous base.
- c. At the completion of all work the fixtures, fittings, accessories and other materials shall be thoroughly cleaned and delivered in a condition to the satisfaction of the Engineer.

TS-37 Maintenance

The Contractor shall maintain and keep the works in good condition in accordance with Specification. During the period of maintenance, the Contractor shall make good all defects which may appear in the pipelines trench, and in the lots in which the pipes are lined.

I. ELECTRICAL WORKS

TS-38 General

38.1 The work include furnishing, delivery and installation of all materials, equipment and labor, necessary for the complete execution of all the Electrical Work as shown on the drawings and as specified herein. All installation shall conform to the requirements of the latest edition of the Philippine Electrical Code (PEC) and the rules and regulations of local and national authorities concerned with the enforcement of the electrical laws and the requirements of the local power company.

38.2 The Contractor shall also provide necessary grounding, if requested by the local electrical cooperatives/power sources in cases of the line to ground connection/ facilities.

TS-39 Materials

39.1 All materials shall be new and of high quality which shall conform to this specification and other applicable standards.

39.2 All electrical materials shall meet the requirements and shall bear inspection label whenever standards have been established. Before any materials are ordered, the Contractor shall submit to the Engineer for the approval a complete list of

manufacturer's name, address, descriptive data, trade name of items, etc. which the Contractor proposes to use or install.

a. Wires

All wires shall be copper, soft drawn and annealed, and of ninety eight (98) percent conductivity, they shall be smooth and true and of cylindrical form and shall be within one (1) percent of the actual size called for.

Wires for lighting system shall be thermoplastic installed for 600 Volts unless otherwise noted on the drawings or specified herein.

All wires shall comply with the requirements of the Underwriter's Laboratories, the A.S.T.M. and I.P.C.E.A. as they apply to the particular usage.

For lighting system no wire smaller than 2.0 mm sq. shall be used.

b. Plate and receptacles

Type of color of receptacles outlet plates shall be as selected by the Engineer.

All switches and receptacles plates shall be of ivory plastic cover or as directed by the Engineer.

c. Panel Board

Lighting panel convenience outlet and other electrical runs, shall be equipped with circuit breakers as indicated in the plans. Branch circuit breaker shall be plug-in type, while main circuit breaker shall be bolt-on type. Circuit breaker shall be enclosed on hinged metal box or cabinet to suit the size and rating to prevent the entrance of water and tampering by unauthorized persons.

d. Junction and Pull Boxes

Junction and pull boxes, of acceptable gauge steel, shall be provided as indicated or as required for facilitating the pulling of wires and cables. Pull boxes in finish places shall be located and installed with the permission and to the satisfaction of the Engineer. Splices and taps in any system shall be made only in junction boxes.

e. Wall Switches

Wall switches shall be rated 5 amperes with voltage rating as required and shall be tumbler operation and the color plating and appearance of wall plate shall be as selected by the Engineer.

f. Electrical Fixtures

All fluorescent shall be equipped with 40 watts fluorescent lamp with HPF ballast or approved equivalent.

g. Raceways

Rigid non-metallic conduit (PVC) shall be used on all installations embedded in concrete and concealed in wood ceilings or walls inside the building only. Rigid non-metallic conduit may be buried directly in earth provided the depth shall not be less than 457 mm (18”).

Bends in conduits shall be so made that the conduit won't be injured and that the internal diameter of the conduit will not be effectively reduce. A complete run of conduit shall not contain more than the equivalent of four quarter bends including those located immediately at the outlet of fitting. Whenever necessary a pull box shall be provided as directed.

No conduit shall be used in any system smaller than 15mm (1/2”) electrical trade size.

All conduits for underground electrical installations shall be rigid steel conduit (RSC) encased in 0.10 x 1.10M concrete.

TS-40 Location of Wiring and Outlet

40.1 The location of outlets shown on diagrammatic wiring plans be considered as approximate and it shall be responsibility of the Contractor, before installation of outlet boxes, to study, verify and obtain precise information from all pertinent drawing, for exact location of all outlets and wiring. If so directed by the Engineer, the Contractor shall make any necessary adjustment of his work to fit conditions for recessed fixtures and for outlets occurring in glazed tile, block, wood paneling or other finish material, in order that all boxes may register flushed with finish. Local switches which are shown near doors as shall be located at the strike side of the doors as finally hung, regardless of swing shown on the drawings as maybe directed by the Engineer.

40.2 All wiring and lighting fixture shall be installed as specified and at location shown on plans.

40.3 Mounting heights of devices shall be detailed as follows if not specified on the drawing or as may be directed by the Engineer.

- | | |
|-----------------------|---------------------------|
| a. Light Switches | 1.40 m above finish floor |
| b. Convenience Outlet | 0.30 m above finish floor |
| c. Panel Board | 1.70 m above finish floor |

TS-41 Testing

41.1 The entire installation shall be free from improper grounds and from short circuits. These tests shall be made in the presence of the Engineer. Panel board shall be tested with mains connected to the feeder, branches connected and switches closed, all fixture in place and permanently connected, lamps removed or omitted from the sockets and all wall switches closed. Each individual power feeder shall be tested with the power equipment connected for proper and intended operation. In no case shall the insulation resistance be less than that allowed by the Regulations for Electrical Equipment of Buildings. Failure shall be connected in a manner satisfactory to the Engineer.

41.2 It shall be the responsibility of the Contractor to test all system of the entire electrical installation in the presence of the Engineer, for proper operational condition. This condition shall apply to the power and lighting installation, where sequence operation is required, the Contractor shall test for proper sequence and he shall leave the entire electrical installation in satisfactory working condition.

TS-42 Guarantee

The Contractor shall guarantee that the electrical systems are free from improper grounds and defective materials for a period of one (1) year from date of acceptance of the work. Any defects, appearing within the aforesaid period shall be remedied by the Contractor at his own expense.

TS-43 Workmanship

43.1 The work throughout shall be executed in the best and most approved manner under the direction and to the satisfaction of the Engineer, who will jointly interpret the meaning of the drawings and specification and shall reject any work and materials which, in his judgment, are not in full accordance therewith.

43.2 The Contractor shall have on file for ready access and reference, as set of drawing indicating all work as actually installed incorporating in same all charges and additions. Upon completion of the Contract, the Contractor shall prepare a set of drawings indicated there on the electrical work as actually and finally installed; these drawings shall be turned over to the Engineer.

Section VII. Drawings

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

Please see attached in PDF format



Section VIII. Bill of Quantities

Please see attached in PDF format



Section IX. Checklist of Technical and Financial Documents

Notes on the Checklist of Technical and Financial Documents

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

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

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



Checklist of Technical and Financial Documents

I. TECHNICAL COMPONENT ENVELOPE

Class "A" Documents

Legal Documents

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

Technical Documents

- (e) Statement of the prospective bidder of all its ongoing government and private contracts, including contracts awarded but not yet started, if any, whether similar or not similar in nature and complexity to the contract to be bid; **and**
- (f) Statement of the bidder's Single Largest Completed Contract (SLCC) similar to the contract **(Vertical Structures preferably Meat Establishment)** to be bid, except under conditions provided under the rules; **and**
- (g) Philippine Contractors Accreditation Board (PCAB) License; **or** Special PCAB License in case of Joint Ventures; **and** registration for the type and cost of the contract to be bid; **and**

General Engineering (Size Range: Small B, License Category: C & D)

- (h) 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**

| Lot | ABC (in PhP) | Cash or cashier's/ manager's check | Surety Bond |
|-----|---------------|---------------------------------------|-------------------------------------|
| 1 | 15,200,000.00 | Php304,000.00 (2% of ABC) | Php760,000.00 (5% of ABC) |

- (i) Project Requirements, which shall include the following:
 - a. Organizational chart for the contract to be bid;



- b. List of contractor's key personnel (e.g., Project Manager, Project Engineers, Materials Engineers, and Foremen), to be assigned to the contract to be bid, with their complete qualification and experience data;

The key personnel must meet the required minimum years of experience set below:

| <u>Key Personnel</u> | <u>General Experience</u> | <u>Relevant Experience</u> |
|----------------------------------|---------------------------|---|
| Civil Engineer | Minimum of 3 years | similar projects |
| Foreman | Minimum of 1 year | similar projects |
| Mason | Minimum of 1 year | similar projects |
| Registered Electrical Engineer | Minimum of 3 years | similar projects |
| Electrician (TESDA Certified) | Minimum of 2 years | similar projects |
| Registered Master Plumber | Minimum of 3 years | similar projects |
| Registered Mechanical Engineer | Minimum of 3 years | similar projects |
| Skilled Welder (TESDA Certified) | Minimum of 2 years | similar projects |
| Materials Engineer I or II | None required | None required but with DPWH Certification |

Duly signed curriculum vitae of key personnel to be assigned to the project, with their complete qualification and experience, including updated registration with Professional Regulation Commission (certified scanned copy of PRC ID) and/or appropriate regulatory bodies (e.g. TESDA), and valid PTR.



- c. List of contractor's major equipment units, which are owned, leased, and/or under purchase agreements, supported by proof of ownership or certification of availability of equipment from the equipment lessor/vendor for the duration of the project, as the case may be; **and**

| The minimum major equipment requirements are the following: | | |
|---|-----------------|------------------------|
| EQUIPMENT | CAPACITY | NUMBER OF UNITS |
| Backhoe/Loader | 1 | 0.6 c.u |
| Bagger mixer | 2 | 1 bagger |
| Welding Machine | 2 | |
| Plate Compactor | 2 | |
| Dump Truck | 1 | |
| Bar Cutter | 2 | |
| Bender | 2 | |

| | | |
|---------------|---|-------------|
| Generator set | 1 | 1.75 kva |
| Water Truck | 1 | 2000 liters |

➤ **Additional requirements to be submitted during post qualification**

- a. Construction Schedule and S-curve
 - b. Manpower Schedule;
 - c. Construction methods;
 - d. Equipment Utilization Schedule;
 - e. Construction safety and health program signed by the Safety Officer and approved by the Owner;
 - f. PERT/CPM or other acceptable tools of project scheduling;
 - g. Certificate of Site Inspection to be issued by LGU signed from Municipal Engineering Office;
 - h. NMIS Accreditation for Meat Establishment Contractor; and
 - i. NMIS Accreditation for Meat Establishment Fabricator
- (j) 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

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

Class "B" Documents

- (m) 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.

- ❖ Number of copies of **FIRST ENVELOPE Technical Component**, separate envelopes:
1. One (1) original copy
 2. One (1) additional copy

II. FINANCIAL COMPONENT ENVELOPE

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

Other documentary requirements under RA No. 9184

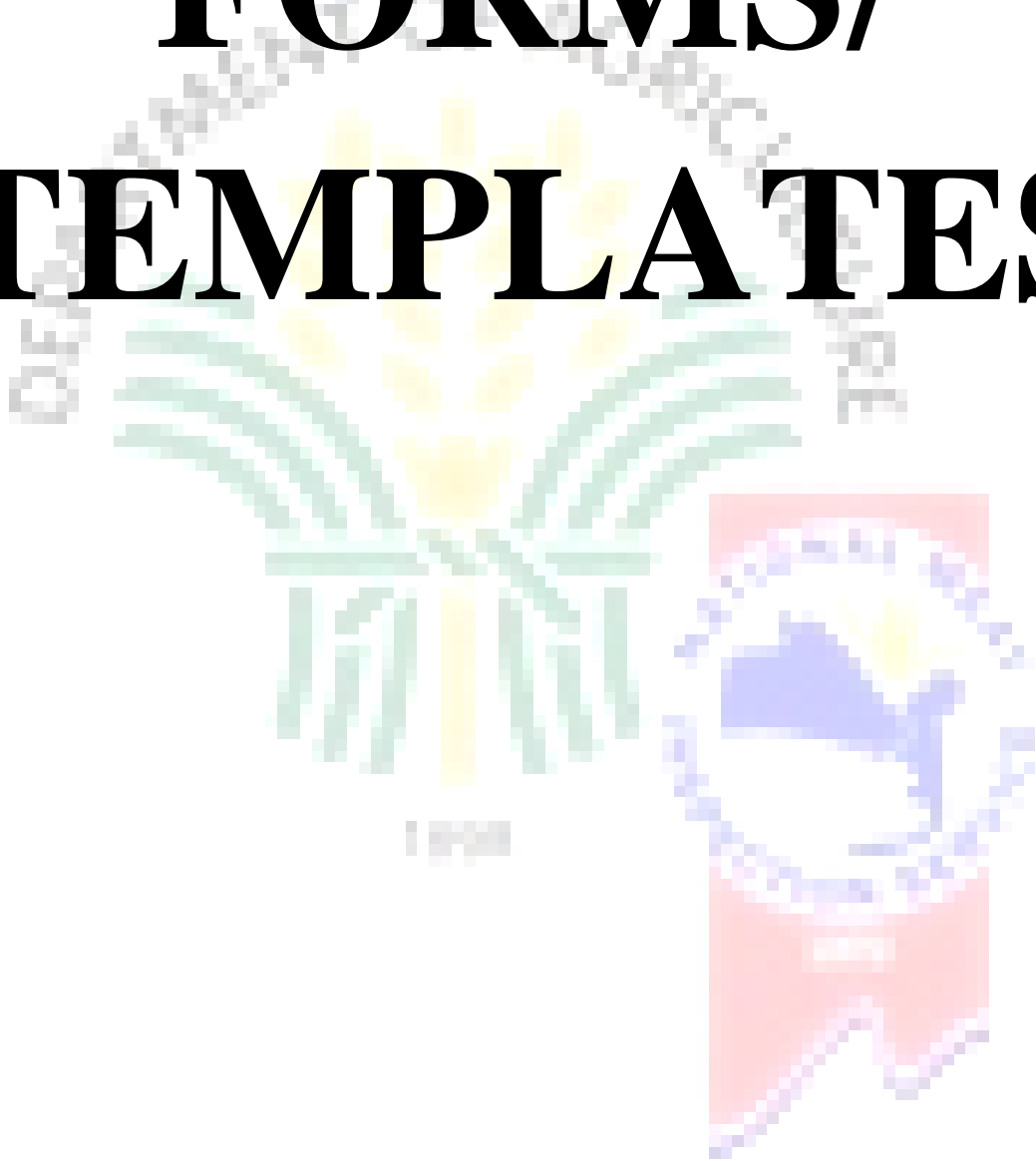
- (o) Original of duly signed Bid Prices in the Bill of Quantities; **and**
- (p) Duly accomplished Detailed Estimates Form, including a summary sheet indicating the unit prices of construction materials, labor rates, and equipment rentals used in coming up with the Bid; **and**
- (q) Cash Flow by Quarter.

❖ Number of copies of **SECOND ENVELOPE Financial Component**, separate envelopes:

1. One (1) original copy
2. One (1) additional copy



UPDATED FORMS/ TEMPLATES



Bid Securing Declaration Form

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

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

BID SECURING DECLARATION **Project Identification No.: NMIS-INF-2021-03**

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

I/We, the undersigned, declare that:

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

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

[Insert NAME OF BIDDER OR ITS AUTHORIZED REPRESENTATIVE]

[Insert signatory's legal capacity]

Affiant

[Jurat]

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

Bid Form for the Procurement of Infrastructure Projects

[shall be submitted with the Bid]

BID FORM

Date : _____

Project Identification No. : **NMIS-INF-2021-03**

To: **National Meat Inspection Service**

No. 4 Visayas Ave., Brgy. Vasra, Quezon City

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

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

formal Contract is prepared and executed; and

- j. We understand that you are not bound to accept the Lowest Calculated Bid or any other Bid that you may receive.
- k. We likewise certify/confirm that the undersigned, is the duly authorized representative of the bidder, and granted full power and authority to do, execute and perform any and all acts necessary to participate, submit the bid, and to sign and execute the ensuing contract for the [Name of Project] of the [Name of the Procuring Entity].
- l. We acknowledge that failure to sign each and every page of this Bid Form, including the Bill of Quantities, shall be a ground for the rejection of our bid.

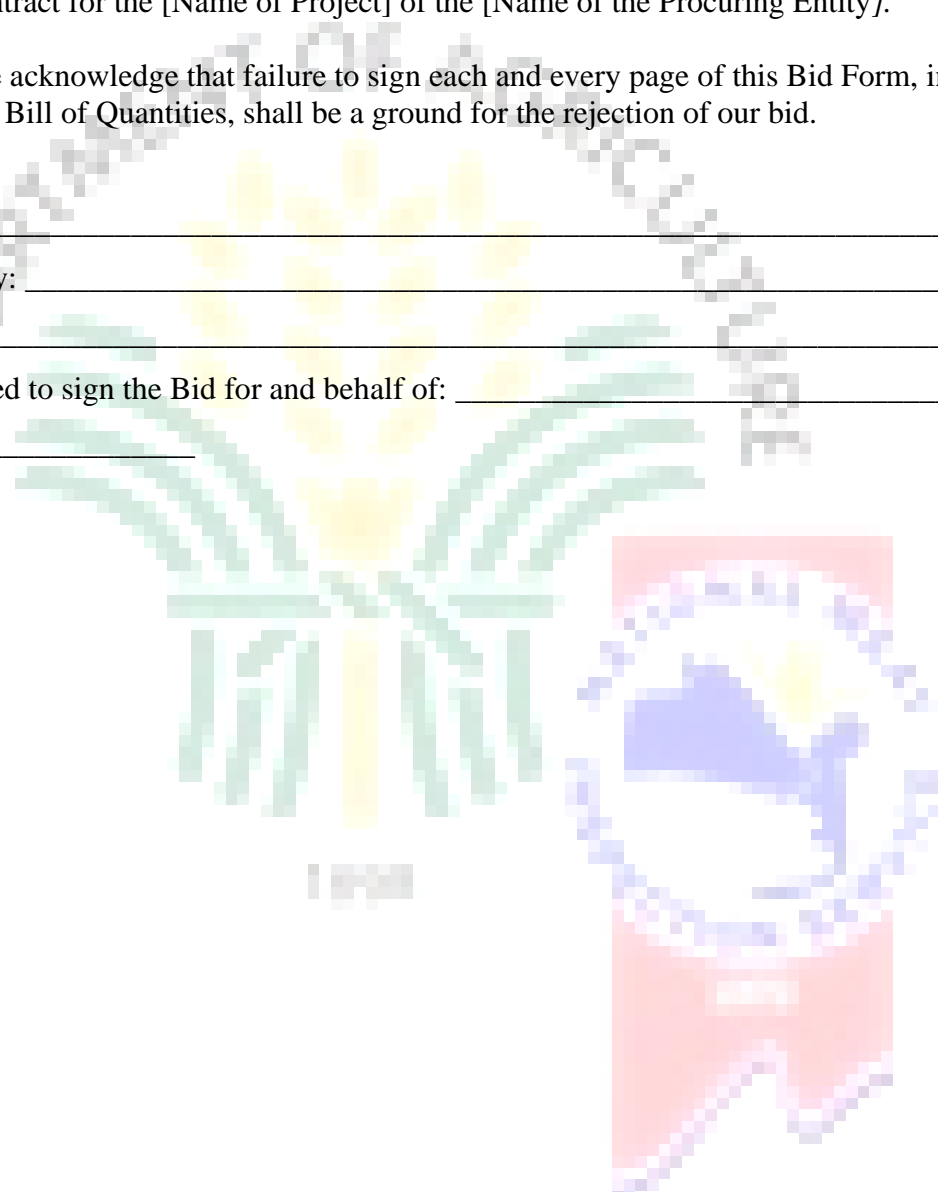
Name: _____

Legal Capacity: _____

Signature: _____

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

Date: _____



Omnibus Sworn Statement (Revised)

[shall be submitted with the Bid]

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

AFFIDAVIT

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

1. *[Select one, delete the other:]*

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

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

2. *[Select one, delete the other:]*

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

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

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

4. Each of the documents submitted in satisfaction of the bidding requirements is an authentic copy of the original, complete, and all statements and information provided therein are true and correct;

5. [Name of Bidder] is authorizing the Head of the Procuring Entity or its duly authorized representative(s) to verify all the documents submitted;

6. *[Select one, delete the rest:]*

[If a sole proprietorship:] The owner or sole proprietor is not related to the Head of the Procuring Entity, members of the Bids and Awards Committee (BAC), the Technical

Working Group, and the BAC Secretariat, the head of the Project Management Office or the end-user unit, and the project consultants by consanguinity or affinity up to the third civil degree;

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

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

7. *[Name of Bidder]* complies with existing labor laws and standards; and
8. *[Name of Bidder]* is aware of and has undertaken the responsibilities as a Bidder in compliance with the Philippine Bidding Documents, which includes:
 - a. Carefully examining all of the Bidding Documents;
 - b. Acknowledging all conditions, local or otherwise, affecting the implementation of the Contract;
 - c. Making an estimate of the facilities available and needed for the contract to be bid, if any; and
 - d. Inquiring or securing Supplemental/Bid Bulletin(s) issued for the *[Name of the Project]*.
9. *[Name of Bidder]* did not give or pay directly or indirectly, any commission, amount, fee, or any form of consideration, pecuniary or otherwise, to any person or official, personnel or representative of the government in relation to any procurement project or activity.
10. **In case advance payment was made or given, failure to perform or deliver any of the obligations and undertakings in the contract shall be sufficient grounds to constitute criminal liability for Swindling (Estafa) or the commission of fraud with unfaithfulness or abuse of confidence through misappropriating or converting any payment received by a person or entity under an obligation involving the duty to deliver certain goods or services, to the prejudice of the public and the government of the Philippines pursuant to Article 315 of Act No. 3815 s. 1930, as amended, or the Revised Penal Code,**

IN WITNESS WHEREOF, I have hereunto set my hand this ___ day of _____, 2021 at _____, Philippines.

[Insert NAME OF BIDDER OR ITS AUTHORIZED REPRESENTATIVE]

[Insert signatory's legal capacity]

Affiant

[Jurat]

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

Performance Securing Declaration

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

PERFORMANCE SECURING DECLARATION

Invitation to Bid: [Insert Reference Number indicated in the Bidding Documents]

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

I/We, the undersigned, declare that:

1. I/We understand that, according to your conditions, to guarantee the faithful performance by the supplier/distributor/manufacturer/contractor/consultant of its obligations under the Contract, I/we shall submit a Performance Securing Declaration within a maximum period of ten (10) calendar days from the receipt of the Notice of Award prior to the signing of the Contract.
2. I/We accept that: I/we will be automatically disqualified from bidding for any procurement contract with any procuring entity for a period of one (1) year for the first offense, or two (2) years **for the second offense**, upon receipt of your Blacklisting Order if I/We have violated my/our obligations under the Contract;
3. I/We understand that this Performance Securing Declaration shall cease to be valid upon:
 - a. issuance by the Procuring Entity of the Certificate of Final Acceptance, subject to the following conditions:
 - i. Procuring Entity has no claims filed against the contract awardee;
 - ii. It has no claims for labor and materials filed against the contractor; and
 - iii. Other terms of the contract; or
 - b. replacement by the winning bidder of the submitted PSD with a performance security in any of the prescribed forms under Section 39.2 of the 2016 revised IRR of RA No. 9184 as required by the end-user.

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

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

[Jurat]

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