



CHECKLIST OF REQUIREMENTS FOR BIDDERS

ELIGIBILITY, TECHNICAL, AND FINANCIAL REQUIREMENTS SHOULD BE APPROPRIATELY SIGNED AND PROPERLY TABBED AS FOLLOWS:

Class “A” Documents:

ELIGIBILITY DOCUMENTS’ ENVELOPE

TAB A

- Registration certificate from the Securities and Exchange Commission (SEC), Department of Trade and Industry (DTI) for sole proprietorship, or Cooperative Development Authority (CDA) for cooperatives, or any proof of such registration as stated in the BDS;
- Mayor’s permit issued by the city or municipality where the principal place of business of the prospective bidder is located;
- Audited financial statements, stamped “received” by the Bureau of Internal Revenue (BIR) or its duly accredited and authorized institutions, for the preceding calendar year, which should not be earlier than two (2) years from bid submission; and
- Registration Certificate from Philippine Government Electronic Procurement System (PhilGEPS) – Platinum Membership

TAB B

Statement of all its on-going 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;

Sec IX Bidding Forms (SF-INFR-15)

This statement shall be supported with:

- Notice of Award or Notice to Proceed or Contract issued by the owners.
- Certificate of Good Standing (No slippage delay).
- All spaces should be filled up with correct information.

Statement of the Bidder’s Single Largest Completed Contract (SLCC) similar to the contract to be bid, in accordance with ITB Clause 5.4.

Note: Similar project (SLCC) refers to Three (3)- Storey Building, costing at least fifty percent (50%) of the ABC equivalent to ₱ 13,199,975.76.

Sec IX Bidding Forms (SF-INFR-15)

This statement shall be supported with:

- Program of Works (SLCC)
- Notice of Award or Notice to Proceed or Contract issued by the owners.
- Owner’s Certificate of Final Acceptance; or the Constructors Performance Evaluation Summary (CPES) Final Rating or the Certificate of Completion, must be satisfactory
- All spaces should be filled up with correct information.

TAB C

Valid Philippine Contractors Accreditation Board (PCAB) License at least: Size Range – Medium A, License Category- B

TAB D

Net Financial Contracting Capacity (NFCC) Computation

NFCC = [(Current assets minus current liabilities) (15)] minus the value of all outstanding or uncompleted portions of the projects under ongoing contracts, including awarded contracts yet to be started, coinciding with the contract to be bid.

Class “B” Documents: If applicable, Joint Venture Agreement in accordance with RA 4566.

Technical Documents:

TAB E **The Bid Security shall be in the form of a Bid Securing Declaration or any of the following forms and amounts:**

1. The amount of not less than **₱ 527,999.03** [2% of ABC], if bid security is in cash, cashier’s/manager’s check, bank draft/guarantee or irrevocable letter of credit;
2. The amount of not less than **₱ 1,319,997.58** [5% of ABC] if bid security is in Surety Bond.

TAB F **Project Requirements, which shall include the following:**

- Organizational chart for the contract to be bid;
- List of contractor’s personnel as stated in the Bid Data Sheet Clause 12.1 (b) (ii.2)
- 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.
- Construction Schedule and S-curve;
- Manpower Schedule;
- Detailed Construction Methods;
- PERT/CPM (network diagram);
- Equipment/Tools Utilization Schedule;
- Site Inspection Certificate issued by BulSU-PMO;
- Contractor’s Confirmation (Construction Specifications); and
- Certification of Satisfactory Performance (with no negative slippage) from Project Management Office (PMO) for previous and on-going projects with BulSU, if any.

TAB G Sworn statement in accordance with Section 25.3 of the IRR of RA 9184 and using the form prescribed in Section IX. Bidding Forms.

FINANCIAL DOCUMENTS’ ENVELOPE

<u>TAB H</u>	Duly signed Financial Bid Form
<u>TAB I</u>	Duly signed and priced Bill of quantities
<u>TAB J</u>	Duly signed and priced Detailed Estimates
<u>TAB K</u>	Cash Flow by the Quarter and Payment Schedule
<u>TAB L</u>	Detailed Unit Price Analysis
<u>TAB M</u>	Back-up quantity computation sheet/tally sheet as programmed
<u>TAB N</u>	Soft copy in compact disc (CD) of the duly priced Bill of Quantities & Detailed Estimates using Microsoft Excel

Notes:

1. Each Bidder shall submit one (1) original or certified true copy of the original and three (3) additional photocopies of the first (Eligibility/Technical) and second components (Financial) of its bid duly signed by the authorized representative of the bidder.
2. Any missing document in the above mentioned checklist is a ground for outright rejection of the bid.
3. In case of discrepancies between this checklist and the bidding documents the latter shall prevail.
4. Any bid submitted after the deadline for submission and receipt of bids prescribed by the BulSU shall be declared “Late” and shall not be accepted by the BulSU.



Republic of the Philippines
BULACAN STATE UNIVERSITY
City of Malolos, Bulacan

**INVITATION TO BID FOR
COMPLETION OF THE COLLEGE OF INDUSTRIAL TECHNOLOGY
(CIT) BUILDING – INFRA-2019-10**

The **BULACAN STATE UNIVERSITY (BulSU)**, through its **Bids and Awards Committee (BAC)**, invites contractors to apply for eligibility and bid for the project hereunder described:

Name of Project	:	Completion of the College of Industrial Technology (CIT) Building
Location	:	Bulacan State University, Main Campus
Scope of Work	:	Site Preparatory Works, Concrete Works, Structural Steel/ Metal Works, Thermal & Moisture Control, Doors and Windows, Finishes, Electrical Works, Plumbing Works, and Others
PCAB License	:	Size Range – Medium A License Category- B
Similar Project	:	Construction of at least Three (3)-Storey Building, costing at least fifty percent (50%) of the ABC equivalent to ₱ 13,199,975.76
ABC	:	₱ 26,399,951.51
Completion Date	:	One Hundred Eighty (180) calendar days

The prospective bidder must have completed a Single Largest Completed Contract (SLCC) that is similar to the contract to be bid, and whose value, adjusted to current prices using the PSA consumer price indices, must be at least fifty percent (50%) of the ABC to be bid: Provided, however, that contractors under Small A and Small B Categories without similar experience on the contract to be bid may be allowed to bid if the cost of such contract is not more than the Allowable Range of Contract Cost (ARCC) of their registration based on the guidelines as prescribed by the PCAB. The Eligibility Check/Screening as well as the Preliminary Examination of Bids shall use non-discretionary “pass/fail” criterion. Post-qualification of the lowest calculated bid shall be conducted.

All particulars relative to Eligibility Statement and Screening, Bid Security, Performance Security, Pre-Bidding Conference(s), Evaluation of Bids, Post-Qualification and Award of Contract shall be governed by the pertinent provisions of R.A. 9184 and its Implementing Rules and Regulations (IRR).

The schedule of activities is listed below:

Activities	Date/Time	Venue
1. Advertisement Period	April 12, 2019 – April 19, 2019	PhilGEPS website (www.philgeps.gov.ph), BulSU website (www.bulsu.edu.ph) and at conspicuous places in the premises of BulSU
2. Issuance of Bid Documents	April 12, 2019 – May 6, 2019	Procurement Office, Mendoza Hall (near Gate 4), BulSU Main Campus, City of Malolos, Bulacan
3. Pre-bid Conference	April 23, 2019 (Tuesday), 1:30 PM	BAC Function Room, 3 rd Floor, Hostel, Bulacan State University- Main Campus, City of Malolos, Bulacan
4. Deadline of Submission of Bids	May 6, 2019 (Monday) 1:00 PM	BAC Function Room, 3 rd Floor, Hostel, Bulacan State University- Main Campus, City of Malolos, Bulacan
5. Opening of Bids	May 6, 2019 (Monday) 1:30 PM	

Bid Documents will be available only to prospective bidders upon payment of a non-refundable amount of **TWENTY THOUSAND PESOS ONLY (P 20,000.00)** to the Bulacan State University Cashier, City of Malolos, Bulacan.

The Bulacan State University assumes no responsibility whatsoever to compensate or indemnify bidders for any expenses incurred in the preparation of the bid. Moreover, the Bulacan State University reserves the right to reject any or all bid proposal(s) at any time prior to contract award, declare the bidding a failure, or award the contract to the bidder whose offer is the most responsive, lowest calculated bid, and most advantageous to the government.

For further information, please refer to:

The Bulacan State University-BAC Secretariat
Guinhawa, City of Malolos, Bulacan 3000
With Telefax No (044) 794-7755 ; (044)919-780099 loc 1053

HERMOGENA A. BAUTISTA
BAC Chairperson, Infrastructure & Repairs



Republic of the Philippines
BULACAN STATE UNIVERSITY
City of Malolos, Bulacan
**BIDS AND AWARDS COMMITTEE FOR
INFRASTRUCTURE AND REPAIRS**

Project Reference No.: I-2019-10

Date: April 12, 2019

**INVITATION TO BID FOR
COMPLETION OF THE COLLEGE OF INDUSTRIAL TECHNOLOGY
(CIT) BUILDING –INFRA-2019-10**

1. The *Bulacan State University (BulSU)*, through the *Income Fund 2019* intends to apply the sum of *Twenty Six Million Three Hundred Ninety-Nine Thousand Nine Hundred Fifty-One Pesos and 51/100 (₱ 26,399,951.51)* being the Approved Budget for the Contract (ABC) to payments under the contract for **Completion of the College of Industrial Technology (CIT) Building–I-2019-10**. Bids received in excess of the ABC shall be automatically rejected at bid opening.
 2. The *Bulacan State University (BulSU)* now invites bids for **Completion of the College of Industrial Technology (CIT) Building–I-2019-10**. Completion of the Works is required *within One Hundred Eighty (180) calendar days upon receipt of Notice to Proceed*. Bidders should have completed a contract similar to the Project. The description of an eligible bidder is contained in the Bidding Documents, particularly, in Section II-Instruction to Bidders.
 3. Bidding will be conducted through open competitive bidding procedures using a non-discretionary “pass/fail” criterion as specified in the 2016 Revised Implementing Rules and Regulations (IRR) of Republic Act (RA) 9184, otherwise known as the “Government Procurement Reform Act”.
- Bidding is restricted to Filipino citizens/sole proprietorships, cooperatives, and partnerships or organizations with at least seventy five percent (75%) interest or outstanding capital stock belonging to citizens of the Philippines.
4. Interested bidders may obtain further information from *Bulacan State University* and inspect the Bidding Documents at the address given below during *office hours from 8:00 a.m. to 5:00 p.m., Monday to Friday only (Except on holidays)*.
 5. A complete set of Bidding Documents may be acquired by interested Bidders on *April 12, 2019* from the address 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 Twenty Thousand Pesos (₱ 20,000.00)*.

It may also be downloaded free of charge from the website of the Philippine Government Electronic Procurement System (PhilGEPS) and the website of the Bulacan State

University, provided that Bidders shall pay the applicable fee for the Bidding Documents not later than **May 6, 2019**.

6. The **Bulacan State University** will hold a Pre-Bid Conference on **April 23, 2019 (Tuesday), 1:30 p.m.** at the BAC Function Room, 3rd Floor, Hostel, Bulacan State University, Guinhawa, City of Malolos, Bulacan 3000, which shall be open to prospective bidders.
7. Bids must be duly received by the BAC Secretariat at the address below on or before **May 6, 2019 (Monday), 1:00 p.m.** All Bids must be accompanied by a bid security in any of the acceptable forms and in the amount stated in **ITB** Clause - 18.

Bid opening shall be on **May 6, 2019 (Monday), 1:30 p.m.** at the BAC Function Room, 3rd Floor, Hostel, Bulacan State University, Guinhawa, City of Malolos, Bulacan 3000. Bids will be opened in the presence of the bidders' representatives who choose to attend at the address below. Late bids shall not be accepted.
8. The **Bulacan State University** 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 Section 41 of RA 9184 and its IRR, without thereby incurring any liability to the affected bidder or bidders.
9. For further information, please refer to:

ANNE CAMILLE C. BAUTISTA

Procurement Office (BAC Secretariat Division)

Bulacan State University

Guinhawa, City of Malolos, Bulacan 3000

Tel. No. (044)919-7800 local 1053 or 1054; Fax No. (044) 794-7755

Email Address: bulsu.bac1secretariat@bulsu.edu.ph

Website: www.bulsu.edu.ph

HERMOGENA A. BAUTISTA

Chairperson

BAC Infrastructure and Repairs

A. General

1. Scope of Bid

- 1.1. The Procuring Entity named in the **BDS**, invites bids for the construction of Works, as described in Section VI. Specifications.
- 1.2. The name, identification, and number of lots specific to this bidding are provided in the **BDS**. The contracting strategy and basis of evaluation of lots is described in **ITB** Clause 27.
- 1.3. The successful Bidder will be expected to complete the Works by the intended completion date specified in **SCC Clause 1.17**.

2. Source of Funds

The BULACAN STATE UNIVERSITY has a budget or received funds from the Funding Source named in the **BDS**, and in the amount indicated in the **BDS**. It intends to apply part of the funds received for the Project, as defined in the **BDS**, to cover eligible payments under the Contract for the Works.

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

- 3.1. Unless otherwise specified in the **BDS**, the BULACAN STATE UNIVERSITY, as well as bidders and contractors, shall observe the highest standard of ethics during the procurement and execution of the contract. In pursuance of this policy, the Funding Source:
 - (a) defines, for purposes of this provision, the terms set forth below as follows:
 - (i) "corrupt practice" means behavior on the part of officials in the public or private sectors by which they improperly and unlawfully enrich themselves, others, or induce others to do so, by misusing the position in which they are placed, and includes the offering, giving, receiving, or soliciting of anything of value to influence the action of any such official in the procurement process or in contract execution; entering, on behalf of the BULACAN STATE UNIVERSITY, into any contract or transaction manifestly and grossly disadvantageous to the same, whether or not the public officer profited or will profit thereby, and similar acts as provided in Republic Act 3019;
 - (ii) "fraudulent practice" means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of the BULACAN STATE UNIVERSITY, and includes collusive practices among Bidders (prior to or after Bid submission) designed to establish bid prices at artificial, non-competitive levels and

to deprive the BULACAN STATE UNIVERSITY of the benefits of free and open competition;

- (iii) “collusive practices” means a scheme or arrangement between two or more Bidders, with or without the knowledge of the BULACAN STATE UNIVERSITY, designed to establish bid prices at artificial, non-competitive levels; and
- (iv) “coercive practices” means harming or threatening to harm, directly or indirectly, persons, or their property to influence their participation in a procurement process, or affect the execution of a contract;
- (v) “obstructive practice” is
 - (aa) deliberately destroying, falsifying, altering or concealing of evidence material to an administrative proceedings or investigation or making false statements to investigators in order to materially impede an administrative proceedings or investigation of the BULACAN STATE UNIVERSITY or any foreign government/foreign or international financing institution into allegations of a corrupt, fraudulent, coercive or collusive practice; and/or threatening, harassing or intimidating any party to prevent it from disclosing its knowledge of matters relevant to the administrative proceedings or investigation or from pursuing such proceedings or investigation; or
 - (bb) acts intended to materially impede the exercise of the inspection and audit rights of the BULACAN STATE UNIVERSITY or any foreign government/foreign or international financing institution herein.
- (b) will reject a proposal for award if it determines that the Bidder recommended for award has engaged in corrupt or fraudulent practices in competing for the Contract; and
- (c) will declare a firm ineligible, either indefinitely or for a stated period of time, to be awarded Contract funded by the Funding Source if it at any time determines that the firm has engaged in corrupt or fraudulent practices in competing or, or in executing, a Contract funded by the Funding Source.

3.2. Further, the BULACAN STATE UNIVERSITY will seek to impose the maximum civil, administrative, and/or criminal penalties available under the applicable laws on individuals and organizations deemed to be involved in any of the practices mentioned in **ITB** Clause 3.1 (a).

- 3.3. Furthermore, the Funding Source and the BULACAN STATE UNIVERSITY reserve the right to inspect and audit records and accounts of a contractor in the bidding for and performance of a contract themselves or through independent auditors as reflected in the **GCC** Clause 34.

4. Conflict of Interest

- 4.1. All Bidders found to have conflicting interests shall be disqualified to participate in the procurement at hand, without prejudice to the imposition of appropriate administrative, civil, and criminal sanctions. A Bidder may be considered to have conflicting interests with another Bidder in any of the events described in paragraphs (a) through (c) and a general conflict of interest in any of the circumstances set out in paragraphs (d) through (g) below:
- (a) A Bidder has controlling shareholders in common with another Bidder;
 - (b) A Bidder receives or has received any direct or indirect subsidy from any other Bidder;
 - (c) A Bidder has the same legal representative as that of another Bidder for purposes of this Bid;
 - (d) A Bidder has a relationship, directly or through third parties, that puts them in a position to have access to information about or influence on the bid of another Bidder or influence the decisions of the BULACAN STATE UNIVERSITY regarding this bidding process;
 - (e) A Bidder submits more than one bid in this bidding process. However, this does not limit the participation of subcontractors in more than one bid;
 - (f) A Bidder who participated as a consultant in the preparation of the design or technical specifications of the goods and related services that are the subject of the bid; or
 - (g) A Bidder who lends, or temporarily seconds, its personnel to firms or organizations which are engaged in consulting services for the preparation related to procurement for or implementation of the project, if the personnel would be involved in any capacity on the same project.
- 4.2. In accordance with Section 47 of the IRR of RA 9184, all Bidding Documents shall be accompanied by a sworn affidavit of the Bidder that it is not related to the Head of the BULACAN STATE UNIVERSITY, members of the Bids and Awards Committee (BAC), members of the Technical Working Group (TWG), members of the BAC Secretariat, the head of the Project Management Office (PMO) or the end-user unit, and the project consultants, by consanguinity or affinity up to the third civil

degree. On the part of the Bidder, this Clause shall apply to the following persons:

- (a) If the Bidder is an individual or a sole proprietorship, to the Bidder himself;
- (b) If the Bidder is a partnership, to all its officers and members;
- (c) If the Bidder is a corporation, to all its officers, directors, and controlling stockholders;
- (d) If the Bidder is a cooperative, to all its officers, directors, and controlling shareholders or members; and
- (e) If the Bidder is a joint venture (JV), the provisions of items (a), (b), (c) or (d) of this Clause shall correspondingly apply to each of the members of the said JV, as may be appropriate.

Relationship of the nature described above or failure to comply with this Clause will result in the automatic disqualification of a Bidder.

5. Eligible Bidders

5.1. Unless otherwise indicated in the **BDS**, the following persons shall be eligible to participate in this Bidding:

- (a) Duly licensed Filipino citizens/sole proprietorships;
- (b) Partnerships duly organized under the laws of the Philippines and of which at least seventy five percent (75%) of the interest belongs to citizens of the Philippines;
- (c) Corporations duly organized under the laws of the Philippines, and of which at least seventy five percent (75%) of the outstanding capital stock belongs to citizens of the Philippines;
- (d) Cooperatives duly organized under the laws of the Philippines.
- (e) Persons/entities forming themselves into a JV, i.e., a group of two (2) or more persons/entities that intend to be jointly and severally responsible or liable for a particular contract: Provided, however, that, in accordance with Letter of Instructions No. 630, Filipino ownership or interest of the joint venture concerned shall be at least seventy five percent (75%): Provided, further, that joint ventures in which Filipino ownership or interest is less than seventy five percent (75%) may be eligible where the structures to be built require the application of techniques and/or technologies which are not adequately possessed by a person/entity meeting the seventy five percent (75%) Filipino ownership requirement: Provided, finally, that in the latter case, Filipino ownership or interest shall not be less than twenty five percent (25%). For this purpose, Filipino ownership or interest

shall be based on the contributions of each of the members of the joint venture as specified in their JVA.

- 5.2. The BULACAN STATE UNIVERSITY may also invite foreign bidders when provided for under any Treaty or International or Executive Agreement as specified in the **BDS**.
- 5.3. Government owned or controlled corporations (GOCCs) may be eligible to participate only if they can establish that they (a) are legally and financially autonomous, (b) operate under commercial law, and (c) are not attached agencies of the BULACAN STATE UNIVERSITY.
- 5.4. (a) 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 Philippine Statistics Authority (PSA) consumer price index. However, contractors under Small A and Small B categories without similar experience on the contract to be bid may be allowed to bid if the cost of such contract is not more than the Allowable Range of Contract Cost (ARCC) of their registration based on the guidelines as prescribed by the PCAB.

(b) For Foreign-funded Procurement, the BULACAN STATE UNIVERSITY and the foreign government/foreign or international financing institution may agree on another track record requirement, as specified in the **BDS**.

For this purpose, contracts similar to the Project shall be those described in the **BDS**.

- 5.5. The Bidder must submit a computation of its Net Financial Contracting Capacity (NFCC), which must be at least equal to the ABC to be bid, calculated as follows:

NFCC = [(Current assets minus current liabilities) (15)] minus the value of all outstanding or uncompleted portions of the projects under ongoing contracts, including awarded contracts yet to be started coinciding with the contract for this Project.

The values of the domestic bidder's current assets and current liabilities shall be based on the latest Audited Financial Statements (AFS) submitted to the BIR.

For purposes of computing the foreign bidders' NFCC, the value of the current assets and current liabilities shall be based on their audited financial statements prepared in accordance with international financial reporting standards.

6. Bidder's Responsibilities

- 6.1. The Bidder or its duly authorized representative shall submit a sworn statement in the form prescribed in Section IX. Bidding Forms as required in **ITB** Clause 12.1(b)(iii).

6.2. The Bidder is responsible for the following:

- (a) Having taken steps to carefully examine all of the Bidding Documents;
- (b) Having acknowledged all conditions, local or otherwise, affecting the implementation of the contract;
- (c) Having made an estimate of the facilities available and needed for the contract to be bid, if any;
- (d) Having complied with its responsibility to inquire or secure Supplemental/Bid Bulletin/s as provided under **ITB** Claus 10.4.
- (e) Ensuring that it is not “blacklisted” or barred from bidding by the GoP or any of its agencies, offices, corporations, or LGUs, including foreign government/foreign or international financing institution whose blacklisting rules have been recognized by the GPPB;
- (f) Ensuring that each of the documents submitted in satisfaction of the bidding requirements is an authentic copy of the original, complete, and all statements and information provided therein are true and correct;
- (g) Authorizing the Head of the BULACAN STATE UNIVERSITY or its duly authorized representative/s to verify all the documents submitted;
- (h) Ensuring that the signatory is the duly authorized representative of the Bidder, and granted full power and authority to do, execute and perform any and all acts necessary to participate, submit the bid, and to sign and execute the ensuing contract, accompanied by the duly notarized Special Power of Attorney, Board/Partnership Resolution, or Secretary’s Certificate, whichever is applicable;
- (i) Complying with the disclosure provision under Section 47 of RA 9184 and its IRR in relation to other provisions of RA 3019;
- (j) Complying with existing labor laws and standards, in the case of procurement of services. Moreover, bidder undertakes to:
 - (i) Ensure the entitlement of workers to wages, hours of work, safety and health and other prevailing conditions of work as established by national laws, rules and regulations; or collective bargaining agreement; or arbitration award, if and when applicable.

In case there is a finding by the BULACAN STATE UNIVERSITY or the DOLE of underpayment or non-payment of workers’ wage and wage-related benefits, bidder agrees that the performance security or portion of

the contract amount shall be withheld in favor of the complaining workers pursuant to appropriate provisions of Republic Act No. 9184 without prejudice to the institution of appropriate actions under the Labor Code, as amended, and other social legislations.

- (ii) Comply with occupational safety and health standards and to correct deficiencies, if any.

In case of imminent danger, injury or death of the worker, bidder undertakes to suspend contract implementation pending clearance to proceed from the DOLE Regional Office and to comply with Work Stoppage Order; and

- (iii) Inform the workers of their conditions of work, labor clauses under the contract specifying wages, hours of work and other benefits under prevailing national laws, rules and regulations; or collective bargaining agreement; or arbitration award, if and when applicable, through posting in two (2) conspicuous places in the establishment's premises; and

- (k) Ensuring that it did not give or pay, directly or indirectly, any commission, amount, fee, or any form of consideration, pecuniary or otherwise, to any person or official, personnel or representative of the;

Failure to observe any of the above responsibilities shall be at the risk of the Bidder concerned.

- 6.3. The Bidder, by the act of submitting its bid, shall be deemed to have inspected the site, determined the general characteristics of the contract works and the conditions for this Project and examine all instructions, forms, terms, and project requirements in the Bidding Documents.
- 6.4. It shall be the sole responsibility of the prospective bidder to determine and to satisfy itself by such means as it considers necessary or desirable as to all matters pertaining to this Project, including: (a) the location and the nature of the contract, project, or 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.
- 6.5. The BULACAN STATE UNIVERSITY shall not assume any responsibility regarding erroneous interpretations or conclusions by the prospective or eligible bidder out of the data furnished by the BULACAN STATE UNIVERSITY. However, the BULACAN STATE UNIVERSITY shall ensure that all information in the Bidding Documents, including supplemental/bid bulletins issued are correct and consistent.

- 6.6. Before submitting their bids, the Bidders are deemed to have become familiar with all existing laws, decrees, ordinances, acts and regulations of the Philippines which may affect the contract in any way.
- 6.7. The Bidder shall bear all costs associated with the preparation and submission of his bid, and the BULACAN STATE UNIVERSITY will in no case be responsible or liable for those costs, regardless of the conduct or outcome of the bidding process.
- 6.8. The Bidder should note that the BULACAN STATE UNIVERSITY will accept bids only from those that have paid the applicable fee for the Bidding Documents at the office indicated in the Invitation to Bid.

7. Origin of Goods and Services

There is no restriction on the origin of Goods, or Contracting of Works or Services other than those prohibited by a decision of the United Nations Security Council taken under Chapter VII of the Charter of the United Nations.

8. Subcontracts

- 8.1. Unless otherwise specified in the **BDS**, the Bidder may subcontract portions of the Works to an extent as may be approved by the BULACAN STATE UNIVERSITY and stated in the **BDS**. However, subcontracting of any portion shall not relieve the Bidder from any liability or obligation that may arise from the contract for this Project.
- 8.2. Subcontractors must submit the documentary requirements under **ITB** Clause 12 and comply with the eligibility criteria specified in the **BDS**. In the event that any subcontractor is found by the BULACAN STATE UNIVERSITY to be ineligible, the subcontracting of such portion of the Works shall be disallowed.
- 8.3. The Bidder may identify the subcontractor to whom a portion of the Works will be subcontracted at any stage of the bidding process or during contract implementation. If the Bidder opts to disclose the name of the subcontractor during bid submission, the Bidder shall include the required documents as part of the technical component of its bid.

B. Contents of Bidding Documents

9. Pre-Bid Conference

- 9.1. (a) If so specified in the **BDS**, a pre-bid conference shall be held at the venue and on the date indicated therein, to clarify and address the Bidders' questions on the technical and financial components of this Project.

(b) The pre-bid conference shall be held at least twelve (12) calendar days before the deadline for the submission of and receipt of bids, but not earlier than seven (7) calendar days from the posting of the Invitation to Bid/Bidding Documents in the PhilGEPS website. If the BULACAN

STATE UNIVERSITY determines that, by reason of the method, nature, or complexity of the contract to be bid, or when international participation will be more advantageous to the GoP, a longer period for the preparation of bids is necessary, the pre-bid conference shall be held at least thirty (30) calendar days before the deadline for the submission and receipt of bids, as specified in the **BDS**.

- 9.2. Bidders are encouraged to attend the pre-bid conference to ensure that they fully understand the BULACAN STATE UNIVERSITY's requirements. Non-attendance of the Bidder will in no way prejudice its bid; however, the Bidder is expected to know the changes and/or amendments to the Bidding Documents as recorded in the minutes of the pre-bid conference and the Supplemental/Bid Bulletin. The minutes of the pre-bid conference shall be recorded and prepared not later than five (5) calendar days after the pre-bid conference. The minutes shall be made available to prospective bidders not later than five (5) days upon written request.
- 9.3. Decisions of the BAC amending any provision of the bidding documents shall be issued in writing through a Supplemental/Bid Bulletin at least seven (7) calendar days before the deadline for the submission and receipt of bids.

10. Clarification and Amendment of Bidding Documents

- 10.1. Prospective bidders may request for clarification(s) on and/or interpretation of any part of the Bidding Documents. Such a request must be in writing and submitted to the BULACAN STATE UNIVERSITY at the address indicated in the **BDS** at least ten (10) calendar days before the deadline set for the submission and receipt of Bids.
- 10.2. The BAC shall respond to the said request by issuing a Supplemental/Bid Bulletin, to be made available to all those who have properly secured the Bidding Documents, at least seven (7) calendar days before the deadline for the submission and receipt of Bids.
- 10.3. Supplemental/Bid Bulletins may also be issued upon the BULACAN STATE UNIVERSITY's initiative for purposes of clarifying or modifying any provision of the Bidding Documents not later than seven (7) calendar days before the deadline for the submission and receipt of Bids. Any modification to the Bidding Documents shall be identified as an amendment.
- 10.4. Any Supplemental/Bid Bulletin issued by the BAC shall also be posted in the PhilGEPS and the website of the BULACAN STATE UNIVERSITY concerned, if available, and at any conspicuous place in the premises of the Procuring Entity concerned. It shall be the responsibility of all Bidders who have properly secured the Bidding Documents to inquire and secure Supplemental/Bid Bulletins that may be issued by the BAC. However, Bidders who have submitted bids before the issuance of the Supplemental/Bid Bulletin must be informed and allowed to modify or withdraw their bids in accordance with **ITB** Clause 23.

C. Preparation of Bids

11. Language of Bids

The eligibility requirements or statements, the bids, and all other documents to be submitted to the BAC must be in English. If the eligibility requirements or statements, the bids, and all other documents submitted to the BAC are in foreign language other than English, it must be accompanied by a translation of the documents in English. The documents shall be translated by the relevant foreign government agency, the foreign government agency authorized to translate documents, or a registered translator in the foreign bidder's country; and 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. The English translation shall govern, for purposes of interpretation of the bid.

12. Documents Comprising the Bid: Eligibility and Technical Components

12.1. Unless otherwise indicated in the **BDS**, the first envelope shall contain the following eligibility and technical documents:

(a) Eligibility Documents –

Class "A" Documents

- (i) PhilGEPS Certificate of Registration and Membership in accordance with Section 8.5.2 of the IRR, except for foreign bidders participating in the procurement by a Philippine Foreign Service Office or Post, which shall submit their eligibility documents under Section 23.1 of the IRR, provided, that the winning bidder shall register with the PhilGEPS in accordance with Section 37.1.4 of the IRR;

- (ii) Statement 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

Statement of the Bidder's SLCC similar to the contract to be bid, in accordance with ITB Clause 5.4.

The two statements required shall indicate for each contract the following:

- (ii.1) name of the contract;
- (ii.2) date of the contract;
- (ii.3) contract duration;
- (ii.4) owner's name and address;

- (ii.5) nature of work;
- (ii.6) contractor's role (whether sole contractor, subcontractor, or partner in a JV) and percentage of participation;
- (ii.7) total contract value at award;
- (ii.8) date of completion or estimated completion time;
- (ii.9) total contract value at completion, if applicable;
- (ii.10) percentages of planned and actual accomplishments, if applicable; and
- (ii.11) value of outstanding works, if applicable.

The statement of the Bidder's SLCC shall be supported by the Notice of Award and/or Notice to Proceed, Project Owner's Certificate of Final Acceptance issued by the Owner other than the Contractor or the Constructors Performance Evaluation System (CPES) Final Rating, which must be at least satisfactory. In case of contracts with the private sector, an equivalent document shall be submitted;

- (iii) Unless otherwise provided in the **BDS**, a valid special PCAB License in case of joint ventures, and registration for the type and cost of the contract for this Project; and
- (iv) NFCC computation in accordance with ITB Clause 5.5.

Class "B" Documents

- (v) If applicable, Joint Venture Agreement (JVA) in accordance with RA 4566.
- (b) Technical Documents –
- (i) Bid security in accordance with **ITB** Clause 18. If the Bidder opts to submit the bid security in the form of:
 - (i.1) a bank draft/guarantee or an irrevocable letter of credit issued by a foreign bank, it shall be accompanied by a confirmation from a Universal or Commercial Bank; or
 - (i.2) a surety bond accompanied by a certification coming from the Insurance Commission that the surety or insurance company is authorized to issue such instruments.
 - (ii) Project Requirements, which shall include the following:

- (ii.1) Organizational chart for the contract to be bid;
- (ii.2) List of contractor's 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. These personnel must meet the required minimum years of experience set in the **BDS**; and
- (ii.3) 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, which must meet the minimum requirements for the contract set in the **BDS**; and
- (iii) Sworn statement in accordance with Section 25.3 of the IRR of RA 9184 and using the form prescribed in Section IX. Bidding Forms.0

13. Documents Comprising the Bid: Financial Component

- 13.1. Unless otherwise stated in the **BDS**, the financial component of the bid shall contain the following:
 - (a) Financial Bid Form, which includes bid prices and the bill of quantities, in accordance with **ITB** Clauses 15.1 and 15.3; and
 - (b) Any other document related to the financial component of the bid as stated in the **BDS**.
- 13.2. (a) Unless otherwise stated in the **BDS**, all Bids that exceed the ABC shall not be accepted.
- (b) Unless otherwise indicated in the **BDS**, for foreign-funded procurement, a ceiling may be applied to bid prices provided the following conditions are met:
 - (i) Bidding Documents are obtainable free of charge on a freely accessible website. If payment of Bidding Documents is required by the procuring entity, payment could be made upon the submission of bids.
 - (ii) The BULACAN STATE UNIVERSITY has procedures in place to ensure that the ABC is based on recent estimates made by the engineer or the responsible unit of the BULACAN STATE UNIVERSITY and that the estimates are based on adequate detailed engineering (in the case of infrastructure projects) and reflect the quality, supervision and risk and inflationary factors, as well as prevailing market prices, associated with the types of works or goods to be procured.

- (iii) The BULACAN STATE UNIVERSITY has trained cost estimators on estimating prices and analyzing bid variances. In the case of infrastructure projects, the BULACAN STATE UNIVERSITY must also have trained quantity surveyors.
- (iv) The BULACAN STATE UNIVERSITY has established a system to monitor and report bid prices relative to ABC and engineer's/procuring entity's estimate.
- (v) The BULACAN STATE UNIVERSITY has established a monitoring and evaluation system for contract implementation to provide a feedback on actual total costs of goods and works.

14. Alternative Bids

- 14.1. Alternative Bids shall be rejected. For this purpose, alternative bid is an offer made by a Bidder in addition or as a substitute to its original bid which may be included as part of its original bid or submitted separately therewith for purposes of bidding. A bid with options is considered an alternative bid regardless of whether said bid proposal is contained in a single envelope or submitted in two (2) or more separate bid envelopes.
- 14.2. 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.
- 14.3. Each Bidder shall submit only one Bid, either individually or as a partner in a JV. A Bidder who submits or participates in more than one bid (other than as a subcontractor if a subcontractor is permitted to participate in more than one bid) will cause all the proposals with the Bidder's participation to be disqualified. This shall be without prejudice to any applicable criminal, civil and administrative penalties that may be imposed upon the persons and entities concerned.

15. Bid Prices

- 15.1. The contract shall be for the whole Works, as described in **ITB** Clause 1.1, based on the priced Bill of Quantities submitted by the Bidder.
- 15.2. The Bidder shall fill in rates and prices for all items of the Works described in the Bill of Quantities. Bids not addressing or providing all of the required items in the Bidding Documents including, where applicable, Bill of Quantities, shall be considered non-responsive and, thus, automatically disqualified. In this regard, where a required item is provided, but no price is indicated, the same shall be considered as non-responsive, but specifying a zero (0) or a dash (-) for the said item would mean that it is being offered for free to the Government, except those required by law or regulations to be provided for.
- 15.3. All duties, taxes, and other levies payable by the Contractor under the Contract, or for any other cause, prior to the deadline for submission of

bids, shall be included in the rates, prices, and total bid price submitted by the Bidder.

- 15.4. All bid prices for the given scope of work in the contract as awarded shall be considered as fixed prices, and therefore not subject to price escalation during contract implementation, except under extraordinary circumstances as specified in GCC Clause 48. Upon the recommendation of the BULACAN STATE UNIVERSITY, price escalation may be allowed in extraordinary circumstances as may be determined by the National Economic and Development Authority in accordance with the Civil Code of the Philippines, and upon approval by the GPPB. Furthermore, in cases where the cost of the awarded contract is affected by any applicable new laws, ordinances, regulations, or other acts of the GoP, promulgated after the date of bid opening, a contract price adjustment shall be made or appropriate relief shall be applied on a no loss-no gain basis.

16. Bid Currencies

- 16.1. All bid prices shall be quoted in Philippine Pesos unless otherwise provided in the **BDS**. However, for purposes of bid evaluation, bids denominated in foreign currencies shall be converted to Philippine currency based on the exchange rate prevailing on the day of the Bid Opening.
- 16.2. If so allowed in accordance with **ITB** Clause 16.1, the BULACAN STATE UNIVERSITY for purposes of bid evaluation and comparing the bid prices will convert the amounts in various currencies in which the bid price is expressed to Philippine Pesos at the exchange rate as published in the *Bangko Sentral ng Pilipinas* (BSP) reference rate bulletin on the day of the bid opening.
- 16.3. Unless otherwise specified in the **BDS**, payment of the contract price shall be made in Philippine Pesos.

17. Bid Validity

- 17.1. Bids shall remain valid for the period specified in the **BDS** which shall not exceed one hundred twenty (120) calendar days from the date of the opening of bids.
- 17.2. In exceptional circumstances, prior to the expiration of the bid validity period, the BULACAN STATE UNIVERSITY may request Bidders to extend the period of validity of their bids. The request and the responses shall be made in writing. The bid security described in **ITB** Clause 18 should also be extended corresponding to the extension of the bid validity period at the least. A Bidder may refuse the request without forfeiting its bid security, but his bid shall no longer be considered for further evaluation and award. A Bidder granting the request shall not be required or permitted to modify its bid.

18. Bid Security

- 18.1. The Bidder shall submit a Bid Securing Declaration or any form of Bid Security in an amount stated in the **BDS**, which shall be not less than the percentage of the ABC in accordance with the following schedule:

Form of Bid Security	Amount of Bid Security (Not less than the Percentage of the ABC)
(a) Cash or cashier's/manager's check issued by a Universal or Commercial Bank.	Two percent (2%)
(b) Bank draft/guarantee or irrevocable letter of credit issued by a Universal or Commercial Bank: Provided, however, that it shall be confirmed or authenticated by a Universal or Commercial Bank, if issued by a foreign bank.	
(c) Surety bond callable upon demand issued by a surety or insurance company duly certified by the Insurance Commission as authorized to issue such security; and/or	Five percent (5%)

The Bid Securing Declaration mentioned above is an undertaking which states, among others, that the Bidder shall enter into contract with the BULACAN STATE UNIVERSITY and furnish the performance security required under ITB Clause 32.2, within ten (10) calendar days from receipt of the Notice of Award, and commits to pay the corresponding amount as fine, and be suspended for a period of time from being qualified to participate in any government procurement activity in the event it violates any of the conditions stated therein as provided in the guidelines issued by the GPPB.

- 18.2. The bid security should be valid for the period specified in the **BDS**. Any bid not accompanied by an acceptable bid security shall be rejected by the BULACAN STATE UNIVERSITY as non-responsive.
- 18.3. No bid securities shall be returned to Bidders after the opening of bids and before contract signing, except to those that failed or declared as post-disqualified, upon submission of a written waiver of their right to file a request for reconsideration and/or protest, or lapse of the reglementary period without having filed a request for reconsideration or protest. Without prejudice on its forfeiture, Bid Securities shall be returned only after the Bidder with the Lowest Calculated Responsive Bid (LCRB) has signed the contract and furnished the Performance Security, but in no

case later than the expiration of the Bid Security validity period indicated in **ITB Clause 18.2**.

18.4. Upon signing and execution of the contract, pursuant to **ITB Clause 31**, and the posting of the performance security, pursuant to **ITB Clause 32**, the successful Bidder's Bid Security will be discharged, but in no case later than the Bid Security validity period as indicated in **ITB Clause 18.2**.

18.5. The bid security may be forfeited:

- (a) if a Bidder:
 - (i) withdraws its bid during the period of bid validity specified in **ITB Clause 17**;
 - (ii) does not accept the correction of errors pursuant to **ITB Clause 27.3(b)**;
 - (iii) has a finding against the veracity of the required documents submitted in accordance with **ITB Clause 28.2**;
 - (iv) submission of eligibility requirements containing false information or falsified documents;
 - (v) submission of bids that contain false information or falsified documents, or the concealment of such information in the bids in order to influence the outcome of eligibility screening or any other stage of the public bidding;
 - (vi) allowing the use of one's name, or using the name of another for purposes of public bidding;
 - (vii) withdrawal of a bid, or refusal to accept an award, or enter into contract with the Government without justifiable cause, after the Bidder had been adjudged as having submitted the LCRB;
 - (viii) refusal or failure to post the required performance security within the prescribed time;
 - (ix) refusal to clarify or validate in writing its bid during post-qualification within a period of seven (7) calendar days from receipt of the request for clarification;
 - (x) any documented attempt by a Bidder to unduly influence the outcome of the bidding in his favor;
 - (xi) failure of the potential joint venture partners to enter into the joint venture after the bid is declared successful; or
 - (xii) all other acts that tend to defeat the purpose of the competitive bidding, such as habitually withdrawing from bidding, submitting late Bids or patently insufficient bid, for

at least three (3) times within a year, except for valid reasons.

- (b) if the successful Bidder:
 - (i) fails to sign the contract in accordance with **ITB** Clause 31;
 - (ii) fails to furnish performance security in accordance with **ITB** Clause 32.

19. Format and Signing of Bids

- 19.1 Bidders shall submit their bids through their duly authorized representative using the appropriate forms provided in Section IX. Bidding Forms on or before the deadline specified in the **ITB** Clause 21 in two (2) separate sealed bid envelopes, and which shall be submitted simultaneously. The first shall contain the technical component of the bid, including the eligibility requirements under **ITB** Clause 12.1, and the second shall contain the financial component of the bid. This shall also be observed for each lot in the case of lot procurement.
- 19.2 Forms as mentioned in **ITB** Clause 19.1 must be completed without any alterations to their format, and no substitute form shall be accepted. All blank spaces shall be filled in with the information requested.
- 19.3 The Bidder shall prepare and submit an original of the first and second envelopes as described in **ITB** Clauses 12 and 13. In addition, the Bidder shall submit copies of the first and second envelopes. In the event of any discrepancy between the original and the copies, the original shall prevail.
- 19.4 Each and every page of the Bid Form, including the Bill of Quantities, under Section IX hereof, shall be signed by the duly authorized representative/s of the Bidder. Failure to do so shall be a ground for the rejection of the bid.
- 19.5 Any interlineations, erasures, or overwriting shall be valid only if they are signed or initialed by the duly authorized representative/s of the Bidder.

20. Sealing and Marking of Bids

- 20.1. Bidders shall enclose their original eligibility and technical documents described in **ITB** Clause 12, in one sealed envelope marked "ORIGINAL - TECHNICAL COMPONENT," and the original of their financial component in another sealed envelope marked "ORIGINAL - FINANCIAL COMPONENT," sealing them all in an outer envelope marked "ORIGINAL BID."
- 20.2. Each copy of the first and second envelopes shall be similarly sealed duly marking the inner envelopes as "COPY NO. ____ - TECHNICAL COMPONENT" and "COPY NO. ____ – FINANCIAL COMPONENT" and the outer envelope as "COPY NO. ____," respectively. These envelopes

containing the original and the copies shall then be enclosed in one single envelope.

20.3. The original and the number of copies of the bid as indicated in the **BDS** shall be typed or written in ink and shall be signed by the Bidder or its duly authorized representative/s.

20.4. All envelopes shall:

- (a) contain the name of the contract to be bid in capital letters;
- (b) bear the name and address of the Bidder in capital letters;
- (c) be addressed to the BULACAN STATE UNIVERSITY's BAC in accordance with **ITB** Clause 20.1;
- (d) bear the specific identification of this bidding process indicated in the **ITB** Clause 1.2; and
- (e) bear a warning "DO NOT OPEN BEFORE..." the date and time for the opening of bids, in accordance with **ITB** Clause 21.

20.5. Bid envelopes that are not properly sealed and marked, as required in the bidding documents, shall not be rejected, but the Bidder or its duly authorized representative shall acknowledge such condition of the bid as submitted. The BAC or the BULACAN STATE UNIVERSITY shall assume no responsibility for the misplacement of the contents of the improperly sealed or marked bid, or for its premature opening.

D. Submission and Opening of Bids

21. Deadline for Submission of Bids

Bids must be received by the BULACAN STATE UNIVERSITY's BAC at the address and on or before the date and time indicated in the **BDS**.

22. Late Bids

Any bid submitted after the deadline for submission and receipt of bids prescribed by the BULACAN STATE UNIVERSITY, pursuant to **ITB** Clause 21, shall be declared "Late" and shall not be accepted by the BULACAN STATE UNIVERSITY. The BAC shall record in the minutes of Bid Submission and Opening, the Bidder's name, its representative and the time the late bid was submitted.

23. Modification and Withdrawal of Bids

23.1. The Bidder may modify its bid after it has been submitted; provided that the modification is received by the BULACAN STATE UNIVERSITY prior to the deadline prescribed for submission and receipt of bids. The Bidder shall not be allowed to retrieve its original bid, but shall be allowed to

submit another bid equally sealed and properly identified in accordance with Clause 20, linked to its original bid marked as “TECHNICAL MODIFICATION” or “FINANCIAL MODIFICATION” and stamped “received” by the BAC. Bid modifications received after the applicable deadline shall not be considered and shall be returned to the Bidder unopened.

- 23.2. A Bidder may, through a Letter of Withdrawal, withdraw its bid after it has been submitted, for valid and justifiable reason; provided that the Letter of Withdrawal is received by the BULACAN STATE UNIVERSITY prior to the deadline prescribed for submission and receipt of bids. The Letter of Withdrawal must be executed by the authorized representative of the Bidder identified in the Omnibus Sworn Statement, a copy of which should be attached to the letter.
- 23.3. Bids requested to be withdrawn in accordance with **ITB** Clause 23.1 shall be returned unopened to the Bidders. A Bidder, who has acquired the bidding documents may also express its intention not to participate in the bidding through a letter which should reach and be stamped by the BAC before the deadline for submission and receipt of bids. A Bidder that withdraws its bid shall not be permitted to submit another bid, directly or indirectly, for the same contract.
- 23.4. No bid may be modified after the deadline for submission of bids. No bid may be withdrawn in the interval between the deadline for submission of bids and the expiration of the period of bid validity specified by the Bidder on the Financial Bid Form. Withdrawal of a bid during this interval shall result in the forfeiture of the Bidder’s bid security, pursuant to **ITB** Clause 18.5, and the imposition of administrative, civil, and criminal sanctions as prescribed by RA 9184 and its IRR.

24. Opening and Preliminary Examination of Bids

- 24.1. The BAC shall open the Bids in public, immediately after the deadline for the submission and receipt of bids in public, as specified in the **BDS**. In case the Bids cannot be opened as scheduled due to justifiable reasons, the BAC shall take custody of the Bids submitted and reschedule the opening of Bids on the next working day or at the soonest possible time through the issuance of a Notice of Postponement to be posted in the PhilGEPS website and the website of the BULACAN STATE UNIVERSITY concerned.
- 24.2. Unless otherwise specified in the BDS, the BAC shall open the first bid envelopes and determine each Bidder’s compliance with the documents prescribed in ITB Clause 12, using a non-discretionary “pass/fail” criterion. If a Bidder submits the required document, it shall be rated “passed” for that particular requirement. In this regard, bids that fail to include any requirement or are incomplete or patently insufficient shall be considered as “failed”. Otherwise, the BAC shall rate the said first bid envelope as “passed”.
- 24.3. Unless otherwise specified in the **BDS**, immediately after determining compliance with the requirements in the first envelope, the BAC shall

forthwith open the second bid envelope of each remaining eligible Bidder whose first bid envelope was rated “passed.” The second envelope of each complying Bidder shall be opened within the same day. In case one or more of the requirements in the second envelope of a particular bid is missing, incomplete or patently insufficient, and/or if the submitted total bid price exceeds the ABC unless otherwise provided in **ITB** Clause 13.2, the BAC shall rate the bid concerned as “failed.” Only bids that are determined to contain all the bid requirements for both components shall be rated “passed” and shall immediately be considered for evaluation and comparison.

- 24.4. Letters of Withdrawal shall be read out and recorded during bid opening, and the envelope containing the corresponding withdrawn bid shall be returned to the Bidder unopened.
- 24.5. All members of the BAC who are present during bid opening shall initial every page of the original copies of all bids received and opened.
- 24.6. In the case of an eligible foreign bidder as described in **ITB** Clause 5, the following Class “A” Documents may be substituted with the appropriate equivalent documents, if any, issued by the country of the foreign bidder concerned, which shall likewise be uploaded and maintained in the PhilGEPS in accordance with Section 8.5.2 of the IRR.:
 - a) Registration certificate from the Securities and Exchange Commission (SEC), Department of Trade and Industry (DTI) for sole proprietorship, or CDA for cooperatives;
 - b) Mayor’s/Business permit issued by the local government where the principal place of business of the Bidder is located; and
 - c) Audited Financial Statements showing, among others, the prospective Bidder’s total and current assets and liabilities stamped “received” by the Bureau of Internal Revenue or its duly accredited and authorized institutions, for the preceding calendar year which should not be earlier than two years from the date of bid submission.
- 24.7. Each partner of a joint venture agreement shall likewise submit the document required in **ITB** Clause 12.1(a)(i). Submission of documents required under **ITB** Clauses 12.1(a)(iii) to 12.1(a)(iv) by any of the joint venture partners constitutes compliance.
- 24.8. The BULACAN STATE UNIVERSITY shall prepare the minutes of the proceedings of the bid opening that shall include, as a minimum: (a) names of Bidders, their bid price (per lot, if applicable, and/or including discount, if any), bid security, findings of preliminary examination, and whether there is a withdrawal or modification; and (b) attendance sheet. The BAC members shall sign the abstract of bids as read.
- 24.8. The Bidders or their duly authorized representatives may attend the opening of bids. The BAC shall ensure the integrity, security, and confidentiality of all submitted bids. The Abstract of Bids as read and the minutes of the Bid Opening shall be made available to the public upon

written request and payment of a specified fee to recover cost of materials.

- 24.9 To ensure transparency and accurate representation of the bid submission, the BAC Secretariat shall notify in writing all Bidders whose bids it has received through its PhilGEPS-registered physical address or official e-mail address. The notice shall be issued within seven (7) calendar days from the date of the bid opening.

E. Evaluation and Comparison of Bids

25. Process to be Confidential

- 25.1. Members of the BAC, including its staff and personnel, as well as its Secretariat and TWG, are prohibited from making or accepting any kind of communication with any Bidder regarding the evaluation of their bids until the issuance of the Notice of Award, unless otherwise allowed in the case of **ITB** Clause 26.
- 25.2. Any effort by a Bidder to influence the BULACAN STATE UNIVERSITY in the BULACAN STATE UNIVERSITY's decision in respect of bid evaluation, bid comparison or contract award will result in the rejection of the Bidder's bid.

26. Clarification of Bids

To assist in the evaluation, comparison and post-qualification of the bids, the BULACAN STATE UNIVERSITY may ask in writing any Bidder for a clarification of its bid. All responses to requests for clarification shall be in writing. Any clarification submitted by a Bidder in respect to its bid and that is not in response to a request by the BULACAN STATE UNIVERSITY shall not be considered

27. Detailed Evaluation and Comparison of Bids

- 27.1. The BULACAN STATE UNIVERSITY will undertake the detailed evaluation and comparison of Bids which have passed the opening and preliminary examination of Bids, pursuant to **ITB** Clause 24, in order to determine the Lowest Calculated Bid.
- 27.2. The Lowest Calculated Bid shall be determined in two steps:
- (a) The detailed evaluation of the financial component of the bids, to establish the correct calculated prices of the bids; and
 - (b) The ranking of the total bid prices as so calculated from the lowest to highest. The bid with the lowest price shall be identified as the Lowest Calculated Bid.
- 27.3. The BULACAN STATE UNIVERSITY's BAC shall immediately conduct a detailed evaluation of all bids rated "passed," using non-discretionary "pass/fail" criterion. The BAC shall consider the following in the evaluation of bids:

- (a) Completeness of the bid. Unless the **BDS** allows partial bids, bids not addressing or providing all of the required items in the Schedule of Requirements including, where applicable, bill of quantities, shall be considered non-responsive and, thus, automatically disqualified. In this regard, where a required item is provided, but no price is indicated, the same shall be considered as non-responsive, but specifying a zero (0) or a dash (-) for the said item would mean that it is being offered for free to the BULACAN STATE UNIVERSITY, except those required by law or regulations to be provided for; and
 - (b) Arithmetical corrections. Consider computational errors and omissions to enable proper comparison of all eligible bids. It may also consider bid modifications. Any adjustment shall be calculated in monetary terms to determine the calculated prices.
- 27.4. Based on the detailed evaluation of bids, those that comply with the above-mentioned requirements shall be ranked in the ascending order of their total calculated bid prices, as evaluated and corrected for computational errors, discounts and other modifications, to identify the Lowest Calculated Bid. Total calculated bid prices, as evaluated and corrected for computational errors, discounts and other modifications, which exceed the ABC shall not be considered, unless otherwise indicated in the **BDS**.
- 27.5. The BULACAN STATE UNIVERSITY's evaluation of bids shall be based on the bid price quoted in the Bid Form, which includes the Bill of Quantities.
- 27.6. Bids shall be evaluated on an equal footing to ensure fair competition. For this purpose, all Bidders shall be required to include in their bids the cost of all taxes, such as, but not limited to, value added tax (VAT), income tax, local taxes, and other fiscal levies and duties which shall be itemized in the bid form and reflected in the detailed estimates. Such bids, including said taxes, shall be the basis for bid evaluation and comparison.
- 27.7. If so indicated pursuant to **ITB** Clause 1.2. Bids are being invited for individual lots or for any combination thereof, provided that all Bids and combinations of Bids 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 BULACAN STATE UNIVERSITY. Bid prices quoted shall correspond to all of the requirements specified for each lot. Bid Security as required by **ITB** Clause 18 shall be submitted for each contract (lot) separately. The basis for evaluation of lots is specified in **BDS** Clause 27.3.

28. Post Qualification

- 28.1. The BAC shall determine to its satisfaction whether the Bidder that is evaluated as having submitted the Lowest Calculated Bid complies with and is responsive to all the requirements and conditions specified in **ITB** Clauses 5, 12, and 13.

- 28.2. 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**.

Failure to submit any of the post-qualification requirements on time, or a finding against the veracity thereof, shall disqualify the Bidder for award. Provided in the event that a finding against the veracity of any of the documents submitted is made, it shall cause the forfeiture of the bid security in accordance with Section 69 of the IRR of RA 9184.

- 28.3. The determination shall be based upon an examination of the documentary evidence of the Bidder's qualifications submitted pursuant to **ITB** Clauses 12 and 13, as well as other information as the BULACAN STATE UNIVERSITY deems necessary and appropriate, using a non-discretionary "pass/fail" criterion, which shall be completed within a period of twelve (12) calendar days.
- 28.4. If the BAC determines that the Bidder with the Lowest Calculated Bid passes all the criteria for post-qualification, it shall declare the said bid as the LCRB, and recommend to the Head of the BULACAN STATE UNIVERSITY the award of contract to the said Bidder at its submitted price or its calculated bid price, whichever is lower, subject to **ITB** Clause 30.3.
- 28.5. A negative determination shall result in rejection of the Bidder's bid, in which event the BULACAN STATE UNIVERSITY shall proceed to the next Lowest Calculated Bid, with a fresh period to make a similar determination of that Bidder's capabilities to perform satisfactorily. If the second Bidder, however, fails the post qualification, the procedure for post qualification shall be repeated for the Bidder with the next Lowest Calculated Bid, and so on until the LCRB is determined for recommendation of contract award.
- 28.6. Within a period not exceeding fifteen (15) calendar days from the determination by the BAC of the LCRB and the recommendation to award the contract, the Head of the BULACAN STATE UNIVERSITY or his duly authorized representative shall approve or disapprove the said recommendation.
- 28.7. In the event of disapproval, which shall be based on valid, reasonable, and justifiable grounds as provided for under Section 41 of the IRR of RA 9184, the Head of the BULACAN STATE UNIVERSITY shall notify the BAC and the Bidder in writing of such decision and the grounds for it. When applicable, the BAC shall conduct a post-qualification of the Bidder with the next Lowest Calculated Bid. A request for reconsideration may be filed by the Bidder with the Head of the BULACAN STATE UNIVERSITY in accordance with Section 37.1.3 of the IRR of RA 9184.

29. Reservation Clause

- 29.1. Notwithstanding the eligibility or post-qualification of a Bidder, the BULACAN STATE UNIVERSITY concerned reserves the right to review its qualifications at any stage of the procurement process if it has reasonable grounds to believe that a misrepresentation has been made by the said Bidder, or that there has been a change in the Bidder's capability to undertake the project from the time it submitted its eligibility requirements. Should such review uncover any misrepresentation made in the eligibility and bidding requirements, statements or documents, or any changes in the situation of the Bidder which will affect its capability to undertake the project so that it fails the preset eligibility or bid evaluation criteria, the BULACAN STATE UNIVERSITY shall consider the said Bidder as ineligible and shall disqualify it from submitting a bid or from obtaining an award or contract.
- 29.2. Based on the following grounds, the BULACAN STATE UNIVERSITY reserves the right to reject any and all Bids, declare a Failure of Bidding at any time prior to the contract award, or not to award the contract, without thereby incurring any liability, and make no assurance that a contract shall be entered into as a result of the bidding:
- (a) If there is *prima facie* evidence of collusion between appropriate public officers or employees of the BULACAN STATE UNIVERSITY, or between the BAC and any of the Bidders, or if the collusion is between or among the Bidders themselves, or between a Bidder and a third party, including any act which restricts, suppresses or nullifies or tends to restrict, suppress or nullify competition;
 - (b) If the BULACAN STATE UNIVERSITY's BAC is found to have failed in following the prescribed bidding procedures; or
 - (c) For any justifiable and reasonable ground where the award of the contract will not redound to the benefit of the GOP as follows:
 - (i) If the physical and economic conditions have significantly changed so as to render the project no longer economically, financially or technically feasible as determined by the Head of the BULACAN STATE UNIVERSITY;
 - (ii) If the project is no longer necessary as determined by the Head of the BULACAN STATE UNIVERSITY; and
 - (iii) If the source of funds for the project has been withheld or reduced through no fault of the BULACAN STATE UNIVERSITY.
- 29.3. In addition, the BULACAN STATE UNIVERSITY may likewise declare a failure of bidding when:
- (a) No bids are received;

- (b) All prospective Bidders are declared ineligible;
- (c) All bids fail to comply with all the bid requirements, fail post-qualification; or
- (d) The Bidder with the LCRB refuses, without justifiable cause, to accept the award of contract, and no award is made in accordance with Section 40 of the IRR of RA 9184.

F. Award of Contract

30. Contract Award

- 30.1. Subject to **ITB** Clause 28, the Head of the BULACAN STATE UNIVERSITY or its duly authorized representative shall award the contract to the Bidder whose bid has been determined to be the LCRB.
- 30.2. Prior to the expiration of the period of bid validity, the BULACAN STATE UNIVERSITY shall notify the successful Bidder in writing that its bid has been accepted, through a Notice of Award duly received by the Bidder or its representative personally or by registered mail or electronically, receipt of which must be confirmed in writing within two (2) days by the Bidder with the LCRB and submitted personally or sent by registered mail or electronically to the BULACAN STATE UNIVERSITY.
- 30.3. Notwithstanding the issuance of the Notice of Award, award of contract shall be subject to the following conditions:
 - (a) Submission of the following documents within ten (10) calendar days from receipt of the Notice of Award:
 - (i) In the case of procurement by a Philippine Foreign Service Office or Post, the PhilGEPS Registration Number of the winning foreign Bidder; or
 - (ii) Valid PCAB license and registration for the type and cost of the contract to be bid for foreign bidders when the Treaty or International or Executive Agreement expressly allows submission of the PCAB license and registration for the type and cost of the contract to be bid as a pre-condition to the Award;
 - (b) Posting of the performance security in accordance with **ITB** Clause 32;
 - (c) Signing of the contract as provided in **ITB** Clause 31; and
 - (d) Approval by higher authority, if required, as provided in Section 37.3 of the IRR of RA 9184.

31. Signing of the Contract

- 31.1. At the same time as the BULACAN STATE UNIVERSITY notifies the successful Bidder that its bid has been accepted, the BULACAN STATE UNIVERSITY shall send the Contract Form to the Bidder, which Contract has been provided in the Bidding Documents, incorporating therein all agreements between the parties.
- 31.2. Within ten (10) calendar days from receipt of the Notice of Award, the successful Bidder shall post the required performance security, sign and date the contract and return it to the BULACAN STATE UNIVERSITY.
- 31.3. The BULACAN STATE UNIVERSITY shall enter into contract with the successful Bidder within the same ten (10) calendar day period provided that all the documentary requirements are complied with.
- 31.4. The following documents shall form part of the contract:
 - (a) Contract Agreement;
 - (b) Bidding Documents;
 - (c) Winning Bidder's bid, including the Technical and Financial Proposals, and all other documents/statements submitted (e.g., Bidder's response to request for clarifications on the bid), including corrections to the bid, if any, resulting from the BULACAN STATE UNIVERSITY's bid evaluation;
 - (d) Performance Security;
 - (e) Notice of Award of Contract; and
 - (f) Other contract documents that may be required by existing laws and/or specified in the **BDS**.

32. Performance Security

- 32.1. To guarantee the faithful performance by the winning Bidder of its obligations under the contract, it shall post a performance security within a maximum period of ten (10) calendar days from the receipt of the Notice of Award from the BULACAN STATE UNIVERSITY and in no case later than the signing of the contract.
- 32.2. The Performance Security shall be denominated in Philippine Pesos and posted in favor of the BULACAN STATE UNIVERSITY in an amount not less than the percentage of the total contract price in accordance with the following schedule:

Form of Performance Security	Amount of Performance Security (Not less than the Percentage of the Total Contract Price)
(a) Cash or cashier's/manager's check issued by a Universal or Commercial Bank.	Ten percent (10%)

(b) Bank draft/guarantee or irrevocable letter of credit issued by a Universal or Commercial Bank: Provided, however, that it shall be confirmed or authenticated by a Universal or Commercial Bank, if issued by a foreign bank.	
(c) Surety bond callable upon demand issued by a surety or insurance company duly certified by the Insurance Commission as authorized to issue such security.	Thirty percent (30%)

32.3. Failure of the successful Bidder to comply with the above-mentioned requirement shall constitute sufficient ground for the annulment of the award and forfeiture of the bid security, in which event the BULACAN STATE UNIVERSITY shall have a fresh period to initiate and complete the post qualification of the second Lowest Calculated Bid. The procedure shall be repeated until LCRB is identified and selected for recommendation of contract award. However if no Bidder passed post-qualification, the BAC shall declare the bidding a failure and conduct a re-bidding with re-advertisement, if necessary.

33. Notice to Proceed

Within seven (7) calendar days from the date of approval of the Contract by the appropriate government approving authority, the BULACAN STATE UNIVERSITY shall issue the Notice to Proceed (NTP) together with a copy or copies of the approved contract to the successful Bidder. All notices called for by the terms of the contract shall be effective only at the time of receipt thereof by the successful Bidder.

34. Protest Mechanism

Decision of the BULACAN STATE UNIVERSITY at any stage of the procurement process may be questioned in accordance with Sections 55 of the IRR of RA 9184.

Bid Data Sheet

ITB Clause	
1.1	<p>The Procuring Entity is Bulacan State University (BuSU).</p> <p>The name of the Contract is:</p> <p>Completion of the College of Industrial Technology (CIT) Building</p> <p>The identification number of the Contract is Infra-2019-10.</p>
2	<p>The Funding Source is:</p> <p>The Government of the Philippines (GOP) through Income Fund 2019 in the amount of Twenty Six Million Three Hundred Ninety Nine Thousand Nine Hundred Fifty One Pesos and 51/100 (₱ 26,399,951.51).</p> <p>The name of the Project is Completion of the College of Industrial Technology (CIT) Building-Infra2019-10</p>
3.1	No further instructions.
5.1	No further instructions.
5.2	Bidding is restricted to eligible bidders as defined in ITB Clause 5.1.
5.4(a)	<p>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 Philippine Statistics Authority (PSA) consumer price index. However, contractors under Small A and Small B categories without similar experience on the contract to be bid may be allowed to bid if the cost of such contract is not more than the Allowable Range of Contract Cost (ARCC) of their registration based on the guidelines as prescribed by the PCAB.</p> <p><u>Similar project:</u> <u>Construction of at least Three (3)-Storey Building, costing fifty percent (50%) of the ABC.</u></p> <p>Supporting documents to be submitted:</p> <ul style="list-style-type: none"> (1) Program of Works; (2) Notice of Award or Notice to Proceed or Contract issued by the owners; (3) Owner's Certificate of Final Acceptance; or the Constructors Performance Evaluation Summary (CPES) Final Rating or the Certificate of Completion, must be satisfactory.
5.4(b)	For this purpose, similar contracts shall refer to contracts which have the same major categories of work.
8.2	Not applicable.
9.1	The BULACAN STATE UNIVERSITY will hold a Pre-bid Conference for this Project on April 23, 2019 (Tuesday) 1:30 p.m. at the BAC Function Room ,

	3rd Floor, Hostel, Bulacan State University (Main Campus), Guinhawa, City of Malolos, Bulacan
10.1	<p>The BULACAN STATE UNIVERSITY's address is:</p> <p>Ms. HERMOGENA A. BAUTISTA <i>Chairperson, BAC – Infrastructure & Repairs</i> BULACAN STATE UNIVERSITY <i>Guinhawa, City of Malolos, Bulacan</i> Tel No. : (044) 919-7800 loc 1053; Fax No.: (044) 791-0153 E-mail address: <u>bulsu.bac2secretariat@bulsu.edu.ph</u></p>
10.4	No further instructions.
12.1	No further instructions.
12.1(a)(iii)	<p>Valid Philippine Contractors Accreditation Board (PCAB) License at least:</p> <p>Size Range – Medium A, License Category- B</p>
12.1(b)(ii.1)	Organizational Chart for the contract to be bid
12.1(b)(ii.2)	<p>The required key personnel are the following:</p> <ol style="list-style-type: none"> 1. Project Manager 2. *Project In-charge Engineer 3. *Project Architect 4. *Safety Officer 5. Foreman 6. Carpenter 7. Mason 8. *Electrician 9. Plumber 10. Welder 11. Steelmen 12. Laborer (Skilled/Helper) <p>Notes:</p> <ol style="list-style-type: none"> 1. The list of contractor's personnel must be supported by complete documents certifying their qualification and experience such as valid PRC ID, COSH certificate, CV, etc. 2. Key Personnel's Affidavit of commitment to work on the Contract 3. Key personnel named in the bid proposal must be committed to the project from the start date of the contract up to its completion. In case of replacement of key personnel, the contractor must request in writing to the BuLSU indicating the valid reasons for such replacement and attaching

	thereto documents pertaining to the substitute personnel and the same must be approved.
12.1(b)(ii.3)	<p>The minimum major equipment requirements are the following:</p> <ol style="list-style-type: none"> 1. Mixer 2. Welding Machine/ Acetylene/ Oxygen 3. Truck 4. Power Tools/ Hand Tools 5. Lifting Equipment such as Chain Block/ Mechanized Pulley for the erection of truss 6. Vibrator
12.1(b)(ii.4)	<p>Additional documents to be included in the technical envelope:</p> <ol style="list-style-type: none"> a. Construction Schedule and S-curve; b. Manpower Schedule; c. Detailed Construction Methods; d. PERT/CPM (network diagram); e. Equipment/Tools Utilization Schedule; f. Site Inspection Certificate issued by BuLSU; g. Contractor's Confirmation with the Construction Specifications; and h. Certification of Satisfactory Performance (with no negative slippage) from Project Management Office (PMO) for previous and on-going projects with BuLSU, if any.
13.1(b)	<p>This shall include the following documents:</p> <ol style="list-style-type: none"> 1) Duly signed Financial Bid Form; 2) Bid prices in the Bill of Quantities; 3) Detailed estimates, including a summary sheet indicating the unit prices of construction materials, labor rates, and equipment rentals used in coming up with the Bid; 4) Cash flow by quarter or payment schedule; 5) Detailed Unit Price Analysis; 6) Back-up quantity computation sheet/tally sheet as programmed and 7) Preferably with soft copy in compact disc (CD) of the duly priced Bill of Quantities & Detailed Estimates using Microsoft Excel.
13.2	<p>The ABC is Twenty Six Million Three Hundred Ninety Nine Thousand Nine Hundred Fifty One Pesos and 51/100 (₱ 26,399,951.51)</p> <p>Any bid with a financial component exceeding this amount shall not be accepted.</p>
14.2	No further instructions.
15.4	No further instruction.
16.1	The bid prices shall be quoted in Philippine Pesos.
16.3	No further instructions.

17.1	Bids will be valid until one hundred twenty (120) calendar days after bid opening.
18.1	<p>The bid security shall be in the form of a <u>Bid Securing Declaration</u> or any of the following forms and amounts:</p> <p>1. The amount of not less than ₱ 527,999.03 <i>[Insert 2% of ABC]</i>, if bid security is in cash, cashier's/manager's check, bank draft/guarantee or irrevocable letter of credit;</p> <p>2.The amount of not less than ₱ 1,319,997.58 <i>[Insert 5% of ABC]</i> if bid security is in Surety Bond.</p>
18.2	The bid security shall be valid until one hundred twenty (120) calendar days after bid opening.
20.3	Each Bidder shall submit <u>one (1) original or certified true copy of the original and three (3) additional photocopies of the first and second components of its bid duly signed by the authorized representative of the bidder.</u>
21	<p>The address for submission of bids is:</p> <p><i>BAC Function Room, 3rd Floor, Hostel, Bulacan State University, Guinhawa, City of Malolos, Bulacan.</i></p> <p>The deadline for submission of bids is on May 6, 2019 (Monday), 1:00 p.m.</p>
24.1	<p>The place of bid opening is:</p> <p><i>BAC Function Room, 3rd Floor, Hostel, Bulacan State University, Guinhawa, City of Malolos, Bulacan.</i></p> <p>The date and time of bid opening is on May 6, 2019 (Monday), 1:30 p.m.</p>
24.2	No further instructions.
24.3	No further instructions.
27.3	Partial bid is not allowed. The infrastructure project is packaged in a single lot and the lot shall not be divided into sub-lots for the purpose of bidding, evaluation, and contract award.
27.4	No further instructions.
28.2	<i>List licenses and permits relevant to the Project and the corresponding law requiring it or state "None."</i>
31.4(f)	No further instructions.

Definitions

For purposes of this Clause, boldface type is used to identify defined terms.

- 1.1. The **Arbiter** is the person appointed jointly by the BULACAN STATE UNIVERSITY and the Contractor to resolve disputes in the first instance, as provided for in **GCC** Clause 21.
- 1.2. **Bill of Quantities** refers to a list of the specific items of the Work and their corresponding unit prices, lump sums, and/or provisional sums.
- 1.3. The **Completion Date** is the date of completion of the Works as certified by the BULACAN STATE UNIVERSITY's Representative, in accordance with **GCC** Clause 49.
- 1.4. The **Contract** is the contract between the BULACAN STATE UNIVERSITY and the Contractor to execute, complete, and maintain the Works.
- 1.5. The **Contract Effectivity Date** is the date of signing of the Contract. However, the contractor shall commence execution of the Works on the Start Date as defined in GCC Clause 1.28.
- 1.6. The **Contract Price** is the price stated in the Notice of Award and thereafter to be paid by the BULACAN STATE UNIVERSITY to the Contractor for the execution of the Works in accordance with this Contract
- 1.7. **Contract Time Extension** is the allowable period for the Contractor to complete the Works in addition to the original Completion Date stated in this Contract.
- 1.8. The **Contractor** is the juridical entity whose proposal has been accepted by the BULACAN STATE UNIVERSITY and to whom the Contract to execute the Work was awarded.
- 1.9. The **Contractor's Bid** is the signed offer or proposal submitted by the Contractor to the BULACAN STATE UNIVERSITY in response to the Bidding Documents.
- 1.10. **Days** are calendar days; months are calendar months.
- 1.11. **Dayworks** are varied work inputs subject to payment on a time basis for the Contractor's employees and Equipment, in addition to payments for associated Materials and Plant.
- 1.12. A **Defect** is any part of the Works not completed in accordance with the Contract.
- 1.13. The **Defects Liability Certificate** is the certificate issued by BULACAN STATE UNIVERSITY's Representative upon correction of defects by the Contractor.

- 1.14 The **Defects Liability Period** is the one year period between contract completion and final acceptance within which the Contractor assumes the responsibility to undertake the repair of any damage to the Works at his own expense.
- 1.15 **Drawings** are graphical presentations of the Works. They include all supplementary details, shop drawings, calculations, and other information provided or approved for the execution of this Contract.
- 1.16 **Equipment** refers to all facilities, supplies, appliances, materials or things required for the execution and completion of the Work provided by the Contractor and which shall not form or are not intended to form part of the Permanent Works.
- 1.17 The **Intended Completion Date** refers to the date specified in the **SCC** when the Contractor is expected to have completed the Works. The Intended Completion Date may be revised only by the BULACAN STATE UNIVERSITY's Representative by issuing an extension of time or an acceleration order.
- 1.18 **Materials** are all supplies, including consumables, used by the Contractor for incorporation in the Works.
- 1.19 The **Notice to Proceed** is a written notice issued by the BULACAN STATE UNIVERSITY or the BULACAN STATE UNIVERSITY's Representative to the Contractor requiring the latter to begin the commencement of the work not later than a specified or determinable date.
- 1.20 **Permanent Works** are all permanent structures and all other project features and facilities required to be constructed and completed in accordance with this Contract which shall be delivered to the BULACAN STATE UNIVERSITY and which shall remain at the Site after the removal of all Temporary Works.
- 1.21 **Plant** refers to the machinery, apparatus, and the like intended to form an integral part of the Permanent Works.
- 1.22 The **BULACAN STATE UNIVERSITY** is the party who employs the Contractor to carry out the Works stated in the **SCC**.
- 1.23 The **BULACAN STATE UNIVERSITY's Representative** refers to the Head of the BULACAN STATE UNIVERSITY or his duly authorized representative, identified in the **SCC**, who shall be responsible for supervising the execution of the Works and administering this Contract.
- 1.24 The **Site** is the place provided by the BULACAN STATE UNIVERSITY where the Works shall be executed and any other place or places which may be designated in the **SCC**, or notified to the Contractor by the BULACAN STATE UNIVERSITY's Representative as forming part of the Site.

- 1.25 **Site Investigation Reports** are those that were included in the Bidding Documents and are factual and interpretative reports about the surface and subsurface conditions at the Site.
- 1.26 **Slippage** is a delay in work execution occurring when actual accomplishment falls below the target as measured by the difference between the scheduled and actual accomplishment of the Work by the Contractor as established from the work schedule. This is actually described as a percentage of the whole Works.
- 1.27 **Specifications** means the description of Works to be done and the qualities of materials to be used, the equipment to be installed and the mode of construction.
- 1.28 The **Start Date**, as specified in the **SCC**, is the date when the Contractor is obliged to commence execution of the Works. It does not necessarily coincide with any of the Site Possession Dates.
- 1.29 A **Subcontractor** is any person or organization to whom a part of the Works has been subcontracted by the Contractor, as allowed by the BULACAN STATE UNIVERSITY, but not any assignee of such person.
- 1.30 **Temporary Works** are works designed, constructed, installed, and removed by the Contractor that are needed for construction or installation of the Permanent Works.
- 1.31 **Work(s)** refer to the Permanent Works and Temporary Works to be executed by the Contractor in accordance with this Contract, including (i) the furnishing of all labor, materials, equipment and others incidental, necessary or convenient to the complete execution of the Works; (ii) the passing of any tests before acceptance by the BULACAN STATE UNIVERSITY's Representative; (iii) and the carrying out of all duties and obligations of the Contractor imposed by this Contract as described in the **SCC**.

a. Interpretation

- i. In interpreting the Conditions of Contract, singular also means plural, male also means female or neuter, and the other way around. Headings have no significance. Words have their normal meaning under the language of this Contract unless specifically defined. The BULACAN STATE UNIVERSITY's Representative will provide instructions clarifying queries about the Conditions of Contract.
- ii. If sectional completion is specified in the **SCC**, references in the Conditions of Contract to the Works, the Completion Date, and the Intended Completion Date apply to any Section of the Works (other than references to the Completion Date and Intended Completion Date for the whole of the Works).
- iii. The documents forming this Contract shall be interpreted in the following order of priority:

- a) Contract Agreement;
- b) Bid Data Sheet;
- c) Instructions to Bidders;
- d) Addenda to the Bidding Documents;
- e) Special Conditions of Contract;
- f) General Conditions of Contract;
- g) Specifications;
- h) Bill of Quantities; and
- i) Drawings.

b. Governing Language and Law

- i. This Contract has been executed in the English language, which shall be the binding and controlling language for all matters relating to the meaning or interpretation of this Contract. All correspondence and other documents pertaining to this Contract which are exchanged by the parties shall be written in English.
- ii. This Contract shall be interpreted in accordance with the laws of the Republic of the Philippines.

c. Communications

Communications between parties that are referred to in the Conditions shall be effective only when in writing. A notice shall be effective only when it is received by the concerned party.

d. Possession of Site

- i. On the date specified in the **SCC**, the BULACAN STATE UNIVERSITY shall grant the Contractor possession of so much of the Site as may be required to enable it to proceed with the execution of the Works. If the Contractor suffers delay or incurs cost from failure on the part of the BULACAN STATE UNIVERSITY to give possession in accordance with the terms of this clause, the BULACAN STATE UNIVERSITY'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 BULACAN STATE UNIVERSITY.
- ii. If possession of a portion is not given by the date stated in the **SCC** Clause 5.1, the BULACAN STATE UNIVERSITY will be deemed to have delayed the start of the relevant activities. The resulting adjustments in contract time to address such delay shall be in accordance with **GCC** Clause 47.

- iii. The Contractor shall bear all costs and charges for special or temporary right-of-way required by it in connection with access to the Site. The Contractor shall also provide at his own cost any additional facilities outside the Site required by it for purposes of the Works.
- iv. The Contractor shall allow the BULACAN STATE UNIVERSITY's Representative and any person authorized by the BULACAN STATE UNIVERSITY's Representative access to the Site and to any place where work in connection with this Contract is being carried out or is intended to be carried out.

e. The Contractor's Obligations

- i. The Contractor shall carry out the Works properly and in accordance with this Contract. The Contractor shall provide all supervision, labor, Materials, Plant and Contractor's Equipment, which may be required. All Materials and Plant on Site shall be deemed to be the property of the BULACAN STATE UNIVERSITY.
- ii. The Contractor shall commence execution of the Works on the Start Date and shall carry out the Works in accordance with the Program of Work submitted by the Contractor, as updated with the approval of the BULACAN STATE UNIVERSITY's Representative, and complete them by the Intended Completion Date.
- iii. The Contractor shall be responsible for the safety of all activities on the Site.
- iv. The Contractor shall carry out all instructions of the BULACAN STATE UNIVERSITY's Representative that comply with the applicable laws where the Site is located.
- v. The Contractor shall employ the key personnel named in the Schedule of Key Personnel, as referred to in the **SCC**, to carry out the supervision of the Works. The BULACAN STATE UNIVERSITY 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.
- vi. If the BULACAN STATE UNIVERSITY's Representative asks the Contractor to remove a member of the Contractor's staff or work force, for justifiable cause, the Contractor shall ensure that the person leaves the Site within seven (7) days and has no further connection with the Work in this Contract.
- vii. During Contract implementation, the Contractor and his subcontractors shall abide at all times by all labor laws, including child labor related enactments, and other relevant rules.

- viii. The Contractor shall submit to the BULACAN STATE UNIVERSITY for consent the name and particulars of the person authorized to receive instructions on behalf of the Contractor.
- ix. The Contractor shall cooperate and share the Site with other contractors, public authorities, utilities, and the BULACAN STATE UNIVERSITY between the dates given in the schedule of other contractors particularly when they shall require access to the Site. The Contractor shall also provide facilities and services for them during this period. The BULACAN STATE UNIVERSITY may modify the schedule of other contractors, and shall notify the Contractor of any such modification thereto.
- x. Should anything of historical or other interest or of significant value be unexpectedly discovered on the Site, it shall be the property of the BULACAN STATE UNIVERSITY. The Contractor shall notify the BULACAN STATE UNIVERSITY's Representative of such discoveries and carry out the BULACAN STATE UNIVERSITY's Representative's instructions in dealing with them.

f. Performance Security

- i. Within ten (10) calendar days from receipt of the Notice of Award from the BULACAN STATE UNIVERSITY but in no case later than the signing of the contract by both parties, the Contractor shall furnish the performance security in any of the forms prescribed in **ITB** Clause 32.2.
- ii. The performance security posted in favor of the BULACAN STATE UNIVERSITY shall be forfeited in the event it is established that the Contractor is in default in any of its obligations under the Contract.
- iii. The performance security shall remain valid until issuance by the BULACAN STATE UNIVERSITY of the Certificate of Final Acceptance.
- iv. The performance security may be released by the BULACAN STATE UNIVERSITY and returned to the Contractor after the issuance of the Certificate of Final Acceptance subject to the following conditions:
 - 1. There are no pending claims against the Contractor or the surety company filed by the BULACAN STATE UNIVERSITY;
 - 2. The Contractor has no pending claims for labor and materials filed against it; and
 - 3. Other terms specified in the **SCC**.

- v. The Contractor shall post an additional performance security following the amount and form specified in **ITB** Clause 32.2 to cover any cumulative increase of more than ten percent (10%) over the original value of the contract as a result of amendments to order or change orders, extra work orders and supplemental agreements, as the case may be. The Contractor shall cause the extension of the validity of the performance security to cover approved contract time extensions.
- vi. In case of a reduction in the contract value or for partially completed Works under the contract which are usable and accepted by the BULACAN STATE UNIVERSITY the use of which, in the judgment of the implementing agency or the BULACAN STATE UNIVERSITY, will not affect the structural integrity of the entire project, the BULACAN STATE UNIVERSITY shall allow a proportional reduction in the original performance security, provided that any such reduction is more than ten percent (10%) and that the aggregate of such reductions is not more than fifty percent (50%) of the original performance security.
- vii. Unless otherwise indicated in the **SCC**, the Contractor, by entering into the Contract with the BULACAN STATE UNIVERSITY, acknowledges the right of the BULACAN STATE UNIVERSITY to institute action pursuant to Act 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.

g. Subcontracting

- i. Unless otherwise indicated in the **SCC**, the Contractor cannot subcontract Works more than the percentage specified in **BDS** Clause 8.1.
- ii. Subcontracting of any portion of the Works does not relieve the Contractor of any liability or obligation under this Contract. The Contractor 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.
- iii. If subcontracting is allowed. The contractor may identify its subcontractor during contract implementation stage. Subcontractors disclosed and identified during the bidding may be changed during the implementation of this Contract. In either case, subcontractors must submit the documentary requirements under ITB Clause 12 and comply with the eligibility criteria specified in the **BDS**. In the event that any subcontractor is found by any BULACAN STATE UNIVERSITY to be eligible, the subcontracting of such portion of the Works shall be disallowed.

h. Liquidated Damages

- i. The Contractor shall pay liquidated damages to the BULACAN STATE UNIVERSITY for each day that the Completion Date is later than the Intended Completion Date. The applicable liquidated damages is at least one-tenth (1/10) of a percent of the cost of the unperformed portion for every day of delay. The total amount of liquidated damages shall not exceed ten percent (10%) of the amount of the contract. The BULACAN STATE UNIVERSITY may deduct liquidated damages from payments due to the Contractor. Payment of liquidated damages shall not affect the Contractor's liabilities. Once the cumulative amount of liquidated damages reaches ten percent (10%) of the amount of this Contract, the BULACAN STATE UNIVERSITY may rescind or terminate this Contract, without prejudice to other courses of action and remedies available under the circumstances.
- ii. If the Intended Completion Date is extended after liquidated damages have been paid, the Engineer of the BULACAN STATE UNIVERSITY shall correct any overpayment of liquidated damages by the Contractor by adjusting the next payment certificate.

i. 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.

j. The Procuring Entity, Licenses and Permits

The BULACAN STATE UNIVERSITY shall, if requested by the Contractor, assist him in applying for permits, licenses or approvals, which are required for the Works.

k. Contractor's Risk and Warranty Security

- i. The Contractor shall assume full responsibility for the Works from the time project construction commenced up to final acceptance by the BULACAN STATE UNIVERSITY and shall be held responsible for any damage or destruction of the Works except those occasioned by *force majeure*. The Contractor shall be fully responsible for the safety, protection, security, and convenience of his personnel, third parties, and the public at large, as well as the Works, Equipment, installation, and the like to be affected by his construction work.
- ii. The defects liability period for infrastructure projects shall be one year from contract completion up to final acceptance by the BULACAN STATE UNIVERSITY. During this period, the Contractor shall undertake the repair works, at his own expense, of any damage to the Works on account of the use of materials of inferior quality within ninety (90) days from the time the Head of the BULACAN STATE UNIVERSITY has issued an order to

undertake repair. In case of failure or refusal to comply with this mandate, the BULACAN STATE UNIVERSITY shall undertake such repair works and shall be entitled to full reimbursement of expenses incurred therein upon demand.

- iii. Unless otherwise indicated in the **SCC**, in case the Contractor fails to comply with the preceding paragraph, the BULACAN STATE UNIVERSITY 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.
- iv. After final acceptance of the Works by the BULACAN STATE UNIVERSITY, the Contractor shall be held responsible for “Structural Defects,” *i.e.*, major faults/flaws/deficiencies in one or more key structural elements of the project which may lead to structural failure of the completed elements or structure, or “Structural Failures,” *i.e.*, where one or more key structural elements in an infrastructure facility fails or collapses, thereby rendering the facility or part thereof incapable of withstanding the design loads, and/or endangering the safety of the users or the general public:
 1. Contractor – Where Structural Defects/Failures arise due to faults attributable to improper construction, use of inferior quality/substandard materials, and any violation of the contract plans and specifications, the contractor shall be held liable;
 2. Consultants – Where Structural Defects/Failures arise due to faulty and/or inadequate design and specifications as well as construction supervision, then the consultant who prepared the design or undertook construction supervision for the project shall be held liable;
 3. BULACAN STATE UNIVERSITY’s Representatives/Project Manager/Construction Managers and Supervisors – The project owner’s representative(s), project manager, construction manager, and supervisor(s) shall be held liable in cases where the Structural Defects/Failures are due to his/their willful intervention in altering the designs and other specifications; negligence or omission in not approving or acting on proposed changes to noted defects or deficiencies in the design and/or specifications; and the use of substandard construction materials in the project;
 4. Third Parties - Third Parties shall be held liable in cases where Structural Defects/Failures are caused by work undertaken by them such as leaking pipes, diggings or excavations, underground cables and electrical wires, underground tunnel, mining shaft and the like, in which

case the applicable warranty to such structure should be levied to third parties for their construction or restoration works.

5. Users - In cases where Structural Defects/Failures are due to abuse/misuse by the end user of the constructed facility and/or non-compliance by a user with the technical design limits and/or intended purpose of the same, then the user concerned shall be held liable.
- v. The warranty against Structural Defects/Failures, except those occasioned on force majeure, shall cover the period specified in the **SCC** reckoned from the date of issuance of the Certificate of Final Acceptance by the BULACAN STATE UNIVERSITY.
- vi. The Contractor shall be required to put up a warranty security in the form of cash, bank guarantee, letter of credit, GSIS or surety bond callable on demand, in accordance with the following schedule:

Form of Warranty	Amount of Warranty Security Not less than the Percentage (%) of Total Contract Price
1. Cash or letter of credit issued by Universal or Commercial bank: provided, however, that the letter of credit shall be confirmed or authenticated by a Universal or Commercial bank, if issued by a foreign bank	Five Percent (5%)
2. Bank guarantee confirmed by Universal or Commercial bank: provided, however, that the letter of credit shall be confirmed or authenticated by a Universal or Commercial bank, if issued by a foreign bank	Ten Percent (10%)
3. Surety bond callable upon demand issued by GSIS or any surety or insurance company duly certified by the Insurance Commission	Thirty Percent (30%)

- vii. The warranty security shall be stated in Philippine Pesos and shall remain effective for one year from the date of issuance of the Certificate of Final Acceptance by the BULACAN STATE UNIVERSITY, and returned only after the lapse of said one year period.
- viii. In case of structural defects/failure occurring during the applicable warranty period provided in **GCC** Clause 12.5, the BULACAN

STATE UNIVERSITY shall undertake the necessary restoration or reconstruction works and shall be entitled to full reimbursement by the parties found to be liable for expenses incurred therein upon demand, without prejudice to the filing of appropriate administrative, civil, and/or criminal charges against the responsible persons as well as the forfeiture of the warranty security posted in favor of the BULACAN STATE UNIVERSITY.

I. 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.

m. Procuring Entity's Risk

- i. From the Start Date until the Certificate of Final Acceptance has been issued, the following are risks of the BULACAN STATE UNIVERSITY:
 1. The risk of personal injury, death, or loss of or damage to property (excluding the Works, Plant, Materials, and Equipment), which are due to:
 - a. any type of use or occupation of the Site authorized by the BULACAN STATE UNIVERSITY after the official acceptance of the works; or
 - b. negligence, breach of statutory duty, or interference with any legal right by the BULACAN STATE UNIVERSITY or by any person employed by or contracted to him except the Contractor.
 2. The risk of damage to the Works, Plant, Materials, and Equipment to the extent that it is due to a fault of the BULACAN STATE UNIVERSITY or in the BULACAN STATE UNIVERSITY's design, or due to war or radioactive contamination directly affecting the country where the Works are to be executed.

n. Insurance

- i. The Contractor shall, under his name and at his own expense, obtain and maintain, for the duration of this Contract, the following insurance coverage:
 1. Contractor's All Risk Insurance;
 2. Transportation to the project Site of Equipment, Machinery, and Supplies owned by the Contractor;
 3. Personal injury or death of Contractor's employees; and

4. Comprehensive insurance for third party liability to Contractor's direct or indirect act or omission causing damage to third persons.
- ii. The Contractor shall provide evidence to the BULACAN STATE UNIVERSITY's Representative that the insurances required under this Contract have been effected and shall, within a reasonable time, provide copies of the insurance policies to the BULACAN STATE UNIVERSITY's Representative. Such evidence and such policies shall be provided to the BULACAN STATE UNIVERSITY's through the BULACAN STATE UNIVERSITY's Representative.
- iii. The Contractor shall notify the insurers of changes in the nature, extent, or program for the execution of the Works and ensure the adequacy of the insurances at all times in accordance with the terms of this Contract and shall produce to the BULACAN STATE UNIVERSITY's Representative the insurance policies in force including the receipts for payment of the current premiums.

The above insurance policies shall be obtained from any reputable insurance company approved by the BULACAN STATE UNIVERSITY's Representative.

- iv. If the Contractor fails to obtain and keep in force the insurances referred to herein or any other insurance which he may be required to obtain under the terms of this Contract, the BULACAN STATE UNIVERSITY may obtain and keep in force any such insurances and pay such premiums as may be necessary for the purpose. From time to time, the BULACAN STATE UNIVERSITY may deduct the amount it shall pay for said premiums including twenty five percent (25%) therein from any monies due, or which may become due, to the Contractor, without prejudice to the BULACAN STATE UNIVERSITY exercising its right to impose other sanctions against the Contractor pursuant to the provisions of this Contract.
- v. In the event the Contractor fails to observe the above safeguards, the BULACAN STATE UNIVERSITY may, at the Contractor's expense, take whatever measure is deemed necessary for its protection and that of the Contractor's personnel and third parties, and/or order the interruption of dangerous Works. In addition, the BULACAN STATE UNIVERSITY may refuse to make the payments under **GCC** Clause 40 until the Contractor complies with this Clause.
- vi. The Contractor shall immediately replace the insurance policy obtained as required in this Contract, without need of the BULACAN STATE UNIVERSITY's demand, with a new policy issued by a new insurance company acceptable to the BULACAN STATE UNIVERSITY for any of the following grounds:

1. The issuer of the insurance policy to be replaced has:

- a. become bankrupt;
- b. been placed under receivership or under a management committee;
- c. been sued for suspension of payment; or
- d. been suspended by the Insurance Commission and its license to engage in business or its authority to issue insurance policies cancelled; or
- e. Where reasonable grounds exist that the insurer may not be able, fully and promptly, to fulfill its obligation under the insurance policy.

o. Termination for Default of Contractor

- i. The BULACAN STATE UNIVERSITY shall terminate this Contract for default when any of the following conditions attend its implementation:
 - a. Due to the Contractor's fault and while the project is on-going, it has incurred negative slippage of fifteen percent (15%) or more in accordance with Presidential Decree 1870, regardless of whether or not previous warnings and notices have been issued for the Contractor to improve his performance;
 - b. Due to its own fault and after this Contract time has expired, the Contractor incurs delay in the completion of the Work after this Contract has expired; or
 - c. The Contractor:
 - a. abandons the contract Works, refuses or fails to comply with a valid instruction of the BULACAN STATE UNIVERSITY or fails to proceed expeditiously and without delay despite a written notice by the BULACAN STATE UNIVERSITY;
 - b. does not actually have on the project Site the minimum essential equipment listed on the bid necessary to prosecute the Works in accordance with the approved Program of Work and equipment deployment schedule as required for the project;

- c. does not execute the Works in accordance with this Contract or persistently or flagrantly neglects to carry out its obligations under this Contract;
 - d. neglects or refuses to remove materials or to perform a new Work that has been rejected as defective or unsuitable; or
 - e. sub-lets any part of this Contract without approval by the BULACAN STATE UNIVERSITY.
- ii. All materials on the Site, Plant, Works, including Equipment purchased and funded under the Contract shall be deemed to be the property of the BULACAN STATE UNIVERSITY if this Contract is rescinded because of the Contractor's default.

p. Termination for Default of Procuring Entity

The Contractor may terminate this Contract with the BULACAN STATE UNIVERSITY if the works are completely stopped for a continuous period of at least sixty (60) calendar days through no fault of its own, due to any of the following reasons:

- 1. Failure of the BULACAN STATE UNIVERSITY to deliver, within a reasonable time, supplies, materials, right-of-way, or other items it is obligated to furnish under the terms of this Contract; or
- 2. The prosecution of the Work is disrupted by the adverse peace and order situation, as certified by the Armed Forces of the Philippines Provincial Commander and approved by the Secretary of National Defense.

q. Termination for Other Causes

- i. The BULACAN STATE UNIVERSITY may terminate this Contract, in whole or in part, at any time for its convenience. The Head of the BULACAN STATE UNIVERSITY may terminate this Contract for the convenience of the BULACAN STATE UNIVERSITY if he has determined the existence of conditions that make Project Implementation economically, financially or technically impractical and/or unnecessary, such as, but not limited to, fortuitous event(s) or changes in law and National Government policies.
- ii. The BULACAN STATE UNIVERSITY or the Contractor may terminate this Contract if the other party causes a fundamental breach of this Contract.

iii. Fundamental breaches of Contract shall include, but shall not be limited to, the following:

1. The Contractor stops work for twenty eight (28) days when no stoppage of work is shown on the current Program of Work and the stoppage has not been authorized by the BULACAN STATE UNIVERSITY's Representative;
2. The BULACAN STATE UNIVERSITY's Representative instructs the Contractor to delay the progress of the Works, and the instruction is not withdrawn within twenty eight (28) days;
3. The BULACAN STATE UNIVERSITY shall terminate this Contract if the Contractor is declared bankrupt or insolvent as determined with finality by a court of competent jurisdiction. In this event, termination will be without compensation to the Contractor, provided that such termination will not prejudice or affect any right of action or remedy which has accrued or will accrue thereafter to the BULACAN STATE UNIVERSITY and/or the Contractor. In the case of the Contractor's insolvency, any Contractor's Equipment which the BULACAN STATE UNIVERSITY instructs in the notice is to be used until the completion of the Works;
4. A payment certified by the BULACAN STATE UNIVERSITY's Representative is not paid by the BULACAN STATE UNIVERSITY to the Contractor within eighty four (84) days from the date of the BULACAN STATE UNIVERSITY's Representative's certificate;
5. The BULACAN STATE UNIVERSITY's Representative gives Notice that failure to correct a particular Defect is a fundamental breach of Contract and the Contractor fails to correct it within a reasonable period of time determined by the BULACAN STATE UNIVERSITY's Representative;
6. The Contractor does not maintain a Security, which is required;
7. The Contractor has delayed the completion of the Works by the number of days for which the maximum amount of liquidated damages can be paid, as defined in the **GCC** Clause h; and
8. In case it is determined prima facie by the BULACAN STATE UNIVERSITY 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, the following:

- a. corrupt, fraudulent, collusive, coercive, and obstructive practices as defined in **ITB** Clause 3.1(a), unless otherwise specified in the SCC;
 - b. drawing up or using forged documents;
 - c. using adulterated materials, means or methods, or engaging in production contrary to rules of science or the trade; and
 - d. any other act analogous to the foregoing.
- iv. The Funding Source or the BULACAN STATE UNIVERSITY, as appropriate, will seek to impose the maximum civil, administrative and/or criminal penalties available under the applicable law on individuals and organizations deemed to be involved with corrupt, fraudulent, or coercive practices.
- v. When persons from either party to this Contract gives notice of a fundamental breach to the BULACAN STATE UNIVERSITY's Representative in order to terminate the existing contract for a cause other than those listed under **GCC** Clause 18.3, the BULACAN STATE UNIVERSITY's Representative shall decide whether the breach is fundamental or not.
- vi. If this Contract is terminated, the Contractor shall stop work immediately, make the Site safe and secure, and leave the Site as soon as reasonably possible.

r. Procedures for Termination of Contracts

- i. The following provisions shall govern the procedures for the termination of this Contract:
 - 1. Upon receipt of a written report of acts or causes which may constitute ground(s) for termination as aforementioned, or upon its own initiative, the BULACAN STATE UNIVERSITY shall, within a period of seven (7) calendar days, verify the existence of such ground(s) and cause the execution of a Verified Report, with all relevant evidence attached;
 - 2. Upon recommendation by the BULACAN STATE UNIVERSITY, the Head of the BULACAN STATE UNIVERSITY shall terminate this Contract only by a written notice to the Contractor conveying the termination of this Contract. The notice shall state:
 - a. that this Contract is being terminated for any of the ground(s) afore-mentioned, and a statement of the acts that constitute the ground(s) constituting the same;

- b. the extent of termination, whether in whole or in part;
- c. an instruction to the Contractor to show cause as to why this Contract should not be terminated; and
- d. special instructions of the BULACAN STATE UNIVERSITY, if any.

The Notice to Terminate shall be accompanied by a copy of the Verified Report;

- 3. Within a period of seven (7) calendar days from receipt of the Notice of Termination, the Contractor shall submit to the Head of the BULACAN STATE UNIVERSITY a verified position paper stating why the contract should not be terminated. If the Contractor fails to show cause after the lapse of the seven (7) day period, either by inaction or by default, the Head of the BULACAN STATE UNIVERSITY shall issue an order terminating the contract;
 - 4. The BULACAN STATE UNIVERSITY may, at anytime before receipt of the Contractor's verified position paper described in item (c) above withdraw the Notice to Terminate if it is determined that certain items or works subject of the notice had been completed, delivered, or performed before the Contractor's receipt of the notice;
 - 5. Within a non-extendible period of ten (10) calendar days from receipt of the verified position paper, the Head of the BULACAN STATE UNIVERSITY shall decide whether or not to terminate this Contract. It shall serve a written notice to the Contractor of its decision and, unless otherwise provided in the said notice, this Contract is deemed terminated from receipt of the Contractor of the notice of decision. The termination shall only be based on the ground(s) stated in the Notice to Terminate; and
 - 6. The Head of the BULACAN STATE UNIVERSITY may create a Contract Termination Review Committee (CTRC) to assist him in the discharge of this function. All decisions recommended by the CTRC shall be subject to the approval of the Head of the BULACAN STATE UNIVERSITY.
- ii. Pursuant to Section 69(f) of RA 9184 and without prejudice to the imposition of additional administrative sanctions as the internal rules of the agency may provide and/or further criminal prosecution as provided by applicable laws, the procuring entity shall impose on contractors after the termination of the contract the penalty of suspension for one (1) year for the first offense, suspension for two (2) years for the second offense from participating in the public bidding process, for violations

committed during the contract implementation stage, which include but not limited to the following:

1. Failure of the contractor, due solely to his fault or negligence, to mobilize and start work or performance within the specified period in the Notice to Proceed (“NTP”);
2. Failure by the contractor to fully and faithfully comply with its contractual obligations without valid cause, or failure by the contractor to comply with any written lawful instruction of the procuring entity or its representative(s) pursuant to the implementation of the contract. For the procurement of infrastructure projects or consultancy contracts, lawful instructions include but are not limited to the following:
 - a. Employment of competent technical personnel, competent engineers and/or work supervisors;
 - b. Provision of warning signs and barricades in accordance with approved plans and specifications and contract provisions;
 - c. Stockpiling in proper places of all materials and removal from the project site of waste and excess materials, including broken pavement and excavated debris in accordance with approved plans and specifications and contract provisions;
 - d. Deployment of committed equipment, facilities, support staff and manpower; and
 - e. Renewal of the effectivity dates of the performance security after its expiration during the course of contract implementation.
3. Assignment and subcontracting of the contract or any part thereof or substitution of key personnel named in the proposal without prior written approval by the procuring entity.
4. Poor performance by the contractor or unsatisfactory quality and/or progress of work arising from his fault or negligence as reflected in the Constructor's Performance Evaluation System (“CPES”) rating sheet. In the absence of the CPES rating sheet, the existing performance monitoring system of the procuring entity shall be applied. Any of the following acts by the Contractor shall be construed as poor performance:
 - a. Negative slippage of 15% and above within the critical path of the project due entirely to the fault or negligence of the contractor; and

- b. Quality of materials and workmanship not complying with the approved specifications arising from the contractor's fault or negligence.

- 5. Willful or deliberate abandonment or non-performance of the project or contract by the contractor resulting to substantial breach thereof without lawful and/or just cause.

In addition to the penalty of suspension, the performance security posted by the contractor shall also be forfeited.

s. Force Majeure, Release From Performance

- i. For purposes of this Contract the terms "*force majeure*" and "fortuitous event" may be used interchangeably. In this regard, a fortuitous event or *force majeure* shall be interpreted to mean an event which the Contractor could not have foreseen, or which though foreseen, was inevitable. It shall not include ordinary unfavorable weather conditions; and any other cause the effects of which could have been avoided with the exercise of reasonable diligence by the Contractor.
- ii. If this Contract is discontinued by an outbreak of war or by any other event entirely outside the control of either the BULACAN STATE UNIVERSITY or the Contractor, the BULACAN STATE UNIVERSITY's Representative shall certify that this Contract has been discontinued. The Contractor shall make the Site safe and stop work as quickly as possible after receiving this certificate and shall be paid for all works carried out before receiving it and for any Work carried out afterwards to which a commitment was made.
- iii. If the event continues for a period of eighty four (84) days, either party may then give notice of termination, which shall take effect twenty eight (28) days after the giving of the notice.
- iv. After termination, the Contractor shall be entitled to payment of the unpaid balance of the value of the Works executed and of the materials and Plant reasonably delivered to the Site, adjusted by the following:
 - 1. any sum to which the Contractor is entitled under **GCC** Clause 28;
 - 2. the cost of his suspension and demobilization;
 - 3. any sum to which the BULACAN STATE UNIVERSITY is entitled.
- v. The net balance due shall be paid or repaid within a reasonable time period from the time of the notice of termination.

t. Resolution of Disputes

- i. If any dispute or difference of any kind whatsoever shall arise between the parties in connection with the implementation of the contract covered by the Act and this IRR, the parties shall make every effort to resolve amicably such dispute or difference by mutual consultation.
- ii. If the Contractor believes that a decision taken by the BULACAN STATE UNIVERSITY's Representative was either outside the authority given to the BULACAN STATE UNIVERSITY's Representative by this Contract or that the decision was wrongly taken, the decision shall be referred to the Arbiter indicated in the **SCC** within fourteen (14) days of the notification of the BULACAN STATE UNIVERSITY's Representative's decision.
- iii. Any and all disputes arising from the implementation of this Contract covered by the R.A. 9184 and its IRR shall be submitted to arbitration in the Philippines according to the provisions of Republic Act No. 876, otherwise known as the "Arbitration Law" and Republic Act 9285, otherwise known as the "Alternative Dispute Resolution Act of 2004": *Provided, however, That*, disputes that are within the competence of the Construction Industry Arbitration Commission to resolve shall be referred thereto. The process of arbitration shall be incorporated as a provision in this Contract that will be executed pursuant to the provisions of the Act and its IRR: *Provided, further, that*, by mutual agreement, the parties may agree in writing to resort to other alternative modes of dispute resolution.

u. Suspension of Loan, Credit, Grant, or Appropriation

In the event that the Funding Source suspends the Loan, Credit, Grant, or Appropriation to the BULACAN STATE UNIVERSITY, from which part of the payments to the Contractor are being made:

1. The BULACAN STATE UNIVERSITY is obligated to notify the Contractor of such suspension within seven (7) days of having received the suspension notice.
2. If the Contractor has not received sums due it for work already done within forty five (45) days from the time the Contractor's claim for payment has been certified by the BULACAN STATE UNIVERSITY's Representative, the Contractor may immediately issue a suspension of work notice in accordance with **GCC** Clause 45.2.

v. Procuring Entity's Representative's Decisions

- i. Except where otherwise specifically stated, the BULACAN STATE UNIVERSITY's Representative will decide contractual matters between the BULACAN STATE UNIVERSITY and the Contractor in the role representing the BULACAN STATE UNIVERSITY.

- ii. The BULACAN STATE UNIVERSITY's Representative may delegate any of his duties and responsibilities to other people, except to the Arbiter, after notifying the Contractor, and may cancel any delegation after notifying the Contractor.

w. Approval of Drawings and Temporary Works by the Procuring Entity's Representative

- i. All Drawings prepared by the Contractor for the execution of the Temporary Works, are subject to prior approval by the BULACAN STATE UNIVERSITY's Representative before its use.
- ii. The Contractor shall be responsible for design of Temporary Works.
- iii. The BULACAN STATE UNIVERSITY's Representative's approval shall not alter the Contractor's responsibility for design of the Temporary Works.
- iv. The Contractor shall obtain approval of third parties to the design of the Temporary Works, when required by the BULACAN STATE UNIVERSITY.

x. Acceleration and Delays Ordered by the Procuring Entity's Representative

- i. When the BULACAN STATE UNIVERSITY wants the Contractor to finish before the Intended Completion Date, the BULACAN STATE UNIVERSITY's Representative will obtain priced proposals for achieving the necessary acceleration from the Contractor. If the BULACAN STATE UNIVERSITY accepts these proposals, the Intended Completion Date will be adjusted accordingly and confirmed by both the BULACAN STATE UNIVERSITY and the Contractor.
- ii. If the Contractor's Financial Proposals for an acceleration are accepted by the BULACAN STATE UNIVERSITY, they are incorporated in the Contract Price and treated as a Variation.

y. Extension of the Intended Completion Date

- i. The BULACAN STATE UNIVERSITY's Representative shall extend the Intended Completion Date if a Variation is issued which makes it impossible for the Intended Completion Date to be achieved by the Contractor without taking steps to accelerate the remaining work, which would cause the Contractor to incur additional costs. No payment shall be made for any event which may warrant the extension of the Intended Completion Date.
- ii. The BULACAN STATE UNIVERSITY's Representative shall decide whether and by how much to extend the Intended Completion Date within twenty one (21) days of the Contractor

asking the BULACAN STATE UNIVERSITY's Representative for a decision thereto after fully submitting all supporting information. If the Contractor has failed to give early warning of a delay or has failed to cooperate in dealing with a delay, the delay by this failure shall not be considered in assessing the new Intended Completion Date.

z. Right to Vary

- i. The BULACAN STATE UNIVERSITY's Representative with the prior approval of the BULACAN STATE UNIVERSITY may instruct Variations, up to a maximum cumulative amount of ten percent (10%) of the original contract cost.
- ii. Variations shall be valued as follows:
 1. At a lump sum price agreed between the parties;
 2. where appropriate, at rates in this Contract;
 3. in the absence of appropriate rates, the rates in this Contract shall be used as the basis for valuation; or failing which
 4. at appropriate new rates, equal to or lower than current industry rates and to be agreed upon by both parties and approved by the Head of the BULACAN STATE UNIVERSITY.

aa. Contractor's Right to Claim

If the Contractor incurs cost as a result of any of the events under **GCC** Clause 13, the Contractor shall be entitled to the amount of such cost. If as a result of any of the said events, it is necessary to change the Works, this shall be dealt with as a Variation.

bb. Dayworks

- i. Subject to **GCC** Clause 43 on Variation Order, 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 BULACAN STATE UNIVERSITY's Representative has given written instructions in advance for additional work to be paid for in that way.
- ii. All work to be paid for as Dayworks shall be recorded by the Contractor on forms approved by the BULACAN STATE UNIVERSITY's Representative. Each completed form shall be verified and signed by the BULACAN STATE UNIVERSITY's Representative within two days of the work being done.
- iii. The Contractor shall be paid for Dayworks subject to obtaining signed Dayworks forms.

cc. Early Warning

- i. The Contractor shall warn the BULACAN STATE UNIVERSITY's Representative at the earliest opportunity of specific likely future events or circumstances that may adversely affect the quality of the work, increase the Contract Price, or delay the execution of the Works. The BULACAN STATE UNIVERSITY's Representative may require the Contractor to provide an estimate of the expected effect of the future event or circumstance on the Contract Price and Completion Date. The estimate shall be provided by the Contractor as soon as reasonably possible.
- ii. The Contractor shall cooperate with the BULACAN STATE UNIVERSITY's Representative in making and considering proposals for how the effect of such an event or circumstance can be avoided or reduced by anyone involved in the work and in carrying out any resulting instruction of the BULACAN STATE UNIVERSITY's Representative.

dd. Program of Work

- i. Within the time stated in the **SCC**, the Contractor shall submit to the BULACAN STATE UNIVERSITY's Representative for approval a Program of Work showing the general methods, arrangements, order, and timing for all the activities in the Works.
- ii. An update of the Program of Work shall show the actual progress achieved on each activity and the effect of the progress achieved on the timing of the remaining work, including any changes to the sequence of the activities.
- iii. The Contractor shall submit to the BULACAN STATE UNIVERSITY'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 BULACAN STATE UNIVERSITY'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.
- iv. The BULACAN STATE UNIVERSITY's Representative's approval of the Program of Work shall not alter the Contractor's obligations. The Contractor may revise the Program of Work and submit it to the BULACAN STATE UNIVERSITY's Representative again at any time. A revised Program of Work shall show the effect of any approved Variations.
- v. When the Program of Work is updated, the Contractor shall provide the BULACAN STATE UNIVERSITY's Representative with an updated cash flow forecast. The cash flow forecast shall

include different currencies, as defined in the Contract, converted as necessary using the Contract exchange rates.

- vi. All Variations shall be included in updated Program of Work produced by the Contractor.

ee. Management Conferences

- i. Either the BULACAN STATE UNIVERSITY's Representative or the Contractor may require the other to attend a Management Conference. The Management Conference shall review the plans for remaining work and deal with matters raised in accordance with the early warning procedure.
- ii. The BULACAN STATE UNIVERSITY's Representative shall record the business of Management Conferences and provide copies of the record to those attending the Conference and to the BULACAN STATE UNIVERSITY. The responsibility of the parties for actions to be taken shall be decided by the BULACAN STATE UNIVERSITY's Representative either at the Management Conference or after the Management Conference and stated in writing to all who attended the Conference.

ff. Bill of Quantities

- i. The Bill of Quantities shall contain items of work for the construction, installation, testing, and commissioning of work to be done by the Contractor.
- ii. The Bill of Quantities is used to calculate the Contract Price. The Contractor is paid for the quantity of the work done at the rate in the Bill of Quantities for each item.
- iii. If the final quantity of any work done differs from the quantity in the Bill of Quantities for the particular item and is not more than twenty five percent (25%) of the original quantity, provided the aggregate changes for all items do not exceed ten percent (10%) of the Contract price, the BULACAN STATE UNIVERSITY's Representative shall make the necessary adjustments to allow for the changes subject to applicable laws, rules, and regulations.
- iv. If requested by the BULACAN STATE UNIVERSITY's Representative, the Contractor shall provide the BULACAN STATE UNIVERSITY's Representative with a detailed cost breakdown of any rate in the Bill of Quantities.

gg. Instructions, Inspections and Audits

- i. The BULACAN STATE UNIVERSITY's personnel shall at all reasonable times during construction of the Work be entitled to examine, inspect, measure and test the materials and workmanship, and to check the progress of the construction.

- ii. If the BULACAN STATE UNIVERSITY's Representative instructs the Contractor to carry out a test not specified in the Specification to check whether any work has a defect and the test shows that it does, the Contractor shall pay for the test and any samples. If there is no defect, the test shall be a Compensation Event.
- iii. The Contractor shall permit the Funding Source named in the **SCC** to inspect the Contractor's accounts and records relating to the performance of the Contractor and to have them audited by auditors appointed by the Funding Source, if so required by the Funding Source.

hh. Identifying Defects

The BULACAN STATE UNIVERSITY's Representative shall check the Contractor's work and notify the Contractor of any defects that are found. Such checking shall not affect the Contractor's responsibilities. The BULACAN STATE UNIVERSITY's Representative may instruct the Contractor to search uncover defects and test any work that the BULACAN STATE UNIVERSITY's Representative considers below standards and defective.

ii. Cost of Repairs

Loss or damage to the Works or Materials to be incorporated in the Works between the Start Date and the end of the Defects Liability Periods shall be remedied by the Contractor at the Contractor's cost if the loss or damage arises from the Contractor's acts or omissions.

jj. Correction of Defects

- i. The BULACAN STATE UNIVERSITY's Representative shall give notice to the Contractor of any defects before the end of the Defects Liability Period, which is One (1) year from project completion up to final acceptance by the BULACAN STATE UNIVERSITY's Representative.
- ii. Every time notice of a defect is given, the Contractor shall correct the notified defect within the length of time specified in the BULACAN STATE UNIVERSITY's Representative's notice.
- iii. The Contractor shall correct the defects which he notices himself before the end of the Defects Liability Period.
- iv. The BULACAN STATE UNIVERSITY shall certify that all defects have been corrected. If the BULACAN STATE UNIVERSITY considers that correction of a defect is not essential, he can request the Contractor to submit a quotation for the corresponding reduction in the Contract Price. If the BULACAN STATE UNIVERSITY accepts the quotation, the corresponding change in the SCC is a Variation.

kk. Uncorrected Defects

- i. The BULACAN STATE UNIVERSITY shall give the Contractor at least fourteen (14) days notice of his intention to use a third party to correct a Defect. If the Contractor does not correct the Defect himself within the period, the BULACAN STATE UNIVERSITY may have the Defect corrected by the third party. The cost of the correction will be deducted from the Contract Price.
- ii. The use of a third party to correct defects that are uncorrected by the Contractor will in no way relieve the Contractor of its liabilities and warranties under the Contract.

II. Advance Payment

- i. The BULACAN STATE UNIVERSITY 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**.
- ii. The advance payment shall be made only upon the submission to and acceptance by the BULACAN STATE UNIVERSITY of an irrevocable standby letter of credit of equivalent value from a commercial bank, a bank guarantee or a surety bond callable upon demand, issued by a surety or insurance company duly licensed by the Insurance Commission and confirmed by the BULACAN STATE UNIVERSITY.
- iii. The advance payment shall be repaid by the Contractor by an amount equal to the percentage of the total contract price used for the advance payment.
- iv. The contractor may reduce his standby letter of credit or guarantee instrument by the amounts refunded by the Monthly Certificates in the advance payment.
- v. The BULACAN STATE UNIVERSITY will provide an Advance Payment on the Contract Price as stipulated in the Conditions of Contract, subject to the maximum amount stated in **SCC** Clause 39.1.

mm. Progress Payments

- i. The Contractor may submit a request for payment for Work accomplished. Such request for payment shall be verified and certified by the BULACAN STATE UNIVERSITY'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.
- ii. The BULACAN STATE UNIVERSITY shall deduct the following from the certified gross amounts to be paid to the contractor as progress payment:

1. Cumulative value of the work previously certified and paid for.
 2. Portion of the advance payment to be recouped for the month.
 3. Retention money in accordance with the condition of contract.
 4. Amount to cover third party liabilities.
 5. Amount to cover uncorrected discovered defects in the works.
- iii. Payments shall be adjusted by deducting therefrom the amounts for advance payments and retention. The BULACAN STATE UNIVERSITY shall pay the Contractor the amounts certified by the BULACAN STATE UNIVERSITY's Representative within twenty eight (28) days from the date each certificate was issued. No payment of interest for delayed payments and adjustments shall be made by the BULACAN STATE UNIVERSITY.
- iv. The first progress payment may be paid by the BULACAN STATE UNIVERSITY to the Contractor provided that at least twenty percent (20%) of the work has been accomplished as certified by the BULACAN STATE UNIVERSITY's Representative.
- v. Items of the Works for which a price of "0" (zero) has been entered will not be paid for by the BULACAN STATE UNIVERSITY and shall be deemed covered by other rates and prices in the Contract.

nn. Payment Certificates

- i. The Contractor shall submit to the BULACAN STATE UNIVERSITY's Representative monthly statements of the estimated value of the work executed less the cumulative amount certified previously.
- ii. The BULACAN STATE UNIVERSITY's Representative shall check the Contractor's monthly statement and certify the amount to be paid to the Contractor.
- iii. The value of Work executed shall:
 1. be determined by the BULACAN STATE UNIVERSITY's Representative;
 2. comprise the value of the quantities of the items in the Bill of Quantities completed; and
 3. include the valuations of approved variations.

- iv. The BULACAN STATE UNIVERSITY's Representative may exclude any item certified in a previous certificate or reduce the proportion of any item previously certified in any certificate in the light of later information.

oo.Retention

- i. The BULACAN STATE UNIVERSITY shall retain from each payment due to the Contractor an amount equal to a percentage thereof using the rate as specified in GCC Sub-Clause ii.
- ii. Progress payments are subject to retention of ten percent (10%), referred to as the "retention money." Such retention shall be based on the total amount due to the Contractor prior to any deduction and shall be retained from every progress payment until fifty percent (50%) of the value of Works, as determined by the BULACAN STATE UNIVERSITY, are completed. If, after fifty percent (50%) completion, the Work is satisfactorily done and on schedule, no additional retention shall be made; otherwise, the ten percent (10%) retention shall again be imposed using the rate specified therefor.
- iii. The total "retention money" shall be due for release upon final acceptance of the Works. The Contractor may, however, request the substitution of the retention money for each progress billing with irrevocable standby letters of credit from a commercial bank, bank guarantees or surety bonds callable on demand, of amounts equivalent to the retention money substituted for and acceptable to the BULACAN STATE UNIVERSITY, provided that the project is on schedule and is satisfactorily undertaken. Otherwise, the ten (10%) percent retention shall be made. Said irrevocable standby letters of credit, bank guarantees and/or surety bonds, to be posted in favor of the Government shall be valid for a duration to be determined by the concerned implementing office/agency or BULACAN STATE UNIVERSITY and will answer for the purpose for which the ten (10%) percent retention is intended, *i.e.*, to cover uncorrected discovered defects and third party liabilities.
- iv. On completion of the whole Works, the Contractor may substitute retention money with an "on demand" Bank guarantee in a form acceptable to the BULACAN STATE UNIVERSITY.

pp. Variation Orders

- i. Variation Orders may be issued by the BULACAN STATE UNIVERSITY to cover any increase/decrease in quantities, including the introduction of new work items that are not included in the original contract or reclassification of work items that are either due to change of plans, design or alignment to suit actual field conditions resulting in disparity between the preconstruction plans used for purposes of bidding and the "as staked plans" or construction drawings prepared after a joint survey by the

Contractor and the BULACAN STATE UNIVERSITY after award of the contract, provided that the cumulative amount of the Variation Order does not exceed ten percent (10%) of the original project cost. The addition/deletion of Works should be within the general scope of the project as bid and awarded. The scope of works shall not be reduced so as to accommodate a positive Variation Order. A Variation Order may either be in the form of a Change Order or Extra Work Order.

- ii. A Change Order may be issued by the BULACAN STATE UNIVERSITY to cover any increase/decrease in quantities of original Work items in the contract.
- iii. An Extra Work Order may be issued by the BULACAN STATE UNIVERSITY to cover the introduction of new work necessary for the completion, improvement or protection of the project which were not included as items of Work in the original contract, such as, where there are subsurface or latent physical conditions at the site differing materially from those indicated in the contract, or where there are duly unknown physical conditions at the site of an unusual nature differing materially from those ordinarily encountered and generally recognized as inherent in the Work or character provided for in the contract.
- iv. Any cumulative Variation Order beyond ten percent (10%) shall be subject of another contract to be bid out if the works are separable from the original contract. In exceptional cases where it is urgently necessary to complete the original scope of work, the Head of the BULACAN STATE UNIVERSITY may authorize a positive Variation Order go beyond ten percent (10%) but not more than twenty percent (20%) of the original contract price, subject to the guidelines to be determined by the GPPB: *Provided, however, That appropriate sanctions shall be imposed on the designer, consultant or official responsible for the original detailed engineering design which failed to consider the Variation Order beyond ten percent (10%).*
- v. In claiming for any Variation Order, the Contractor shall, within seven (7) calendar days after such work has been commenced or after the circumstances leading to such condition(s) leading to the extra cost, and within twenty-eight (28) calendar days deliver a written communication giving full and detailed particulars of any extra cost in order that it may be investigated at that time. Failure to provide either of such notices in the time stipulated shall constitute a waiver by the contractor for any claim. The preparation and submission of Variation Orders are as follows:
 1. If the BULACAN STATE UNIVERSITY's representative/Project Engineer believes that a Change Order or Extra Work Order should be issued, he shall prepare the proposed Order accompanied with the notices submitted by the Contractor, the plans therefore, his

computations as to the quantities of the additional works involved per item indicating the specific stations where such works are needed, the date of his inspections and investigations thereon, and the log book thereof, and a detailed estimate of the unit cost of such items of work, together with his justifications for the need of such Change Order or Extra Work Order, and shall submit the same to the Head of the BULACAN STATE UNIVERSITY for approval.

2. The Head of the BULACAN STATE UNIVERSITY or his duly authorized representative, upon receipt of the proposed Change Order or Extra Work Order shall immediately instruct the appropriate technical staff or office of the BULACAN STATE UNIVERSITY to conduct an on-the-spot investigation to verify the need for the Work to be prosecuted and to review the proposed plan, and prices of the work involved.
3. The technical staff or appropriate office of the BULACAN STATE UNIVERSITY shall submit a report of their findings and recommendations, together with the supporting documents, to the Head of the BULACAN STATE UNIVERSITY or his duly authorized representative for consideration.
4. The Head of the BULACAN STATE UNIVERSITY or his duly authorized representative, acting upon the recommendation of the technical staff or appropriate office, shall approve the Change Order or Extra Work Order after being satisfied that the same is justified, necessary, and in order.
5. The timeframe for the processing of Variation Orders from the preparation up to the approval by the BULACAN STATE UNIVERSITY concerned shall not exceed thirty (30) calendar days.

qq. Contract Completion

Once the project reaches an accomplishment of ninety five (95%) of the total contract amount, the BULACAN STATE UNIVERSITY may create an inspectorate team to make preliminary inspection and submit a punch-list to the Contractor in preparation for the final turnover of the project. Said punch-list will contain, among others, the remaining Works, Work deficiencies for necessary corrections, and the specific duration/time to fully complete the project considering the approved remaining contract time. This, however, shall not preclude the claim of the BULACAN STATE UNIVERSITY for liquidated damages.

rr. Suspension of Work

- i. The BULACAN STATE UNIVERSITY shall have the authority to suspend the work wholly or partly by written order for such period as may be deemed necessary, due to *force majeure* or any fortuitous events or for failure on the part of the Contractor to correct bad conditions which are unsafe for workers or for the general public, to carry out valid orders given by the BULACAN STATE UNIVERSITY or to perform any provisions of the contract, or due to adjustment of plans to suit field conditions as found necessary during construction. The Contractor shall immediately comply with such order to suspend the work wholly or partly.
- ii. The Contractor or its duly authorized representative shall have the right to suspend work operation on any or all projects/activities along the critical path of activities after fifteen (15) calendar days from date of receipt of written notice from the Contractor to the district engineer/regional director/consultant or equivalent official, as the case may be, due to the following:
 - 1. There exist right-of-way problems which prohibit the Contractor from performing work in accordance with the approved construction schedule.
 - 2. Requisite construction plans which must be owner-furnished are not issued to the contractor precluding any work called for by such plans.
 - 3. Peace and order conditions make it extremely dangerous, if not possible, to work. However, this condition must be certified in writing by the Philippine National Police (PNP) station which has responsibility over the affected area and confirmed by the Department of Interior and Local Government (DILG) Regional Director.
 - 4. There is failure on the part of the BULACAN STATE UNIVERSITY to deliver government-furnished materials and equipment as stipulated in the contract.
 - 5. Delay in the payment of Contractor's claim for progress billing beyond forty-five (45) calendar days from the time the Contractor's claim has been certified to by the BULACAN STATE UNIVERSITY's authorized representative that the documents are complete unless there are justifiable reasons thereof which shall be communicated in writing to the Contractor.
- iii. In case of total suspension, or suspension of activities along the critical path, which is not due to any fault of the Contractor, the elapsed time between the effectivity of the order suspending operation and the order to resume work shall be allowed the Contractor by adjusting the contract time accordingly.

ss. Payment on Termination

- i. If the Contract is terminated because of a fundamental breach of Contract by the Contractor, the BULACAN STATE UNIVERSITY's Representative shall issue a certificate for the value of the work done and Materials ordered less advance payments received up to the date of the issue of the certificate and less the percentage to apply to the value of the work not completed, as indicated in the SCC. Additional Liquidated Damages shall not apply. If the total amount due to the BULACAN STATE UNIVERSITY exceeds any payment due to the Contractor, the difference shall be a debt payable to the BULACAN STATE UNIVERSITY.
- ii. If the Contract is terminated for the BULACAN STATE UNIVERSITY's convenience or because of a fundamental breach of Contract by the BULACAN STATE UNIVERSITY, the BULACAN STATE UNIVERSITY's Representative shall issue a certificate for the value of the work done, Materials ordered, the reasonable cost of removal of Equipment, repatriation of the Contractor's personnel employed solely on the Works, and the Contractor's costs of protecting and securing the Works, and less advance payments received up to the date of the certificate.
- iii. The net balance due shall be paid or repaid within twenty eight (28) days from the notice of termination.
- iv. If the Contractor has terminated the Contract under **GCC** Clauses 17 or 18, the BULACAN STATE UNIVERSITY shall promptly return the Performance Security to the Contractor.

tt. Extension of Contract Time

- i. Should the amount of additional work of any kind or other special circumstances of any kind whatsoever occur such as to fairly entitle the contractor to an extension of contract time, the BULACAN STATE UNIVERSITY shall determine the amount of such extension; provided that the BULACAN STATE UNIVERSITY is not bound to take into account any claim for an extension of time unless the Contractor has, prior to the expiration of the contract time and within thirty (30) calendar days after such work has been commenced or after the circumstances leading to such claim have arisen, delivered to the BULACAN STATE UNIVERSITY notices in order that it could have investigated them at that time. Failure to provide such notice shall constitute a waiver by the Contractor of any claim. Upon receipt of full and detailed particulars, the BULACAN STATE UNIVERSITY shall examine the facts and extent of the delay and shall extend the contract time completing the contract work when, in the BULACAN STATE UNIVERSITY's opinion, the findings of facts justify an extension.
- ii. No extension of contract time shall be granted the Contractor due to (a) ordinary unfavorable weather conditions and (b)

inexcusable failure or negligence of Contractor to provide the required equipment, supplies or materials.

- iii. Extension of contract time may be granted only when the affected activities fall within the critical path of the PERT/CPM network.
- iv. No extension of contract time shall be granted when the reason given to support the request for extension was already considered in the determination of the original contract time during the conduct of detailed engineering and in the preparation of the contract documents as agreed upon by the parties before contract perfection.
- v. Extension of contract time shall be granted for rainy/unworkable days considered unfavorable for the prosecution of the works at the site, based on the actual conditions obtained at the site, in excess of the number of rainy/unworkable days pre-determined by the BULACAN STATE UNIVERSITY in relation to the original contract time during the conduct of detailed engineering and in the preparation of the contract documents as agreed upon by the parties before contract perfection, and/or for equivalent period of delay due to major calamities such as exceptionally destructive typhoons, floods and earthquakes, and epidemics, and for causes such as non-delivery on time of materials, working drawings, or written information to be furnished by the BULACAN STATE UNIVERSITY, non-acquisition of permit to enter private properties or non-execution of deed of sale or donation within the right-of-way resulting in complete paralyzation of construction activities, and other meritorious causes as determined by the BULACAN STATE UNIVERSITY's Representative and approved by the Head of the BULACAN STATE UNIVERSITY. Shortage of construction materials, general labor strikes, and peace and order problems that disrupt construction operations through no fault of the Contractor may be considered as additional grounds for extension of contract time provided they are publicly felt and certified by appropriate government agencies such as DTI, DOLE, DILG, and DND, among others. The written consent of bondsmen must be attached to any request of the Contractor for extension of contract time and submitted to the BULACAN STATE UNIVERSITY for consideration and the validity of the Performance Security shall be correspondingly extended.

uu. Price Adjustment

Except for extraordinary circumstances as determined by NEDA and approved by the GPPB, no price escalation shall be allowed. Nevertheless, in cases where the cost of the awarded contract is affected by any applicable new laws, ordinances, regulations, or other acts of the GoP, promulgated after the date of bid opening, a contract price adjustment shall be made or appropriate relief shall be applied on a no loss-no gain basis.

vv. Completion

The Contractor shall request the BULACAN STATE UNIVERSITY's Representative to issue a certificate of Completion of the Works, and the BULACAN STATE UNIVERSITY's Representative will do so upon deciding that the work is completed.

ww. Taking Over

The BULACAN STATE UNIVERSITY shall take over the Site and the Works within seven (7) days from the date the BULACAN STATE UNIVERSITY's Representative issues a certificate of Completion.

xx. Operating and Maintenance Manuals

- i. If "as built" Drawings and/or operating and maintenance manuals are required, the Contractor shall supply them by the dates stated in the **SCC**.
- ii. If the Contractor does not supply the Drawings and/or manuals by the dates stated in the **SCC**, or they do not receive the BULACAN STATE UNIVERSITY's Representative's approval, the BULACAN STATE UNIVERSITY's Representative shall withhold the amount stated in the **SCC** from payments due to the Contractor.

Special Conditions of Contract

GCC Clause	
1.17	<p>The Intended Completion Date is within <i>One Hundred Eighty (180) calendar days.</i></p> <p><i>NOTE: The contract duration shall be reckoned from the start date and not from contract effectivity date.</i></p>
1.22	The Procuring Entity is BULACAN STATE UNIVERSITY .
1.23	The Procuring Entity's Representative is DR. CECILIA N. GASCON, University President.
1.24	The Site is located at <i>the Bulacan State University - Main Campus, City of Malolos, Bulacan</i>
1.28	The Start Date is <i>within seven (7) calendar days from receipt of Notice to Proceed (NTP).</i>
1.31	The Works must conform with the Project Construction Specifications, Plans/ Drawings, and Program of Works
12	<p>In addition to the General Conditions of the Contract hereof, the contractor must submit and comply the following:</p> <p>(a) Construction Safety and Health Program for this project which must be approved by the Department of Labor and Employment (DOLE)</p> <p>(b) Contractor's All Risk Insurance Policy</p>
15.1	<p>The Contractor shall, under his name and at his own expense, obtain and maintain, for the duration of this Contract, the following insurance coverage:</p> <p>(a) Contractor's All Risk Insurance;</p> <p>(b) Transportation to the project Site of Equipment, Machinery, and Supplies owned by the Contractor;</p> <p>(c) Personal injury or death of Contractor's employees; and</p> <p>(d) Comprehensive insurance for third party liability to Contractor's direct or indirect act or omission causing damage to third persons.</p>
a.ii	<i>If different dates are specified for completion of the Works by section ("sectional completion"), these dates should be listed here</i>
d.i	The BULACAN STATE UNIVERSITY shall give possession of all parts of the Site to the Contractor from receipt of Notice to Proceed.
e.v	<p>The Contractor shall employ the following Key Personnel:</p> <p>1. Project Manager</p>

	<ol style="list-style-type: none"> 2. *Project In-charge Engineer 3. *Project Architect 4. *Safety Officer 5. Foreman 6. Carpenter 7. Mason 8. *Electrician 9. Plumber 10. Welder 11. Steelmen 12. Laborer (Skilled/Helper) <p>Notes:</p> <p>1. The list of contractor's personnel must be supported by complete documents certifying their qualification and experience.</p> <p>2. Key personnel named in the bid proposal must be committed to the project from the start date of the contract up to its completion. In case of replacement of key personnel, the contractor must request in writing to the BulSU indicating the valid reasons for such replacement and attaching thereto documents pertaining to the substitute personnel and the same must be approved.</p>
f.iv.3	No further instructions.
f.vii	No further instructions.
g.i	No further instructions.
i	No further instructions.
k.iii	No further instructions.
k.v	<p><i>In case of permanent structures, such as buildings of types 4 and 5 as classified under the National Building Code of the Philippines and other structures made of steel, iron, or concrete which comply with relevant structural codes (e.g., DPWH Standard Specifications), such as, but not limited to, steel/concrete bridges, flyovers, aircraft movement areas, ports, dams, tunnels, filtration and treatment plants, sewerage systems, power plants, transmission and communication towers, railway system, and other similar permanent structures: Fifteen (15) years.</i></p> <p><i>In case of semi-permanent structures, such as buildings of types 1, 2, and 3 as classified under the National Building Code of the Philippines, concrete/asphalt roads, concrete river control, drainage, irrigation lined canals, river landing, deep wells, rock causeway, pedestrian overpass, and other similar semi-permanent structures: Five (5) years.</i></p>

	<i>In case of other structures, such as Bailey and wooden bridges, shallow wells, spring developments, and other similar structures: Two (2) years.</i>
I	<i>If the Contractor is a joint venture, all partners to the joint venture shall be jointly and severally liable to the BULACAN STATE UNIVERSITY.</i>
18.3(h)(i)	No further instructions.
t.ii	No further instructions.
bb.i	No further instructions.
dd.i	The Contractor shall submit the Program of Work to the Project Management Office of the Bulacan State University within five (5) calendar days after issuance of Letter of Acceptance.
dd.iii	The period between Program of Work updates is <i>five (5) calendar days</i> . The amount to be withheld for late submission of an updated Program of Work is five percent (5%) of the contract price .
gg.iii	The Funding Source is the <i>Government of the Philippines</i> .
ll.i	The amount of the advance payment is not more than 15% of the Contract Price .
mm.i	Materials and equipment delivered on the site but not completely put in place shall be included for payment.
i	The date by which “as built” drawings are required is within ten (10) calendar days after project completion .
ii	The amount to be withheld for failing to produce “as built” drawings and/or operating and maintenance manuals by the date required is ten percent (10%) of the contract price .

CONSTRUCTION SPECIFICATIONS

PROJECT TITLE	COMPLETION OF CIT BUILDING
LOCATION	Bulacan State University Main Campus
OWNER	Bulacan State University

Prepared by:

MA. VICTORIA V. UMALI
Civil Engineer, PMO

Submitted by:

AR. MA. SATURNINA C. PARUNGAO
Director, PMO

Approved by:

CECILIA N. GASCON, Ph.D.
University President

DIVISION 1.0 GENERAL CONDITIONS

PART 1.0 GENERAL

1.1 **SCOPE OF WORK:** The work covered under this Contract is for the construction of the **Completion of CIT Building** at Bulacan State University - Main Campus, Malolos, Bulacan. It consists of the furnishing all materials, labor, equipment, transportation, incidentals, facilities, and superintendence necessary to complete the project in accordance with true intent these Specifications and Contract Drawings.

1.2 **PLANS AND SPECIFICATIONS:** The Contractor shall be responsible for carefully examining, comparing and verifying the data furnished by the Plans and Specifications. In case of obscurity or discrepancy in the Plans and Specifications, the Contractor shall submit the matter to the Project Management Office of the Bulacan State University for the proper explanation or necessary correction, before any adjustment shall be made. Any adjustment by the Contractor without such determination shall be at his risk and expense.

Omitted or wrongly described details of work, which are manifestly necessary to carry out the true intent of the drawings and specifications, shall be performed as if fully and correctly set forth and described in the drawings and specifications.

The Owner may, from time to time, make changes in the specifications and construction drawings. However, if the cost to the Contractor shall be materially increased by such change, the Owner shall pay the Contractor for the reasonable cost in accordance with the changes.

1.3 **LAWS TO BE OBSERVED:** The contractor shall comply with National Building Code of the Philippines, National Structural Code of the Philippines, Fire Code of the Philippines, Plumbing Code of the Philippines as well as Local Rules and Regulations of the City of Malolos, Bulacan. This includes safety practices especially during construction process. The Contractor or those engaged thereon shall obtain all necessary licenses and permits and pay all taxes or fees, which may due to the local and/or National Government in connection with the prosecution of the work. He shall also be responsible for all damages to persons or property that may occur.

PART 2.0 MATERIALS

2.1 **MATERIALS:** Unless otherwise specified, all materials shall be new and free from defects and imperfections. The quality of materials shall be of the best grade of their respective kinds for the purpose. The work shall be performed in the best and most acceptable manner in strict accordance with the requirements of the Plans and Specifications. Preference will be given to articles or materials that are locally manufactured, conditions of quality and price being equal.

2.2 **SAMPLES AND INFORMATION ON MATERIALS:** When required by the Specifications, or when called for by the Architect, the Contractor shall furnish, for approval, full Information and satisfactory evidence as to the kind and

quality of materials or articles he will incorporate in the work. The Contractor shall furnish, for Architect's and Owner's approval, all samples when so directed and have to be submitted within twenty-five (25) days after the award of the contract. The work shall be in accordance with approved samples. Materials and articles installed or used without such approval shall be at the risk of subsequent rejection.

Any failure on the part of the Contractor to conform or use materials that are not specified herein shall be under subsequent rejection. Any alteration or revision of material usage without approval from the Architect shall make the Contractor responsible and liable in terms of guarantee, workmanship and defects.

PART 3.0 WORKMANSHIP

3.1 Workmanship shall be in accordance with the best standard practices and all operations required under any and all parts of the Specifications shall be undertaken in a neat, workmanlike manner. Only skilled personnel with sufficient experience in similar operations shall be allowed to undertake the same.

Any alteration or revision on the execution of Drawings without approval from the Architect shall be under subsequent rejection and shall make the Contractor responsible and liable for any workmanship and execution defects. Defective workmanship shall be remedied by the Contractor, at his expense. He shall not be entitled to any payment hereunder until defective workmanship has been remedied.

3.2 **TEMPORARY FACILITIES:** The Contractor shall furnish all temporary lights and power and shall pay all expenses in connection therewith. Furthermore, the Contractor shall provide and pay for all water expenses for building purposes that are required by all trades. He shall remove all connections and appliances connected there with prior to the completion of the Contract and leave the premises perfectly clean.

3.3 **PROTECTION OF WORK AND OWNER'S PROPERTY:** The Contractor shall put up safety measures and continuously maintain adequate protection of all his work from damage and shall protect the Owners property, as well as all materials furnished and delivered to him by the Owner. He shall make good any such damage, injury or loss, except such as may be caused by agents or employees of the Owner, or due to causes considered as an Act of God.

PART 4.0 SUPERVISION AND INSPECTION

4.1 **AUTHORIZED REPRESENTATIVE:** Whenever the Contractor is not at the site, orders maybe given by the Owner to his authorized representative and shall be accepted and complied to by the superintendent or foreman of the Contractor.

4.2 **INSPECTION OF WORK:** The Architect or Owner shall, at all times, have access to the work whenever it is in preparation or progress and the Contractor shall

provide facilities for such access for inspection. The manner of work and all materials and equipment used therein shall be subject to inspection, tests, and approval of the Owner.

- 4.3 **CONSTANT SUPERVISION.** The Contractor shall ensure that the project will have constant supervision by a competent superintendent, who shall be present where construction is being carried on at all times during the working hours. Existing condition of the work site shall be documented and photos shall be taken before commence of the work to ensure such status, any damages on the areas due to on-going work shall be refurbished at the Contractor's expense.

- 4.4 **DISPUTES:** The Architect shall, within a reasonable time, make decision on all claims of the Owner or Contractor and on all matters relating to the execution and progress of the work or the interpretation of the Contract Documents.

Except as otherwise specifically provided in this Contract, all disputes concerning questions of fact arising under this contract shall be decided by the Architect, whose decisions shall be final and conclusive upon the parties as to questions of fact.

- 4.4 **AS BUILT PLANS.** Three sets of "As-Built Plans" of the project concerned duly signed and sealed by the Engineer-in-charge of construction should be submitted as a requirement for the final acceptance of the work. It should be properly drawn indicating all the specifications, layouts, tables and necessary data. An initial layout should be submitted on A3 paper for checking and approval of PMO. Final "As-Built plans", both soft and hard copies, three sets on A3 and a CD copy, respectively.

- 4.5 **CLEAN UP:** The Contractor, prior to the turnover of the work to the Owner, shall remove any excess materials, waste, debris, rubbish, and all construction and installation equipment and tools from the premises before the final acceptance of the work.

DIVISION 2.0 SITEWORKS

SECTION 2.01 EARTHWORK

PART 1.0 GENERAL

- 1.1 **WORK INCLUDED:** Work in this section includes the demolition, complete clearing of site, general site grading, excavating, filling and backfilling.

PART 2.0 DEMOLITION WORK AND CLEARING THE SITE

- 2.1 **Demolition** – The Contractor shall inspect and investigate the existing structure to be demolished and apply the most appropriate and efficient technique to put down the structure and clear the site. The Contractor shall ensure safety during the entire demolition process.

- 2.2 The building site shall be compacted (by flooding/wetting, tamping, or rolling), leveled according to the plans, and cleared of rubbish, roots, and other perishable and objectionable matters to the suitable subgrade.
- 2.3 All such unsuitable materials shall be removed from the building site and spread uniformly over the areas adjacent to the proposed building, or otherwise disposed of as may be directed by the Engineer/Architect-in-charge of the Construction.

PART 3.0 STAKING – OUT THE BUILDING LINES

- 3.1 The building lines shall be staked out and all lines and grades shown in the drawing should be established, after which the approval of the Engineer/Architect-in-charge of the Construction shall be secured before any excavation work commenced.
- 3.2 Batter boards and reference marks shall be erected at such places where they will not be disturbed by the excavation of the building.

PART 4.0 EXCAVATION, BACKFILLING AND COMPACTION

4.1 EXCAVATION

- 4.1.1 Excavation shall be made to the dimensions and elevations and grade indicated in the drawings. Where the building site is covered with any kind of fill, the excavation for footings shall be made deeper until the stratum for safe bearing capacity of soil is reached. Should unsuitable bearings be encountered, elevations shall be carried to such depths as will be directed by the architect, and the contract price shall be adjusted accordingly.
 - 4.1.2 In the event that it is required to remove unsatisfactory material to a greater depth than specified, an adjustment in the contract price will be made in accordance with the contract. Should excavations through error be carried to such depth or size required, such additional depth or size required, such additional works shall be at the Contractor's expense.
 - 4.1.3 Excavation shall extend a sufficient distance from wall footings to allow forms installation of services and for inspection.
 - 4.1.4 Surplus satisfactory excavated material not required for fill or embankment shall be disposed of to the designated waste or spoil areas. Unsatisfactory excavated material shall be disposed of in designated wastes or spoil areas. Excavation and filling shall be performed in manner and sequence that will provide proper drainage at all times.
- 4.2 **CUTTING, FILLING AND GRADING.** Cutting, filling and grading will be done to bring all areas of the respective surfacing as fixed by the finished grade.
- 4.3 **COMPACTION.** Compaction shall be by rolling with approved tamping rollers, vibratory rollers, pneumatic-tired rollers, three-wheel power rollers, or other approved equipment well suited to the particular soil being compacted. Material shall be moistened or aerated as necessary to provide the moisture content that will facilitate obtaining the specified compaction with the equipment utilized.

4.4 SUB-GRADE PREPARATION (for Roads and Ramps)

- a. **CONSTRUCTION.** Sub-grade shall be shaped to line, grade, and cross-section, and compacted as specified. This shall be done by plowing, disking, and moistening or aerating. Low areas resulting from removal of unsatisfactory material or excavation of rock shall be brought up to required grade with satisfactory materials, and entire sub-grade shaped. Elevation of finish sub-grade shall conform to elevations shown.
- b. **PROTECTION.** During construction, any excavation shall be kept shaped and drained. Ditches and drains shall be maintained in such manner as to drain effectively at all times. Graded areas shall be protected against action of the elements prior to acceptance of the work. Settlement or washing that may have occurred shall be repaired and grades shall be re-established to the required elevations and slopes immediately prior to installation of paving.

DIVISION 3.0 CONCRETE

SECTION 3.01 CAST-IN-PLACE CONCRETE

PART 1 GENERAL

1.1 **SCOPE.** This section covers cast-in-place concrete, complete.

1.2 **DELIVERY AND STORAGE**

- a. **CEMENT.** Cement shall be stored immediately upon receipt at the site of the work in a suitable weatherproof and airtight structure and elevated above the ground to prevent the absorption of moisture. Bags shall be stacked close together to reduce circulation of air, but shall not be stacked against outside walls. The manner of storage shall permit easy access for inspection and identification of each shipment.
- b. **AGGREGATES.** Aggregates shall be stored in areas covered with tightly laid wood planks, sheet metal or other hard and clean surface, and in a manner that will preclude the inclusion of foreign materials. Aggregates of different sizes shall be stored in separate piles.
- c. **REINFORCEMENT.** Reinforcement shall be stored in such a manner that will prevent excessive rusting or coating with grease, oil, dirt, and other objectionable materials. Storage shall be in separate piles or racks to avoid confusion and loss of identification after bundles have been broken.

PART 2.0 MATERIALS

2.1 **CEMENT.** Portland cement shall conform to the requirement of the specifications and tests for Portland Cement Type I (ASTM C150) or its equivalent more readily available in the locality. Use only one brand for each type of cement.

2.2 **REINFORCEMENT.** All reinforcing steel bars shall be deformed. The manufacturer shall submit certification of compliance to this

specification prior to the delivery of these materials.

- 2.3 **FINE AGGREGATES.** The fine aggregates for concrete shall consist of natural sand, or inert materials with similar characteristics having clean, hard, strong, durable grains, and free from injurious amount of dust, organic matters or loam and shall not contain more than 5% clay.
- 2.4 **COARSE AGGREGATES.** Coarse aggregates shall be hard, durable, uncoated gravel, crushed gravel, or a combination thereof. Sizes of coarse aggregates to be used shall vary from 20 mm to 40 mm (3/4" to 1-1/2"). Material test shall be submitted for fine and coarse aggregates.
- 2.5 **WATER.** Mixing water for concrete shall be free from injurious amounts of oils, acids, alkalis, salts, or other substances that may be deleterious to concrete or steel and shall be reasonably clear and clean.
- 2.6 **CURING MATERIALS.** Materials shall conform to one of the following unless otherwise designated:
- a. Polyethylene sheeting for curing, 6 mils minimum thickness, clear.
 - b. Waterproof Kraft paper or polyethylene-coated waterproof paper for concrete curing shall be of commercial quality.
 - c. Burlap, plain or polyethylene-coated burlap shall be of commercial quality or other approved equal materials.
- 2.7 **FORMS COATING** shall be non-staining type mineral oil.

PART 3.0

FORMS

- 3.1 **GENERAL REQUIREMENTS.** Forms shall be provided for all concrete. Forms shall be set true to line and grade and maintained as to ensure completed work within the allowable tolerance specified, and shall be mortar-tight. The contractor shall be responsible for the adequacy of forms and form support. Wire ties shall not be used where the concrete surface will be exposed to weathering and where discoloration will be exposed. All formwork shall be provided with adequate clean-out openings to permit inspection and easy cleaning after all reinforcement has been placed. Where forms for continuous surfaces are placed in successive units, these shall be fitted over the completed surface to obtain accurate alignment of the surface and to prevent leakage of mortar. Panel forms shall be constructed to provide tight joints between panels. All forms shall be constructed so that they can be removed without damaging the concrete. All exposed joints, edges and external corners shall be chamfered a minimum of 20 mm unless specified otherwise hereinafter.
- 3.2 **MATERIALS FOR FORMS.** Forms shall be of wood, plywood, steel, or other suitable materials. Wood forms for surfaces exposed to view in the finished structure and requiring a standard finish, shall be plywood. For unexposed surface, undressed square-edged lumber may be used. Forms for surfaces requiring special finishes shall be

plywood or hard-pressed fiber board not less than 12 mm thick. Surfaces of steel forms shall be free from irregularities, dents, and sags.

3.3 **COATING.** Before placing the concrete, the contact surfaces of forms shall be coated with non-staining mineral oil or suitable non-staining form coating compound, or shall be given two coats of nitrocellulose lacquer, except as specified otherwise. Mineral oil shall be used on forms for surfaces, which are to be painted. For surfaces not exposed to view in the finished structure and when temperature is above 40 degrees F, sheeting may be wetted thoroughly with clean water.

3.4 **TOLERANCE AND VARIATIONS.** The contractor shall set and maintain concrete forms to insure that after removal of the forms and prior to patching and finishing, no portion of the concrete work will exceed any of the tolerances specified.

PART 4 CLASSES OF CONCRETE

4.1 **STRENGTH REQUIREMENTS.** Concrete of the various classes, if not indicated in the drawings and as specified under other sections, shall be proportioned and mixed for the following strengths:

CLASS	SPECIFIED COMPRESSIVE STRENGTH, 28 Days, Psi
A	3,000
B	2,500

Concrete made with high-early-strength cement shall have a 7-day strength equal to the specified 28-day strength for concrete of the class specified made with type I or II Portland cement.

4.2 **USAGE.** Concrete of the various classes shall be used as follows:
Class A concrete - for footings, columns, beams/girders, slab and septic vault. Class A concrete shall be a mixture of 1 part cement, 2 parts fine aggregates and 4 parts coarse aggregates by volume, plus enough clean water to make the mixture into a pliable paste

Class B concrete - for all curbs, ground gutters, and concrete hollow blocks footing. Class B concrete shall be a mixture of 1 part cement, 2-1/2 parts fine aggregates and 5 parts of coarse aggregates by volume, plus enough clean water to make the mixture into a pliable paste.

PART 5 PROPORTIONING, MEASUREMENT AND MIXING

5.1 **CONCRETE DESIGN MIX.** Concrete mixes except otherwise indicated shall be designed by the contractor. The proportions shall be changed whenever necessary to maintain the workability, strength,

and standard of quality core the concrete covered by these specifications, and to meet the varying conditions encountered during construction. Test for slump and unit weight shall be performed under the supervision of the Construction Architect/Engineer.

- 5.2 **SLUMP** shall be determined in conformance with ASTM C 143, and shall be within the following limits, provided the required strength is obtained:

STRUCTURAL ELEMENT	SLUMP FOR VIBRATED CONCRETE	
	Minimum	Maximum
Walls, footings, columns, and grade beams	75 mm.	100 mm.
Other construction	75 mm.	100 mm.

- 5.3 **PROPORTIONING OF MATERIALS** shall be accomplished by weighing, except as otherwise provided herein. In urgent situation, volumetric proportioning may be used temporarily, if permitted by the Construction Architect/Engineer, who will stipulate the length of the period during which volumetric proportioning may be used. The contractor shall furnish the necessary equipment and shall establish accurate procedures for determining the quantities of free moisture in the aggregates, the true volume of the fine aggregate if volumetric proportioning is used, and the air content of the freshly mixed concrete if air-entrained concrete is used. Such procedures are subject to the approval of the Construction Architect/Engineer. Moisture, volumetric and air determinations shall be made at intervals as directed by the Construction Architect/Engineer and as specified hereinafter under field testing requirements. Allowable tolerances for measuring cement and water shall be one percent (1%); for aggregates, two percent (2%); and three percent (3%) for mixtures.

- 5.4 **WEIGHT MEASUREMENT.** The fine aggregate and each size of coarse aggregate shall be weighed separately. Cement in standard packages (bags) need not be weighed, but bulk cement or fractional packages shall be weighed on a scale separate from that used for weighing other materials.

- 5.5 **VOLUMETRIC MEASUREMENT.** The weight proportions shall be transposed into equivalent volumetric proportions by weighing representative samples of the aggregates in the conditions in which they will be measured and in accordance with ASTM C29. In determining the true volume of the fine aggregate, allowance shall be made for the bulking effect from the moisture contained therein. Suitable allowances shall also be made for variations in the moisture conditions of the aggregates.

- 5.6 **MIXING.** All concrete shall be machine-mixed. In cases of emergency or small batches, the mixing may be done by hand if so authorized by the Construction Architect/ Engineer. Mixing shall begin within 30 minutes after the cement has been added to the aggregates. The time of mixing after all cement and aggregates are in the mixer drum shall be not less than one minute for mixers having a capacity of one cubic yard or less; for mixers of larger capacities, the minimum time shall be increased 15 second for each additional cubic yard. A reduction in the aforementioned mixing time shall be permitted if mixer performance tests made at the contractor's option and at his expense, indicate adequate mixing with the reduced time. All mixing water shall be introduced in the drum before one-fourth of the mixing time has elapsed. The entire content of the mixer drum shall be discharged before recharging. The time elapsing between the introduction of the mixing water to the cement and aggregates or the cement to the aggregates and placing of the concrete in final position in the forms shall not exceed 60 minutes, if the air temperature is less than 85 degrees Fahrenheit. If the air temperature is equal or greater than 85 degrees Fahrenheit, time elapsed shall not exceed 45 minutes. The re-tampering of concrete, i.e., re-mixing with or without additional cement, aggregate or water, will not be permitted.

PART 6 PLACING REINFORCEMENTS AND MISCELLANEOUS MATERIALS

- 6.1 **GENERAL REQUIREMENTS.** All reinforcement bars, stirrups, hanger bars, wire fabric, spiral, and other reinforcing materials shall be provided as indicated on the drawing or required by this specification, together with all necessary wire ties, chairs, spaces, supports and other devices necessary to install and secure the reinforcement properly. All reinforcement, when placed, shall be free from rust, scales, oil, grease, clay, and other coatings, and foreign substances that would reduce or destroy the bond. Rusting of reinforcement shall not be a basis of rejection, provided that the rusting has not reduced the effective cross sectional area of the reinforcement to the extent that the strength is reduced beyond specified value. Heavy, thick rust or loose, flaky rust shall be removed by rubbing with burlap or other approved method, prior to placing. Reinforcement, which has bends not shown on the project drawings, approved shop drawings, or is reduced in section by rusting such that its weight is not within permissible ASTM tolerances, shall not be used. All reinforcement shall be supported and wired together to prevent displacement by construction loads or by the placing of concrete. Unless directed otherwise by the Construction Architect/Engineer, reinforcement shall not be bent after being partially embedded in hardened concrete. Where cover over reinforcing steel is not specified it shall be in accordance with ACI 318, see below specifications for this project:

TABLE OF LAP SPLICE & ANCHORAGE LENGTH											
BAR DIAMETER (mm)	ANCHORAGE LENGTH (m)	STANDARD HOOK (m)			LAP SPLICE (m)				UNIT WEIGHT (Kg/m)	MIN. LAP SPLICE LENGTH OF COIL REINF. INDIVIDUAL BARS 1	
					TENSION BAR		COMP. BAR				
		90 DEG	180 DEG	135 DEG	TOP BAR	BOT BAR	TOP BAR	BOT BAR		W/ TES	W/ SPIRAL
10	0.80	0.15	0.13	0.10	0.42	0.30	0.42	0.30	0.617	0.30	0.30
12	0.80	0.20	0.15	0.12	0.42	0.30	0.42	0.30	0.889	0.30	0.30
16	0.80	0.25	0.18	0.14	0.73	0.52	0.87	0.62	1.580	0.52	0.47
20	0.80	0.30	0.20	0.20	0.91	0.65	1.10	0.78	2.469	0.65	0.58
25	0.86	0.40	0.28	0.28	1.15	0.82	1.40	1.00	3.858	0.80	0.73
28	0.86	0.48	0.38		1.45	1.03	1.53	1.09	4.840	0.90	0.82
32	1.12	0.56	0.43		1.90	1.35	1.74	1.24	6.327	1.03	0.83
36	1.43	0.61	0.48		2.40	1.70	2.00	1.40	8.000	1.20	1.05

- 6.2 **PLACING.** Reinforcement shall be placed accurately and secured. It shall be supported by suitable chairs or spacers or by metal hangers. On the ground, and where otherwise subject to corrosion, concrete or other suitable non-corroding material shall be used for supporting reinforcement. Where the concrete surface will be exposed to the weather in the finished structure or where rust would impair the appearance or finish of the structure, all reinforcement supports, within specified concrete cover, shall be galvanized or made of a suitable non-corroding material.
- 6.3 **SPLICING OF REINFORCEMENT.** Splicing of reinforcement shall be in accordance with ACI 318, except as indicated otherwise or modified herein. Where splices in addition to those indicated on the drawings are necessary, they shall be approved by the Construction Architect/Engineer prior to their use. Splices shall not be used in grade beams and slabs at points of maximum stress. Except as indicated or specified otherwise herein, in lieu of lapping, but splicing of reinforcement may be permitted provided the splicing material, equal or greater in cross sectional area to the spliced steel, shall possess a minimum of 125 percent of the yield strength or 90 percent of the ultimate strength of the reinforcing steel, whichever is the greater. But splicing shall preferably use over lapping for bar sizes No. 11 and above.
- 6.4 **MOVING REINFORCING STEEL.** All placement or movement of reinforcing steel after placement to positions other than that indicated or specified shall be subject to the approval of the Construction Architect/Engineer.
- 6.5 **SETTING MISCELLANEOUS MATERIAL.** Anchors and bolts, including, but no limited to those for machine and equipment bases, frames or edgings, hangers and inserts, door bucks, pipe supports, pipe sleeves, metal ties, conduits, drains and all other materials in connection with concrete construction, shall, where practicable, be

placed and secured in position when the concrete is placed. Anchor bolts for machines shall be set to templates, plumbed carefully and checked for location and elevation with an instrument, and shall be held in position rigidly to prevent displacement while concrete is being placed.

PART 7

CONVEYING AND PLACING CONCRETE

7.1

CONVEYING. Concrete shall be conveyed from the mixer to the forms as rapidly as practicable by proper methods, avoiding segregation or loss of ingredients. It shall be deposited as nearly as practicable in its final positions in the forms. At any point in the conveying, the free vertical drop of the concrete shall not exceed 91 cm. Chuting will be permitted only where the concrete is deposited into a hopper before it is placed in the forms. Conveying equipment shall be cleaned thoroughly before each run. All concrete shall be deposited as soon as practicable after the forms and reinforcements have been inspected and approved by the Construction Architect/Engineer. Concrete, which has been segregated in conveying, shall be removed and disposed of as directed by the Construction Architect/Engineer.

7.2

PLACING CONCRETE. No concrete shall be placed after there is evidence of initial set. All concrete placing equipment and methods shall be subject to approval of the Construction Architect/Engineer. Concrete placement will not be permitted when weather conditions prevent proper placement and consolidation. Before placing concrete on porous sub-grades, they shall be dampened as directed by the Construction Architect/Engineer. Forms shall be clean and free from dirt, construction debris and water. Concrete shall be deposited in horizontal layers approximately 31 to 51 cm deep in a manner to preclude the formation of cold joints between successive layers. The method of depositing concrete shall be such as to avoid displacing the reinforcement and segregating the aggregate. Concrete shall be worked about the reinforcement and embedded fixtures and avoid overworking which may result in segregation. On the bottom of slabs, the girders where the congestion of steel near the forms makes placing difficult, a layer of mortar equal to the approved slump shall be deposited to cover the surface to a depth of approximately 25 mm before placing the concrete. Water, which accumulates on the surface of the concrete during placing, shall be removed by absorption with porous materials in a manner that prevents removal of cement. Pumping of concrete through aluminum pipe shall not be permitted.

7.3

VIBRATION. All concrete, except for concrete slabs 100 mm or less in depth, shall be compacted using high frequency, internal, mechanical vibrating equipment supplemented by hand spading and tamping. Concrete slabs 100 mm or less in depth shall be consolidated by wood tamper, and spading and settling with a heavy

leveling straight edge. Vibrator shall be designated to operate with vibratory element submerged in the concrete and shall have a frequency of not less than 6,000 impulses per minute when submerged. The vibrating equipment shall be adequate at all times in number units' power of each unit to consolidate the concrete properly. Vibration of forms and reinforcement shall not be employed except when authorized specifically the Construction Architect/Engineer. Vibrators shall not be used to transport the concrete in the forms. Vibration shall be discontinued when the concrete has been compacted thoroughly and ceased to decrease in volume.

7.4

CONSTRUCTION JOINTS. Joints not shown on the drawings shall be made and located so as to least impair the strength of the structure and shall be subject to approval of the Construction Architect/Engineer. In general, they shall be located near the middle of the spans of slabs, grade beams. Horizontal joints in walls shall be at the underside of floor, slabs, grade beams, or girders and at the top of footings or grade slabs. Grade beams, brackets, and drop panels shall be placed at the same time as slabs. Joints shall be perpendicular to the main reinforcement. All construction joints in contact with the grade or earth shall be provided with an approved type rubber or PVC water-stop to minimize water leakage. Water-stop shall be installed so as to form a continuous watertight diaphragm. Joints and splices shall be vulcanized or heat-sealed and as recommended by the manufacturer as approved.

- a. Reinforcement in construction joints. All reinforcing steel shall be continued across joints. Keys and inclined dowels shall be provided as directed by the Construction Architect/Engineer. Longitudinal keys at least 38 mm deep shall be provided in all joints in walls and between walls and slabs or footings.

PART 8

SLABS ON GRADE

All slabs on ground shall not be less than 0.10 m. thick reinforced with 10mm diameter round deformed bars laid on 0.40m. on center both ways. All slabs-on-fill shall be laid on gravel bed on thoroughly compacted earthfill as specified on the plan.

PART 9

SURFACE FINISH (EXCEPT FLOOR FINISH)

9.1

GENERAL REQUIREMENTS. All formed surfaces shall be repaired by patching with cement mortar. Cement mortar for patching shall be the same composition as that used in the concrete, except that for exposed surfaces' part of the cement shall be white Portland cement to provide a finish color matching the surrounding concrete. Patching shall be done as soon as the forms are removed area to surfaces which are to be cured with a curing compound shall be covered during the application of the compound. All areas to be patched shall be cleaned thoroughly. Minor honeycomb or

otherwise defective areas shall be cut out to solid concrete but to a depth of not less than 25 mm.

9.2 **RUBBED-FINISH.** Rubbed-finish shall be provided for all exposed concrete beams and ceiling. The surface of the concrete shall not vary more than 16 mm when measured from a five-foot template. Exposed surfaces shall be rubbed with carborundum or other abrasives to a smooth even finish or uniform appearance. Upon completion of the rubbing, the surface shall be washed thoroughly with clean water.

9.3 **BROOM-FINISH.** Broom-finish shall be given to exterior parking area or as approved. The concrete shall be screeded and floated to the required finish level with no coarse aggregate visible. After the surface moisture has disappeared and laitance has been removed, surface shall be steel-trowelled to an even, smooth finish. The trowelled surfaces shall be broomed with a fiber-bristle brush in a direction traversing to that of the main traffic.

PART 10

CURING

10.1 **GENERAL REQUIREMENTS.** Curing for all concrete shall be accomplished by preventing loss of moisture, rapid temperature change, mechanical injury, or injury from rain or flowing water for a period of 7 days when normal Portland cement has been used. Curing shall be started as soon after placing and finishing as free water has disappeared from the surface of the concrete. Curing may be accomplished by any of the following methods or combination thereof, as approved.

10.2 **MOIST CURING.** Unformed surfaces shall be covered with burlap or other approved fabric-type mats and shall be kept continually wet. Forms shall be kept continually wet. If forms are removed before the end of the curing period, curing shall be continued on unformed surfaces that will be unexposed in the finished work.

10.3 **IMPERVIOUS SHEET CURING.** Surfaces shall be covered with waterproof paper, polyethylene coated waterproof paper or burlap, or polyethylene sheets, lapped 100 mm at edges and ends, and sealed with an adhesive tape suitable for the type of covering used. The covering shall be weighed to prevent displacement, and kept in place and in repair during the curing period.

10.4 **CURING PERIODS.** When 7-day compression test cylinders, representative of parts of a structure already placed, indicate that the 28-day strengths may be less than 90% of the design strengths, those parts of the structure shall be given additional curing, as directed by the Construction Architect/Engineer. Curing shall be as follows:

TIME (Minimum)	CONCRETE ELEMENT
7 Days	All concrete not specified otherwise
10 Days	Pavement not undercover

10.5 **REMOVAL OF FORMS AND PROTECTION.** Forms shall be removed in a manner, which will prevent damage to the concrete. Forms shall not be removed without approval of the Construction Architect/Engineer.

PART 11

11.1

SAMPLING

CONCRETE. The strengths specified and the design mix shall be verified during the progress of the work at intervals by testing standard cylinders of samples taken at the job site. Three test cylinders shall be taken for each 60 cubic meter or fraction thereof of each class of concrete placed, but at least test cylinders shall be taken each day for each class of concrete placed that day, or as directed by the Construction Architect/Engineer. No more than 3 cylinders shall be taken from any one batch. The contractor shall furnish the necessary labor, materials, and facilities for taking the samples, handling, storing the cylinders at the site of the work, and shipping the cylinders for testing to the authorized and designated testing laboratory at his expense.

11.2

SAMPLE IDENTIFICATION. Each sample shall be contained in a clean container, which shall be securely fastened to prevent loss of material. It shall be tagged for identification. The tag shall contain the following information: (1) Contract No., (2) Sample No., (3) Quantity, (4) Date Sample was taken, (5) Sampler, and (6) Intended Use.

11.3

CONCRETE TESTING.

- a. Testing consistency of concrete slump shall be determined in accordance with ASTM C143. Samples for a slump determination will be taken from the concrete during placing in the forms. Tests shall be made.
- b. Tests shall likewise be made at the beginning of a concrete placement operation and at subsequent intervals to insure that the specification requirements are met.
- c. Concrete testing shall also be done whenever test cylinders are made.
- d. Testing of specimens for compressive strength shall be in accordance with ASTM C39. Test will be made at 7 and 28 days from time of molding. When a satisfactory relationship between 7- and 28-day strengths has been established, the 7-day tests' results may be used as an indicator of the 28-day strength. Each test shall be the average of the strengths of the three test specimens of a set except that if one specimen in a set of three shows evidence, other than low strength, or improper sampling,

molding, handling, or curing, the remaining two specimens shall be considered the test result. No more than 10 percent of the cylinders tested shall have compressive strengths less than that specified.

DIVISION 4.0 MASONRY

SECTION 4.01 CONCRETE MASONRY UNIT WORK

PART 1 GENERAL

1.1 SCOPE. This section includes concrete masonry unit work, complete.

1.2 DELIVERY, HANDLING, AND STORAGE OF MATERIALS. Cement and other cementitious materials shall be delivered to the site and stored in unbroken bags, barrels, or other approved containers, plainly marked and labeled with the manufacturer's names and brands. Mortar materials shall be stored in dry, weather tight sheds or enclosures, and shall be stored and handled in a manner which will prevent the inclusion of foreign material and damage by water or dampness. Concrete masonry units shall be handled with care to avoid chipping and breakage, and shall be stored as directed. Concrete masonry materials shall be protected from contact with the earth and exposure to the weather, and shall be kept dry until used.

PART 2 MATERIALS

CONCRETE MASONRY UNITS shall be 2 or 3-core steam-cured modular blocks. CHB shall have a minimum face thickness of 1" (0.25) nominal size shall be 6"x8"x16" and 4"x8"x16" with minimum compressive strength as follows:

Class A – 900 psi

Class B – 750 psi

All units shall be stored for a period of not less than 28 days (including curing period) and shall not be delivered to the job site prior to that time unless the strengths equal or exceed those mentioned in the specifications.

2.1 PORTLAND CEMENT shall Portland ASTM C150-68 Type I

2.2 SAND shall conform to PNS 18 type 1.

2.3 WATER for mixing shall be potable.

2.4 REINFORCING STEEL BARS – lintel and vertical reinforcing bars, which conforms strictly to ASTM specifications. Rebars for CHB shall be with 10mmØ deformed steel bars spacing as indicated on the detailed drawings. corrugated structural grade.

PART 3 PROPORTIONS, MEASUREMENT AND MIXING

- 3.1 **MORTAR MIXING.** Mortar materials shall be measured by volumetric proportioning in approved containers that will insure that the specified proportions of materials will be controlled and accurately maintained during the progress of the work. Measuring materials with shovels will not be permitted. Unless specified otherwise, mortar shall be mixed in such manner that the materials will be distributed uniformly throughout the mass. Mortar shall be mixed in the proportions of one part Portland cement and 3 parts sand.
- 3.2 **GROUT** shall consist of a mixture of cementitious materials aggregate as specified hereinafter; water shall be added in sufficient quantity to produce a fluid mixture. Fine grout shall be provided in grout spaces less than 50 mm in any horizontal dimension or in which clearance between reinforcing and masonry is less than 20 mm.
- 3.3 **FINE GROUT** shall be mixed in proportions of one part Portland cement and 3 parts sand.
- 3.4 **COARSE GROUT** shall be mixed in proportions of one part Portland cement, 3 parts Sand and 3 parts pea Gravel passing a 10-mm sieve.

PART 4

ERECTION

- 4.1 **WORKMANSHIP.** Concrete masonry walls shall be carried up level and plumb all around. One section of the walls shall not be carried up in advance of the others unless specifically approved. Unfinished work shall be stepped back for joining with new work. Heights of masonry at each floor, and at sills and heads of opening shall be checked with an instrument to maintain the level of the walls. Door and window frames, louvered openings, anchors, pipes, ducts and conduits shall be built-in carefully and in a neat manner as the masonry work progresses. Spaces around metal doorframes shall be filled solidly with mortar. Concrete masonry units shall be handled with care to avoid chipping, backing, and spilling of faces and edges. Structural steel work, bolts, anchors, inserts, plugs, ties, lintels, and miscellaneous metal work specified elsewhere shall be placed in position as the work progresses. Unless directed otherwise, partitions shall extend from the floor to the bottom of the floor or roof construction above. Non-load-bearing partitions and interior walls shall be securely anchored to the construction above in a manner that provides lateral stability while permitting unrestricted deflection of construction above, scaffolding well-braced and securely tied in position. Overloading of scaffolding will not be permitted.
- 4.2 **MORTAR JOINTS** shall be uniform in thickness, and the average thickness of any three consecutive joints shall be 10 mm to 12 mm. Changes in coursing or bonding after the work is started will not be permitted. Exposed joints shall be rolled slightly concave with a

round or other approved jointer when the mortar is thumbprint hard. The jointer shall be slightly larger than the width of the joint so that complete contact is made along the edges of the units, compressing and sealing the surface of the joint. Joints in masonry that will not be exposed shall be struck-flush. Horizontal joints shall be struck-flush. Horizontal joints shall be rolled first. Joints shall be brushed to remove all loose and excess mortar. All horizontal joints shall be level; vertical joints shall be plumb and in alignment from top to bottom of wall, within a tolerance of plus or minus 12 mm.

- 4.3 **CONCRETE MASONRY UNIT WORK.** The first course of concrete masonry units shall be laid in a full bed of mortar for the full width of the unit; the succeeding courses shall be laid with broken joints. The bed-joints of concrete masonry unit shall be formed by applying the mortar to the entire top surfaces of the inner and outer face shell. The head joints shall be formed by applying the mortar for a width of about 25-mm to the ends of the adjoining units laid previously. The mortar for joints shall be smooth, not furrowed, and shall be of such thickness that it will be forced out of the joints as the units are being placed in positions. Where anchors, bolts, and ties occur within the cells of the units, such cells shall be filled with mortar or grout as the work progresses. Concrete masonry units shall not be damped before or during laying.
- 4.4 **REINFORCING** shall be positioned accurately as indicated. As masonry work progresses, vertical reinforcing shall be rigidly secured in place at vertical intervals as indicated. Reinforcing shall be embedded in grout as grouting proceeds. The minimum clear distance between masonry and vertical reinforcement shall be not less than 12 mm. Unless indicated or specified otherwise, splices shall be formed by lapping bars not less than 20 bar diameters and wire tying them together.
- 4.5 **BONDING AND ANCHORING.** Masonry walls and partitions shall be accurately anchored or bonded at points where they intersect, and where they abut or adjoin the concrete frame of a building. All anchors shall be completely embedded in mortar.
- 4.6 **GROUT PLACEMENT.** Grouting shall be performed from interior side of walls, except as approved otherwise. Sills, ledges, offsets and other surfaces to be left exposed shall be protected from grout droppings; grout falling on such surfaces shall be removed immediately.

DIVISION 5.0 METAL

SECTION 5.01 REINFORCING STEEL BARS

PART 1.0 GENERAL

- 1.1 All steel reinforcing bars to be used in this project shall consist of round deformed bars with lugs or projection on their sides to provide a greater bond between concrete and the steel. Steel reinforcement shall be provided as indicated, together with all necessary wire ties, chairs, spacers, supports and other devices necessary to install and secure the reinforcement properly.
- 1.2 The steel reinforcing bars for footings, columns, beams, girders, CHB walls, slabs, and other concrete members shall all conform to the number, size and spacing as indicated in the drawings or schedule of steel reinforcement.
- 1.3 All steel reinforcement to be installed in place shall be free from rust, scale or other coatings and foreign substances to prevent the destruction or reduction of the bond with concrete and shall be accurately placed and secured against displacement by tying them together at each bar intersection with gauge no. 16 G.I. wire.
- 1.4 The following concrete cover for reinforcement shall be used for the various parts/members of the buildings:

SUSPENDED SLAB.	3/4 IN. (20 MM.)
SLAB ON GRADE.	1 1/2 IN. (40 MM.)
WALLS ABOVE GRADE.1 IN. (25 MM.)
BEAM STIRRUPS AND COLUMN TIES.	1-1/2 IN. (40 MM.)
WHERE CONCRETE IS EXPOSED TO EARTH BUT POURED AGAINST FORMS.	2 IN. (50 MM.)
WHERE CONCRETE IS DEPOSITED DIRECTLY AGAINST EARTH.	3 IN. (75 MM.)

- 1.5 Structural Steel shall be ASTM A36 with minimum yield strength, f_y , 248 MPa (36,000 psi). All structural steel works shall be painted with red oxide primer and shall be final coated with aluminum silver paint.
- 1.6 **SOURCE QUALITY CONTROL**
The Contractor shall be responsible for the fabrication, correct fitting and alignment of the various metal items or component members. However, the Fabricator shall permit the Architect or an independent inspection agency, if engaged by the Owner, to inspect work In progress in his shop. Such Inspection shall not relieve the Contractor of his responsibility to furnish materials and workmanship in accordance with the Contract Documents.
- 1.7 **PRODUCT DELIVERY, HANDLING AND STORAGE**
All materials shall be handled and stored in such manner as to prevent damage or disfigurement. Finished items or components shall be stored above ground on platforms, pallets, or other supports and protected from harmful elements.
- 1.8 **PROTECTION**
The installer shall protect any existing work subject to damage during the installation of specified work and shall adequately protect specified work during installation. The installer shall protect finished work that is readily subject to damage by subsequent work or environmental conditions

immediately following the installation thereof.

- 1.9 **FIELD MEASUREMENTS:** Fabricator shall take actual measurements in field to verify or supplement dimensions indicated. He shall be responsible for accurate fit of specified work.
- 1.10 **FIELD QUALITY CONTROL:** Facilities shall be provided by the Contractor, as needed, for the proper inspection of the specified work, including temporary platforms, hoists, protective devices, electric current, etc. Improper workmanship, as determined by the Architect, shall be corrected and replaced, at no additional cost to the Owner.
- 1.11 **CONDITIONS OF WORK-IN-PLACE:**
Work-in-place, on which specified work is in any way dependent, must be examined. Any defect that may influence satisfactory completion and performance of specified work must be reported, in writing, to the Contractor and the Architect. The absence of such notification shall be construed as acceptance of work-in-place.
- 1.12 **CORROSION PROTECTION**
Separate dissimilar metals, and metals from soil and other corrosive surfaces, with a 30-mil coating of Bituminous compound, SSPC Paint 12, unless permanent separation is provided.

SECTION 5.02 STRUCTURAL STEEL

PART 1. 0 SCOPE

1.) THE SPECIFICATIONS FOR STRUCTURAL STEEL BUILDINGS

Advance Stress Design and Plastic design is intended as alternate to the currently approved Load and Resistance for the Design Specifications for Structural Steel Buildings the American Institute of Steel Construction, Inc.

1.1 Alternative Design Specifications.

As an alternative, the design of structural steel buildings using the Load and Resistance Factor Design Specification for Structural Steel Buildings, December 1, 1993, published by the American Institute of Steel Construction, Inc. shall be permitted.

1.2 Cold and Formed Steel Members.

The design of cold-formed carbon or low-alloy steel structural members shall be in accordance with the requirements of Load and Resistance Factor Design Specifications for Cold Formed Steel Structural Members, March 16, 1991; or the specifications for Design of Cold-Formed Steel structural members, 1986 (with December 1989 addendum), published by the American Iron and Steel Institute (AISI).

1.3 Special provisions for earthquake resistance.

1.3.1 In regions of high seismic risk (Seismic zone 4) or moderate (seismic zone 2) provisions of Section 515 shall be satisfied.

- 2.) This section provides minimum requirements for the design and construction of structural steel building elements of any structure erected under requirements

of the National Building Code of the Philippines (NBCP) to which this section forms a part of by reference.

- 3.) This section shall govern in all matters pertaining to design, construction and material properties of structural design elements wherever this Section is in conflict with the requirements contained in other standards referenced in this section.

PART 2.0 PRODUCTS

2.) MATERIALS:

- 1.1 Structural Steel: ASTM A36.
- 1.2 Structural Tubing: ASTM A500, Grade B.
- 1.3 Structural Tubing: ASTM A501.
- 1.4 Steel Pipe: ASTM A53, Grade B.
- 1.5 Bolts, Nuts and Washers.
- 1.6 High strength bolts, including nuts and washers: ASTM // A325 // A490 //.
- 1.7 Bolts and nuts, other than high-strength: ASTM A307, Grade A.
- 1.8 Plain washers, other than those in contact with high-strength bolt heads and nuts: ANSI Standard B18.22.1.
- 1.9 Zinc Coating: ASTM A123.
- 1.10 Galvanizing Repair Paint: Mil. Spec. MIL-P-21035.

PART 3 EXECUTION

3.1 CONNECTIONS (SHOP AND FIELD):

- A. Welding: Welding in accordance with AWS D1.1. Welds shall be made only by welders and welding operators who have been previously qualified by tests as prescribed in AWS D1.1 to perform type of work required.
- B. High Strength Bolts: High strength bolts tightened to a bolt tension not less than 70% of their minimum tensile strength. Tightening done with properly calibrated wrenches, by turn-of-nut method or by use of direct tension indicators (bolts or washers). Tighten bolts in connections identified as slip-critical using Direct Tension Indicators. Twist-off torque bolts are not an acceptable alternate fastener for slip critical connections.

3.2 FABRICATION:

Fabrication in accordance with Chapter M, AISC 360.

3.3 SHOP PAINTING:

- A. General: Shop paint steel with primer in accordance with AISC 303, Section 6.
- B. Shop paint for steel surfaces is specified in Section 09, PAINTING.
- C. Do not apply paint to following:
 - 1. Surfaces within 50 mm (2 inches) of joints to be welded in field.
 - 2. Surfaces which will be encased in concrete.
 - 3. Surfaces which will receive sprayed on fireproofing.
 - 4. Top flange of members which will have shear connector studs applied.
- D. Structural steel in the interstitial space that does not receive sprayed on fireproofing shall be painted with primer in accordance with general requirement of shop painting.
- E. Zinc Coated (Hot Dip Galvanized) per ASTM A123 (after fabrication): Touch up after erection: Clean and wire brush any abraded and other spots worn

through zinc coating, including threaded portions of bolts and welds and touch up with galvanizing repair paint.

3.4 ERECTION:

- A. General: Erection in accordance with AISC 303, Section 7B. Temporary Supports: Temporary support of structural steel frames during erection in accordance with AISC 303, Section 7.

3.5 FIELD PAINTING:

- A. After erection, touch-up steel surfaces specified to be shop painted. After welding is completed, clean and prime areas not painted due to field welding.
- B. Finish painting of steel surfaces is specified in Section 9.0, PAINTING.

DIVISION 7.0 THERMAL AND MOISTURE PROTECTION

PART 1.0 GENERAL

1.1 **DESCRIPTION:** The metal roofing required for this work is indicated on the drawings.

1.2 **QUALITY ASSURANCE:** Work shall be done by thoroughly trained and experienced workmen, who are completely familiar with the materials involved and the recommended methods of installation.

1.3 **PRODUCT HANDLING**

- A. **PROTECTION:** The Roofing Contractor shall use all means necessary to protect the materials before, during and after installation. All roofing materials shall be stored in a covered shelter or covered completely with loose tarpaulin or similar materials and stock with one end slightly elevated.
- B. **REPLACEMENTS:** In the event of damage, all necessary repairs and replacements must be immediately made, subject to the approval of the Architect and at no additional cost to the Owner.

1.4 **SUBMITTALS:** Samples of finishes and accessories, shop drawings showing materials, layouts, details of construction, installation and all necessary dimensions shall be submitted.

PART 2.0 PRODUCTS

2.1 **MATERIALS:** All metal roofing shall be horizontal Rib Design Pre-painted metal roofing.

2.2 **THICKNESS:** 0.4mm to 0.6mm thick, (Ga. 24) Coloroof sheets for roofing and 0.4mm thick. (GA. 24) for flashing. Stainless Steel for roof gutter.

2.3 **COLOR:** For Architects approval.

2.4 **FASTENING:** Fastened by metal cleats, which are mounted on the roof structure by means of self-drilling screws, wood screws or stove bolts. Location of fasteners are along trusses and rafters.

2.5 **ACCESSORIES:** Provide all accessories indicated In the drawings or necessary for the completion of work.

2.5 **INSULATION:** Use Polyethelene (PE) Foam with foil on one side with mesh wire under metal roofing.

- 2.6 **WATERPROOFING:** Materials as approved by the Architects and shall be laid as per manufacturers instruction and as directed. Contractor shall guarantee the work for minimum period of Five (5) years from date of application.

PART 3.0 EXECUTION

3.1 ROOF INSTALLATION

- A. Roof framing should be well anchored, straight, level and parallel to each other.
- B. Check that all gutter and eave lines are perpendicular by using the 345 triangle method or by Intersecting method.
- C. Install the main gutter before the hip and valley gutters.

3.2. ROOF CARE DURING INSTALLATION

- A. Cement from concreting works, waterproofing compounds, chemical solutions, joint welding sparks, nails and iron tools should not be allowed to drop on, extend to or rust away at the roof, since removal or scraping of such materials later could damage the roof's coating.
- B. Scaffoldings should have protective caps on the points of contact with the roof and should be rested gently on the roof edges, gutters and end-flashings to prevent dents and scratches.
- C. Roof traffic should be minimized. When crossing the roof area, walking should be conducted along roof frame locations, along overlaps or on wooden planks laid over the roof panels.

3.3 CLEANING UP

- A. Pick up all discarded scrap materials, especially ferrous metals such as nails and wires.
- B. Immediately wash all plastering sites with water.
- C. Clean all gutters of leaves and other waste refuse to prevent clogging at downspout areas and to allow the continuous flow of water.

DIVISION 8.0 DOORS AND WINDOWS

SECTION 8.03 WOOD DOORS

PART 1.0 GENERAL

1.1 SUBMITTALS

- A. SHOP DRAWINGS: Indicate dimensions and elevation of each door type, location in building of each door, and pertinent erection instructions.
- B. SAMPLES: Submit samples of corner section of each type of door cut diagonally with twelve-inch sides, showing construction and finish.

1.2 PRODUCT HANDLING

Specified work shall be protected against damage and dampness during transportation to project site. Damaged items shall be replaced without additional cost to the Owner. Specified work shall be delivered to the building, in which it is to be installed and at such time when the normal temperature and humidity conditions approximate the interior conditions that will exist when the building is occupied.

1.3 WARRANTY

Specified work shall be guaranteed for one (1) year starting from date of Owners acceptance against warping, twisting or manufacturing defects. During "Warranty Period", the contractor, shall ascertain that each wood door shall

be equal in quality to the original specifications; the contractor shall make the necessary adjustments without additional cost to the Owner, including all labor costs of handling and refinishing. The Contractor further agrees to make the replacement within ten (10) days after the receipt of notice from the Owner.

PART 2.0

PRODUCTS

2.1

FLUSH HOLLOW CORE DOOR

- A. **TANGUILE DOOR:** 45 mm thick door using 6 mm thick Tanguile plywood veneer applied on horizontal cross-banding. For flush doors of Comfort Rooms and other moisture exposed doors, use 6mm thick fiber cement board facing.
- B. **FACE:** 3 plywood veneer, verify type from plans
- C. **STILE EDGES:** Provide stile edges to doors as shown on the drawings.
- D. **TOP AND BOTTOM EDGES:** Hardwood or soft wood in accordance with the MANUFACTURER'S latest printed standards. Top and bottom edges of doors shall be sealed with spar varnish or other approved sealer prior to shipment
- E. **FRAME:** Provide wood frames trimmed from 50 x 50 mm wood strips. Use thoroughly seasoned, kiln dried soft wood cores for frames and trim, milled true to form from solid stock and free from defects that would impair its strength or durability. Provide applied members at jambs and heads where indicated.
Provide applied members at jambs and heads where indicated.

2.2

PANEL DOORS

TANGUILE OR NARRA: Panel doors shall be decorative or carving-type, from Tanguile or Narra, as indicated.

PART 3.0

EXECUTION

- A. **WOOD DOORS:** Wood doors shall be conditioned to the average prevailing temperature and humidity at building before hanging. Doors should fit accurately in their respective frames, with proper door clearances.
- B. **CLEARANCES:** Door clearances shall be 1/8-Inch at head and lock stile, 1/6-inch at hinge stile, and 1/2-inch at bottom including thickness of resilient floor covering, unless otherwise indicated.
- C. **CONSTRUCTION:** Stiles and rails shall be mortised and provided with the necessary rabbets to receive the specified type of panel. All joints shall be made with water resistant glue. The assembled door frames shall be held in retainers until the glue has dried and attained its strength.
Panels shall be true to shape and profiles and shall be uniform throughout for doors of the same type. Mouldings shall be solid with sharp and clean cut profiles. All joints at corners shall be mitered.
- D. **FINISH:** Upon completion of each door unit, the door shall be sanded free of machine marks, which will show through the finish. Verify from Plans for the finish of all doors.

PART 4.0

FOR OTHER DOORS – see plans for specifications

DIVISION 9.0

FINISHES

Section 9.1 GLAZING

PART I – GENERAL

1.1 SCOPE

This section includes all labor, materials, equipment and the performance of all operations necessary to furnish and install all glass and glazing work in accordance with the drawings and this specification. The works included are:

- a) Glass and glazing for hollow, and wood doors (where specified).
- b) Glass and glazing for aluminum doors, windows and frames (where specified).
- c) Mirror for all toilets.

1.2 SUBMITTALS

1.2.1 SAMPLES: Submit samples for Architect's approval of all glass types specified herein, not less than 5" x 8" (125 x 800mm). Match these samples with the delivered materials prior to installation.

1.2.2 CERTIFICATES: Submit manufacturer's specification and recommendations for glazing conditions specified herein. Submit certificates of compliances, certifying conformance with requirements of this specification.

1.3 QUALIFICATIONS

1.3.1 MANUFACTURERS: It is the intent of this specifications that the products of the specific manufacturer's listed herein, represent quality standard and performance standards desired. Other manufacturers offering products equivalent to those specified will be acceptable, subject to approval.

1.4 DELIVERY, PROTECTION AND STORAGE

All glass shall be carefully packed for transportation, exercising reasonable precaution to insure avoidance of damage during transit. Use care in unloading, unpacking and storage on arrival at job site to avoid damage. Deliver all glazing accessory materials in manufacturer's original unopened containers, clearly marked as to their contents. Store all materials at the job site, in a manner assuring its safety from all forms of damage. Screen from paint, plaster, welding splatter, construction scum and the like. Protect glass from soiling, condensation, etching, etc. Follow manufacturer's instructions rigidly.

1.5 SUBMITTALS

1.5.1 SHOP DRAWINGS

a) Details for the exterior wall are shown schematically and together with the profiles to be developed are intended to establish performance and material quantities desired. The exterior wall as shown shall be a complete system including all stiffeners, fasteners, sealant, drainage systems, gasket, joining, miscellaneous pieces, and material thicknesses as required to form a high quality waterproof enclosure in accordance with the profiles shown. The window wall Contractor shall be responsible for development of final design intent shown. All proposed details and finishes for each type of window must be reviewed and accepted by the Architect prior to fabrication.

b) Details not shown are similar in character to those detailed. Where specific dimensions, details or design intent cannot be determined, consult the Architect before proceeding with work.

c) All details are to be coordinated with the structural framing and other building components including exterior cladding, interior finishes, and other related building components in order to provide a complete enclosure of finish materials. Structural and fireproofing requirements shall comply with applicable codes and regulations.

d) The anchorage angles, shapes, locations, and details are suggestive and are to be engineered and detailed as required. The General Contractor is to coordinate all anchorage details with the appropriate trades.

e) Provide aluminum brake metal closure plates with Thermal Acrylic Enamel (TAE) finish between window wall sill members and slab edges. Design of sill and closure shall accommodate slab elevation tolerances. Closures shall be 3.2mm aluminum plate with thermal acrylic enamel finish and shall be anchored to slabs with flush anchors at not greater than 0.6m on centers.

f) Any electrical outlets required for window washing at roof terraces shall be flush electrical boxes with finished covers flush with adjacent cladding material.

g) All required lighting protection devices shall have concealed conductor cables. Only rod portion (no base plate) shall be visible.

h) All flashing to be stainless sheet steel metal. All vertical and horizontal joints in flashing to have flat locked soldered seams. Provide expansion joints not over 9.5mm on centers with loose lock filled with sealant. All penetration of flashing by panel attachment is to be seated.

i) Eight (8) copies of all shop drawings shall be submitted to the Architect for his approval. These drawings shall be at full scale as far as practical, and shall show in detail the construction of all parts of the work, including glass and metal thicknesses, methods of joining, details, and all file connections and anchorage, fastening and sealing methods, metal finishes and all other pertinent information. No work shall be fabricated until the Architect has approved shop drawings for that work.

1.6.1 SAMPLES: Before any work is fabricated, this Contractor shall submit to the Architect for his approval the samples representing materials and finishes proposed for use in this work.

1.6.2 MOCK-UPS

a. Mock-up for Color Selection: This contractor shall furnish all labor and materials to build (at jobsite) full size mock-up of the 'Punch' window expression (1.2 m wide x 2.2 m high or biggest panel size) for finalizing colors/ textures prior to order. Aside from this, a window wall mock-up for testing will be prepared at the testing site, in accordance with the following:

b. Window Wall Mock-up and Testing:

1. Erect mock-up of full sized 2-storey high window wall as indicated on building exterior elevation and plan drawings.
2. Test mock-up for air infiltration, water penetration, and structural performance.
3. Built mock-up indicated but not less than requirements of ASTM E331 or E547 Section 8 to be used as test specimen and also for Architect's visual examination.
4. Use same materials, finishes, details, methods and anchoring system proposed for window wall.

Test as follows:

- a. Air infiltration - ASTM E283
- b. Water Penetration (Uniform Static Pressure) - ASTM E331. Conduct with 15.15 liters per minute per 0.093 m².
- c. Water Penetration (Dynamic Pressure) - AAMA 501.1.
- d. Structural Performance - ASTM E330. Conduct at 1.5 times maximum design wind pressure positive and negative.
- e. Repeat Water Penetration (Uniform Static Pressure) test after structural test to design load.
- f. Test to failure applying load in direction stipulated by the Architect.
- g. Record pressures and deflections during test and describe failure.
- h. Mock-up for Aluminum Panels: Prior to aluminum panel fabrication, provide panel mock-up 1 m in length for Architect's review.

1.3.4 GUARANTEE

Before final payment is made, this contractor shall guarantee to the Owner in writing that all parts of the work will meet the specified Overall performance requirements. The work shall be free from defects in materials and workmanship for a period of two (2) years following its acceptance by the Architect. He shall certify in writing also that all work is in accordance with the Contract Documents and authorized alterations/additions thereto. Should any defect develop during the guarantee period due to improper workmanship or materials under his jurisdiction, such defects will, upon written request, be repaired or replaced by this contractor at his own expense. If exploratory work is required to determine the cause of defects, the cost of such work shall be borne by this contractor only in case his work is found, in the judgment of the Architect, to be at fault.

1.4 REFERENCES

Whenever published specifications, standards or methods are referred to, it shall be understood that reference is made to the latest edition of such publication.

1.5 CONTRACTOR

- a. The contractor for the glazed aluminum curtain wall work is referred to throughout this section as 'this contractor', as opposed to the General Contractor, also referred to.
- b. The contractor shall have had sufficient track record in the execution of custom type monumental projects similar to the scope and nature to that specified.
- c. The contractor's proposal shall be accompanied by a written statement of any and all exceptions to, or variances from, the requirements of the drawings and specifications explaining such proposed variations/exceptions. Unless exceptions are so listed, the proposal shall be understood to represent full compliance with the requirements of the drawings and specifications.

1.6 CONTRACTOR'S RESPONSIBILITY

- a. This contractor shall examine the contract drawings and these specifications to ensure that the work is complete. If errors, omissions, or inconsistencies are discovered he shall promptly notify the Architect and the General Contractor in writing, and in submitting his bid shall state any qualifications affecting it.

- b. This contractor shall coordinate his work with that of other trades and/or contractors involved, and shall promptly furnish deadlines for items to be supplied by others.
- c. Dimensional tolerances and deviation from true plane permissible in the building frame to or over which the metal curtain walls is to be attached are defined in item 3.1 of these specifications.

FOR OTHER FINISHES:

- A. FLOOR FINISHES – Refer to plans for the details. Sample of all materials shall be submitted to the Procuring Entity for approval as to color and quality workmanship.
- B. WALL FINISHES - Refer to plans for the details. Sample of all materials shall be submitted to the Procuring Entity for approval as to color and quality workmanship.
- C. CEILING FINISHES - Refer to plans for the details. Sample of all materials shall be submitted to the Procuring Entity for approval as to color and quality workmanship.

Section 9.2 PAINTING

This work includes painting and finishing interior and exterior surfaces. Unless otherwise specified, all materials before the application executes shall be approved by Construction Architect/Engineer.

DIVISION 16

ELECTRICAL

SECTION 16.1

ELECTRICAL SYSTEM

PART 1 - GENERAL

1.01 EXPLANATION

OWNER– GENERAL CONTRACTOR – ELECTRICAL CONTRACTOR RELATIONSHIP

- a. The Electrical Work is a Specialty Trade, which shall be performed by a Contractor hereinafter referred to as the CONTRACTOR.
- b. The scope of work and responsibility of the CONTRACTOR is stipulated in these specifications and is treated separately from the function of the General Contractor and other Specialty Trade Contractors for the sole purpose of delineating the electrical work.
- c. Should the General Contractor subcontract the Electrical Work to a Specialty Trade CONTRACTOR all responsibilities and function of the CONTRACTOR stipulated in the Specification shall be assumed by the General Contractor.
- d. There shall be no contractual relation between the Owner and the specialty Trade Contractor subcontracted by the General Contractor.

1.02 GENERAL REQUIREMENTS

- a. Visit the site and ascertain local conditions, facilities and other conditions as may affect the work. The CONTRACTOR will be deemed to have done this before preparing his proposal and no subsequent claim on the ground of inadequate or inaccurate information will be entertained.
- b. The CONTRACTOR shall strictly implement and observe safety all the time. Thus, provide all necessary pre-caution, signages and barriers to protect general public from any harm caused by the work from the building site.

- c. The work of the CONTRACTOR consist of furnishing all labor, supervision, equipment and materials, and performing all operations in connection with the electrical system shown on the Drawings, to bring the electrical system to operating condition and ready for use by the Owner.

1.03 SPECIFIC CONDITIONS

- a. The performance of the equipment and materials installed shall be as specified and the quality of the installation is in accordance with the specification and good practice.
- b. The works shall be carried out in accordance with the requirements of all authorities having jurisdiction over the works and/or approval required there from. Such notice shall be provided and the application shall be prepared accompanied by such plans and information as may be called for and/or obtain such approval.
- c. Reference Codes and Standards listed are applicable in respect of all materials and workmanship except where in conflict with the provisions of this specification. Where this specification expressly requires standards higher than or different from those applicable under the relevant standard or documents, this specification will take precedence.
- d. Where special conditions exist which would make compliance with these specification unusually difficult, then details should be submitted in writing to the Engineer, who may grant an exemption, any such exemption granted shall be obtained in writing from the Engineer by the party seeking the exemption.
- e. Any items of equipment offered and not listed under Preferred Equipment must be approved by the Engineer. Any such exemption granted shall be obtained in writing from the Engineer by the party supplying the equipment.

1.04 WORK BY OTHERS

The following will be by other unless otherwise shown in the Drawing.

- a. Service connection to the Power utility company's facilities.
- b. Others as may be specified in the Drawing, elsewhere in the specification, the addenda, or in the contract documents.

1.05 INTENT

- a. It is the intention of the Specifications and Drawings to call for finished work tested and ready for operation, and/or continuation.
- b. Any apparatus, appliance, material, or work not shown in drawings but mentioned in the Specifications or vice versa, or any incidental accessories necessary to make the work complete in accordance with the scope set forth elsewhere, even if not particularly specified, shall be furnished, delivered and installed by the CONTRACTOR without additional expenses to the Owner.
- c. Minor details not usually shown or specified but necessary for proper installation and operation shall be included in the Contractor's estimate, the same as if herein are specified.
- d. With submission of bid, the CONTRACTOR shall give written notice to the Architect of any materials or apparatus believed inadequate or unsuitable in violation of laws, ordinances, rules and necessary items of work omitted. In the absence of such written notice, it is mutually agreed that the CONTRACTOR has included the cost of all required items in his proposal and that he will be responsible for the approved satisfactory functioning of the entire system without extra compensation.

1.06 DRAWINGS

- a. The Drawings accompanying this specifications, addendum drawings and additional detail or clarification drawings as may be subsequently prepared by the ENGINEER and shop

drawings as may be submitted by supplier and/or manufacturer are hereby made part of this specifications.

- b. The Contractor shall follow drawings in laying out work and check drawings of the other trade to verify spaces in which work will be installed. If directed by the ENGINEER, the CONTRACTOR shall, without extra charge, make reasonable modifications in the layout as needed to prevent conflict with work of other trade or for proper execution of the work.

1.07 EXTRA WORK AND CHANGE ORDERS

Cost estimates of all extra works and change order that are deemed necessary during the progress of the work shall be submitted to the Owner for approval at least ten (10) days before any work is started, or within a reasonable length of time so as not to impede the progress of the work.

1.08 TEMPORARY FACILITIES

The CONTRACTOR shall make all arrangements and pay for the provisions of the necessary electricity required for the work and shall clean all temporary installation before or upon completion of the work.

1.09 INSPECTIONS AND TESTS.

The ENGINEER or his representative shall be allowed access to all parts of the work at all times and shall be furnished such information and assistance by the CONTRACTOR as may be required to make a complete detailed inspection .

1.10 LEAVING THE SITE.

The CONTRACTOR shall not withdraw from the site until the OWNER has agreed that no further work is necessary at the time.

1.11 SUSPENSION OR DELAYS.

The Contractor shall not suspend or fail to make proper progress with the work without justifiable cause. The OWNER in the event of delay or suspension of work still persisting after written complaint, in accordance with existing laws and regulations shall have the right to take over the work and all materials of the site and make arrangements as are necessary to have the work completed by others.

1.12 CLEANING UP

During the process of the work and of the completion of the project, the CONTRACTOR shall remove from the premises all dirt, debris, rubbish and waste materials caused by him in the performance of his work. He shall remove all tools, scaffolding and surplus materials after completion and acceptance of the work.

PART 2 - GENERAL REQUIREMENTS (ELECTRICAL)

1.01 CODES AND REGULATIONS

The installation specified herein shall comply with the following, which are hereby made part of this specification:

- a. All wiring, installation, equipment and test shall be carried out in strict compliance and in accordance with the provisions of the latest edition of Philippine Electrical Code (PEC) including amendments and rulings.
- b. The ordinances, rules and regulations of City/Municipality and the local utility company concerned.

1.02 PERMITS AND APPROVAL

All permits and electrical fees required for this work shall be obtained by and at the expense of the contractor. The contractor shall furnish and transmit to BulSU/PMO copies of certificates of inspection and approval after completion of the work. The Contractor shall prepare all as-built plans and all other paper work required by the approving authorities.

PART 3 WORK STANDARDS

1.01 STANDARDS OF WORKMANSHIP

- a. The contractor shall execute all work in a neat and workmanlike manner and shall do all necessary work whether it is clearly specified in these specifications or shown on the drawing or not. All works shall be done in accordance with the best practices employed in modern electrical installations.
- b. The CONTRACTOR shall employ only competent and efficient workmen using proper tools and equipment. A licensed Electrical practitioner shall be assigned and maintained at the jobsite during the entire course of the project and shall Upon written request of the ENGINEER, discharge or otherwise removed from work any employee who is, in the opinion of the ENGINEER, contrary to instructions or conducts himself improperly.

1.02 REMOVAL OF DEFECTIVE OR UNAUTHORIZED WORK

Any defective work whether the result of poor workmanship, defective materials, damage through carelessness or any other cause, found to exist prior to acceptance of, or final payment for, the work shall be removed immediately and replaced by work and materials which shall conform to these specifications, or shall be otherwise remedied in acceptable manner.

1.03 COORDINATION WITH OTHER CONTRACTORS

The CONTRACTOR shall arrange his work and dispose his materials so as not to interfere with the work or storage of materials of the other Contractors. If the CONTRACTOR installs his electrical work before coordinating with the work of other trades, he shall make necessary changes in his work to correct the condition without extra charge.

PART 4 - MATERIALS

1.01 STANDARD OF MATERIALS

All materials shall be new and shall conform to the technical specifications. All materials shall be the standard products of reputable manufacturers. All local materials shall bear the PS mark when such standards have been set. All materials of foreign origin shall bear marks of approval by product standards agencies of the Country of origin.

1.02 EQUIVALENTS

- a. Where the Technical Specifications or the Drawings give the name of the manufacturers and / or catalog number of materials, it is given as a guide to the size, strength, quality or class of the materials, desired and shall be interpreted to mean that item or another fully equal for the service intended. Substitution shall be subject to prior written approval of the ENGINEER.
- b. The apparent silence of the Specification and Drawings as to any detail, or apparent omission from them of a detailed description concerning any materials shall be required to mean that only material of first class quality shall be used.

1.03 APPROVAL

- a. All materials shall be subject to the approval of the ENGINEER. All materials and equipment installed without prior approval of the ENGINEER shall be at the risk of subsequent rejection.
- b. Approval by the ENGINEER shall not relieve the CONTRACTOR of the responsibility of inspecting such materials for defects or non-conformance with the Specifications.

1.04 DEFECTIVE MATERIALS

- a. All materials not conforming to the requirements of the Specifications shall be considered as defective.
- b. No defective material, the defect of which has been subsequently corrected, shall be re-used only until the ENGINEER has given approval.

PART 5 - SUBMITTALS

The CONTRACTOR shall, within twenty-five (15) days after the award of the contract, submit for the approval of the ENGINEER a list of materials he proposes to use in the Work, including such samples, catalog, drawings, and descriptive data as for review and evaluation.

1.01 SHOP DRAWINGS

The CONTRACTOR shall submit to the ENGINEER with such promptness as not to cause delay in his work or in that of any CONTRACTOR, three (3) copies of all shop Drawings and the schedules required by the work. The shop drawing shall give complete information on the proposed equipment/fixture. Each item of the drawings shall be properly labeled, indicating the intended service of the material, the job name, and Contractor's name.

1.02 "AS-BUILT" DRAWINGS

Upon substantial completion of the project (more than 95% complete), the CONTRACTOR shall submit to the OWNER three (3) sets of "AS-BUILT" Drawings showing all changes and deviations from the contract drawings duly signed and sealed by the Engineer in charge. The "AS-BUILT" Drawings shall be identical to the contract drawings except for the said changes and deviations. An initial layout should be submitted on A3 size paper for checking and approval of PMO. Final "As-Built Plans" on A3 size and CD (Soft & Hard copies) upon final testing and commissioning shall be submitted as a requirement prior to the final acceptance of the project.

1.03 GUARANTEE

The CONTRACTOR shall furnish the OWNER a written guarantee covering the satisfactory operation of the electrical installation in all its parts for a period of one (1) year from the date of final acceptance. During this period, the CONTRACTOR shall repair or replace any defective work/materials and pay for any repair or replacement costs.

PART 6 PROTECTION

1.01 CONTRACTOR'S WORK AND MATERIALS

The CONTRACTOR shall protect all his work and material from loss, injury or defacement. Any cost, damaged or defaced material shall be replaced by the CONTRACTOR at his own expense.

1.02 INJURY TO PERSONS OR DAMAGE TO PROPERTY

The CONTRACTOR shall be responsible for all injury to persons and damage to property caused by the works or by workmen and shall be liable for any claims against the owner on account of such injury and/or damage. The CONTRACTOR shall likewise take

necessary precautions to protect the property of the OWNER against rain or other inclemency of the weather and against theft.

SECTION 16.2 BASIC MATERIALS AND METHOD

PART 1- RACEWAY MATERIALS AND WORKMANSHIP

1.01 GENERAL

Install a complete raceway system as shown on the drawings and stated in other section of the Specifications. All materials used in the raceway system shall be new and the approved material for the service intended.

1.02 MATERIAL SPECIFICATIONS

Raceway materials shall be as hereunder specified:

- a. Rigid Steel Conduit (RSC) shall be hot-dipped galvanized manufactured to U.L and ANSI Standard, 3 meters in length, taper threaded at both ends with one coupling, conduit shall be of approved brand, or any PS approved local equivalent.
- b. PVC Conduit shall be schedule 40 or thick wall un-plasticized PVC (up) pipe 3 meters in length for electrical use (red, orange), it shall be suitable for installation in concrete slab and manufactured to PSA Standard.
- c. Flexible PVC Conduit shall be corrugated Polyvinyl Chloride (PVC) and shall be manufactured to applicable PSA Standard.
- d. Fittings for rigid steel conduit shall be U.L listed or PS approved local equivalent. Connectors and coupling shall be approved for the purpose, U.L listed.
- e. Other raceway not mentioned above but called for of the drawings shall be as specified thereon.

1.03 INSTALLATION

- a. Not more than four (4) 90 degrees bends shall occur in any run. When it becomes necessary to have more than (4) 90 degree bends in any run, an intermediate pull box is required and shall be free of dents or flattening. Field bends shall not be allowed for conduits larger than 20 mm dia. trade size except by hydraulic or motor operated benders.
- b. All raceways run shall be in underground, ceilings and walls. Embedded runs shall be installed in such manner as not to weaken or interfere with the structure of the building, as approved by the structural engineer. No horizontal runs of embedded conduit or tubing shall be permitted in solid walls and partitions. Raceway shall be of ample size to permit the ready insertion and withdrawal of conductors without abrasion. All joints shall be cut square, reamed smooth, and drawn up tight.
- c. Hangers and supports
 - c.1 Raceway shall be securely and rigidly supported to the building structure in a neat and workmanlike manner and wherever possible, parallel runs of horizontal raceways shall be grouped together of adjustable trapeze hangers. Support spacing shall not be more than 3,000 mm.
 - c.2 Single raceway 32 mm dia. and larger run concealed horizontally shall be Supported by suitable beam clamps or split-ring hangers with support rod. Multiple runs shall be grouped together of trapeze hangers where possible.
 - c.3 Raceways 25 mm dia. and smaller run concealed above a ceiling may be supported directly to the building structure with strap hangers or no. 14 gauge galvanized wire provided the support spacing does not exceed 1220 mm.
 - c.4) Raceways shall be firmly supported and fastened at 3,000 mm. intervals and within 0.90 meter of each outlet or cabinet.

PART 2 OUTLET BOXES

1.01 GENERAL

Install all junction and outlet boxes as shown on the drawings or as required by the construction. The drawings indicate only the approximate location of each fixture, receptacle, special purpose outlet and wall switch. The exact location shall be determined later at the site as the work progresses. The right is reserved by the Engineer to change the exact location of any switch, light outlet, receptacle outlet and any other outlet in any room before the same is installed.

1.02 MATERIAL SPECIFICATIONS

- a. Outlet and junction boxes shall be PVC molded or approved equal where not exposed to the weather and case metal boxes where exposed to the weather as in outdoors or roof deck installations.
- b. The allowable conduit fill as given by the NEC shall not be exceeded. Deep boxes, box rings and raised plastic covers shall be used, when necessary, to obtain required conductor capacity.

1.03 INSTALLATION

- a) Receptacle Outlet Boxes. Wall receptacles shall be mounted approximately 300 mm above the finished floor (AFF) at center unless otherwise noted.
All receptacle outlet boxes shall be equipped with grounding leaf which shall be connected to the grounding terminal of device; the leaf shall be properly bonded to the box and to the separate ground wire if any.
- b) Switch Outlet Boxes. Wall switch shall be mounted approximately 1200mm above the finished floor (AFF) at center unless otherwise noted. When the switch is mounted in a masonry wall, the bottom of the outlet box shall be in line with the bottom of a masonry unit.
- c) Lighting Fixture Outlet Boxes. The lighting fixture outlet boxes shall be furnished with the necessary accessories to install the fixture. The support must be such as not to deepen the outlet box supporting the fixture. The supports for the lighting fixtures shall be independent of the ceiling system or as required.
- d) Boxes for outlet of auxiliary systems shall be as specified elsewhere in these Specifications or as shown on the drawings

PART 3 - CONDUCTOR MATERIALS AND WORKMANSHIP

1.01 GENERAL

Provide and install a complete wiring system and shall be of soft- annealed having a conductivity of not less than 98 % of that of pure copper and insulated for 600 volts.

1.02 CONDUCTOR SPECIFICATIONS

- a. Conductors used in the wiring system shall be of soft-annealed copper having conductivity of not less than 98 % of that of pure copper and insulated for 600 volts THHN/THWN.
- b. The wires and cables shall be delivered to the site in its original package.
Whenever possible, plainly marked or tagged as follows.
 1. Size, kind, and insulation of wire.
 2. Name of the Manufacturer.
 3. Trade name of wire.

1.03 CONDUCTOR WORKMANSHIP

- a. Install conductors in all raceways as required to a neat and workmanlike manner. Empty conduits, as noted, shall have a No. 14 gauge galvanized pull wire left in place for future use. No wires shall be drawn into the raceways until all work is finished, which may cause injury or damage.

- b. Conductors shall be color-coded in accordance with the PEC or as indicated. Grounding wires should always be colored white. Main feeders and Sub-feeders shall be tagged in all pull, junction, and outlet box and in the gutter of panels with approved markers.
- c. No lubricant other than powdered soapstone or approved pulling compound may be used when pulling conductors.
- d. At least 200 mm of slack wire shall be left in every outlet box whether it be used or left for future use.
- e. All conductors and connection should be tested free of grounds, short or open circuit before turnover of the job to the owner.
- f. Unless otherwise indicated in the drawings or specified, number of conductors constituting a single or branch circuit shall be drawn in one conduit.

SECTION 16.3 SERVICE ENTRANCE AND DISTRIBUTION SYSTEM

PART 1 - SERVICE ENTRANCE

1.01 GENERAL

Provide and install a complete service entrance system as shown on the drawings and as required for a complete system. All materials and workmanship shall conform to the PEC, and the local laws and regulations. The electric service entrance shall conform to the requirements and regulations of the electric utility serving the project.

1.02 MATERIALS

- a. Conduit used for service-entrance shall be galvanized rigid steel conduit (RSC), or approved equal.
- b. Conductors for service entrance shall be copper, type THWN, THHN or approved equal.

1.03 SCOPE

- a. Verify with the electric utility company serving the project the point of connection to the utility facilities before preparing the bid and include therein all work entailed for such connection.
- b. Metering and transformer facilities include all materials, labor, electrical Permit and charges that the utility company and municipality may require for the purpose of installing metering connection shall be shouldered by the owner and not the contractor, otherwise, maybe indicated in the program of works.

PART 2- FEEDERS AND BRANCH CIRCUITS

1.01 GENERAL

Provide and install complete electrical feeders, sub-feeders and branch circuits as shown on the drawings or as required for a complete system. All materials and workmanship shall conform to the specification, the PEC, and the local laws and regulations.

1.02 MATERIALS

- a. Raceways shall be indicated on the drawings.
- b. Conductor type shall be as indicated on the drawings. No wire smaller than 2.0 mm diameter or 3.5 square mm (AWG No. 12) shall be used for lighting or power circuit except for grounding. Grounding wires should always be colored white. Conductors smaller than 3.5 square mm shall be solid or stranded and conductors 5.5 square mm and larger shall be stranded.

1.03 INSTALLATION

- a. Feeder conductors and raceways shall be installed as shown on the drawings and no change in size shall be made without written consent of the ENGINEER. Feeder conductors shall be continuous, and without splices between terminals unless expressly indicated in the drawings. When feeders are run in multiple, they shall be exactly of the same length to avoid unbalanced division of the current.
- b. The drawings indicate the general methods of installation of all circuit wiring and the outlet which are to be supplied for these circuits. Branch circuit raceways shall be run from outlet to panel boards as direct as the building conditions will allow.

PART 3 ENCLOSED CIRCUIT BREAKERS

1.01 GENERAL

Furnish and install individual Enclosed Circuit Breaker (ECB) as indicated on the drawings or as required. All ECB for 3-phase load have a common trip and grounding terminal.

1.03 MATERIAL SPECIFICATIONS

Enclosed Circuit Breaker shall be industrial type or approved equal. Also approved by the Bureau of Product Standard with NEMA enclosure and shall exhibit the "PS" marks as proof thereof.

1.04 INSTALLATION

The Enclosed Circuit Breaker shall be flush mounted / wall mounted or in Accordance with the PEC. The CONTRACTOR shall provide all mounting materials.

PART 4 - PANEL BOARDS – CIRCUIT BREAKERS

1.01 GENERAL

Furnish and install Panelboards with circuit breakers (MCCB or Bolt-On Type) assembly as indicated in layout, load schedule and where shown on the drawings.

1.02 MATERIAL SPECIFICATIONS

- a) Provide molded-case circuit breakers of frame, trip rating and interrupting capacity as shown on the drawings. Also provide the number of spaces for future circuit breakers as shown in the load schedule. The circuit breakers shall be quick-make, quick-break, thermal magnetic trip indicating, and have a common trip on all multiple breakers with internal trip mechanism.
- b) Bus bar connections to the branch circuit breakers shall be the three phase-sequence type. Single-phase three wire bus barring shall be such that any two adjacent single-pole breakers are connected to opposite polarities in such a manner that two- pole breakers can be installed in any location..
- c) Terminals for feeder conductors to the panel board mains and neutral shall be suitable for the type of conductor specified. Terminal for branch-circuit wiring both breaker and neutral shall be suitable for the type of conductor specified.
- d) The Panel board bus assembly shall be enclosed in a steel cabinet. The size of the wiring gutters and gauge of steel shall be in accordance with NEMA Standards. And shall be fabricated from galvanized steel or equivalent rust resistant steel.
- e) On the inside of the steel cabinet, provide a printed panel directory which will indicate the location of the equipment or outlet supplied by each circuit.
- f) All circuit breakers should be GE, SCHNEIDER or approved equal. All are bolt-on type. There shall be no intermixing of circuit breakers brand.

1.03 INSTALLATION

- a. Before installing panel boards, check all the architectural drawings for possible conflict of space. Adjust the location of the panel boards to prevent such conflict with other items.
- b. When the panel boards is recessed into a wall serving an area with accessible. Ceiling space, provide and install an empty conduit system for each spare circuit for future wiring. A 20mm conduit shall be stubbed into the ceiling space above the panel board's as such accessible ceiling space exists.
- c. The panel boards shall be mounted in accordance with the PEC. Furnish all materials for mounting the panel boards

PART 5 - WIRING DEVICES

1.01 GENERAL

Furnish and install all wiring devices and plate as called for on the drawings and as specified herein.

1.02 MATERIAL SPECIFICATIONS

- a. Switches should be equal or greater than 10A, 250V except as otherwise noted. Terminals shall be screw type or approved equal.
- b. General use receptacle shall be at least 15A, 250V grounding type unless otherwise indicated on the drawings. Terminal shall be screw type or approved equal.
- c. Special purpose receptacles shall be as called for on the Drawings. Matching twist lock plugs should be supplied.

1.03 INSTALLATION

- a. Mounting height shall be as follows unless otherwise noted on the Drawings:
 - 1. Wall switch - 1.20 meters above floor finish
 - 2. Receptacles – 0.30 meter and 1.80 meter for wall Fan outlet above floor finish, except above counter.
- b. For screw type devices, the wire connected thereto shall be formed into a clockwise look to fit around the screws.

PART 6 LIGHTING

1.01 GENERAL

Furnish, install and connect all lighting fixtures to the building wiring system. Unless otherwise noted.

1.02 SPECIFICATION

- a. Fixture type shall be as indicated on the Drawings/Program of Works. LED are the priority unless specified by the designer.
- b. LED tubes shall be high power factor or high frequency (electric) energy saving type. High power factor and rated at more than 30k hrs of operation. The ballast shall be subject to one (1) year manufacturer's guarantee. The guarantee shall be filed with the Owner. The ballast shall indicate Bureau of Product Standards approval with "PS" Mark.
- c. Lighting fixture housing shall be G.A 22 minimum, with baked enamel and aluminum louver Finish
- d. Down lights and/or pin lights shall be of heavy gauge spun aluminum with wooden plaster level and equipped with the lamp type indicated on the drawings. Pin lights shall have no live parts exposed at the back of the fixtures. Minimum opening diameter shall be 150 mm and minimum depth shall be 200mm.
- e. Special lighting requirements shall be as indicated in the drawings.
- f. Provide grounding on lighting fixtures with grounding terminals.

1.02 INSTALLATION

Coordinate with the ceiling designer and the General Contractor in order that the proper type of fixture be furnished to match the ceiling or building construction materials.

- a. Contain all necessary relays, meters, resistance, and thermal cutouts, terminals and fuses for the control and double supervision of the system. Panel shall contain the number of zone and station circuits required. A trouble bell shall be provided for external connection.
- b. All interior wiring shall be in strict accordance with the NFPA Codes 72 and all local electrical and fire codes applying. Size and number of wire shall be in accordance with the wiring diagram supplied by manufacturer of fire alarm system, but shall not be less than as shown on the drawings.
- c. All materials and equipment shall be U.L listed.

PART 7 - ACU AND OTHER SPECIAL EQUIPMENT

- a. Installed Air-conditioning units are types with inverter technology and should be installed by authorized certified installers.
- b. Specifications and mounting of units shall be as per drawing. Shop drawings for drains should be provided as necessary.
- c. ECB should be provided equal to or higher than specified depending on the advice of authorized certified installer.
- g. Special equipment will be given separate ECB depending on the drawing/load schedule even if it is not specifically specified on the drawings.

DIVISION 15.0 MECHANICAL

SECTION 15400 PLUMBING FIXTURES AND EQUIPMENT

Part 1 GENERAL

SCOPE/WORK INCLUDED. Work in this section includes furnishing all labor, materials, equipment, incidentals, procedures and supervision necessary for the installation of the plumbing system.

- 1.1 **SUBMITTALS.** The Contractor shall furnish, for approval, full Information and satisfactory evidence as to the kind and quality of materials or articles he will incorporate in the work.
- 1.2 **QUALIFICATION OF WORKMEN.** Only competent workmen, who have been thoroughly trained and experienced in the skills required and who are completely familiar with the materials involved and with the requirements of his work, shall be engaged.
- 1.3 **GENERAL REQUIREMENTS.** The project drawings shall show the general requirements as to sizes, arrangement, extent of piping, and location of equipment. Unless otherwise indicated or specified herein, all work shall be accomplished in accordance with the National Plumbing Code.

PART 2 PRODUCTS AND MATERIALS

2.1 PIPES AND FITTINGS

- a) SOIL, WASTE, AND VENT PIPES shall be approved by the Architect/Engineer In-Charge.
 - 1. PVC cement shall be as recommended by the PVC pipe manufacturer, solvent type.
- b) COLD AND HOT WATER LINE PIPES shall be approved by the Architect/Engineer In-Charge.
 - 1. Couplings and pipe fittings shall be of the heavy duty type and as recommended by the pipe manufacturer.
- c) VALVES
 - 1. Angle, check and globe valves shall be bronze, 125 pounds, and type as suitably for the application. Check valves shall be swing types.
 - 2. Gate valves. All valves used for shut-off valves or gate valves shall be bronze, with screwed ends, and 125 pounds' pressure capacity.
 - 3. Clean-outs shall be provided in all soil, storm or waste lines at every change in direction greater than 45 degrees, size same as the pipe served. Clean-outs shall be extended to an easily accessible place or where indicated on the drawings.
 - 4. Pipe sleeves shall be installed and properly secured in place at all points where pipes pass through masonry or concrete, except un-framed floors on earth with sufficient diameter to provide approximately 6 mm clearance around the pipe or insulation. Pipe sleeves in walls, partitions and through floors shall be of PVC pipe, schedule 40.
 - 5. Pipe hangers, inserts and supports shall be provided to all horizontal runs of pipes and shall be hanged with adjustable wrought iron or malleable iron pipe hangers spaced not over 1.5 meters apart for PVC pipes and 3.0 meters apart for steel pipes. Trapeze hangers may be used in place of separate hangers on pipes running parallel to and close to each other.
 - 6. Shock absorbers or air capped chambers shall be provided, where shown on the drawings, on all individual branch water lines to equipment or fixtures.
- d) HOSE BIBB shall be with metal handle, heavy duty type, chrome plated, compression type, with hose threads; size shall be as indicated.
- a) FAUCETS for water system shall be approved by the Architect/Engineer In-Charge, manufactured by American Standard or as specified herein or as indicated shall be heavy-duty type, chrome-plated and or as specified in Miscellaneous Specialties.
- b) FLOOR DRAIN shall be stainless steel with strainer, size 100 mm x 100 mm with stainless fastening screw.

- c) TOILET AND BATH FIXTURES AND ACCESSORIES shall all be American Standard as specified in Miscellaneous Specialties.

PART 3 INSTALLATION

- 3.1 **GENERAL.** Piping shall be installed according to the shop drawings, as recommended by the manufacturer and as directed during installation, straight and as direct as possible, forming right angles or parallel lines with building walls and other pipes, and neatly spaced. Erect pipe risers plumb and true, parallel with walls and other pipes neatly spaced. Before being placed in position, pipe and fittings shall be cleaned carefully. All pipes shall be maintained in a clean condition.
- 3.2 ALL PIPING shall be properly supported or suspended on stands, clamps, hangers, or equivalent of approved design. Supports shall be installed in such a manner to permit pipe free expansion and contraction while minimizing vibration. Do not install pipes in a manner that interferes with other pipes, ducts, conduits, equipment and adjacent structures of the building. The arrangement, positions and connection of pipes, fixtures, drains, valves, and the like indicated on the drawings shall be followed as closely as possible. All pipes shall be cut accurately to measurement and shall be worked into place without springing and forcing. Changes in pipes shall be made with reducing fittings. Pipes shall not pass through columns, footings, and beams, except where noted on the drawings.
- 3.3 ROUGH-IN FOR PIPES AND FITTINGS shall be carried along with the building construction. Correctly located openings of proper sizes shall be provided where required in the walls and floors for the passages of pipes. All items to be embedded in concrete shall be thoroughly cleaned and free from all rust and scale.
- 3.4 PIPES IN TRENCHES. Sewer and water piping shall be placed in separate trenches.
- 3.5 INSTALLATION OF SCREW-JOINTED PIPING. All pipes shall be cut accurately according to measurements established by the contractor and shall be worked into place without springing or forcing. Proper provision shall be made for the expansion and contraction of all pipelines. Pipe and fittings shall be free from fins and burrs. Screw joints shall be made with a lubricant applied on the male threads only; threads shall be full cut and not more than three threads on the pipe shall remain exposed. All exposed ferrous pipe threads after being installed and tested shall be given one coat of zinc chromate and enamel paint.
- 3.6 INSTALLATION OF FIXTURES. Connections between the earthenware of fixtures and the flanges on soil pipe shall be made gas and watertight. All bulk material including putty and plastics shall not be used for gaskets. Floor drains shall be secured in a water tight manner.

- 3.7 PROTECTIVE COATING FOR GALVANIZED STEEL PIPING BURIED IN THE GROUND. All galvanized steel piping buried in the ground shall be given a protective coating of zinc chromate primer and enamel paint.

PART 4 QUALITY ASSURANCE

- 4.1 TESTS. All defects disclosed by tests shall be rectified and the test repeated. All labor, materials and equipment used for tests shall be provided by the contractor.

- a) **WATER PIPING.** Water piping shall be subjected to a hydrostatic pressure test of 100 pounds per sq. inch. All potable water piping shall be disinfected by a mixture containing not less than 0.6 pound of high test calcium hypochlorite, or an equivalent amount of chlorinated lime (about 2 pound), to each 1000-gallon of water, which provides not less than 50 PPM of available chlorine. The mixture shall be injected into the system shall then be drained, flushed with potable water, and placed in service.
- b) **SANITARY PIPING.** Before the installation of any fixture, the ends of the system shall be capped and all lines filled with water to the roof or 3 m above the highest fixture connections if test is done in sections or by floors and allowed to stand for at least 30 minutes without leakage. Test tees having cast iron screwed plugs shall be installed in the vertical stacks when tests are made in sections or by floors. Test within building shall be made with piping exposed. Underground piping shall be tested before backfilling.
- c) **PLUMBING SYSTEMS AND EQUIPMENT.** Plumbing system and equipment after complete installation shall be given an in service tests. All fixtures are installed the entire vent and sewer systems shall have a final test. Final test shall be either the smoke or peppermint test. Before proceeding with either test all traps shall be filled with water. Smoke test shall be accomplished by filling the entire sewer system with a pungent thick smoke produced by one or more smoke machines. When smoke appears at stack openings on the ceiling or roof, they shall be closed. A pressure equivalent to a 25 mm water column shall be exerted and maintained for 15 minutes before inspection starts. Peppermint tests shall be accomplished by introducing a minimum of 2 ounces of oil of peppermint into each stack. All stacks and line openings shall be closed during test, for a minimum period of 1/2 hour.

PART 5 GUARANTEE

The contractor shall furnish to the Owner a written guarantee covering the satisfactory operations of the plumbing installation. This shall be for a period of one year after the date of acceptance. During this period, the contractor shall repair or replace any defective work and pay for any repair or replacement cost. All damages due to improper use or caused by the Owner or his representatives/employees shall be at the

Owner's expense.

SECTION 15.02 EXTERIOR SANITARY SEWER SYSTEM

PART 1 GENERAL

- 1.1 SCOPE / WORK INCLUDED.** This section includes exterior sanitary sewer, complete. The construction required herein should include appurtenance structures to points of connection with the building sanitary sewer 1.5 m outside the buildings to which the sewer system is to be connected. Excavation and backfilling shall conform to Section: Earthwork.

PART 2 MATERIALS

2.1 POLYVINYL CHLORIDE (PVC)

- a) Sewer piping shall be approved by the Architect/Engineer In-Charge, size as indicated or 0.20 m in diameter or equivalent Philippine National Standard.
- b) Fittings and specials for use with PVC pipe shall have a strength not less than the pipe and shall be manufacturer's standard product, as approved.
- c) Jointing material. Coupling and sealing rings for pipe couplings and fittings shall conform to manufacturer's recommendation, as approved.

- 2.2 CONCRETE PIPES.** Pipes from septic tank to the storm drainage line shall be tongue and groove non-reinforced concrete pipes.

2.3 SEWER MANHOLE

- a) **GENERAL.** Sewer manhole shall be constructed of concrete with cast-iron frame and cover. The invert channels shall be smooth and semi-circular in shape, conforming to the inside of the adjacent storm sewer section. Changes in direction of flow shall be made with a smooth curve of as large a radius as the size of the inlet and box will permit. The invert channels shall be formed directly on the concrete of the inlet base and shall be constructed by laying full section sewer pipe through the inlet and breaking out the top half after the surrounding concrete has hardened. The floor of the manhole outside the channels shall be smooth and shall slope toward the channels not less than 25 mm per foot nor more than 50 mm per foot.
- b) **MANHOLE COVER** shall be pre-cast concrete. Cover shall be of type and size indicated. The word "SEWER", at least 50 mm high, shall be marked or cast into cover so as to be plainly visible.

- 2.4 SEPTIC TANK.** Provide septic tank as indicated with complete piping and fittings. Cover shall be pre-cast concrete of type and size indicated. The word "SEPTIC" at least 50 mm high, shall be marked or cast into cover so as to be plainly visible. Septic tank cover shall be provided with steel lifting handle.

2.5 **REINFORCED CONCRETE FOR SEWER MANHOLE AND SEPTIC TANK** shall be as specified in Section: Cast-In-Place Concrete.

PART 3 INSTALLATIONS

3.1 **PIPE LAYING**

- a) **PIPE LAYING** shall precede upgrade with the groove ends of tongue and groove pipe pointing in the direction of the flow. Each pipe shall be laid accurately to the line and grade shown on the drawings. Pipe shall be laid and centered so that the sewer has a uniform invert. As the work progresses, the interior of the sewer shall be cleaned of all superfluous materials.
- b) **BEFORE MAKING A PIPE JOINT**, all surfaces of the portions of the pipe to be joined shall be cleaned and dry. Lubricants, primers and adhesives shall be used as recommended by the pipe manufacturer. The joints shall then be placed, fitted, jointed, and adjusted to obtain the degree of water tightness required.
- c) **TRENCHES** shall be kept free of water and as dry as possible during bedding, lying, and jointing and for as long a period as required. When work is not in progress, open ends of pipe and fittings shall be satisfactorily closed with wood blocks or bulkheads so that no trench water or other material will enter the pipe or fittings.
- d) **BACKFILL**. As soon as possible after the joint is made, sufficient backfill material shall be placed along the pipe to prevent pipe movement off line or grade.
- e) **SURFACE CLEAN-OUT**. Cast-iron or PVC clean-out shall be provided, as indicated.
- f) **JOINTS BETWEEN DIFFERENT PIPE MATERIALS** shall be made as specified, using approved jointing materials.

PART 4 QUALITY ASSURANCES

All work shall be in first class condition and constructed properly in accordance with the drawings. No piping shall be buried, covered, or concealed until it has been inspected, tested, and approved. Water for testing will be furnished by the contractor.

PART 5 CLEAN-UP

Upon completion of the construction of the sanitary sewers, the contractor shall remove all surplus construction materials and debris resulting from the work.

- END -

Prepared by:

MA. VICTORIA V. UMALI
Civil Engineer, PMO

Submitted by:

Ar. MA. SATURNINA C. PARUNGAO
Director, PMO

Approved by:

CECILIA N. GASCON, Ph.D.
University President

Conforme:

CONTRACTOR

Bid Form

Date: _____

IB¹ N°: _____

HERMOGENA A. BAUTISTA

Chairperson, BAC (Infrastructure & Repairs)

BULACAN STATE UNIVERSITY

Guinhawa, City of Malolos, Bulacan

We, the undersigned, declare that:

- (a) We have examined and have no reservation to the Bidding Documents, including Addenda, for the Contract **COMPLETION OF THE COLLEGE OF INDUSTRIAL TECHNOLOGY (CIT) BUILDING-INFRA-2019-10**.

- (b) We offer to execute the Works for this Contract in accordance with the Bid and Bid Data Sheet, General and Special Conditions of Contract accompanying this Bid;

The total price of our Bid, excluding any discounts offered below is: *[insert information]*;

The discounts offered and the methodology for their application are: *[insert information]*;

- (c) Our Bid shall be valid for a period of *[insert number]* days from the date fixed for the Bid submission deadline in accordance with the Bidding Documents, and it shall remain binding upon us and may be accepted at any time before the expiration of that period;
- (d) If our Bid is accepted, we commit to obtain a Performance Security in the amount of *[insert percentage amount]* percent of the Contract Price for the due performance of the Contract;
- (e) Our firm, including any subcontractors or suppliers for any part of the Contract, have nationalities from the following eligible countries: *[insert information]*;
- (f) We are not participating, as Bidders, in more than one Bid in this bidding process, other than alternative offers in accordance with the Bidding Documents;
- (g) Our firm, its affiliates or subsidiaries, including any subcontractors or suppliers for any part of the Contract, has not been declared ineligible by the Funding Source;
- (h) We understand that this Bid, together with your written acceptance thereof included in your notification of award, shall constitute a binding contract between us, until a formal Contract is prepared and executed; and
- (i) We understand that you are not bound to accept the Lowest Calculated Bid or any other Bid that you may receive.
- (j) We likewise certify/confirm that the undersigned, is the duly authorized representative of the bidder, and granted full power and authority to do, execute and perform any and all acts necessary to participate, submit the bid, and to sign and execute the ensuing contract for **COMPLETION OF THE COLLEGE OF INDUSTRIAL TECHNOLOGY (CIT) BUILDING-INFRA-2019-10** of the *BULACAN STATE UNIVERSITY*.

¹ If ADB, JICA and WB funded projects, use IFB.

(k) We acknowledge that failure to sign each and every page of this Bid Form, including the Bill of Quantities, shall be a ground for the rejection of our bid.

Name: _____

In the capacity of: _____

Signed: _____

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

Date: _____

Form of Contract Agreement

Know All Men by These Present:

This CONTRACT made and executed this ____ day of _____ 2018, by and between:

BULACAN STATE UNIVERSITY, a state educational institution duly organized and existing under and by virtue of the laws of the Philippines, with principal office and postal address at **Guinhawa, City of Malolos, Bulacan of the Philippines** represented by its President **CECILIA N. GASCON, Ph.D.** (hereinafter called "the UNIVERSITY")

and -

[Name of Contractor], duly organized and existing under the laws of the Philippines, with postal address at [Address of Contractor] represented herein by its Owner & General Manager [Name of the Owner] and by virtue of the powers conferred upon him, hereinafter referred to as the CONTRACTOR.

WHEREAS, the **UNIVERSITY** is desirous that the Contractor execute **COMPLETION OF THE COLLEGE OF INDUSTRIAL TECHNOLOGY (CIT) BUILDING–INFRA-2019-10** (hereinafter called "the Works") and the **UNIVERSITY** has accepted the Bid for [Amount of the Contract] hereinafter called ("the Contract Price") by the Contractor for the execution and completion of such Works and the remedying of any defects therein;

WHEREAS, as a measure of guarantee for the faithful performance of and compliance with his obligations under this contract, the **CONTRACTOR** posted performance security in the form of Surety Bond amounting to [Performance Security] which is thirty percent (30%) of the contract price as specified in the Bidding Documents.

NOW THIS AGREEMENT WITNESSETH AS FOLLOWS:

1. In this Agreement words and expressions shall have the same meanings as are respectively assigned to them in the Conditions of the Contract referred to.
2. Republic Act no. 9184 and its Implementing Rules and Regulations, as amended, as well as the applicable Government Procurement Policy Board Resolutions shall apply to this Contract.
3. **SCOPE OF WORK**
 - 3.1 CONTRACTOR agrees to render the Services enumerated and described in the Construction Specifications and in accordance with the general terms and conditions and made an integral part hereof.
 - 3.2 Plans/Drawings as approved by the UNIVERSITY necessary in the execution of work mutually agreed upon by the UNIVERSITY and CONTRACTOR.

3.3 The CONTRACTOR shall undertake the construction and completion of the PROJECT in full compliance with Contract Documents.

4. **WARRANTY**

Section 62 (b) of R.A. 9184: The CONTRACTOR shall assume full responsibility for the contract work from the time project construction commenced up to a reasonable period as defined in the IRR taking into consideration the scale and coverage of the project from its final acceptance by the government and shall be held responsible for any damage or construction of works except those occasioned by force majeure.

The CONTRACTOR shall be fully responsible for the safety, protection, security, and convenience of his personnel, third parties, and the public at large, as well as the works, equipment, installation and the like to be affected by his construction work and shall be required to put up a warranty security in the form of cash, bank guarantee, letter of credit, Government Service Insurance System bond, or callable surety bond. The CONTRACTOR shall undertake the repair works, at his own expense, of any defect or damage to the infrastructure projects on account of the use of materials of inferior quality within ninety (90) days from the time the Head of the Procuring Entity has issued an order to undertake repair. In case of failure or refusal to comply with this mandate, the government shall undertake such repair works and shall be entitled to full reimbursement of expenses incurred therein upon demand.

5. **WORK CHANGES**

Variation Orders may be issued by the UNIVERSITY to cover any increase/decrease in quantities, including the introduction of new work items that are not included in the original contract or reclassification of work items that are either due to change of plans, design or alignment to suit actual field conditions resulting in disparity between the preconstruction plans used for purposes of bidding and the "as staked plans" or construction drawings prepared after a joint survey by the CONTRACTOR and the Government after award of the contract, provided that the cumulative amount of the positive or additive Variation Order does not exceed ten percent (10%) of the original contract price.

In claiming for any Variation Order, the CONTRACTOR shall, within seven (7) calendar days after such work has been commenced pursuant to Section 3.2 of the Revised IRR Annex "E" of R.A. 9184; or, within twenty eight (28) calendar days after the circumstances or reasons justifying a claim for extra cost shall have occurred, deliver a notice giving full and detailed particulars of any extra cost in order that it may be investigated at that time.

6. **COMPLETION OF WORK**

The CONTRACTOR binds itself to complete the undertaking herein contracted within **One Hundred Eighty (180) calendar days** commencing on the day the undertaking started, which should not be later than seven (7) calendar days from receipt of the Notice to Proceed;

The CONTRACTOR shall pay the UNIVERSITY for liquidated damages (LD), and not by way of penalty, an amount equal to one-tenth (1/10) of one percent (1%) of the cost of the unperformed portion of the works for every day of delay. The UNIVERSITY shall deduct the liquidated damages from payments or any money due or which may be due to the CONTRACTOR under this Contract and/or collect such liquidated damages from the retention money or other securities posted by the CONTRACTOR whichever is convenient to the UNIVERSITY. Once the cumulative amount of liquidated damages reaches ten percent (10%) of the amount of this contract, the UNIVERSITY shall rescind this contract, without prejudice to other courses of action and remedies open to the UNIVERSITY.

7. PENAL CLAUSE

In addition to the Performance Security posted by the winning bidder to guarantee the faithful performance of its obligations under the contract in accordance with the Bidding Documents, the CONTRACTOR shall pay a penalty of 0.5% of the contract price for each day of delay of the project and 1% of the same for every breach.

8. PROJECT COST AND TERMS OF PAYMENT

In consideration of the Contract Price mentioned herein to be paid by the UNIVERSITY to the CONTRACTOR, the CONTRACTOR hereby covenants, with the UNIVERSITY, to execute and complete such works and to remedy defect therein in conformity in all respect with the provisions of the Contract;

The Contract Price shall be paid to the CONTRACTOR through the Government disbursement procedure subject to the payment, retention money, and warranty provisions in the General Conditions of Contract, the Special Conditions of Contract, and the IRR of R.A. 9184;

9. The following Contract Documents are incorporated hereto and made integral part of this Agreement:

9.1 The said Bid which is the Form of Bid Accomplished and submitted by the Contractor, including:

- a. Bid Security
- b. Bid Prices in the Bill of Quantities
- c. Detailed Estimates
- d. Valid Philippine Contractor's Accreditation Board (PCAB) License and Registration for the type and cost of the contract for this Project
- e. Organizational Chart
- f. List of Contractor's Personnel
- g. List of Contractor's Equipment

- h. Construction Schedule and S-Curve
- i. Construction Safety and Health Program for this Project
- j. Manpower Schedule
- k. Construction Methods
- l. PERT/CPM
- m. Site Inspection Certificate
- n. Omnibus Sworn Statement

- 9.2 Invitation to Apply for Eligibility and to Bid;
- 9.3 Bid Data Sheet;
- 9.4 General and Special Conditions of the Contract;
- 9.5 Supplemental Bid Bulletin
- 9.6 Eligibility requirements, documents and/or statements;
- 9.7 Performance Security and Warranty;
- 9.8 Approved Resolution to Award;
- 9.9 Notice of Award of Contract and winning bidder's "Conforme" thereto; and
- 9.10 Other contract documents that may be required by the existing laws and/or the Entity.

10. RESOLUTION OF CONFLICTS

10.1 Any and all disputes arising from the implementation of **COMPLETION OF THE COLLEGE OF INDUSTRIAL TECHNOLOGY (CIT) BUILDING-INFRA-2019-10** between the UNIVERSITY and the CONTRACTOR, shall be submitted to arbitration in the Philippines according to the provisions of Republic Act No. 876, otherwise known as the "Arbitration Law": Provided, however, That, disputes that are within the competence of the Construction Industry Arbitration Commission to resolve shall be referred thereto. The process of arbitration shall be incorporated as a provision in the contract that will be executed pursuant to the provisions of this Act: Provided, That by mutual agreement, the parties may agree in writing to resort to alternative modes of dispute resolution.

IN WITNESS WHEREOF, the parties hereto have caused this Contract to be executed in accordance with the laws of the Republic of the Philippines on the day and year first above written.

SIGNED, SEALED, AND DELIVERED BY:

BULACAN STATE UNIVERSITY

[NAME OF THE CONTRACTOR]

CECILIA N. GASCON, Ph.D.
President

Owner & General Manager

SIGNED IN THE PRESENCE OF:

Contractor's Witness

Funds Available:

FELICITAS G. MIRABUENOS
Accountant IV, BuISU Accounting Office
ACKNOWLEDGMENT

REPUBLIC OF THE PHILIPPINES

_____)S.S.

_____)

BEFORE ME, a Notary Public for and in the Province/City of _____,
this _____,
2018, personally came and appeared:

Name	Gov't issued identification	Issued At/Date
CECLIA N. GASCON, Ph. D		

Known to me and known to be the same persons who executed the foregoing instrument and acknowledged to me that same is the free and voluntary act and deed of the entities which they respectively represent.

The foregoing instrument is an AGREEMENT consisting of four (4) pages (exclusive of attachments), including this page on which this acknowledgment is written and signed by the parties hereto and their instrument witnesses on the left hand margin of each and every page hereof.

WITNESS MY HAND AND SEAL on the date and place first above written.

Doc. No. _____

Page No. _____

Book No. _____

Series of 2019

Omnibus Sworn Statement

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

AFFIDAVIT

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

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

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

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

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

If a sole proprietorship: As the owner and sole proprietor or authorized representative of [Name of Bidder], I have full power and authority to do, execute and perform any and all acts necessary to participate, submit the bid, and to sign and execute the ensuing contract for **COMPLETION OF THE COLLEGE OF INDUSTRIAL TECHNOLOGY (CIT) BUILDING–INFRA-2019-10** of the **BULACAN STATE UNIVERSITY** [insert “as shown in the attached duly notarized Special Power of Attorney” for the authorized representative];

If a partnership, corporation, cooperative, or joint venture: I am granted full power and authority to do, execute and perform any and all acts necessary to participate, submit the bid, and to sign and execute the ensuing contract for **COMPLETION OF THE COLLEGE OF INDUSTRIAL TECHNOLOGY (CIT) BUILDING–INFRA-2019-10** of the **BULACAN STATE UNIVERSITY**, accompanied by the duly notarized Special Power of Attorney, Board/Partnership Resolution, or Secretary’s Certificate, whichever is applicable;

3. [Name of Bidder] is not “blacklisted” or barred from bidding by the Government of the Philippines or any of its agencies, offices, corporations, or Local Government Units, foreign government/foreign or international financing institution whose blacklisting rules have been recognized by the Government Procurement Policy Board;
4. Each of the documents submitted in satisfaction of the bidding requirements is an authentic copy of the original, complete, and all statements and information provided therein are true and correct;
5. [Name of Bidder] is authorizing the Head of the Procuring Entity or its duly authorized representative(s) to verify all the documents submitted;

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

If a sole proprietorship: The owner or sole proprietor is not related to the Head of the Procuring Entity, members of the Bids and Awards Committee (BAC), the Technical Working Group, and the BAC Secretariat, the head of the Project Management Office or the end-user unit, and the project consultants by consanguinity or affinity up to the third civil degree;

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

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

7. [Name of Bidder] complies with existing labor laws and standards; and
8. [Name of Bidder] is aware of and has undertaken the following responsibilities as a Bidder:
- a) Carefully examine all of the Bidding Documents;
 - b) Acknowledge all conditions, local or otherwise, affecting the implementation of the Contract;
 - c) Made an estimate of the facilities available and needed for the contract to be bid, if any; and
9. Inquire or secure Supplemental/Bid Bulletin(s) issued for the **COMPLETION OF THE COLLEGE OF INDUSTRIAL TECHNOLOGY (CIT) BUILDING-INFRA-2019-10** [Name of Bidder] did not give or pay directly or indirectly, any commission, amount, fee, or any form of consideration, pecuniary or otherwise, to any person or official, personnel or representative of the government in relation to any procurement project or activity.

IN WITNESS WHEREOF, I have hereunto set my hand this ___ day of ___, 2018 at _____, Philippines.

Bidder's Representative/Authorized Signatory

SUBSCRIBED AND SWORN to before me this ____ day of *[month]* *[year]* at *[place of execution]*, Philippines. Affiant/s is/are personally known to me and was/were identified by me through competent evidence of identity as defined in the 2004 Rules on Notarial Practice (A.M. No. 02-8-13-SC). Affiant/s exhibited to me his/her *[insert type of government identification card used]*, with his/her photograph and signature appearing thereon, with no. _____ and his/her Community Tax Certificate No. _____ issued on ____ at _____.

Witness my hand and seal this ____ day of *[month]* *[year]*.

NAME OF NOTARY PUBLIC

Serial No. of Commission _____

Notary Public for _____ until _____

Roll of Attorneys No. _____

PTR No. _____ *[date issued]*, *[place issued]*

IBP No. _____ *[date issued]*, *[place issued]*

Doc. No. _____

Page No. _____

Book No. _____

Series of _____

* This form will not apply for WB funded projects.

Name of the Procuring Entity
Number

Standard Form Number: SF-INFR-15
Revised on: July 29, 2004

Project Reference Number: Infra-2019-10

Name of Project: Completion of the College of Industrial Technology (CIT) Building

Location of the Project: BulSU Main Campus, City of Malolos, Bulacan

Statement of at least one (1) completed contract that is Similar to the Contract to be Bid
(Project equivalent to at least fifty per cent (50%) of the ABC)

Business Name : _____

Business Address: _____

Name of Contract/Location Project Cost	a. Owner's Name b. Address c. Tel. Nos	Nature of Work	Contractor's Role (ITB Clause 12.1(a)(iii.6))		a. Amount at Award b. Amount at Completion c. Duration	a. Date Awarded b. Contract Effectivity c. Date Completed
			Description	% of participation		
Government						
Private						

Notes: This statement shall be supported with:

1. Program of Works
2. Notice of Award or Notice to Proceed or Contract issued by the owners.
3. Owner's Certificate of Final Acceptance; or the Constructors Performance Evaluation Summary (CPES) Final Rating or the Certificate of Completion, must be satisfactory.
4. All spaces should be filled up with correct information.

Submitted by : _____
Designation : _____
Date : _____

Name of the Procuring Entity
Number

Project Reference Number: Infra-2019-10

Name of Project: Completion of the College of Industrial Technology (CIT) Building

Location of the Project: BulSU Main Campus, Main Campus, Bulacan

Standard Form Number: SF-INFR-15

Revised on: July 29, 2004

List of All On-going Government & Private Construction Contracts including contracts awarded but not yet started

Business Name : _____

Business Address: _____

Name of Contract/Location Project Cost	a. Date of the Contract	Contract Duration	a. Owner's Name b. Address c. Tel. Nos	Nature of Work	Contractor's Role (ITB Clause 12.1(a)(iii.6))		a. Total Contract Value at Award b. Date of Completion or Est. Completion c. Total Contract Value at completion	% of Accomplishment		Value of Outstanding Works
					Description	% of participation		Planned	Actual	
Government										
Private										

Notes: This statement shall be supported with:

1. Notice of Award or Notice to Proceed or Contract issued by the owners.
2. Certificate of Good Standing (No slippage and delay).
3. All spaces should be filled up with correct information

Submitted by : _____
(Printed Name & Signature)

Designation : _____

Date : _____

Bid-Securing Declaration

(REPUBLIC OF THE PHILIPPINES)

CITY OF _____) S.S.

X-----X

COMPLETION OF THE COLLEGE OF INDUSTRIAL TECHNOLOGY (CIT) BUILDING–INFRA-2019-10

To: **Ms. HERMOGENA A. BAUTISTA**
Chairperson, Bids and Awards Committee
Infrastructure and Repairs
Bulacan State University
City of Malolos, Bulacan 3000

I/We, the undersigned, declare that:

1. I/We understand that, according to your conditions, bids must be supported by a Bid Security, which may be in the form of a Bid-Securing Declaration.
2. I/We accept that: (a) I/we will be automatically disqualified from bidding for any contract with any procuring entity for a period of two (2) years upon receipt of your Blacklisting Order; and, (b) I/we will pay the applicable fine provided under Section 6 of the Guidelines on the Use of Bid Securing Declaration, within fifteen (15) days from receipt of written demand by the procuring entity for the commission of acts resulting to the enforcement of the bid securing declaration under Sections 23.1(b), 34.2, 40.1 and 69.1, except 69.1 (f), of the IRR of RA 9184; without prejudice to other legal action the government may undertake.
3. I/We understand that this Bid-Securing Declaration shall cease to be valid on the following circumstances:
 - Upon expiration of the bid validity period, or any extension thereof pursuant to your request;
 - I am/we are declared ineligible or post-disqualified upon receipt of your notice to such effect, and (i) I/we failed to timely file a request for reconsideration or (ii) I/we filed a waiver to avail of said right;
 - I am/we are declared as the bidder with the Lowest Calculated Responsive Bid, and I/we have furnished the performance security and signed the Contract.

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

[Insert NAME OF BIDDER'S AUTHORIZED REPRESENTATIVE]
[Insert signatory's legal capacity]

Affiant

SUBSCRIBED AND SWORN to before me this ____ day of *[month]* *[year]* at *[place of execution]*, Philippines. Affiant/s is/are personally known to me and was/were identified by me through competent evidence of identity as defined in the 2004 Rules on Notarial Practice (A.M. No. 02-8-13-SC). Affiant/s exhibited to me his/her *[insert type of government identification card used]*, with his/her photograph and signature appearing thereon, with no. _____.

Witness my hand and seal this ____ day of *[month]* *[year]*.

NAME OF NOTARY PUBLIC

Serial No. of Commission _____
Notary Public for _____ **until** _____
Roll of Attorneys No. _____
PTR No. ____, *[date issued]*, *[place issued]*
IBP No. ____, *[date issued]*, *[place issued]*
Doc. No. ____
Page No. ____
Book No. ____
Series of 2019.