

# **PHILIPPINE BIDDING DOCUMENTS**



## **Public Bidding for the Proposed Construction of a Three (3) Storey Roxas City Hall Building (Phase I) at Pueblo De Panay, Barangay Lawa- an, Roxas City, Capiz under ITB No. RC-2024-004i**

Government of the Republic of the  
Philippines

Sixth Edition  
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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  
**CITY OF ROXAS**  
City Hall, Roxas City 5800  
(036) 620-5220

**BIDS AND AWARDS COMMITTEE OFFICE**

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## **Invitation to Bid for**

### **Public Bidding for the Proposed Construction of a Three (3) Storey Roxas City Hall Building at Pueblo De Panay, Barangay Lawa-an, Roxas City, Capiz under ITB No. RC-2025-002i**

1. The *Roxas City Government*, through the *GOP-2025* intends to apply the sum of **Four Hundred Thirty Six Million Four Hundred Ninety-eight Thousand Seven Hundred Thirty-one Pesos and 12/100 (Php 436,498,731.12)** being the Approved Budget for the Contract (ABC) to payments under the **Design and Build** contract for **Public Bidding for the Proposed Construction of a Three (3) Storey Roxas City Hall Building at Pueblo De Panay, Barangay Lawa-an, Roxas City, Capiz under ITB No. RC-2025-002i**. Bids received in excess of the ABC shall be automatically rejected at bid opening.
2. The Whole Project shall have an Approved Budget of PESOS: One Billion Ninety Five Million Six Hundred Fifteen Thousand Pesos (Php1,095,615,000.00), inclusive of the cost for the Detailed Architectural and Engineering Design (DAED), Site Development, Building 1 Construction, Building 1 Finishing/ Furnishing, and a Utility Structure. An allocation of PESOS: **Four Hundred Thirty Six Million Four Hundred Ninety-eight Thousand Seven Hundred Thirty-one Pesos and 12/100 (Php436,498,731.12)** covering Phase 1 as Approved Budget Contract (ABC) as defined under this TOR, has been set aside for this project under Public Bidding for the Proposed Construction of a Three (3) Storey Roxas City Hall Building at Pueblo De Panay, Barangay Lawa-an, Roxas City, Capiz under ITB No. RC-2025-002i.
3. The *Roxas City Government* now invites bids for the above Procurement Project. Completion of the Works is required **Four Hundred Eighty-five. (485) Calendar days**. Bidders should have completed a contract similar to the Project. The description of an eligible bidder is contained in the Bidding Documents, particularly, in Section II (Instructions to Bidders).
4. Bidding will be conducted through open competitive bidding procedures using non-discretionary "*pass/fail*" criterion as specified in the 2016 revised Implementing Rules and Regulations (IRR) of Republic Act (RA) No. 9184.



- (i) The Eligibility Criteria for Bidders shall govern by the Design and Build Scheme (Annex "G") of IRR of RA 9184.  
The Bidder shall meet the following requirements:
  - A. Active Philippine Contractor Accreditation Board (PCAB) License of:
    - a.1 Quadruple A (AAAA) in General Engineering
    - b.1 Large B in Building and Infrastructure Plant
    - c.1 Small B in Structural Steel Works
    - d.1 Small B in Electrical Works
    - e.1 Small B in Mechanical Works
  - B. Shall have completed at least two (2) similar Design and Build Projects having a total value of at least Fifty Percent (50%) of the total ABC.
  - C. Shall have completed a single and similar Design and Build Project of at least Fifty Percent (50%) of the total ABC.
  - D. Fulfills ISO 9001:2015 for a Quality Management System
  - E. Sub-contracting shall not be allowed.
- 5. Interested bidders may obtain further information from *Roxas City Government* and inspect the Bidding Documents at the address given below from *8:00 a.m. to 5:00 p.m.*
- 6. A complete set of Bidding Documents may be acquired by interested bidders on **February 18, 2025 to March 10, 2025** from given address and website/s below *and upon payment of the applicable fee for the Bidding Documents, pursuant to the latest Guidelines issued by the GPPB, in the amount of **Fifty Thousand Pesos (Php50,000.00)***. The Procuring Entity shall allow the bidder to present its proof of payment for the fees *to be presented in person*.
- 7. The *Roxas City Government* will hold a **Pre-Bid Conference** on **February 25, 2025, 10:00 a.m.**, at *2<sup>nd</sup> Floor – Conference Room, City Mayor’s Office, Roxas City Government*, which shall be open to prospective bidders.
- 8. Bids must be duly received by the BAC Secretariat through manual submission at the office address as indicated below on or before **March 10, 2025 at 9:00 a.m.** Late bids shall not be accepted.
- 9. All bids must be accompanied by a bid security in any of the acceptable forms and in the amount stated in **ITB** Clause 15.
- 10. Bid opening shall be on **March 10, 2025 at 9:00 a.m.** at the given address below. Bids will be opened in the presence of the bidders’ representatives who choose to attend the activity.

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

12. For further information, please refer to:

*Megan G. Barrientos  
Head, BAC Secretariat  
Arzobispo St., Roxas City  
bacroxascity19@gmail.com  
(036) 620-5220*

13. You may visit the following websites:

For downloading of Bidding Documents: *PhilGEPS.gov.ph*  
*http://roxascity.gov.ph*

***February 18, 2025***

**LORIE BELLE O. USISON**  
*BAC Chairperson*

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

## 1. Scope of Bid

The Procuring Entity, *Roxas City Government* invites Bids for ***Public Bidding for the Proposed Construction of a Three (3) Storey Roxas City Hall Building at Pueblo De Panay, Barangay Lawa-an, Roxas City, Capiz under ITB No. RC-2025-002i.***

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 *GOP-2025* in the amount of ***Four Hundred Thirty Six Million Four Hundred Ninety-eight Thousand Seven Hundred Thirty-one Pesos and 12/100 (Php 436,498,731.12).***

2.2. The source of funding is:

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

## 3. Bidding Requirements

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

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

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

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

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

#### **5. Eligible Bidders**

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

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

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

#### **6. Origin of Associated Goods**

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

#### **7. Subcontracts**

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

The Procuring Entity has prescribed that:

a. Subcontracting is not allowed.

7.1. 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 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: 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 *[indicate date]*. 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	<p>The Bidder must have experience of having completed a Single Largest Completed Contract (SLCC) that is similar to this Project complying with any of the following conditions:</p> <p>A. Shall have completed at least two (2) similar Design and Build Projects having a total value of at least Fifty Percent (50%) of the total ABC.</p> <p>-or-</p> <p>B. Shall have completed a single and similar Design and Build Project of at least Fifty Percent (50%) of the total ABC.</p>
7.1	<i>Sub-contracting is not allowed.</i>
10.1	<p>Proof of Authority - Must specify the project to be bid.</p> <p><b>All notarized documents must be original in all copies (Original, Copy 1, Copy 2, Copy 3)</b></p>
10.3	<p>The Bidder shall meet the following requirements: Active Philippine Contractor Accreditation Board (PCAB) License of:</p> <p>a.1 Quadruple A (AAAA) in General Engineering b.1 Large B in Building and Infrastructure Plant c.1 Small B in Structural Steel Works d.1 Small B in Electrical Works e.1 Small B in Mechanical Works</p>
10.4	<p>The key personnel must meet the required experience:</p> <p>Manpower Requirements:</p> <p><b><u>REFER TO SECTION VIII. TERMS OF REFERENCE (TOR)</u></b></p>
10.5	<p>The minimum major equipment requirements are the following:</p> <p><b><u>REFER TO SECTION VIII. TERMS OF REFERENCE (TOR)</u></b></p>

12	<i>Alternate Bids shall not be accepted.</i>
16	<p><i>Each bidder shall submit 4 copies of its first and second component envelopes. (Original, Copy1, Copy 2, Copy 3)</i></p> <p>All envelopes shall:</p> <p>a. contain the name of the contract to be bid in <b>capital letters</b>;</p> <p><b><i>PROPOSED CONSTRUCTION OF A THREE (3) STOREY ROXAS CITY HALL BUILDING AT PUEBLO DE PANAY, BARANGAY LAWA-AN, ROXAS CITY, CAPIZ</i></b></p> <p>b. bear the specific identification of this bidding process indicated in the <b>ITB</b> Clause 1.2; ITB No. RC-2025-002i</p> <p>c. bear the name and address of the Bidder in capital letters;</p> <p>be addressed to the ROXAS CITY GOVERNMENT'S BAC in accordance with <b>ITB</b> Clause 1.1;</p> <p><b>BIDS AND AWARDS COMMITTEE (BAC) ROXAS CITY GOVERNMENT</b></p> <p><b>d.</b> The First Component Envelope shall contain the Eligibility and Technical Documents with a Sequence of Checklist for Proper Tabbing of the Bid as specified in Section IX (Checklist of Technical and Financial Documents);</p> <p><b>e.</b> The Second Component Envelope shall contain the Financial Documents with a Sequence of Checklist for Proper Tabbing of the Bid as specified in Section IX (Checklist of Technical and Financial Documents);</p> <p>f. and bear a warning “<b>DO NOT OPEN BEFORE...</b>” the date and time for the opening of bids, in accordance with ITB Clause 21.</p>

15.1	<p>The bid security shall be in the form of a Bid Securing Declaration or any of the following forms and amounts:</p> <ul style="list-style-type: none"> <li>a. The amount of not less than <i>2% of the ABC</i>, if bid security is in cash, cashier's/manager's check, bank draft/guarantee or irrevocable letter of credit;</li> <li>b. The amount of not less than <i>5% of the ABC</i>, if bid security is in Surety Bond.</li> </ul>
19.2	Partial bids are not allowed.
20	The Bidder must be compliant with ISO 9001:2015 (Quality Management System)
21	Additional contract documents relevant to the Project that may be required by existing laws and/or the Procuring Entity, such as construction schedule and S-curve, manpower schedule, construction methods, equipment utilization schedule, construction safety and health program approved by the DOLE, and other acceptable tools of project scheduling.

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

## 1. Scope of Contract

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

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

## 2. Sectional Completion of Works

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

## 3. Possession of Site

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

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

## 4. The Contractor's Obligations

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

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

## **5. Performance Security**

5.1. Within ten (10) calendar days from receipt of the Notice of Award from the Procuring Entity but in no case later than the signing of the contract by both parties, the successful Bidder shall furnish the performance security in any of the forms prescribed in Section 39 of the 2016 revised IRR.

5.2. The Contractor, by entering into the Contract with the Procuring Entity, acknowledges the right of the Procuring Entity to institute action pursuant to RA No. 3688 against any subcontractor be they an individual, firm, partnership, corporation, or association supplying the Contractor with labor, materials and/or equipment for the performance of this Contract.

## **6. Site Investigation Reports**

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

## **7. Warranty**

7.1. In case the Contractor fails to undertake the repair works under Section 62.2.2 of the 2016 revised IRR, the Procuring Entity shall forfeit its performance security, subject its property(ies) to attachment or garnishment proceedings, and perpetually disqualify it from participating in any public bidding. All payables of the GOP in his favor shall be offset to recover the costs.

7.2. The warranty against Structural Defects/Failures, except that occasioned-on force majeure, shall cover the period from the date of issuance of the Certificate of Final Acceptance by the Procuring Entity. Specific duration of the warranty is found in the **SCC**.

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

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

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



## 9. Termination for Other Causes

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

## 10. Dayworks

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

## 11. Program of Work

- 11.1. The Contractor shall submit to the Procuring Entity’s Representative for approval the said Program of Work showing the general methods, arrangements, order, and timing for all the activities in the Works. The submissions of the Program of Work are indicated in the **SCC**.
- 11.2. The Contractor shall submit to the Procuring Entity’s Representative for approval an updated Program of Work at intervals no longer than the period stated in the **SCC**. If the Contractor does not submit an updated Program of Work within this period, the Procuring Entity’s Representative may withhold the amount stated in the **SCC** from the next payment certificate and continue to withhold this amount until the next payment after the date on which the overdue Program of Work has been submitted.

## 12. Instructions, Inspections and Audits

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

## 13. Advance Payment

The Procuring Entity shall, upon a written request of the Contractor which shall be submitted as a Contract document, make an advance payment to the Contractor in an amount not exceeding fifteen percent (15%) of the total

contract price, to be made in lump sum, or at the most two installments according to a schedule specified in the **SCC**, subject to the requirements in Annex “E” of the 2016 revised IRR of RA No. 9184.

#### **14. Progress Payments**

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

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

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

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

# Special Conditions of Contract

GCC Clause	
2	<i>REFER TO SECTION VIII. TERMS OF REFERENCE (TOR)</i>
4.1	<i>REFER TO SECTION VIII. TERMS OF REFERENCE (TOR)</i>
6	<i>No further instructions</i>
7.2	<b><i>In case of permanent structures</i></b> , such as buildings of types 4 and 5 as classified under the National Building Code of the Philippines and other structures made of steel, iron, or concrete which comply with relevant structural codes (e.g., DPWH Standard Specifications), such as, but not limited to, steel/concrete bridges, flyovers, aircraft movement areas, ports, dams, tunnels, filtration and treatment plants, sewerage systems, power plants, transmission and communication towers, railway system, and other similar permanent structures: <i>Fifteen (15) years.</i>
10	No dayworks are applicable to the contract.
11.1	The Contractor shall submit the Program of Works to the Procuring Entity's Representative within <i>10 calendar</i> days from receipt of the Notice of Award.
11.2	<i>No further instructions</i>
13	The amount of the advance payment is <i>15% of the total contract price and schedule of payment.</i>
14	<i>No further instructions</i>
15.1	The date by which operating and maintenance manuals are required is <b><i>on the day of acceptance of the finished project</i></b>  The date by which "as built" drawings are required prior to <i>acceptance of the finished project.</i>
15.2	<i>No further instructions</i>

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

**Refers to SECTION VIII. TERMS OF REFERENCE (TOR)**

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

**Refers to SECTION VIII. TERMS OF REFERENCE  
(TOR)**

## ***Section VIII. TERMS OF REFERENCE***



Republic of the Philippines  
City of Roxas  
**OFFICE OF THE CITY ENGINEER**

### **TERMS OF REFERENCE (TOR)**

***Public Bidding for the Proposed Construction of a Three (3) Storey Roxas City Hall Building at Pueblo De Panay, Barangay Lawa-an, Roxas City, Capiz under ITB No. RC-2025-002i***

#### **1. PROJECT INFORMATION**

The vision of the Roxas City Government to build a new City Hall Building has been proposed to be built in Pueblo De Panay, Barangay Lawa-an, Roxas City, Capiz to cater to the growing number of Roxas City Government employees. The new City Hall Building will be constructed in a two-hectare lot owned by the Roxas City Government.

##### **1.1 Project Description**

The Contract will involve the Design and Build Scheme leading to the construction of the Three (3) - Storey City Hall Building at Pueblo De Panay, Barangay Lawa-an, Roxas City, Capiz.

The lot where the new City Hall Building will be built is presently a hilly vacant lot. The lot area is approximately twenty thousand square meter (20,000 m<sup>2</sup>), more or less. The new building will have a total floor area of not less than 9,000m<sup>2</sup>, with a building footprint of not less than 3,000 m<sup>2</sup>.

The plans and designs shall be in accordance with the plan of the said structures as conceptualized by the Buildings and Special Projects Management Cluster – City Engineer's Office (CEO), or as conceptualized by the winning bidder if the latter is found to be superior (as defined in Section 3.1 of this TOR).

The Project shall have an Approved Budget of PESOS: One Billion, Ninety Five Million, Six Hundred Fifteen Thousand (Php 1,095,615,000.00), inclusive of the cost for the Detailed Architectural and Engineering Design (DAED), Site Development, Building 1 Construction, Building 1 Finishing/ Furnishing, and a Utility Structure. An allocation of PESOS: Four Hundred Thirty Six Million Four Hundred Ninety-eight Thousand Seven Hundred Thirty-one Pesos and 12/100 (Php 436,498,731.12) covering Phase 1 as Approved Budget Contract (ABC) as defined under this TOR, has been set aside for this project under Public Bidding for the Proposed Construction of a Three (3) Storey Roxas City Hall Building at Pueblo De Panay, Barangay Lawa-an, Roxas City, Capiz under ITB No. RC-2025-002i.

## **1.2 Design Parameters**

The New City Hall Building will sit on a 2-hectare land and which will have a Site Development Plan, a three-storey Building 1 and a utility structure.

The Project shall cover the design and build of the New City Hall Building located in Pueblo De Panay, Barangay Lawa-an, Roxas City, Capiz.

The plans and designs shall conform to the General Site Development Requirements, and Building Specifications, as prescribed in this TOR.

The project shall have the following basic components:

- a. Complete Architectural and Engineering Plans, specifications, and detailed designs for the Site Development Plan, Three-storey Building 1 and Utility Structure;
- b. Site Development Plans shall include road networks, drainage/sewerage, electrical, water, and other facilities.

The plans, designs, and specifications shall be subject to review and approval by CEO - Roxas City Government. The Design Development (DD) and the Contract Documents (CD) phases of the design shall continue after the Bid is awarded. It shall likewise be subject to review and approval by CEO-Roxas City Government.

## **1.3 Contractual Framework**



The contractual arrangement to be used for this project is the Design-and-Build (DB) Scheme. Under this scheme the procuring entity awards a single contract for the architectural/engineering design and construction to a single firm, partnership, corporation, joint venture or consortium.

The DB Scheme of procurement was recommended, endorsed, and adopted pursuant to the guidelines provided in Annex “G” – Guidelines for the Procurement and Implementation of Contracts of Design and Build Infrastructure of the revised Implementing Rules and Regulation (IRR) of Republic Act (RA) 9184.

## **1.4 MINIMUM QUALIFICATIONS OF THE PROPONENT**

The eligibility requirement shall comply with the provisions of Section 9, 10, & 11 of Annex “G” of the revised IRR of RA 9184.

## **2. SCOPE OF CONTRACT**

### **2.1 OBLIGATIONS OF THE WINNING BIDDER/ CONTRACTOR**

a. Render Detailed Architectural and Engineering Design Services including final schematic design necessary for the implementation of the Project. The design services shall include, but shall not be limited to: design for architectural, civil, structural, electrical, mechanical/fire protection, sanitary/plumbing, and auxiliary systems.

All drawings shall be generated using licensed AutoCAD or Revit software and printed on A1 (594mm x 841mm.) High-Quality Tracing Papers;

b. Conduct Engineering Survey, Investigations and Mapping (in accordance with the 2015 Design Guidelines, Criteria and Standards (DGCS) Volumes 2B (Engineering Surveys) and 2C (Geological and Geotechnical Investigations):

1.) Geodetic and Topographic surveys, verification of existing conditions, such as location of existing drainage and other utilities (Electrical, Communication, Water and drainage service entrance, among others) for the Owner’s final design requirement; (Annex B- Geodetic & Topographic Survey)

2.) Soil boring and investigation accordance with the 2015 National Structural Code of the Philippines (NSCP)

c. The project shall be constructed according to the DAEDs prepared by the Winning Bidder and approved by the CEO – Roxas City Government and in compliance with the Minimum Performance Standard and Specification (MPSS). For construction herein provided, the said MPSS for Construction includes conformance to the provisions pertaining to buildings under the latest edition of the Department of Public Works and Highways (DPWH) Standard Specifications for Public Works Structures, Volumes II and III (Blue Book). The Blue Book prescribes, among other things, the material requirements and construction requirements for different items of work, including the tests to be conducted during construction by the CEO – Roxas City Government accredited testing laboratory. The Blue Book incorporates pertinent provisions of the American Society for Testing and Materials (ASTM) and American Concrete Institute (ACI), among other standards, pertaining to construction. Attention shall be given to the relevant items of works in the following Parts of the Blue Book:

#### Volume I

Part A - Detailed Architectural and Engineering Design

Part B - Design Analysis & Specifications

Part C - Survey Data

Part D - Quantity and Cost Calculation

Part E - Details Geotechnical Investigation Report

#### Volume II

Part A – Facilities for the Engineer

Part B – Other General Requirements

#### Volume III

Part A – Siteworks

Part B – Plain and Reinforced Concrete Works

Part C – Finishing

Part D – Mechanical/Plumbing/Sanitary/Fire Protection

Part E – Electrical (with provision for Solar Power)

Part F - Auxiliary

For materials and technologies not covered by the Blue Book, or if the Proponent intends to use any new material/technology which is not accredited by the DPWH Bureau of Research and Standards (BRS), the Proponent shall submit a certification from a recognized foreign or international institution to the effect that the new materials or technology meets the MPSS for this project and has been successfully used in existing structures with proven integrity.

d. The Winning Bidder or Contractor shall be held liable for design and structural defects and/or failure of the completed project within the warranty period specified in Section 62.2 of the IRR of RA 9184; and,

e. Conduct Value Engineering Study (VES) to determine the most economical scheme (Technical Study of alternative types of building structures).

f. The Winning bidder may perform VES as part of the Detailed Engineering Design scope under this project. The Winning bidder shall include the social and environmental concerns or impacts as among the factors for consideration in the value engineering studies as well as taking into account environmental risk assessment.

g. Process and secure the Building Permits.

The VES would involve several phases such as, but not limited to the following:

#### **i. INFORMATION PHASE**

Activities include program or project information gathering and investigation, and in performing functional analysis or system and sub-system to identify high cost areas of the project.

#### **ii. SPECULATIVE/CREATIVE PHASE**

These activities include developing effective and efficient group interaction process (brainstorming) to identify alternative ideas, (Technical study for alternative type of structure), proposals, and solution for accomplishing the function of a systems and sub-system.

### **iii. EVALUATION/ANALYTICAL PHASE**

During this phase, the Winning Bidder shall evaluate and analyze process to determine which ideas, solutions, and measures would show greater potential for cost savings and project improvements.

### **iv. DEVELOPMENT/RECOMMENDATION PHASE**

Activities under this phase include preparation of project component's descriptions, preparations of sketches, and estimation of life cycle cost to be used in justifying and supporting value engineering proposal recommendations.

### **v. REPORT OR PRESENTATION**

During this phase, the Winning Bidder shall prepare and present his report, which should contain information, such as list of items or processes examined, alternatives, functional and the life cycle analyses, value engineering proposals, and supporting information.

## **2.2 OBLIGATIONS OF THE CEO – Roxas City Government**

- a. Provide full information on all requirements for the Project;
- b. Approve the Winning Bidder or Contractor's design without diminishing their full and sole responsibility for the quality and integrity thereof;
- c. Give prompt written notice thereof to Winning Bidder or Contractor, if it observes or becomes aware of any defect in the project;
- d. Designate, when necessary, representatives authorized to act on its behalf. It shall examine documents submitted by the Winning Bidder or Contractor and render decisions pertaining thereto promptly, to avoid unreasonable delay in the progress of their work. It shall observe the procedure of issuing orders to the Winning Bidder or Contractor.
- e. Apply and facilitate the building permit of the project.

- f. Prepare an Environmental Impact Assessment (EIA) with an Environmental Management Plan (EMP) signed by a registered and licensed Environmental Planner for submission to the Department of Environment and Natural Resources-Environmental Management Bureau (DENR-EMB) for the issuance of an Environmental Compliance Certificate (ECC) or Certificate of Non-coverage (CNC). Furthermore, if necessary, a clearance and a discharge permit shall be secured with the pertinent authorities;
- g. Supervise and monitor the implementation of the project; and,
- h. Review and approve payment in favor of the contractor, based on actual accomplishments.

## **2.3 BIDDING DOCUMENTS**

The Bidding Documents for the Project shall govern the conduct of the procurement of the Project.

The Standard Bidding Documents of Government Procurement Policy Board (GPPB) in accordance with the R.A. 9184 shall be used.

## **3. SCOPE OF DESIGN**

The design of the Building shall include among others, the Space Requirements based on DBM-DPWH Joint Circular No. 1 October 20, 2016 Guidelines on Rehabilitation or Construction of Government Buildings/Office of the National Government and all others concerned with a total area of not less than 9,500 square meters. The building design shall be integrated with environment friendly and sustainable features.

The design for Site Development shall include, among others, earthworks, drainage, and landscaping.

### **3.1 CONCEPT DESIGN**

#### **Identity in Government Building Design**

The Roxas City Government envisions their new government building as a dynamic and long-lasting public structure that addresses a variety of technical, practical and aesthetic matters while defining the values of the government in shaping our society. The City Hall Project aims to give comfortable and accessible service to the people of Roxas City encompassing architectural, engineering and technical applications to the design of the building.

#### **Physical Features of the Site**

The Roxas City Hall new building shall utilize the two (2) hectare site located in Pueblo de Panay, Roxas City, Capiz. The layout must optimize the mountainous terrain of the site, fitting to its topography.

### **Character of the Building**

The building must showcase an aesthetic character of a Neo-Classical Style- an authentic classical style, adapted to modern purposes. The design should create a visual connection between the forms, the interior and the exterior.

### **Circulation**

The spatial arrangement of spaces of the Roxas City Hall should be organized and coherent with each other. Ingress and egress of the site, the access to the building as well as the horizontal and vertical routes for movement inside the building should be determined.

### **Use and Need for Space**

The design of the Roxas City Hall architectural composition of spaces should allow functional experience for the users. Considerations for more accessible and inclusive government building compliance to the code and regulations.

## **3.2 BIDDING STAGE**

### **A. PRELIMINARY ARCHITECTURAL AND ENGINEERING DESIGN (PAED) BY THE PROSPECTIVE BIDDER**

The Prospective Bidder shall, at the bidding stage, prepare Preliminary Architectural and Engineering Design (PAED) Plans based on the DPWH Minimum Performance Specifications and Parameters (MPSP) for the Project as shown in Section VIII – Item 4.0 and submit as part of the Bidder's Technical Proposal.

The Prospective Bidder shall prepare the PAED according to the items listed below, with a degree of accuracy of approximately plus or minus twenty percent (+/-20%) of the final quantities and in accordance with the MPSP and as prescribed.

#### **A.1 Architectural Plans Duly Signed and Sealed by a Registered and Licensed Architect**

##### **1. Master Plan**

##### **a. City Hall Building**

##### **b. Future Building 1**

- c.Future Building 2
- d. Elevated Plaza and Garden
- e. Main Drop-Off with Water Feature
- f. Parking Area

## 2. Floor Plans

### A. Level 1-A/1-B (considering the hilly terrain)

#### a. Office and General Areas

- i. Tourism & Leidipo Office (12 pax)
- ii. Comelec Office (8 pax)
- iii. Vacant Office
- iv. Department Head Offices
- v. Clinic
- vi. Prayer Room (80 pax)
- vii. Cafeteria (96 pax)

#### b. Public and Common Areas

- i. Executive Drop-Off and Public Drop-Off
- ii. Lobby (Executive and Public Lobby)
- iii. Public Elevator (1)
- iv. VIP Elevator (1)

- v. Stairs and Fire Exits
- c. Utility and Service Areas
  - i. Security Room
  - ii. Telco Rooms
  - iii. MDF
  - iv. Auxiliary Room
  - v. Cafeteria Kitchen / Back of the House
  - v. Grounds Maintenance Room
  - v. Grounds Storage
- d. Office and General Areas
  - i. City Engineer's Office (77 tables)
  - ii. City Civil Registrar's Office (25 tables)
  - iii. City General Services Office (29 tables)
  - iv. City Treasurer's Office (70 tables)
  - v. City Assessor's Office (37 tables)
  - vi. BAC Office (11 tables)
  - vii. BOSS (25 tables)
  - viii. CENRO (43 tables)
  - ix. PESO (9 tables)



x. ICT (15 tables)

xi. Department Head Offices (10)

xii. Public Relation Booths: City Engineer's Office (5 counters)

xiii. Public Relation Booths: City Civil Registrar's Office (8 counters)

xiv. Public Relation Booths: City Treasurer's (15 counters)

xv. Public Relation Booths: City Assessor's Office (5 counters)

xvi. Public Relation Booths: BOSS (8 counters)

e. Public and Common Areas

i. Public Lounge and Waiting Area

ii. Information

iii. Receiving Area

iv. Male and Female Toilets

v. Handicapped Toilet

vi. Pantry/Toilet

vii. Public Elevators (2)

viii. VIP Elevator (1)

ix. Stairs and Fire Exits

f. Utility and Service Areas

- i. EE Room
- ii. Utilities
- iii. Utility Room
- iv. Auxiliary Room
- v. Records Room
- vi. Archive Room
- vii. Storage Room

B. Level 2

a. Office and General Areas

- i. Vice Mayor's Office (17 tables)
- ii. Agriculture's Office (19 tables)
- iii. SP Secretariat Office (24 tables)
- iv. DILG (11 tables)
- v. COA (11 tables)
- vi. SP Office 1 (8 pax)
- vii. SP Office 2 (8 pax)
- viii. SP Office 3 (8 pax)
- ix. SP Office 4 (8 pax)
- x. SP Office 5 (8 pax)

- xi. SP Office 6 (8 pax)
- xii. SP Office 7 (8 pax)
- xiii. SP Office 8 (8 pax)
- xiv. SP Office 9 (8 pax)
- xv. SP Office 10 (8 pax)
- xvi. SK Office (8 pax)
- xvii. Liga Office (8 pax)
- xviii. Department Head Offices (7)
- xix. Councilor Offices (10)
- xx. Session Hall (21 pax)
- xxi. Spectator Gallery (60 pax)
- xxii. Session Lounge (18 seats)
- xxiii. Seminar Room 1 (120 pax)
- xxiv. Seminar Room 2 (80 pax)

b. Public and Common Areas

- i. Receiving Area
- ii. Male and Female Toilets
- iii. Handicapped Toilet
- iv. Pantry/Toilet

v. Public Elevators (2)

vi. VIP Elevator (1)

vii. Stairs and Fire Exits

c. Utility and Service Areas

i. EE Room

ii. Utilities

iii. Utility Room

iv. Auxiliary Room

v. Records Room

vi. Storage Room

C. Level 3

a. Office and General Areas

i. Office of the Mayor

ii. Mayor's Staff (17 tables)

iii. City Administrator's Office (16 tables)

iv. Office of the City Accountant (43 tables)

v. City Budget Office (19 tables)

vi. City Planning and Development Office (40 tables)

vii. Roxas City Information Division (30 tables)

- viii. City Legal (7 tables)
- ix. City Logistics (7 tables)
- x. HRMO (16 tables)
- xi. Department Head Offices (9)
- xii. Conference Room (75 seats)
- xiii. Mayor's Conference Room (20 seats)
- xiv. Meeting Room 1 (14 seats)
- xv. Meeting Room 2 (14 seats)
- xvi. Meeting Room: City Administrator's Office (8 seats)
- xvii. Studio Room
- xviii. Editing Room

b. Public and Common Areas

- i. Receiving Area
- ii. Pantry/Toilet
- iii. Male and Female Toilets
- iv. Handicapped Toilet
- v. Public Elevator (2)
- vi. VIP Elevator (1)
- vii. Executive and Public Outdoor Deck

viii. Stairs and Fire Exits

c. Utility and Service Areas

i. EE Room

ii. Utilities

iii. Utility Room

iv. Auxiliary Room

v. File Room

vi. Storage Room

3. Roof Plan

4. Reflected Ceiling Plan

5. Elevation Plans

6. Section Plans

7. Doors and Windows Detail and Schedule

8. Architectural Columns Detail and Schedule

9. Toilet Details

10. Stair Details

11. Miscellaneous Interior Details

## **A.2 Structural Plans Duly Signed and Sealed by Licensed Structural Engineer**

1.Structural Design Criteria

2.Construction Notes

3.Structural Framing Plans

a.Level 1-A & Level 1-B Floor Plan

b.Level 2 Floor Plan

c.Level 3 Floor Plan

d.Roof Plan

4.Column Detail and Schedule

5.Beam Detail and Schedule

6.Slab Detail and Schedule

**A.3 Mechanical Plans Duly Signed and Sealed by Professional Mechanical Engineer**

1. General Notes

2. Equipment Schedule

3. Air Conditioning Unit & Ventilation Layout

a. Level 1-A & Level 1-B Floor Plan

b. Level 2 Floor Plan

c. Level 3 Floor Plan

d. Roof Plan

4. Piping Layout

- a. Level 1-A & Level 1-B Floor Plan
  - b. Level 2 Floor Plan
  - c. Level 3 Floor Plan
  - d. Roof Plan
- 5. Pressurization Schematic Diagram
  - 6. Smoke Evacuation Schematic Diagram
  - 7. Fresh Air Schematic Diagram
  - 8. Toilet Exhaust Schematic Diagram
  - 9. Systems Schematic Diagram
  - 10. Miscellaneous Details

#### **A.4 Plumbing Plans Duly Signed and Sealed by Registered Master Plumber**

- 1. Site Development Plan
- 2. Sanitary Line Layout
  - a. Level 1-A & Level 1-B Floor Plan
  - b. Level 2 Floor Plan
  - c. Level 3 Floor Plan
  - d. Roof Plan
- 3. Drainage Line Layout
  - a. Level 1-A & Level 1-B Floor Plan



b. Level 2 Floor Plan

c. Level 3 Floor Plan

d. Roof Plan

4. Waterline Layout

a. Level 1-A & Level 1-B Floor Plan

b. Level 2 Floor Plan

c. Level 3 Floor Plan

d. Roof Plan

5. Cistern Tank/Fire Tank Detail

6. Rainwater Tank Detail

7. Septic Tank Detail

8. Sanitary Line Schematic Diagram

9. Waterline Schematic Diagram

10. Storm Drainage Schematic Diagram

11. Miscellaneous Details

**A.5 Fire Protection Plans Duly Signed and Sealed by Professional Mechanical Engineer**

1. Equipment Schedule & General Notes

2. Site Development Pipe Connection Detail

3. Automatic Sprinkler System Layout

- a. Level 1-A & Level 1-B Floor Plan
  - b. Level 2 Floor Plan
  - c. Level 3 Floor Plan
  - d. Roof Plan
- 4. Fire Pump Section Detail and Schematic Diagram
  - 5. Miscellaneous Fire Protection Detail
  - 6. Hydraulic Calculation
  - 7. Hydraulic Data

#### **A.6. Electrical Plans Duly Signed and Sealed by Professional Electrical Engineer**

- 1. General Notes Legend Site Development Plan
- 2. Single Line Diagram with interface for Backup Generator and Solar Power Integration
- 3. Schedule Of Loads
  - a. Level 1-A and Level 1-B Schedule Of Loads
  - b. Level 2 Schedule Of Loads
  - c. Level 3 Schedule Of Loads
- 4. Low Voltage Distribution Layout
  - a. Level 1-A and Level 1-B Lighting Layout
  - b. Level 2 Lighting Layout
  - c. Level 3 Lighting Layout

- d. Roof Plan Lighting Layout
- 5. Power Outlet Layout
  - a. Level 1-A and Level 1-B Power Layout
  - b. Level 2 Power Layout
  - c. Level 3 Power Layout
  - d. Roof Plan Power Layout
- 6. ACU Power Layout
  - a. Level 1-A and Level 1-B Power2 Layout
  - b. Level 2 Power2 Layout
  - c. Level 3 Power2 Layout
  - d. Roof Plan Power2 Layout
- 7. Lightning Protection Layout
- 8. Service Entrance / Vicinity Lighting Provision
  - a. Wireway Mounting Details
  - b. Cable Tray Support Details
  - c. Cable Tray/Wireway Wall Support Detail
  - d. Cable Tray (Ladder Type) Details
  - e. Cable Tray Grounding Details
  - f. Mounted On Steel Beam

- g. Lighting Fixture Mounting Details
- h. Grounding Busbar Detail
- i. Lightning Arrester Installation Details
- j. Ground Rod Detail
- k. Emergency Light
- l. Grounding Details
- m. Ground Test Well Detail
- n. Air Terminal Detail
- o. Air Terminal to Mast Connection Detail
- p. Steel Step Ladder Detail
- 9. Electrical Manhole
  - a. Type "2-Way" Manhole
  - b. Type "3-Way" Manhole
  - c. Duct Section

## **B. DETAILED ARCHITECTURAL AND ENGINEERING REQUIREMENTS**

b.1 Under the Contract Agreement, the Winning Bidder shall prepare the DAED of the Project and submit the DAED (including the editable File) to the CEO – Roxas City Government for approval, within **10 days** from receipt of Notice of Award.

b.2 Prior to the execution of the Construction Works under this Contract, the winning bidder shall submit to CEO – Roxas City Government for approval, the bill of quantities covering the initial phase based on the amount released.

In submitting the DAED, the Bidder must comply with the following:

1. Perform Value Engineering Study as necessary to maximizing utilization of renewable energy based on the results of Traffic, Topographic, Hydrologic and Geotechnical Investigation of the project area;
2. Updated Plans and Details as well as Bill of Quantities with accuracy of plus or minus 5% based on the PAED submitted by the winning Bidder;

### **3. LOT OCCUPANCY AND ORIENTATION**

- a.) Incremental building setback shall be in accordance with the revised IRR of Presidential Decree (PD) 1096 or the National Building Code of the Philippines (NBCP) and current amendments;
- b.) Building Footprint and Floor to Lot Area Ratio (FLAR) shall be in accordance with the provisions of Rules VII and VIII of the revised IRR of PD 1096 or the NBCP and current amendments;
- c.) Allows for efficient traffic circulation;
- d.) Orientation must be well considered for maximum heat control and adequate air circulation.

### **4. CIRCULATION**

- a.) For access and security systems, consider the hierarchy of spaces and segregation of public from private spaces as well as connectivity from public to private spaces;
- b.) Horizontal access within the zone shall be by stairs, elevators, and escalators. Provide sufficient holding areas;
- c.) Minimum number of entry points and total width shall follow the NBCP and Fire Code provisions;
- d.) Each zone shall have its own circulation system with identified emergency routes. Provide unobstructed passageways with clear and easy access to fire exits and areas of refuge;
- e.) Safe and seamless pedestrian and vehicular circulation system to avoid obstruction and traffic build-up;
- f.) Accessibility requirements for Persons with Disabilities (PWDs) under Batasang Pambansa (BP) 344;
- g.) Access to public transportation within walking distance from the project site;

- h.) Required total number of parking space based on the National Building Code of the Philippines or through local ordinance or regulations that specify parking requirements;
- i.) Establish preferred parking and percentage of number of slots from the total parking capacity that are reserved for the use of fuel efficient and low carbon emitting vehicles;
- j.) Provide access to the public to improve community walkability; and,
- k.) Provide secure and effective bicycle access, parking, storage, and biker's facility within acceptable number and distance on the need of the users.

## **5. ARCHITECTURAL DESIGN STANDARDS**

### **a.) WINDOWS**

Window opening must be compliant to National Building Code of the Philippines (PD 1096) RULE VIII – Light and Ventilation; RULE XVIII – Glass and Glazing

### **b.) FLOOR**

Floor Finishes and Construction must be compliant to National Building Code of the Philippines (PD 1096) RULE XII – General Design and Construction Requirements

### **c.) CEILING AND CEILING CAVITY**

Ceiling Finishes and construction must be compliant to National Building Code of the Philippines (PD 1096) RULE VII – Light and Ventilation

### **d.) ROOF**

Roof design and construction must be compliant to National Building Code of the Philippines (PD 1096) RULE XII – General Design and Construction Requirements

### **e.) WALLS/PARTITIONS**

Wall finishes and construction must be compliant to National Building Code of the Philippines (PD 1096) RULE XII – General Design and Construction Requirements

### **f.) PAINTING, VARNISHING AND OTHER RELATED WORKS**

Painting, Varnishing and other related works must be compliant to National Building Code of the Philippines (PD 1096) RULE XII – General Design and Construction Requirements

## **g.) ACOUSTIC COMFORT, VISUAL COMFORT, AND GLARE CONTROL**

Acoustic measures must be compliant to National Building Code of the Philippines (PD 1096) RULE VII – Light and Ventilation

## **6. STRUCTURAL DESIGN STANDARDS**

The proposed Three (3) Storey Building 1 structural system is a dual resisting frame system. The system shall consist of reinforced concrete structural elements and moment-resisting frames to resist vertical and lateral loads. Moment-resisting frames shall be designed to independently resist at least 25 percent of the design base shear. The two systems shall be designed to resist the total design base shear in proportion to their relative rigidities considering the interaction of the dual system at all levels.

a.) The structural design shall be in accordance with the Revised Implementing Rules and Regulations (IRR) of the NBCP and the latest edition of the National Structural Code of the Philippines (NSCP), Volume 1,2015.

### **b.) SEISMIC LOAD**

The structure shall be designed to withstand earthquakes for Seismic Zone 4 with a corresponding Seismic Factor of 0.40 as specified in the NSCP 2015.

A Seismic Importance Factor of 1.50 shall be used. The Seismic Source Distance of the structure is approximately 57.2 km.

### **c.) WIND LOAD**

The roofing and walls shall be designed to withstand the minimum requirement of the latest edition of NSCP.

The structure should be fully designed to withstand strong vertical and lateral rains.

### **d.) DEAD LOADS**

Material or constructive	<b>Table 1: Dead Loads</b>		permanent supported.
	<b>Material</b>	<b>Dry unit weight</b>	
	Structural Steel	77.30 KN/m <sup>3</sup>	
	Reinforced Concrete	23.54 KN/m <sup>3</sup>	
	Soil	18.00 KN/m <sup>3</sup>	
	Floor Finish ( Ceramic Tiles)	0.77 kPA	
	Roofing Sheets (0.6MM THK)	0.05 kPA	
	PE Foam	0.18 kPA	
	Ceiling (Gypsum Board 16MM)	0.10 kPA	
	Channel System	0.10 kPA	
	Duct Allowance	0.20 kPA	
	Waterproofing	0.26 kPA	
	Movable Partition	1.58 kPa	

#### e.) LIVE LOADS

The minimum occupancy of live loads shown in Table 2 shall be used in the design.

**Table 2: Live Loads**

<b>Occupancy / Use</b>	<b>Dry unit weight</b>
Offices / Lobby/ Roof Deck	4.80 KPa
Restrooms	2.40 KPa
Storage Room	6.00 KPa
Stage Areas	7.20 KPa
Mechanical/ Electrical Room	12.00 KPa

#### f.) DESIGN LIFE

The building structure shall have a service life of at least fifty (50) years with a maximum of 15 years liability to the designer.

### **7. ELECTRICAL DESIGN STANDARDS**

#### **a.) SERVICE ENTRANCE**

- i. The main power supply to the building shall be taken from an electric utility company available in the area. The incoming supply shall conform to the local utility guidelines and connect/tap to the power substation of the three (3) storey Building 1, Pueblo De Panay, Barangay Lawa-an, Roxas City, Capiz.
- ii. Unless specified/applicable service entrance conduit shall be made of PVC pipe schedule 40. Underground runs shall be encased in concrete envelope or reinforced concrete envelope when crossing a roadway if needed. Ends of conduits shall be provided with a sealing compound.
- iii. Exposed service entrance conduits shall be wall mounted PVC pipe schedule 40.
- iv. Conduits shall be properly reamed.
- v. The service entrance shall be at least 1.60m above the natural grade line.

#### **b.) SWITCHGEAR AND POWER DISTRIBUTION CENTER**

- i. The switchgear and power distribution center shall be located at the lower level.



ii. The medium voltage metal-clad switchgear shall be designed manufactured, tested, and installed in compliance with the following standards:

ANSI C37.55-Conformance Test Procedures for Medium-Voltage Metal-Clad Assemblies;

ANSI C37.54-Conformance Test Procedures for Indoor AC High-Voltage Circuit Breakers Applied as Removable Elements in Metal-Enclosed Switchgear IEEE,NEMA,UL,NFPA;

ANSI/IEEE C37.90.1-Guide for Surge Withstand Capability Tests;

ANSI/IEEE C57.13-Standard Requirements for Instrument Transformers;

ANSI C39.1-Requirements for Electrical Analog Indicating Instruments;

ANSI C12.1-Code for Electricity Metering;

UL 1449-Standard for Safety for Surge Protective Devices, 3rd Edition;

NFPA 70-National Electrical Code;

NEMA SG-4 Alternating Current High Voltage Circuit Breakers; and,

NEMA SG-5 Power Switchgear Assemblies

iii. Each switchgear assembly shall have a minimum 25% spare capacity. Electronic surge protection shall be provided on the incoming supply line.

#### **c.) BUSBAR (BUSDUCT) TRUNKING SYSTEM (BTS)**

i. Under this section, the BTS is required for interconnection and distribution of power between Switchgear Synchronization Panel, Automatic Transfer Switch (ATS) if applicable, Generators if applicable, and Transformer if applicable to Power Distribution Centers (Low Voltage Switchgear). Underground installation and wiring installation that are less than 8m total distance shall not be on busduct.

ii. The BTS shall be capable of being mounted in any position without derating. Plug-in and feeder sections shall be interchangeable without the use of special adapter joint covers. The complete installation shall be coordinated throughout, and where possible, shall consist of standard sections with special sections and fittings provided to suit the installation.

iii. The dimension of busbars are determined considering normal operating conditions i.e. rated current. The system voltage determines the phase-to-phase & phase-to-earth distance, and also determines the height and shape of the supports to ensure adequate creepage clearance.

iv. The design of the busbar & supports is adequate to withstand the mechanical & thermal effects due to short circuit currents. Design validations are also done to ensure the temperature rise of conductors & enclosure is within safe limits.

v. The BTS shall be of low impedance and air insulated typed technology. It shall be suitable for a 3 phase, 4 wire, 400Volt/230Volt system with full neutral and continuous internal earth conductor of half rated and be of the same material as phase busbars.

vi. The system shall be complete with all necessary fittings, tap-off unit brackets, etc. and tap-off point on both sides of the busbar trunking system. All busbar trunking fittings (elbow, tees, end cable tap box, etc.) shall be Ingress Protection (IP) 55 in accordance to International Electrotechnical Commission (IEC) 60529 and from the same manufacturer as the BTS.

vi. The system shall be complete with all necessary fittings, tap-off unit brackets, etc. and tap-off point on both sides of the busbar trunking system. All busbar trunking fittings (elbow, tees, end cable tap box, etc.) shall be Ingress Protection (IP) 55 minimum in accordance to International Electrotechnical Commission (IEC) 60529 and from the same manufacturer as the BTS.

viii. The BTS shall be terminated by end closure.

#### ix. Coordination for Electrical BTS

The contractor shall ensure detailed coordination of installation and compatibility of busbar trunking between transformer or generators to power distribution centers; Connections to switchgear and to transformers shall be with flanged end units, transformer box and flexible shall be of specific design and manufactured by the busbar trunking manufacturer;

The contractor shall check and confirm structural penetrations through slabs and walls with the Structural Consultant prior to concrete pouring or wall construction;

The contractor shall ensure the rising busbars, cable tray, distribution boards, tap-off arrangement, and other services are coordinated in the riser space prior to installation;

Busbar layouts indicated in the drawings are based on dimensions of a generic nature. The contractor shall include for ensuring the selected busbar system can be installed in all locations without an increase to room size or encroachment to other areas; and,

The contractor shall carry out all necessary site measurements to ensure the busbar system is compatible with site dimensions and conditions.

#### x. Construction

- 1.) All busbar trunking products and fittings (straight length, elbow, tees, flanged end, cable tap box and circuit breaker, etc.) shall be in accordance with IEC 61439-6 or Underwriters Laboratories (UL) 857 and from the same manufacturer as the BTS. The degree of protection of the BTS should be IP55 in accordance to IEC 60529;
- 2.) Rated operation voltage of the busbar trunking is 1000Volt. 3-Phase, 4 or 5 Wire with 50% capacity continual integral/intimal earth busbar. The neutral conductor should have the same cross- sectional area as the phase conductor. The earth busbar must be one continuous piece without bolting on housing;
- 3.) The ampere ratings, approximate footage, fitting, plug-in units etc shall conform to the specification shown on the plan. The electrical contractor shall be responsible for routing the busbar trunking to coordinate with the other trades. Final field measurements shall be made by the contractor prior to release to the busbar trunking for fabrication by the manufacturer;
- 4.) The busbars shall be totally enclosed in a non-ventilated, low impedance sandwich design. The busbar trunking shall be sandwiched throughout its entire length, busbar trunking flared at tap-points are not acceptable;
- 5.) The enclosure shall comprise of non-magnetic aluminum housing with minimum metal thickness of 5mm top and bottom, and 3mm sides. The aluminum housing shall be unpainted, natural finish and fully fault rated, and provide additional protection by Association of Short Circuit Testing Authorities (ASTA) certified integral earthing (Protective Earthing protective conductor);
- 6.) Each piece of busbar trunking shall be labeled E,L1,L2,L3,N at both ends to identify conductor phasing;
- 7.) Minimum enclosure protection shall be IP55 as defined in iec 60529 and must be ASTA certified in both horizontal and vertical positions; and,
- 8.) Copies of ASTA certificates for enclosure Protective Earthing (PE) short-circuit and IP ratings shall be submitted to the CEO – City Engineer's Office for approval.

#### xi. Busbar Conductors

- 1.) The phase and neutral busbar conductors shall be of hard drawn 99.9% purity Aluminum;
- 2.) The neutral conductor shall be fully rated, internal earth conductor shall be half rated and be of the same material as the phase busbars;
- 3.) The entire conductors and joint lengths shall be tinned. All busbar conductors shall be totally insulated with Class B (130°C Mylar) or Class F rated (155°C Melinex) insulating polyester film material. Epoxy insulation is not allowed;
- 4.) The conductors shall be fitted with Aluminum laminate riders, electrically welded to junctions, and tap off positions;

- 5.) There shall be no bolts passing through the busbars of the busway; and,
- 6.) The temperature rise at any point of the busbar trunking enclosure shall not exceed 55°C rise above ambient temperature when in operation at rated current.

#### xii. Busbar Trunking Joints and Supports

- 1.) Joining of the busbar lengths shall be by means of a quick make non-reversible joint pack comprising a double-headed, torque indicating single joint bolt, including a high visibility disc for visual indication of unmade joints. For ease of jointing and to minimize installation time, joints shall have a single torque bolt only;
- 2.) The Joints shall be of a safe asymmetrical design to ensure correct phasing when joining two lengths;
- 3.) It shall be possible to torque the joint using a standard long handle wrench with a 19mm socket;
- 4.) The joints shall accommodate 15mm of thermal expansion of conductors and housing without requiring additional expansion joints, except at building expansions; and,
- 5.) The busbar trunking shall be properly aligned, and securely fixed not exceeding 1.5m(or as recommended by the manufacturer) centers with support adequate to take the weight of the busbar by means of galvanized fixing brackets; comprising hanger clamp, fixing channel, and damping screw supplied by the busbar trunking manufacturer. Additional supports shall be supplied where required and where recommended by the trunking manufacturer.

#### xiii. Tap-Off Positions and Tap-Off Units

- 1.) Busbar trunking shall have tap-off positions where shown on the drawings;
- 2.) Each tap off position shall be provided with automatic safety shutters to shield the live busbars where the position is not occupied with a tap off unit;
- 3.) Tap-off positions shall be non-flared and suitable for tap-off units to be plugged on to the busbars;
- 4.) Shutters shall be activated by the insertion of the tap-off units and will only operate if the boxes are the correct way round;
- 5.) The plug-in contact shall self-align with the busbars and plug-in openings shall provide personal protection and safety of IP 2X when in the open position and IP55 in the closed position in accordance with IEC 60529;
- 6.) Within risers, plug-in tap-off positions shall be provided with a maximum distance of one plug-in opening for each 1000mm;

- 7.) Tap-off boxes shall be constructed of zinc plated sheet steel and shall be complete with hinged lids with an ASTA certified protective standard of IP55;
- 8.) The tap-off boxes shall have circuit protective devices as applicable and shown on the drawings with mechanical interlocks to prevent tap box removal unless the mechanism is in the off position;
- 9.) Where tap-off boxes are inserted into live busbar trunking, they shall be designed and constructed so that the current carrying metal parts are not exposed during the insertion and removal of the boxes;
- 10.) The tap-off box shall remain earthed during removal, until all live connections are disabled. The tap-off box shall ensure that the box can only be inserted to give correct polarity;
- 11.) All operational handles shall be pad lockable;
- 12.) Tap-off boxes up to 630A shall be of the plug-on type for ease of installation and removal; and,
- 13.) The tap-off units shall be Molded Case Circuit Breaker (MCCB) current limiting type. The MCCBs shall complement those used elsewhere (for the distribution panels) in order to allow coordination and future addition of shunt trip/motor operation devices.

#### xiv. Conformity to Codes and Standards

- 1.) The BTS and components shall conform to the following Codes and Standards;
- 2.) All electrical installations shall be carried out in accordance with the best International Standards and Codes of Practice specifically with the current issue of the IEE Regulations (British Standard 7671) and the requirements of the supply authority;
- 3.) The entire installation shall be carried out and tested in accordance with the relevant National and International Standards and requirements of local authority;
- 4.) The design, manufacture, testing, and performance of the BTS shall be in accordance with the latest edition of British Standard European Norm (BS EN) 60439-1 & 2 (IEC 439-1&2) standard, British Standard (BS) 5486-2, and Australian Standard (AS) 3439.2;
- 5.) Types and size of busbar trunking required for this project shall be in satisfactory service under similar conditions for not less than 5 years;
- 6.) Provide verification certificates prior to manufacturer for Mechanical, Electrical, Plumbing (MEP) Consultants review;
- 7.) The busbar trunking manufacturer shall be certified to the highest Quality Management System Standard, namely International Organization for Standardization (ISO) 9001 and ISO 14001 for Environmental Management Systems; and,

8.) All busbar trunking shall include a European Conformity (CE MARK) on its labels in accordance with the low voltage directive number 73/23/European Environmental Council (EEC).

#### xv. Testing

##### 1.) Factory Testing

Perform Factory Tests on each piece of busbar trunking in accordance with the requirements in International Electrotechnical Commission (IEC) 61439-6, Ed. 2-2011 (BS EN 61439-6/EN 61439-6) or IEC 62271, and UL equivalent Standards at the Assembly Manufacturer Factory;

The Busbar Trunking System should pass the Seismic Protection Test with the actual physical product under the Seismic Code Requirements;

Prior to shipping from factory, testing shall be witnessed by CEO- Roxas City Government authorized representative/s and all costs for travel expenses, board, and lodging shall be for the account of the winning contractor/supplier. Notify the CEO- Roxas City Government in writing of the proposed test date not less than fifteen (15) working days; and,

A manufacturer's Standard Factory Certificate of Testing and Inspection shall be submitted in 5 sets certified copies and all testing shall be performed with a calibrated meter to CEO – Roxas City Government.

##### 2.) On-Site Testing

On –Site Testing shall be performed accordance with IEC 61439-6 and other local safety codes with the following test;

Before installation each piece of busbar trunking shall be megger tested at 1000Volts;

On completion of the installation each busbar run shall be megger tested at 1000Volts;

A temperature heat rise test in accordance with the manufacturer's recommendation / procedure shall be carried out on site;

All tests shall be witnessed by the CEO – Roxas City Government representative and the results shall be recorded and submitted to the CEO – Roxas City Government respectively;

The contractor shall carry out infra-red / thermal graphic scanning of the BTS;

The scanning shall be carried out under load conditions prior to handover;

Performed ductile test of the entire length of the busbar; and,

In addition, the contractor shall allow for the scans to be repeated at the end of the defects liability period and a conditional report issued to the CEO – Roxas City Government for review. Scanning shall be carried out at switch panel terminations, changes of directions and on 10% of trunking joints.

3.) Prior to the start of active testing, all externally connected equipment like transformers, synchronizing panel, automatic transfer switch, and low voltage switchgear shall be checked for proper connection.

#### **d. PANEL BOARDS**

The panel boards and all components shall be designed, manufactured and tested in accordance with the latest applicable standards of UL, National Electrical Manufacture's Association (NEMA), and National Electrical Code (NEC) including the following;

UL 67 – Standards for Panel boards

UL 50 – Standards for Cabinets and Boxes

UL 489 – Standards for Molded Case Circuit Breakers

UL 869 – Standards for Service Equipment

Latest Edition of Philippine Electrical Code

#### **e. ROUGHING –INS**

i. Branch circuit conduits, boxes, fittings, and supports shall run parallel to walls, columns, and beams of the building.

1.) Branch circuit conduits shall be either metallic or non-metallic as applicable.

2.) Metal boxes, gutters, supports, and fittings shall be pre-painted or painted with epoxy primer in three (3) coats prior to installation.

3.) Polyvinyl Chloride (PVC) solvent cement shall be applied on all PVC pipe joints/connections.

4.) End bells shall be used at the end of PVC pipes and locknut and bushing shall be used for metallic conduit on all boxes and gutters termination.

5.) Used Electrical Metallic Tubing (EMT) pipe for 15mm dia. to 32mm dia indoor, Intermediate Metalic Conduit (IMC) pipe for 36mm dia to 100mm dia indoor, and RigidSteel Conduit pipe for outdoor. All associated elbows, couplings, and other fittings as per Underwriters Laboratories (UL) 6 and 1242 and the National Electrical Code(NEC) requirements for corrosion protection of steel conduit.

6.) Apply protective coating with zinc-rich paint or liquid galvanizing compound to protect the conduit threads before assembling.

7.) Painting of all conduits, elbows, bushings, hangers, support, and other fittings with two coats of liquid galvanizing compound after installation to ensure the required protection from corrosion.

ii. Ceiling mounted lighting fixtures

Flexible tubing shall be used as a drop pipe from a junction box to a lighting fixture.

iii. In-sight disconnecting

Watertight straight or angle connectors shall be used from pumps, air-conditioning system, and other equipment that will be possible in contact with water or rain.

iv. Centralized paneling

Breaker and wire gutter shall be used for proper arrangement of the Main Distribution Panel (MDP).

v. Stub-out Conduits for spares

15mm nominal diameter Polyvinyl Chloride (PVC) or Intermediate Metal Conduit (IMC) pipes shall be provided as stub-out conduits at different panel boards as per schedule of loads. Ends of stub-out conduits shall be threaded and capped.

vi. Conduit for lightning projection system/bare copper wire - equipment grounding.

15mm nominal diameter PVC of IMC pipe shall be provided.

**f.) WIRES AND WIRING DEVICES**

i. Wires shall be properly designed in accordance with Article 3.10 and the grounding system shall conform to Article 2.50 of the PEC.

ii. Wiring devices should be modern type and approved for both location and purpose.



- iii. Electrical practitioner shall tap all main wires and cables on the designated panel board.
- iv. Wires to be used for electronics usage shall be structured cable.
- v. Feeders shall be laid out in accordance with the line diagrams shown in the electrical plans and designs, unless otherwise specified in the drawings.
- vi. Feeder shall be continuous and without splices as indicated in the electrical plans and designs.
- vii. Unless otherwise specified in the specifications or shown in the drawings, type Stranded, Lead Free. THHN/THWN 90 Degrees copper wires/cables shall be used for feeder, and other circuit homeruns, the conduit shown in the drawings shall be minimum sizes to be used.
- viii. Provide, layout and install all necessary feeders, cables, wires and conduits, pull boxes, hangers, supports, and straps as indicated in the electrical plans and designs.
- ix. Wiring layout installation shall be marked properly.

#### **g.) LIGHTING AND FIXTURES**

- i. Each office and conference area shall be provided with a lighting product that can produce the required illumination level appropriate for the said area.
- ii. International Standards shall be used as reference where local standards did not provide adequate information in the project. These include but not limited to:

ISO 9001:2008;

C.E Certification;

Low Voltage Directive (LVD): 2006/95/EC;

Electromagnetic Compatibility Directive (EMC): 2004/108/EC;

Restriction on Hazardous Substances Directive (RoHS):2002/95/EC; and,

UL 8750 – Standard for Light Emitting Diode (LED) Equipment for Use in Lighting Products.

- iii. A duplex convenience outlet (CO) of the grounding type shall be provided on appropriate wall space/location of the room.

- iv. LED lighting fixtures shall have efficient specifications above the minimum illuminance level in accordance to the Department Order No. 13 Series of 1998 Guidelines Governing Safety and Health in the Construction, (Department of Labor and Employment, 1989), Occupational Safety and Health Standards (As Amended, 1989), (DOLE, 1989), and Guidelines on Energy Conserving Design of Building, Table 3.1 Recommended Design Illuminance Levels, (Department of Energy, 2008).
- v. Lighting Controls and Dimmers may be provided when needed to enable users to adjust the lighting based on use, needs, tasks, and function of spaces and based on Sustainability Target Performance.
- vi. Energy consumption rates for each identified energy-consuming system in the design shall be identified in accordance with the Philippine Electrical Code (PEC) of the Institute of Integrated Electrical Engineers of the Philippines (IIEE, 2009).
- vii. Peak Energy Consumption in kilowatts per square meter per person (kW/m<sup>2</sup>/person) based on specific hour shift and usage shall be calculated.
- viii. The building shall comply with maximum allowable building average lighting power density in accordance with the Philippine Green Building Code, and Sustainability Target Performance.
- ix. Lighting fixtures for all regularly occupied spaces should comply with the minimum luminous efficacy, Guidelines for Energy Conserving Design of Buildings (Department of Energy, 2008), relevant Philippine National Standards (PNS) for lighting products, and other relevant Green Building Standards.
- x. All electrical equipment and devices should be rated 220 volts.

#### **h.) GROUNDING AND BONDING SYSTEM**

Grounding and bonding system shall conform to the following standards:

Latest edition of Philippine Electrical Code (PEC), Part 1, Volume 1, Article 2.50 – Grounding and Bonding;

National Electrical Code (NEC), Article 250 – Grounding and Bonding; and,

DPWH Standard Specification on Grounding System.

### **8.) ELECTRONICS DESIGN STANDARDS**

a.) The complete electronic system to be installed for this Project (i.e., Structured Cabling System) shall be in accordance to the Philippine Electronics Engineering Code, applicable electronic standards consistent with the industry practices.

b.) Provide at least three (3) fiber optic internet service providers with both service reliability and largest area coverage in Pueblo De Panay, Barangay Lawa-an, Roxas City, Capiz.

c.) International standards may be used as reference where local standards do not provide adequate information for the project's cabling system. These include but not limited to:

ISO 11801 – Specification of Structured Cabling for use within commercial premises.

American National Standard Institute (ANSI)/Telecommunication Industry Association (TIA)/Electronic Industry Alliance (EIA)-606-A – Administration Standard for the Telecommunications Infrastructure of Commercial Buildings.

ANSI/TIA/EIA-568-B.2-1 – Commercial Building Telecommunications Cabling Standard.

d.) The complete Structured Cabling System shall be suitable to support Analog and Digital Voice Applications, Data, Local Area Networks (LAN), Wide Area Networks (WAN), Video and Low Voltage devices on common cabling platforms.

## **9.) CLOSED CIRCUIT TELEVISION (CCTV) DESIGN**

a.) Systems shall be designed so that the specification is open enough to allow any competent CCTV installer to tender for contract, but sufficiently specific to ensure that competing companies cannot gain an unfair advantage by quoting for inferior equipment;

b.) The CCTV System shall also be designed to complement the operational requirement and management strategy for the Three Storey Building 1;

c.) Conduits and cables shall be provided ready for future termination of devices.

## **10.) FIRE DETECTION AND ALARM SYSTEM**

a.) The fire alarm system shall be installed in the latest edition of Philippine Electrical Code (PEC), Article 7.60 – Fire Alarm System, National Fire Alarm System and Signaling Code (NFPA) 72, and other prevailing standards.

- b.) Automatic door release mechanisms shall be provided on corridor fire doors and shall be electrically linked to the fire Alarm System. These shall be supplied as part of the main Contract;
- c.) The fire alarm system shall be linked to the main gas services valve (if applicable) for the isolation of the gas supply on activation of the fire alarm system;
- d.) A Fire Alarm System shall be provided with an L3 standard unless a higher standard is required. Use fire resistant cabling or wireless technology whichever is the most economical and reliable. Maintenance issues need also to be considered;
- e.) All surface mounted cables are to be concealed in plastic trunking, low voltage compartments, or attached to cable trays. Vertical drops from the ceiling to break glass units shall be in galvanized steel conduits;
- f.) A fire alarm sounder must be provided externally in the general location of the fire alarm control panel. Fire alarm sounders must have a distinct sound to any other sound activating unit;
- g.) All manual call point units are to be of the fully resettable type via key operation. The use of breakable glass is to be avoided; and,
- h.) The standard specification for the proper installation and connection of fire alarm and connection of fire alarm wiring and equipment shall be governed by DPWH Standard Specification for Fire Alarm System, Item 1210.

## **11.) MECHANICAL DESIGN STANDARDS**

### **a.) AIR – CONDITIONING SYSTEM**

- i. The air conditioning system of the building shall be centralized using a multi-split air-cooled air-conditioning system (Variable Refrigerant Flow (VRF) or air-cooled scroll chiller system.
- ii. Location of the VRF components or water-cooled chillers shall be indicated in the mechanical plan.
- iii. The pipes and insulation materials shall comply with the accepted mechanical engineering design standards.
- iv. Fan Coil Unit (FCU) cassette type (concealed) shall be placed in each location as determined by the Designer.
- v. All pumps, motors, and other mechanical equipment should be rated 380 volts, 3-phase.
- vi. Refrigerant to be used should be R-410a/R-32 and/or natural.

vii. Cooling load requirements for regularly occupied spaces in the building shall be in accordance with American Society of Heating, Refrigerating and Air-conditioning Engineers (ASHRAE) 55-2016: Thermal Environment Conditions for Human Occupancy.

viii. Strategies to maintain appropriate thermal shall be identified in accordance to the need of the users and the Sustainability target Performance.

## **12.) SANITARY AND PLUMBING DESIGN STANDARDS**

### **a.) WASTE AND VENT LINE PIPING SYSTEM**

The drain, waste, and vent line piping system must conform to American Society for Testing and Materials (ASTM) D-2729, ISO 4435 and ISO 3633. Separate lines shall be provided for soil waste and greywater

### **b.) WATER LINE PIPING SYSTEM**

The water piping system must conform to ASTM F2389 for Polypropylene random copolymer (PP-R), Pressure Nominal (PN)-20 Type 3 pipe and ASTM A53/A53. The system must provide for dual \A112.19.4.4m, A112.19.3, A112.19.5.

i. Identify all water-consuming systems which should include mechanical equipment, plumbing fixtures and fittings, provision for recycled water system, rainwater collection, and other process water for appliances.

ii. Water-efficient strategies shall be applied including water-efficient mechanical equipment, water-efficient plumbing fixtures and fitting, rainwater collection, recycled water system, and water efficient appliances.

### **c.) DRAINAGE SYSTEM**

Storm drainage design analysis shall use the recorded rainfall data, slope and roof areas of the Project Building, and the maximum flood level in the area.

### **d.) SEWAGE SYSTEM**

A Septic Vault shall be provided to serve as holding tank and/or lift station prior to disposal to the sewage treatment plant.

#### **e.) TOILETS**

- i. The toilets shall be properly ventilated and provided with running water through a dual piped water supply system, tap and recycle waterline.
- ii. Special facilities (i.e., fixed and movable grab bars) for persons with disabilities shall be provided in accordance with the amended IRR of BP 344.

### **13.) MATERIALS FOR THE PROJECT**

Construction materials for the Project must conform to the DPWH Standard Specifications for Public Works, Volume III (Blue Book).

New materials which are not covered by the Blue Book must pass the requirements of the Product Accreditation Scheme prescribed under DPWH Order No. 189, series of 2002, and be accredited by the CEO – Roxas City Government before they are used in the Project.

#### **a.) REINFORCED CONCRETE**

1. For structural members, the following material strength shall be used:

- i. All Reinforced Concrete Elements -  $f'_c = 35\text{MPa}$  (5000Psi)
- ii. For non-structural members, the minimum comprehensive strength of concrete shall be 27.6MPa (4,000 psi).
- iii. Reinforcing steel bars shall be ASTM A706 with a minimum yield strength,  $F_y$  equivalent to 75,000 psi - 80,000 psi for 20mm diameter and larger diameter rebars, and 414 MPa (60,000 psi) for 16mm diameter and smaller rebars. Alternately, ASTM 615 can be used subject to the conditions specified in the Code as follows:
  1. The actual yield strength based on mill tests does not exceed  $F_y$  by more than 125 MPa; and
  2. The ratio of the actual tensile strength to the actual yield strength is not less than 1.25.

#### **b.) STRUCTURAL STEEL**

For the structural members, ASTM A992 with minimum yield strength,  $F_y$  of 248 MPa (36,000 psi) shall be used. All structural steel works shall be painted with a minimum of two coats of zinc-rich primer paint, and shall be final coated with aluminum silver paint.

#### **c.) PROTECTION FROM CORROSION**

Where applicable, the building must be protected from corrosion/rust up to at least five (5) years.

#### **d.) FIRE PROTECTION**

Fire protection requirements for office/institutional building shall be as per latest Fire Code of the Philippines (RA 9514)

#### **e.) NOISE LEVEL LIMIT**

The sound transmission/noise reduction rating of the building and its component materials, including wall partitions and floor slabs, must reduce noise level such that it will comply with the accepted standards on noise reduction prescribed for an office area.

Appropriate sound absorbing or sound insulation material must be used on walls and partitions to reduce sound transmission inside the function rooms.

Acoustic materials may also be used at the interior walls and ceiling to prevent reverberation/echoing of sound produced inside the room. Sound proofing materials or sound sealing. Weather strip materials such as rubber foam must be installed on clearances of the doors and windows of the room to block the noise from adjoining areas.

Pertinent occupational safety and health standards such as the permissible noise exposure limit, threshold limit value and other applicable occupational and safety standards must be complied with during the construction of the building.

#### **f.) RESISTANCE TO RAINWATER PENETRATION**

The building shall be free from rainwater leaks.

#### **g.) OTHER REQUIREMENTS**

- i. The designer should have extensive experience in the use and incorporation of indigenous materials/products in the design as well as designing spaces used as museums, evacuation center, commercial and institutional buildings.
- ii. The proposed project will feature sustainable technology.
- iii. Special access for PWD shall be provided in accordance with the Amended IRR of BP 344.
- iv. Provision of rainwater harvesting cistern based on the Sustainability Target Performance.
- v. Provision of materials recovery facility.
- vi. Provision of signage and alarm system for the visually and hearing impaired person.
- vii. Licensed Filipino professionals must sign architectural and engineering design plans.
- viii. Environment – friendly termite abatement and maintenance.
- ix. Use of the excavated basement soil in the project to significantly reduce the waste leaving the project site.

### **3.3 PROJECT IMPLEMENTATION**

#### **A. DESIGN PHASE**

Final Design/Contract Document Phase Services to include the preparation of final Detailed Architectural and Engineering Design plans/drawings, specifications, scope of work, and other tender documents. **(Estimated Period: 60 calendar days).**

#### **THE WINNING BIDDER/CONTRACTOR SHALL:**



- 1.) Prepare the Construction Drawings and Specifications from the Preliminary Design setting forth in detail the work required for the architectural, structural, mechanical, electrical, auxiliary system, among others, presented in the form of floor plans, elevations, sections, and details in using appropriate scales and full size details as required in the Building Permit applications and other applications necessary for the construction of the building, together with the schedules and notes conforming with features shown in the preliminary plans and patterned after government standards and requirements.
- 2.) Prepare scope of works, technical documents and technical specifications describing type and quality of materials, finish and manner of construction, and the general conditions under which the Project is to be constructed;
- 3.) Provide one (1) recommended material/ equipment/ product type or make and one (1) alternative conforming to the technical specifications; and,
- 4.) Furnish not less than seven (7) complete sets of working drawings, specifications, and other tender documents normally required for purposes of building permit application and construction work:

In order to facilitate the process of design review by the CEO – Roxas City Government on the concepts of the proposed structures/facilities, a presentation and discussion of Inception Report, Design Criteria and Specifications, Preliminary Designs, and the Draft Final Design shall be undertaken.

Once approved by the CEO – Roxas City Government, the Winning Bidder's DAED shall form part of the MPSS. The CEO – Roxas City Government approved the DAED, together with the MPSS provisions on Construction under Section VI hereof, shall govern the actual Construction undertaken by the Winning Bidder.

The DAED shall be undertaken with a degree of accuracy that will allow estimates to be made within approximately plus or minus five percent (+/-5%) of the final quantities.

The Winning Bidder shall undertake the necessary field surveys and investigation in accordance with the DPWH Guidelines, Criteria, and Standards (DGCS) 2015 Edition Volume 2-B Engineering Surveys, and Volume 2-C Geological and Geotechnical Investigations in the preparation of the DAED plans in accordance with the requirements of the CEO – Roxas City Government. In carrying out these works, the Winning Bidder shall ensure that the engineering, environmental, social, and resettlement teams collaborate closely throughout the entire process, particularly during field investigations and the development of the preliminary and final DAED plans. The Winning Bidder shall ensure that all designs submitted for approval have fully taken into account key findings from the engineering, environmental, social, and resettlement analyses and that negative environmental and social impacts have been minimized or eliminated to the fullest extent possible.

The Winning Bidder shall prepare the “For Construction Drawings” (FCD) based on DAED in accordance with the MPSS and shall submit the FCD to the CEO – Roxas City Government for approval prior to the execution of the Construction works.

## **B. CONSTRUCTION PHASE**

### **1. SCOPE OF CONSTRUCTION**

The Winning Bidder shall undertake the Construction Works for the Project.

#### **a.) STANDARDS AND SPECIFICATIONS FOR CONSTRUCTION**

i. The Construction of the Project shall be implemented according to the DAED prepared by the Winning Bidder, as reviewed and approved by the CEO – Roxas City Government.

ii. The Construction of the Project shall also comply with the MPSS for Construction herein prescribed. The MPSS for Construction includes conformance to the provisions pertaining to building under the latest edition of the DPWH Blue Book, Volumes II and III.

The Blue Book prescribes, among other things, the material requirements and construction requirements for different items of work, including the tests to be conducted during Construction by the Winning Bidder. The Blue Book incorporates provisions of the ASTM and ACI, among others, pertaining to construction. Attention shall be given to the relevant items of work in the following Parts of the Blue Book listed in Section 2.1 item c of this TOR.

#### **b.) DETAILED CONSTRUCTION MANAGEMENT PLAN**

The Winning Bidder shall prepare a Detailed Construction Management Plan (DCMP) as part of the DAED that shall be submitted to the CEO – Roxas City Government for review and approval. The DCMP shall be based on the preliminary Construction Plan submitted in the Technical Proposal of the Bidder’s Bid, as updated and detailed to fit the elements of DAED. The DCMP must identify the procedures, processes, and management systems that the Winning Bidder will apply to ensure the implementation of the Construction Works in accordance with the Contract Agreement.

As a minimum, the DCMP must define the following:

- i. Construction organization and management structures for the Project, identifying key personnel, positions and functions, contractors, and sub-contractors in accordance with Section III – Bid Data Sheet (BDS);
- ii. Construction methodologies and procedure, including pre-fabrication, if any;
- iii. Quality control and assurance programs for all works;
- iv. Construction schedule, milestones, and S-Curve covering all components of the Project;
- v. Major construction equipment and materials to be used;
- vi. Health, safety and security program in accordance with Department Order No. 13, series of 1998, of the Department of Labor and Employment (DOLE) as stated in the DPWH Department Order No. 129, series of 2014;
- vii. Measures and procedures for:
  1. Control and monitoring of the Construction schedule as against actual Construction works;
  2. Supervision and monitoring of the quality control and assurance programs for the Works, including the integrity of tests conducted;
  3. Monthly updating of the Construction Plan and monthly progress reports;
  4. Development and approval of Construction documentation; and,
  5. Survey and condition monitoring.
- viii. Strategies for:
  1. Managing risks;
  2. Obtaining all necessary approvals and permits from National and Local Government authorities; and,
  3. Details of records management and indexing protocols that will enable referencing of all design and construction records to the Project's components, sub-projects, work type, and location.

### **c.) COMPLETION OF CONSTRUCTION**

i. The CEO – Roxas City Government shall issue a Certificate of Final Completion of Construction and certify that the following requirements are fully met:

1.) All Tests for Construction comply with the pertinent provisions of the Blue Book and other test requirements of the MPSS for Construction;

2.) All parts of the Project have been completed in accordance with the approved DAED and the MPSS for Construction, including the rectification of all defects.

3.) The Winning Bidder has submitted the required Operation and Maintenance Manuals meeting the MPSS, certified and approved by the CEO – Roxas City Government,

4.) The Winning Bidder's Project Completion Report has been submitted and certified by the CEO – Roxas City Government as complying with the requirements.

ii. The Winning Bidder must submit as-built drawings and other supporting documents including Building Information Modelling (BIM) to the CEO – Roxas City Government not later than two (2) months after the date of the issuance of the Certificate of Final Completion.

## **4. MINIMUM, PERFORMANCE SPECIFICATIONS and PARAMETERS (MPSP)**

The Contractor shall undertake the design and construction of the Project in conformance with the MPSP.

The Contractor shall provide design-build services, which shall meet the following minimum performance specifications and parameters:

### **4.1 PURPOSE**

The purpose of the Minimum Performance Specifications and Parameters (MPSP) are:

a. Establish the minimum requirements that the Bidder must conform to the design and construction of the Project, proposed Three (3) Storey Building, Pueblo De Panay, Barangay Lawa-an, Roxas City, Capiz, using the Design and Build mode of implementation; and,

b. Create certainty of both the CEO – Roxas City Government and the Bidder in the standards of performance expected of the bidder.

### **4.2 GOVERNING CODES AND SPECIFICATIONS**

The following Design Codes and Specifications shall govern the DAED:

a. Presidential Decree (PD) No. 1096, National Building Code of the Philippines (NBCP) and its Revised Implementing Rules and Regulations (IRR);

- b. Republic Act (RA) No. 9514, Fire Code of the Philippines of 2008;
- c. Batas Pambansa (BP) 344, An Act to Enhance the Mobility of Disabled Persons Requiring Certain Public Buildings, Institutions, Establishments and Public Utilities to install Facilities and Other Devices;
- d. Bureau Of Product Standards (BPS)-Department of Trade and Industry (DTI);
- e. Philippine Green Building Code;
- f. Architectural Act of the Philippines;
- g. Architecture Act of 2004 (RA 9266);
- h. National Structural Code of the Philippines;
- i. Philippine Electrical Code (PEC), 2017;
- j. Sanitation Code of the Philippines;
- k. Revised National Plumbing Code of the Philippines;
- l. Philippine Mechanical Code 2012;
- m. Philippine Society of Ventilating, Air-conditioning and Refrigerating Engineers (PSVARE);
- n. Philippine Electronics Code;
- o. Republic Act 10066, National Cultural Heritage act of 2009
- p. Clean Air Act (RA 8749)
- q. Philippine Clean Water Act (RA 9275);
- r. Water Code of the Philippines (PD 1067);
- s. American Institute of Steel Construction (AISC);
- t. American Concrete Institute (ACI);

- u. American Iron and Steel Institute (AISI);
- v. American Welding Society (AWS);
- w. American National Standards Institute (ANSI);
- x. American Society for Testing Materials (ASTM);
- y. Underwriters' Laboratories, INC.;
- z. American Society of Heating, Refrigeration, and Air-Conditioning Engineers (ASHRAE);
- aa. Ecological Solid Waste Management Act of 2009 (RA 9003);
- bb. DPWH Design Guidelines Criteria and Standards (DGCS) 2015 Edition Volume 6 – Public Buildings and Other Related Structures; and,
- cc. All applicable Laws, Issuances, Regulations, and Ordinances.

#### **4.3 USE OF APPROPRIATE BUILDING DESIGN AND TECHNOLOGY**

- a. The architectural character of the building should appropriately project the image of the Government Office under the NBCP and its Revised IRR;
- b. Building form shall be adapted to tropical climate conditions and the functional requirements of a government office that is culturally, socially, economically, and environmentally responsive to local and international best practice standards;
- c. Choice of building technology and materials should consider site and climatic conditions;
- d. Building systems shall adopt energy efficient and user – friendly technologies both active and passive strategies, techniques, and technologies to establish and promote efficient building performance. It shall integrate energy efficiency, sustainable building ecology, efficient monitoring and management systems, daylight harvesting, passive and active thermal cooling, greywater and rainwater collection and filtering, systematic landscape irrigation, and other sustainable systems. Day lighting shall be interfaced with energy-efficient electrical lighting. Passive cooling and thermal comfort systems and management/monitoring of power consumption shall be incorporated;

- e. Building envelope, materials, and finishes shall be specified in accordance with the applicable building standards. Exterior Architectural features shall be used to conceal utilities such as the Air Cooled Condensing Unit (ACCU) but shall be provided with access for maintenance. Use of renewable and recyclable materials should be maximized;
- f. Environmental concerns should be addressed properly and shall consider regenerative practice, supported by thorough studies and data review of the site condition, and building performance. It shall also comply with the laws, codes, and ordinances on environmental preservation;

#### **4.4 INCORPORATION OF WASTE MANAGEMENT SYSTEMS**

- a. All liquid waste and sewage shall be treated and free from harmful elements prior to their disposal to the waste disposal system;
- b. Recycled water shall be strategically collected, filtered, and distributed for landscaping irrigation, maintenance and operation, and other domestic purposes.

#### **4.5 INFORMATION TECHNOLOGY AND LOCAL AREA NETWORK (IT/LAN) INFRASTRUCTURE**

Reference standard shall be the Telecommunications Industry Association's TIA-942 Telecommunications Infrastructure Standard for Data Centers and other relevant references.

#### **4.6 RELIABLE POWER**

The Building shall be provided with provisions for 100% Emergency Generators and Uninterruptable Power Supply (UPS) ready for critical equipments like servers and life support.

#### **4.7 LIGHTING PROTECTION**

The Building shall be provided with a lightning protection system.

#### **4.8 BUILDING LIFE SAFETY FEATURES**

The Building shall be equipped with a Fire Protection System in accordance with the provisions of the Fire code of the Philippines (FCP).

#### **4.9 BUILDING SECURITY AND MONITORING FEATURES**

The Building shall have adequate Security Surveillance and Electronic Security Systems, Intrusion and Fire Alarm System, and Automated Monitoring Systems.

- a. Building Automation and Monitoring Systems (BAS/BMS). The system shall be flexible to allow addition of features and monitoring points in the communication between BMS, IT/LAN and other equipment;
- b. Security Surveillance and Electronic Security Systems, Intrusion, and Fire Alarm System;

#### **4.10 WATER SUPPLY FACILITIES**

Supply of water shall be sourced from the existing water mains through the provision of cistern tanks, the capacity of which should meet the demands of the building occupants based on the Revised National Plumbing Code of the Philippines and the Metro Roxas Water District (MRWD) parameters, as well as the fire sprinkler system based on the Fire Code provisions.

#### **4.11 DRAINAGE SYSTEM**

The Building shall be provided with a drainage system that can take in and dispose-off the maximum recorded rainfall and flood level in the area efficiently.

#### **4.12 SEWAGE TREATMENT**

A Septic Vault shall be provided to serve as holding tank and/or lift station prior to disposal to the sewage treatment plant.

#### **4.13 UTILITY EFFICIENCY AND CONSERVATION**

##### **a. ENERGY CONSUMPTION REDUCTION**



The building shall reduce energy consumption through energy conservation and efficient strategies to reduce overall energy demand of the project in compliance with the Philippines' National Climate Change Action Plan (NCCAP) and Nationality Determined Contribution (NDC) to reduce energy consumption on all government buildings.

## **b. WATER EFFICIENCY AND CONSERVATION**

- i. The building systems shall apply water efficiency and conservation strategies to reduce the potable water consumption and overall potable water demand.
- ii. Reduction shall be in reference to projected building's base case excluding irrigation.
- iii. Efficient landscape irrigation shall be applied to reduce use of potable water consumption and demand through strategic planning.

## **c. PROVISION FOR ALTERNATIVE ENERGY**

- i. Reduce environmental impact by using renewable energy.
- ii. Energy reduction by use of renewable energy shall be calculated based on the project base case.
- iii. Energy Consumption rates for each identified energy-consuming system in the design shall conform with the Philippine Electrical Code (PEC) of the Institute of Integrated Electrical Engineers of the Philippines (IIEE, 2017).

## **5. APPROVED BUDGET FOR THE CONTRACT (ABC)**

The ABC is PESOS: Four Hundred Thirty Six Million Four Hundred Ninety-eight Thousand Seven Hundred Thirty-one Pesos and 12/100 (Php 436,498,731.12). Bids higher than ABC shall be automatically rejected.

## **6. PROPOSED IMPLEMENTATION SCHEDULE**

### **6.1. PROJECT SCHEDULE**

Please see Annex "C".

## **7. ELIGIBILITY CRITERIA FOR BIDDERS**

The Eligibility Criteria for Bidders shall govern by the Design and Build Scheme (Annex "G") of IRR of RA 9184.

The Bidder shall meet the following requirements:

A. Active Philippine Contractor Accreditation Board (PCAB) License of:

a.1 Quadruple A (AAAA) in General Engineering

b.1 Large B in Building and Industrial Plant

c.1 Small B in Structural Steel Works

d.1 Small B in Electrical Works

e.1 Small B in Mechanical Works

B. Shall have completed at least two (2) similar Design and Build Projects having a total value of at least Fifty Percent (50%) of the total ABC.

C. Shall have completed a single and similar Design and Build Project of at least Fifty Percent (50%) of the total ABC.

D. Fulfills ISO 9001:2015 for a Quality Management System

## **8. CONTENTS OF THE BID**

### **8.1. TECHNICAL PROPOSAL - IN THE FIRST ENVELOPE**

Design scheme of the proposed New City Hall Building should contain, but not limited to the following:

#### **BUILDING DESIGN DRAWINGS**

1. Preliminary Architectural and Engineering Design (PAED) Plans of this TOR as mentioned in Section 3.2.A - PAED by the Prospective Bidder:

a.) Section 3.2.A.1 - Architectural Plans duly Signed and Sealed by Licensed Architect

b.) Section 3.2.A.2 - Structural Plans duly Signed and Sealed by Licensed Structural Engineer

c.) Section 3.2.A.3 - Mechanical Plans duly Signed and Sealed by Professional Mechanical Engineer

d.) Section 3.2.A.4 - Plumbing Plans duly Signed and Sealed by Registered Master Plumber

e.) Section 3.2.A.5 - Fire Protection duly Signed and Sealed by Professional Mechanical Engineer

f.) Section 3.2.A.6 - Electrical Plans duly Signed and Sealed by Professional Electrical Engineer

2. Architect's Perspective

## **OTHER REQUIREMENTS**

1. Considering that this project involves a complex and unique undertaking, bidders are required to make an oral presentation of building and interior spaces, among others, **within 10 days after the deadline for submission of technical proposal**; and,

2. Proposal should include a report containing the performance of all design consultants on all accomplished similar building projects in the recent five (5) years, in accordance with the required minimum years of experience of key personnel in accordance with Government Procurement Policy Board (GPPB) and RA9184.

## **8.2. FINANCIAL PROPOSAL - IN THE SECOND ENVELOPE**

The contents of Financial Proposal - In the Second Envelope shall be governed by RA 9184 and its IRR.

## **9. PROCEDURE AND CRITERIA FOR BIDS EVALUATION**

The Procedure and Criteria for Bids Evaluation shall be governed by RA 9184 and its IRR.

## **10. DATA TO BE PROVIDED BY CEO - ROXAS CITY GOVERNMENT**

These data are for reference only and does not guarantee the Contractor that the data provided are correct, free from error, and applicable to the project at hand. The Contractor is responsible for the accuracy or applicability of any data that he will use in his design-build proposal and services.

Sample Data for Buildings:

a. Lot information Plan

b. Design and Guidelines

## **11. DOCUMENTS TO BE PROVIDED BY THE CONTRACTOR DURING CONTRACT IMPLEMENTATION**

- a. Detailed Architectural and Engineering Plans (including editable CAD file)
- b. Design Analysis
- c. Survey Data
- d. Quantity Calculation
- e. Detailed Geotechnical Investigation Report
- f. As-Built Plans

## **12. DESIGN AND BUILD PERIOD**

The Winning bidder shall commence actual works upon the issuance by the Head of Procuring Entity of the Notice to Proceed (NTP).

The Winning Bidder shall complete the DAED and submit within **sixty (60) calendar days** period to the CEO - Roxas City Government for review and approval by the City Mayor.

Considering that this is a flagship, priority and fast track infrastructure project that needs to be completed on a tight schedule, the Contractor shall complete the design and build services under the contract within Four Hundred Eighty-five (485) calendar days.

# **Bill of Quantities**

**Public Bidding for the Proposed Construction of a Three (3) Storey Roxas City Hall Building at Pueblo De Panay, Barangay Lawa-an, Roxas City, Capiz under ITB No. RC-2025-002i**

CODE	Item Description	UOM	QTY	Unit Cost	Total Cost
	<b>Volume I</b>				
Part A	Detailed Architectural and Engineering Plans (Including editable CAD file)	L.S	1.00		
Part B	Design Analysis and Specification	L.S	1.00		
Part C	Survey Data	L.S	1.00		
Part D	Quantity Calculation	L.S	1.00		
Part E	Detailed Geotechnical Investigation Report and Environmental Compliance	L.S	1.00		
	<b>Volume II</b>				
Part A	Facilities of Engineer	L.S	1.00		
Part B	Other General Requirements				
II.B.2	Project Billboard/Signboard	L.S	1.00		
II.B.3	Occupational Safety and Health Program	L.S	1.00		
II.B.4	Mobilization/ Demobilization	L.S	1.00		
	<b>Volume III</b>				
Part A	Siteworks				
III.A.1	Clearance and Grubbing	sq.m.	20,000.00		
III.A.2	Structure Excavation (Hard Rock)	cu.m.	37,580.29		

III.A.3	Structure Excavation (Soft Rock)	cu.m.	13,008.12		
III.A.4	Soil Replacement & Structural Fill	cu.m.	86.40		
III.A.5	Slope Protection	cu.m.	13,414.04		
Part B	<b>Plain and Reinforced Concrete Works</b>				
III.B.1	Structural Concrete (Ready Mix 5000 PSI, 28 days)	cu.m.	2,957.58		
III.B.2	Lean Concrete (Ready Mix 3000PSI, 28 days )	cu.m.	19.57		
III.B.3	Reinforce Steel (Deformed), Grade 80	kg	585,548.64		
III.B.4	Formworks and Falseworks	sq.m.	13,414.04		
Part C	<b>Finishing</b>				
III.C.1	150mm CHB Non Load Bearing	sq.m.	8,678.46		
III.C.2	100mm CHB Non Load Bearing	sq.m.	2,695.93		
III.C.3	Cement Plaster Finish	sq.m.	23,069.36		
III.C.4	Doors	L.S	1.00		
III.C.5	Windows	L.S	1.00		
III.C.6	Stainless Steel Metal Railings	m	363.60		
III.C.7	Structural Roof Framing	sq.m.	2,440.00		
III.C.8	Prepainted Metal Sheets (Rib type, Long Span above 0.5mm thk)	sq.m.	2,440.00		
III.C.9	Water Proofing	sq.m.	287.72		
Part D	<b>Mechanical/ Plumbing/ Sanitary/ Fire Protection</b>				

III.D.1	150 mm Ø - 300 mm Ø PVC Pipe	In.m	1,761.60		
III.D.2	50 mm Ø - 100 mm Ø PVC Pipe	In.m	3,412.50		
III.D.3	50 mm Ø - 110mmØ PPR Cold Water Line	In.m	2,548.00		
III.D.4	20mmØ - 40mmØ PPR Cold Water Line	In.m	1,134.00		
III.D.5	Pumps ( Plumbing and Sanitary )	L.S	1.00		
III.D.6	25mmØ - 50mmØ BI Pipe and Fittings	In.m	2,940.00		
III.D.7	65mmØ - 150mmØ BI Pipe and Fittings	In.m	690.00		
III.D.8	Ductworks and Accessories	L.S	1.00		
Part E	<b>Electrical (with Provision for Solar Power)</b>				
III.E.1	PVC, 16mm - 20mm dia	In.m	17,766.00		
III.E.2	uPVC, 110mm Dia	In.m	3,903.00		
III.E.3	32 mm Ø - 40 mm Ø Electrical Metal Tubing (EMT)	In.m	630.00		
III.E.4	50 mm Ø - 65 mm Ø Electrical Metal Tubing (EMT)	In.m	991.20		
III.E.5	Cable Tray 300mm x 150mm	In.m	158.84		
III.E.6	Grounding	L.S	1.00		
III.E.7	Switchboards, Panelboards And Control Centers	L.S	1.00		
III.E.8	Fire Detection Alarm System	L.S	1.00		
Part F	<b>Utility Building</b>				
III.F.1	Utility Building	L.S	1.00		
<b>TOTAL</b>					

Name of Bidder \_\_\_\_\_.

\_\_\_\_\_

*[signature]*

\_\_\_\_\_

*[in the capacity of]*

Duly authorized to sign Bid for and on behalf of \_\_\_\_\_

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



# Checklist of Technical and Financial Documents

## I. TECHNICAL COMPONENT ENVELOPE

### *Class “A” Documents*

#### Legal Documents

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

#### Technical Documents

- ☐ (f) Statement of the prospective bidder of all its ongoing government and private contracts, including contracts awarded but not yet started, if any, whether similar or not similar in nature and complexity to the contract to be bid; **and**
- ☐ (g) Statement of the bidder’s Single Largest Completed Contract (SLCC) similar to the contract to be bid, except under conditions provided under the rules; **and**
- ☐ (h) Philippine Contractors Accreditation Board (PCAB) License;  
**or**  
Special PCAB License in case of Joint Ventures;  
**and** registration for the type and cost of the contract to be bid; **and**
- ☐ (i) Original copy of Bid Security. If in the form of a Surety Bond, submit also a certification issued by the Insurance Commission;  
**or**  
Original copy of Notarized Bid Securing Declaration; **and**
- ☐ (j) Project Requirements, which shall include the following:
  - ☐ a. Organizational chart for the contract to be bid;
  - ☐ b. List of contractor’s key personnel (e.g., Project Manager, Project Engineers, Materials Engineers, and Foremen), to be assigned to the contract to be bid, with their complete qualification and experience data;

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

**Additional Documents to be submitted:**

- i. ☐ Preliminary Conceptual Design Plans in accordance with the degree of details specified by the procuring entity;
- ii. ☐ Design and construction methods;
- iii. ☐ List of design and construction personnel, to be assigned to the contract to be bid, with their complete qualification and experience data, and;
- iv. ☐ Value engineering analysis of design and construction method.

**Financial Documents**

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

***Class "B" Documents***

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

## II. FINANCIAL COMPONENT ENVELOPE

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

### Other documentary requirements under RA No. 9184

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

Each Bidder shall submit one (1) original and three (3) copies of the first and second components of its bid. An electronic copy of the bid should also be submitted in PDF file format in flash drive. Should there be discrepancies, the original copy would prevail.

