

PHILIPPINE BIDDING DOCUMENTS

(As Harmonized with Development Partners)

Procurement of GOODS: Supply, Delivery, Installation and Integration of FIRE DETECTION, ALARM, AND SPRINKLEY SYSTEM

Government of the Republic of the Philippines
PHILIPPINE SCIENCE HIGH SCHOOL
MAIN CAMPUS
Agham Road, Diliman, Quezon City

**Sixth Edition
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Preface

These Philippine Bidding Documents (PBDs) for the procurement of Goods through Competitive Bidding have been prepared by the Government of the Philippines for use by any branch, constitutional commission or office, agency, department, bureau, office, or instrumentality of the Government of the Philippines, National Government Agencies, including Government-Owned and/or Controlled Corporations, Government Financing Institutions, State Universities and Colleges, and Local Government Unit. The procedures and practices presented in this document have been developed through broad experience, and are for mandatory use in projects that are financed in whole or in part by the Government of the Philippines or any foreign government/foreign or international financing institution in accordance with the provisions of the 2016 revised Implementing Rules and Regulations of Republic Act No. 9184.

The Bidding Documents shall clearly and adequately define, among others: (i) the objectives, scope, and expected outputs and/or results of the proposed contract or Framework Agreement, as the case may be; (ii) the eligibility requirements of Bidders; (iii) the expected contract or Framework Agreement duration, the estimated quantity in the case of procurement of goods, delivery schedule and/or time frame; and (iv) the obligations, duties, and/or functions of the winning bidder.

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

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

- a. All the documents listed in the Table of Contents are normally required for the procurement of Goods. However, they should be adapted as necessary to the circumstances of the particular Procurement Project.
- b. Specific details, such as the “*name of the Procuring Entity*” and “*address for bid submission*,” should be furnished in the Instructions to Bidders, Bid Data Sheet, and Special Conditions of Contract. The final documents should contain neither blank spaces nor options.
- c. This Preface and the footnotes or notes in italics included in the Invitation to Bid, Bid Data Sheet, General Conditions of Contract, Special Conditions of Contract, Schedule of Requirements, and Specifications are not part of the text of the final document, although they contain instructions that the Procuring Entity should strictly follow.

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

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Glossary of Acronyms, Terms, and Abbreviations

ABC – Approved Budget for the Contract.

BAC – Bids and Awards Committee.

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

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

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

BIR – Bureau of Internal Revenue.

BSP – Bangko Sentral ng Pilipinas.

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

CDA - Cooperative Development Authority.

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

CIF – Cost Insurance and Freight.

CIP – Carriage and Insurance Paid.

CPI – Consumer Price Index.

DDP – Refers to the quoted price of the Goods, which means “delivered duty paid.”

DTI – Department of Trade and Industry.

EXW – Ex works.

FCA – “Free Carrier” shipping point.

FOB – “Free on Board” shipping point.

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

Framework Agreement – Refers to a written agreement between a procuring entity and a supplier or service provider that identifies the terms and conditions, under which specific purchases, otherwise known as “Call-Offs,” are made for the duration of the agreement. It is in the nature of an option contract between the procuring entity and the bidder(s) granting the procuring entity the option to either place an order for any of the goods or services identified in the Framework Agreement List or not buy at all, within a minimum period of one (1) year to a maximum period of three (3) years. (GPPB Resolution No. 27-2019)

GFI – Government Financial Institution.

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

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

GOP – Government of the Philippines.

GPPB – Government Procurement Policy Board.

INCOTERMS – International Commercial Terms.

Infrastructure Projects – Include the construction, improvement, rehabilitation, demolition, repair, restoration or maintenance of roads and bridges, railways, airports, seaports, communication facilities, civil works components of information technology projects, irrigation, flood control and drainage, water supply, sanitation, sewerage and solid waste management systems, shore protection, energy/power and electrification facilities, national

buildings, school buildings, hospital buildings, and other related construction projects of the government. Also referred to as *civil works or works*. (2016 revised IRR, Section 5[u])

LGUs – Local Government Units.

NFCC – Net Financial Contracting Capacity.

NGA – National Government Agency.

PhilGEPS - Philippine Government Electronic Procurement System.

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

PSA – Philippine Statistics Authority.

SEC – Securities and Exchange Commission.

SLCC – Single Largest Completed Contract.

Supplier – refers to a citizen, or any corporate body or commercial company duly organized and registered under the laws where it is established, habitually established in business and engaged in the manufacture or sale of the merchandise or performance of the general services covered by his bid. (Item 3.8 of GPPB Resolution No. 13-2019, dated 23 May 2019). Supplier as used in these Bidding Documents may likewise refer to a distributor, manufacturer, contractor, or consultant.

UN – United Nations.

Section I. Invitation to Bid

Notes on the Invitation to Bid

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

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

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

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



INVITATION TO BID FOR Supply, Delivery, Installation and Integration of Fire Detection, Alarm and Sprinkler System

1. The *PHILIPPINE SCIENCE HIGH SCHOOL – MAIN CAMPUS*, through the *GAA 2020* intends to apply the sum of **Three Million Four Hundred Thousand Pesos (Php 3,400,000.00)** being the ABC to payments under the contract for ***Supply, Delivery, Installation and Integration of Fire Detection, Alarm and Sprinkler System***. Bids received in excess of the ABC shall be automatically rejected at bid opening.
2. The *PHILIPPINE SCIENCE HIGH SCHOOL – MAIN CAMPUS* now invites bids for the above Procurement Project. Delivery of the Goods is required by ***one hundred twenty (120) calendar days***. Bidders should have completed, within ***five (5) years*** from the date of submission and receipt of bids, a contract similar to the Project. The description of an eligible bidder is contained in the Bidding Documents, particularly, in Section II (Instructions to Bidders).
3. Bidding will be conducted through open competitive bidding procedures using a non-discretionary “*pass/fail*” criterion as specified in the 2016 revised Implementing Rules and Regulations (IRR) of Republic Act (RA) No. 9184.
4. Bidding is open to all interested bidders, whether local or foreign, subject to the conditions for eligibility provided in the 2016 revised IRR of RA No. 9184.
5. Prospective Bidders may obtain further information from *PHILIPPINE SCIENCE HIGH SCHOOL – MAIN CAMPUS* and inspect the Bidding Documents at the address given below during ***9:00 a.m. to 3:00 p.m.***
6. A complete set of Bidding Documents may be acquired by interested Bidders on ***November 27, 2020 until before the opening of bids*** from the given address and website(s) below ***and upon payment of the applicable fee for the Bidding Documents, pursuant to the latest Guidelines issued by the GPPB, in the amount of Php 5,000.00.*** The Procuring Entity shall allow the bidder to present its proof of payment for the fees ***in person, by facsimile, or through electronic means.***
7. The *PHILIPPINE SCIENCE HIGH SCHOOL – MAIN CAMPUS* will hold a Pre-Bid Conference¹ on ***December 4, 2020 at 9:30 a.m.*** through video conferencing or webcasting via ***Goggle Meet (meet.google.com/rfu-ftgk-wxw)***, which shall be open to prospective bidders.

¹ May be deleted in case the ABC is less than One Million Pesos (PhP1,000,000) where the Procuring Entity may not hold a Pre-Bid Conference.

8. Bids must be duly received by the BAC Secretariat through manual submission at the office address indicated below on or before ***December 16, 2020 at 9:15 a.m.*** Late bids shall not be accepted.
9. All Bids must be accompanied by a bid security in any of the acceptable forms and in the amount stated in **ITB** Clause 14.
10. Bid opening shall be on ***December 16, 2020 at 9:30 a.m.*** via ***Google Meet*** (meet.google.com/fzp-tnve-naz) Bids will be opened in the presence of the bidders' representatives who choose to attend the activity.
11. The ***PHILIPPINE SCIENCE HIGH SCHOOL – MAIN CAMPUS*** reserves the right to reject any and all bids, declare a failure of bidding, or not award the contract at any time prior to contract award in accordance with Sections 35.6 and 41 of the 2016 revised IRR of RA No. 9184, without thereby incurring any liability to the affected bidder or bidders.
12. For further information, please refer to:

Mr. Azlek Owen B. Tan
Head, BAC Secretariat
Philippine Science High School – Main Campus
Agham Road, Diliman, Quezon City
aobtan@pshs.edu.ph
Telefax No.: 8924-0617 / 7500-1448
www.mc.pshs.edu.ph
13. You may visit the following websites:

For downloading of Bidding Documents: ***PSHS Main Campus Website***
<http://mc.pshs.edu.ph/goods-and-services/> and/or Philgeps Website

November 27, 2020

(Sgd) Ms. Jennifer C. Bermudez
Chairperson, BAC for Goods and Services

Section II. Instructions to Bidders

Notes on the Instructions to Bidders

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

1. Scope of Bid

The Procuring Entity, *PHILIPPINE SCIENCE HIGH SCHOOL – MAIN CAMPUS* wishes to receive Bids for the *Supply, Delivery, Installation and Integration of Fire Detection, Alarm, and Sprinkler System* with identification number ***.

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

The Procurement Project (referred to herein as “Project”) is composed of *Supply, Delivery, Installation and Integration of Fire Detection, Alarm, and Sprinkler System*, the details of which are described in Section VII (Technical Specifications).

2. Funding Information

2.1. The GOP through the source of funding as indicated below for *GAA 2020* in the amount of *Php 3,400,000.00*.

2.2. The source of funding is:

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

3. Bidding Requirements

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

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

The Bidder, by the act of submitting its Bid, shall be deemed to have verified and accepted the general requirements of this Project, including other factors that may affect the cost, duration and execution or implementation of the contract, project, or work and examine all instructions, forms, terms, and project requirements in the Bidding Documents.

4. Corrupt, Fraudulent, Collusive, and Coercive Practices

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

5. Eligible Bidders

- 5.1. Only Bids of Bidders found to be legally, technically, and financially capable will be evaluated.
- 5.2. Foreign ownership exceeding those allowed under the rules may participate pursuant to:
 - i. When a Treaty or International or Executive Agreement as provided in Section 4 of the RA No. 9184 and its 2016 revised IRR allow foreign bidders to participate;
 - ii. Citizens, corporations, or associations of a country, included in the list issued by the GPPB, the laws or regulations of which grant reciprocal rights or privileges to citizens, corporations, or associations of the Philippines;
 - iii. When the Goods sought to be procured are not available from local suppliers; or
 - iv. When there is a need to prevent situations that defeat competition or restrain trade.
- 5.3. Pursuant to Section 23.4.1.3 of the 2016 revised IRR of RA No.9184, the Bidder shall have an SLCC that is at least one (1) contract similar to the Project the value of which, adjusted to current prices using the PSA's CPI, must be at least equivalent to:
 - a. For the procurement of Non-expendable Supplies and Services: The Bidder must have completed a single contract that is similar to this Project, equivalent to at least fifty percent (50%) of the ABC.
- 5.4. The Bidders shall comply with the eligibility criteria under Section 23.4.1 of the 2016 IRR of RA No. 9184.

6. Origin of Goods

There is no restriction on the origin of goods other than those prohibited by a decision of the UN Security Council taken under Chapter VII of the Charter of the UN, subject to Domestic Preference requirements under **ITB** Clause 18.

7. Subcontracts

- 7.1. The Bidder may subcontract portions of the Project to the extent allowed by the Procuring Entity as stated herein, but in no case more than twenty percent (20%) of the Project.

The Procuring Entity has prescribed that:

- a. Subcontracting is not allowed.

- 7.2. *[If Procuring Entity has determined that subcontracting is allowed during the bidding, state:]* The Bidder must submit together with its Bid the documentary requirements of the subcontractor(s) complying with the eligibility criteria stated in **ITB** Clause 5 in accordance with Section 23.4 of the 2016 revised IRR of RA No. 9184 pursuant to Section 23.1 thereof.
- 7.3. *[If subcontracting is allowed during the contract implementation stage, state:]* The Supplier may identify its subcontractor during the contract implementation stage. Subcontractors identified during the bidding may be changed during the implementation of this Contract. Subcontractors must submit the documentary requirements under Section 23.1 of the 2016 revised IRR of RA No. 9184 and comply with the eligibility criteria specified in **ITB** Clause 5 to the implementing or end-user unit.
- 7.4. Subcontracting of any portion of the Project does not relieve the Supplier of any liability or obligation under the Contract. The Supplier will be responsible for the acts, defaults, and negligence of any subcontractor, its agents, servants, or workmen as fully as if these were the Supplier's own acts, defaults, or negligence, or those of its agents, servants, or workmen.

8. Pre-Bid Conference

The Procuring Entity will hold a pre-bid conference for this Project on the specified date and time and **through Google Meet** (meet.google.com/rfu-ftgk-wxw) as indicated in paragraph 6 of the **IB**.

9. Clarification and Amendment of Bidding Documents

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

10. Documents comprising the Bid: Eligibility and Technical Components

- 10.1. The first envelope shall contain the eligibility and technical documents of the Bid as specified in **Section VIII (Checklist of Technical and Financial Documents)**.
- 10.2. The Bidder's SLCC as indicated in **ITB** Clause 5.3 should have been completed within **five (5) years** prior to the deadline for the submission and receipt of bids.
- 10.3. If the eligibility requirements or statements, the bids, and all other documents for submission to the BAC are in foreign language other than English, it must be accompanied by a translation in English, which shall be authenticated by the appropriate Philippine foreign service establishment, post, or the equivalent office having jurisdiction over the foreign bidder's affairs in the Philippines. Similar to the required authentication above, for Contracting Parties to the Apostille Convention, only the translated documents shall be authenticated

through an apostille pursuant to GPPB Resolution No. 13-2019 dated 23 May 2019. The English translation shall govern, for purposes of interpretation of the bid.

11. Documents comprising the Bid: Financial Component

- 11.1. The second bid envelope shall contain the financial documents for the Bid as specified in **Section VIII (Checklist of Technical and Financial Documents)**.
- 11.2. If the Bidder claims preference as a Domestic Bidder or Domestic Entity, a certification issued by DTI shall be provided by the Bidder in accordance with Section 43.1.3 of the 2016 revised IRR of RA No. 9184.
- 11.3. Any bid exceeding the ABC indicated in paragraph 1 of the **IB** shall not be accepted.
- 11.4. For Foreign-funded Procurement, a ceiling may be applied to bid prices provided the conditions are met under Section 31.2 of the 2016 revised IRR of RA No. 9184.

12. Bid Prices

- 12.1. Prices indicated on the Price Schedule shall be entered separately in the following manner:
 - a. For Goods offered from within the Procuring Entity's country:
 - i. The price of the Goods quoted EXW (ex-works, ex-factory, ex-warehouse, ex-showroom, or off-the-shelf, as applicable);
 - ii. The cost of all customs duties and sales and other taxes already paid or payable;
 - iii. The cost of transportation, insurance, and other costs incidental to delivery of the Goods to their final destination; and
 - iv. The price of other (incidental) services, if any, listed in e.
 - b. For Goods offered from abroad:
 - i. Unless otherwise stated in the **BDS**, the price of the Goods shall be quoted delivered duty paid (DDP) with the place of destination in the Philippines as specified in the **BDS**. In quoting the price, the Bidder shall be free to use transportation through carriers registered in any eligible country. Similarly, the Bidder may obtain insurance services from any eligible source country.
 - ii. The price of other (incidental) services, if any, as listed in **Section VII (Technical Specifications)**.

13. Bid and Payment Currencies

- 13.1. For Goods that the Bidder will supply from outside the Philippines, the bid prices may be quoted in the local currency or tradeable currency accepted by the BSP at the discretion of the Bidder. However, for purposes of bid evaluation, Bids denominated in foreign currencies, shall be converted to Philippine currency based on the exchange rate as published in the BSP reference rate bulletin on the day of the bid opening.
- 13.2. Payment of the contract price shall be made in:
 - a. Philippine Pesos.

14. Bid Security

- 14.1. The Bidder shall submit a Bid Securing Declaration² or any form of Bid Security in the amount indicated in the **BDS**, which shall be not less than the percentage of the ABC in accordance with the schedule in the **BDS**.
- 14.2. The Bid and bid security shall be valid until *April 15, 2021*. Any Bid not accompanied by an acceptable bid security shall be rejected by the Procuring Entity as non-responsive.

15. Sealing and Marking of Bids

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

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

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

16. Deadline for Submission of Bids

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

17. Opening and Preliminary Examination of Bids

- 17.1. The BAC shall open the Bids in public at the time, on the date, and at the place specified in paragraph 9 of the **IB**. The Bidders' representatives who are present shall sign a register evidencing their attendance. In case videoconferencing,

² In the case of Framework Agreement, the undertaking shall refer to entering into contract with the Procuring Entity and furnishing of the performance security or the performance securing declaration within ten (10) calendar days from receipt of Notice to Execute Framework Agreement.

webcasting or other similar technologies will be used, attendance of participants shall likewise be recorded by the BAC Secretariat.

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

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

18. Domestic Preference

- 18.1. The Procuring Entity will grant a margin of preference for the purpose of comparison of Bids in accordance with Section 43.1.2 of the 2016 revised IRR of RA No. 9184.

19. Detailed Evaluation and Comparison of Bids

- 19.1. The Procuring BAC shall immediately conduct a detailed evaluation of all Bids rated “*passed*,” using non-discretionary pass/fail criteria. The BAC shall consider the conditions in the evaluation of Bids under Section 32.2 of the 2016 revised IRR of RA No. 9184.
- 19.2. If the Project allows partial bids, bidders may submit a proposal on any of the lots or items, and evaluation will be undertaken on a per lot or item basis, as the case maybe. In this case, the Bid Security as required by **ITB** Clause 15 shall be submitted for each lot or item separately.
- 19.3. The descriptions of the lots or items shall be indicated in **Section VII (Technical Specifications)**, although the ABCs of these lots or items are indicated in the **BDS** for purposes of the NFCC computation pursuant to Section 23.4.2.6 of the 2016 revised IRR of RA No. 9184. The NFCC must be sufficient for the total of the ABCs for all the lots or items participated in by the prospective Bidder.
- 19.4. The Project shall be awarded as follows:

Option 1 – One Project having several items that shall be awarded as one contract.
- 19.5. Except for bidders submitting a committed Line of Credit from a Universal or Commercial Bank in lieu of its NFCC computation, all Bids must include the NFCC computation pursuant to Section 23.4.1.4 of the 2016 revised IRR of RA No. 9184, which must be sufficient for the total of the ABCs for all the lots or items participated in by the prospective Bidder. For bidders submitting the committed Line of Credit, it must be at least equal to ten percent (10%) of the ABCs for all the lots or items participated in by the prospective Bidder.

20. Post-Qualification

- 20.2. 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.

21. Signing of the Contract

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

Section III. Bid Data Sheet

Notes on the Bid Data Sheet

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

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

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

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

Bid Data Sheet

ITB Clause	
5.3	<p>For this purpose, contracts similar to the Project shall be:</p> <ul style="list-style-type: none"> a. <i>Supply, Delivery, Installation and Integration of Fire Detection Alarm System.</i> b. completed within <i>five (5) years</i> prior to the deadline for the submission and receipt of bids.
7.1	“Subcontracting is not allowed.”
12	The price of the Goods shall be quoted DDP <i>Philippine Science High School – Main Campus</i> or the applicable International Commercial Terms (INCOTERMS) for this Project.
14.1	<p>The bid security shall be in the form of a Bid Securing Declaration, or any of the following forms and amounts:</p> <ul style="list-style-type: none"> a. The amount of not less than <i>Php 68,000.00</i> if bid security is in cash, cashier’s/manager’s check, bank draft/guarantee or irrevocable letter of credit; or b. The amount of not less than <i>Php 170,000.00</i> if bid security is in Surety Bond.
19.3	<i>Not Applicable.</i>
20.2	“ <i>No additional requirement.</i> ”
21.2	“ <i>No additional requirement.</i> ”

Section IV. General Conditions of Contract

Notes on the General Conditions of Contract

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

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

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

1. Scope of Contract

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

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

Additional requirements for the completion of this Contract shall be provided in the **Special Conditions of Contract (SCC)**.

2. Advance Payment and Terms of Payment

2.1. Advance payment of the contract amount is provided under Annex “D” of the revised 2016 IRR of RA No. 9184.

2.2. The Procuring Entity is allowed to determine the terms of payment on the partial or staggered delivery of the Goods procured, provided such partial payment shall correspond to the value of the goods delivered and accepted in accordance with prevailing accounting and auditing rules and regulations. The terms of payment are indicated in the **SCC**.

3. Performance Security

Within ten (10) calendar days from receipt of the Notice of Award by the Bidder from the Procuring Entity but in no case later than prior to the signing of the Contract by both parties, the successful Bidder shall furnish the performance security in any of the forms prescribed in Section 39 of the 2016 revised IRR of RA No. 9184.

4. Inspection and Tests

The Procuring Entity or its representative shall have the right to inspect and/or to test the Goods to confirm their conformity to the Project specifications at no extra cost to the Procuring Entity in accordance with the Generic Procurement Manual. In addition to tests in the **SCC, Section IV (Technical Specifications)** shall specify what inspections and/or tests the Procuring Entity requires, and where they are to be conducted. The Procuring Entity shall notify the Supplier in writing, in a timely manner, of the identity of any representatives retained for these purposes.

All reasonable facilities and assistance for the inspection and testing of Goods, including access to drawings and production data, shall be provided by the Supplier to the authorized inspectors at no charge to the Procuring Entity.

5. Warranty

- 6.1. In order to assure that manufacturing defects shall be corrected by the Supplier, a warranty shall be required from the Supplier as provided under Section 62.1 of the 2016 revised IRR of RA No. 9184.
- 6.2. The Procuring Entity shall promptly notify the Supplier in writing of any claims arising under this warranty. Upon receipt of such notice, the Supplier shall, repair or replace the defective Goods or parts thereof without cost to the Procuring Entity, pursuant to the Generic Procurement Manual.

6. Liability of the Supplier

The Supplier's liability under this Contract shall be as provided by the laws of the Republic of the Philippines.

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

Section V. Special Conditions of Contract

Notes on the Special Conditions of Contract

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

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

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

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

Special Conditions of Contract

GCC Clause	
1	<p><i>[List here any additional requirements for the completion of this Contract. The following requirements and the corresponding provisions may be deleted, amended, or retained depending on its applicability to this Contract:]</i></p> <p>Delivery and Documents –</p> <p>For purposes of the Contract, “EXW,” “FOB,” “FCA,” “CIF,” “CIP,” “DDP” and other trade terms used to describe the obligations of the parties shall have the meanings assigned to them by the current edition of INCOTERMS published by the International Chamber of Commerce, Paris. The Delivery terms of this Contract shall be as follows:</p> <p><i>[For Goods supplied from abroad, state:]</i> “The delivery terms applicable to the Contract are DDP delivered <i>[indicate place of destination]</i>. In accordance with INCOTERMS.”</p> <p><i>[For Goods supplied from within the Philippines, state:]</i> “The delivery terms applicable to this Contract are delivered <i>[indicate place of destination]</i>. Risk and title will pass from the Supplier to the Procuring Entity upon receipt and final acceptance of the Goods at their final destination.”</p> <p>Delivery of the Goods shall be made by the Supplier in accordance with the terms specified in Section VI (Schedule of Requirements).</p> <p>For purposes of this Clause the Procuring Entity’s Representative at the Project Site is <i>[indicate name(s)]</i>.</p> <p>Incidental Services –</p> <p>The Supplier is required to provide all of the following services, including additional services, if any, specified in Section VI. Schedule of Requirements: <i>Select appropriate requirements and delete the rest.</i></p> <ol style="list-style-type: none"> a. performance or supervision of on-site assembly and/or start-up of the supplied Goods; b. furnishing of tools required for assembly and/or maintenance of the supplied Goods; c. furnishing of a detailed operations and maintenance manual for each appropriate unit of the supplied Goods; d. performance or supervision or maintenance and/or repair of the supplied Goods, for a period of time agreed by the parties, provided that this service shall not relieve the Supplier of any warranty obligations under this Contract; and

- e. training of the Procuring Entity’s personnel, at the Supplier’s plant and/or on-site, in assembly, start-up, operation, maintenance, and/or repair of the supplied Goods.
- f. *[Specify additional incidental service requirements, as needed.]*

The Contract price for the Goods shall include the prices charged by the Supplier for incidental services and shall not exceed the prevailing rates charged to other parties by the Supplier for similar services.

Spare Parts –

The Supplier is required to provide all of the following materials, notifications, and information pertaining to spare parts manufactured or distributed by the Supplier:

Select appropriate requirements and delete the rest.

- a. such spare parts as the Procuring Entity may elect to purchase from the Supplier, provided that this election shall not relieve the Supplier of any warranty obligations under this Contract; and
- b. in the event of termination of production of the spare parts:
 - i. advance notification to the Procuring Entity of the pending termination, in sufficient time to permit the Procuring Entity to procure needed requirements; and
 - ii. following such termination, furnishing at no cost to the Procuring Entity, the blueprints, drawings, and specifications of the spare parts, if requested.

The spare parts and other components required are listed in **Section VI (Schedule of Requirements)** and the cost thereof are included in the contract price.

The Supplier shall carry sufficient inventories to assure ex-stock supply of consumable spare parts or components for the Goods for a period of *[indicate here the time period specified. If not used indicate a time period of three times the warranty period]*.

Spare parts or components shall be supplied as promptly as possible, but in any case, within *[insert appropriate time period]* months of placing the order.

	<p>Packaging –</p> <p>The Supplier shall provide such packaging of the Goods as is required to prevent their damage or deterioration during transit to their final destination, as indicated in this Contract. The packaging shall be sufficient to withstand, without limitation, rough handling during transit and exposure to extreme temperatures, salt and precipitation during transit, and open storage. Packaging case size and weights shall take into consideration, where appropriate, the remoteness of the Goods’ final destination and the absence of heavy handling facilities at all points in transit.</p> <p>The packaging, marking, and documentation within and outside the packages shall comply strictly with such special requirements as shall be expressly provided for in the Contract, including additional requirements, if any, specified below, and in any subsequent instructions ordered by the Procuring Entity.</p> <p>The outer packaging must be clearly marked on at least four (4) sides as follows:</p> <p>Name of the Procuring Entity Name of the Supplier Contract Description Final Destination Gross weight Any special lifting instructions Any special handling instructions Any relevant HAZCHEM classifications</p>
	<p>A packaging list identifying the contents and quantities of the package is to be placed on an accessible point of the outer packaging if practical. If not practical the packaging list is to be placed inside the outer packaging but outside the secondary packaging.</p> <p>Transportation –</p> <p>Where the Supplier is required under Contract to deliver the Goods CIF, CIP, or DDP, transport of the Goods to the port of destination or such other named place of destination in the Philippines, as shall be specified in this Contract, shall be arranged and paid for by the Supplier, and the cost thereof shall be included in the Contract Price.</p> <p>Where the Supplier is required under this Contract to transport the Goods to a specified place of destination within the Philippines, defined as the Project Site, transport to such place of destination in the Philippines, including insurance and storage, as shall be specified in this Contract, shall be arranged by the Supplier, and related costs shall be included in the contract price.</p>

	<p>Where the Supplier is required under Contract to deliver the Goods CIF, CIP or DDP, Goods are to be transported on carriers of Philippine registry. In the event that no carrier of Philippine registry is available, Goods may be shipped by a carrier which is not of Philippine registry provided that the Supplier obtains and presents to the Procuring Entity certification to this effect from the nearest Philippine consulate to the port of dispatch. In the event that carriers of Philippine registry are available but their schedule delays the Supplier in its performance of this Contract the period from when the Goods were first ready for shipment and the actual date of shipment the period of delay will be considered force majeure.</p> <p>The Procuring Entity accepts no liability for the damage of Goods during transit other than those prescribed by INCOTERMS for DDP deliveries. In the case of Goods supplied from within the Philippines or supplied by domestic Suppliers risk and title will not be deemed to have passed to the Procuring Entity until their receipt and final acceptance at the final destination.</p> <p>Intellectual Property Rights –</p> <p>The Supplier shall indemnify the Procuring Entity against all third-party claims of infringement of patent, trademark, or industrial design rights arising from use of the Goods or any part thereof.</p>
2.2	<p>The terms of payment shall be as follows:</p> <p>The Procuring Entity is allowed to determine the terms of payment on the partial or staggered delivery of the Goods procured, provided such partial payment shall correspond to the value of the goods delivered and accepted in accordance with prevailing accounting and auditing rules and regulations.</p> <p>The supplier may submit a progress billing and corresponding request for progress payment for the delivered goods and/or services accomplished.</p> <p>The procuring entity shall deduct the following from the certified gross amounts to be paid to the supplier as progress payment:</p> <ul style="list-style-type: none"> • All progress payments shall first be charged against the advance payment until the latter has been fully exhausted, unless otherwise approved by the President. • Retention money in an amount equivalent to at least ten percent (10%) of every progress payment.
4	<p>The inspections and tests that will be conducted are: <i>The Inspectorate Team with the TWG and/or End User unit shall have the right to inspect and/or to test the Goods to confirm their conformity to the Project specifications at no extra cost to the Procuring Entity in accordance with the Generic Procurement Manual.</i></p>

Section VI. Schedule of Requirements

The delivery schedule expressed as weeks/months stipulates hereafter a delivery date which is the date of delivery to the project site.

Item Number	Description	Quantity	Total	Delivered, Weeks/Months
1	Supply, Delivery, Installation and Integration of Fire Detection, Alarm, and Sprinkler System	1	1	120 CD

Section VII. Technical Specifications

Notes for Preparing the Technical Specifications

A set of precise and clear specifications is a prerequisite for Bidders to respond realistically and competitively to the requirements of the Procuring Entity without qualifying their Bids. In the context of Competitive Bidding, the specifications (*e.g.* production/delivery schedule, manpower requirements, and after-sales service/parts, descriptions of the lots or items) must be prepared to permit the widest possible competition and, at the same time, present a clear statement of the required standards of workmanship, materials, and performance of the goods and services to be procured. Only if this is done will the objectives of transparency, equity, efficiency, fairness, and economy in procurement be realized, responsiveness of bids be ensured, and the subsequent task of bid evaluation and post-qualification facilitated. The specifications should require that all items, materials and accessories to be included or incorporated in the goods be new, unused, and of the most recent or current models, and that they include or incorporate all recent improvements in design and materials unless otherwise provided in the Contract.

Samples of specifications from previous similar procurements are useful in this respect. The use of metric units is encouraged. Depending on the complexity of the goods and the repetitiveness of the type of procurement, it may be advantageous to standardize the General Technical Specifications and incorporate them in a separate subsection. The General Technical Specifications should cover all classes of workmanship, materials, and equipment commonly involved in manufacturing similar goods. Deletions or addenda should then adapt the General Technical Specifications to the particular procurement.

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

Sample Clause: Equivalency of Standards and Codes

Wherever reference is made in the Technical Specifications to specific standards and codes to be met by the goods and materials to be furnished or tested, the provisions of the latest edition or revision of the relevant standards and codes shall apply, unless otherwise expressly stated in the Contract. Where such standards and codes are national or relate to a particular country or region, other authoritative standards that ensure substantial equivalence to the standards and codes specified will be acceptable.

Reference to brand name and catalogue number should be avoided as far as possible; where unavoidable they should always be followed by the words “*or at least equivalent.*” References to brand names cannot be used when the funding source is the GOP.

Where appropriate, drawings, including site plans as required, may be furnished by the Procuring Entity with the Bidding Documents. Similarly, the Supplier may be requested to provide drawings or samples either with its Bid or for prior review by the Procuring Entity during contract execution.

Bidders are also required, as part of the technical specifications, to complete their statement of compliance demonstrating how the items comply with the specification.

Technical Specifications

Item	Specification	Statement of Compliance
		<p><i>[Bidders must state here either "Comply" or "Not Comply" against each of the individual parameters of each Specification stating the corresponding performance parameter of the equipment offered. Statements of "Comply" or "Not Comply" must be supported by evidence in a Bidders Bid and cross-referenced to that evidence. Evidence shall be in the form of manufacturer's un-amended sales literature, unconditional statements of specification and compliance issued by the manufacturer, samples, independent test data etc., as appropriate. A statement that is not supported by evidence or is subsequently found to be contradicted by the evidence presented will render the Bid under evaluation liable for rejection. A statement either in the Bidder's statement of compliance or the supporting evidence that is found to be false either during Bid evaluation, post-qualification or the execution of the Contract may be regarded as fraudulent and render the Bidder or supplier liable for prosecution subject to the applicable laws and issuances.]</i></p>
1	<p>Supply, Delivery, Installation and Integration of Fire Detection Alarm System</p>	
	<p>The work includes providing new fire protection systems for the proposed building. The equipment, material installations, workmanship, inspection and testing shall be in strict accordance with the required advisory provisions of National Fire Protection Association Standards, Fire Code of the Philippines and National Building Code, except as modified herein.</p> <p>The work includes the following:</p> <ul style="list-style-type: none"> A. Complete wet pipe and automatic sprinkler system at the Administration Building 3rd Floor & Academic Building system. System shall be complete including automatic fire sprinkler system, fire pump, fire department connection, valves, hose, hose valves, hose cabinet, etc. B. Painting of pipe work and equipment. C. Testing and commissioning. 	

	<p>D. Provision of operating instructions and maintenance manuals.</p> <p>E. Training of the building's maintenance staff for proper operation of the entire system.</p> <p>The contractor shall be responsible for coordinating his work with the various trades as necessary to avoid conflicts and to insure the installation of all work within the available space. Requirement for portable fire extinguisher shall comply with the local fire department policy.</p>	
	<p><u>FIRE DETECTION AND ALARM SYSTEM</u></p>	
	<p><u>PART I: GENERAL</u></p>	
	<p>1.1 DESCRIPTION</p> <p>A. Provide fire detection and alarm system in accordance with the Contract Documents.</p> <p>B. The fire detection and alarm system shall be a stand-alone system operating independently of other control systems. It shall have an automatic dial-up feature to the BFP Fire Station.</p> <p>C. Related work specified in other divisions of these specifications:</p> <ol style="list-style-type: none"> 1. Sprinkler water flow and tamper switches. 2. Magnetic door holders and electric door locking hardware. 3. Public Address Emergency Announcement 4. Life Safety Equipment Interfaces 	
	<p>1.2 RELATED DOCUMENTS</p> <p>A. All work specified in this specification is subject to the provisions of Electronics General Provisions.</p> <p>B. Refer to the following specification of related work in connection with the Fire Detection and Alarm System: Background Music (BGM) and Public Address (PA) System</p>	
	<p>1.3 QUALITY ASSURANCE</p>	

	<ul style="list-style-type: none"> A. Fire Department approval of fire detection and alarm system. B. Manufacturer and equipment supplier shall have a minimum of ten (10) years of experience as a contractor of fire detection and alarm system and shall have at least five (5) completed or on-going FDAS installation in the Philippines. C. Equipment supplier shall have twenty-four (24) hour parts and labor service available with a maximum of four (4) hour response time. D. Prior to making required submittals, system supplier shall meet with the Fire Department and make an informal presentation of the fire alarm and detection system. Meeting minutes shall be issued and comments incorporated into the required submittals. E. Engineer In-Charge supervising the work shall be a duly registered Electronics Engineer supervised by a Professional Electronics Engineer as required by RA 9292 and the revised IRR of The National Building Code of the Philippines. 	
	<p>1.4 STANDARDS</p> <ul style="list-style-type: none"> A. Fire Department Requirements B. National Building Code of the Philippines C. National Fire Protection Association (NFPA 72, 101, 5000) D. RA 9514 Revised Fire Code of the Philippines of 2008 and its IRR 	
	<p>1.4 ABBREVIATIONS</p> <ul style="list-style-type: none"> A. FACP Fire Alarm Control Panel B. FTS Firefighter's Telephone System C. FCC Fire Command Center 	
	<p>1.5 SUBMITTALS</p> <ul style="list-style-type: none"> A. Minutes of system supplier's meeting with the Fire Department. B. Manufacturer's product data sheets for equipment including Fire Marshal listing numbers. C. Floor plans (minimum 1:100 scale) showing device locations and 	

	<p>interconnecting conduit and wire. Floor plan (minimum 1:25 scale) of the FCC indicating fire management system equipment, equipment furnished by others, tables, plan racks, and required clearances. Elevations (minimum 1:25 scale) of each wall of the FCC.</p> <p>D. Riser diagram showing devices, equipment, and interconnecting conduit and wire. Indicate points of connection to other equipment such as fire pump controllers, dry pipe sprinkler systems, elevator machine rooms and shafts and kitchen hood fire protection systems.</p> <p>E. Scaled detail drawings of FACP</p> <p>F. Wiring diagram for each device.</p> <p>G. Wiring diagrams for smoke control sequence.</p> <p>H. Voltage drop calculations.</p> <p>I. Interface installation shop drawing for magnetic door holders, and electric door locking hardware.</p> <p>J. List of all devices with address identification.</p> <p>K. Seismic restraint calculations.</p> <p>L. Layout of Fire Alarm Sub-panels.</p>	
	<p>1.7 FIELD TESTING</p> <p>A. Wiring shall be inspected and tested for continuity and short circuits. The minimum allowable resistance between any two conductors or between conductors and ground is ten mega ohms measured with a 500-volt megger.</p> <p>B. Field Test Reports:</p> <ol style="list-style-type: none"> 1. Certification that equipment has been properly installed and is in satisfactory operating condition. 2. Sensitivity settings for smoke detectors. 3. Detailed operational test report in matrix form indicating each initiating device, each signaling device, each communication device, and each control and indicating light on each piece of equipment. Report shall certify the following: 	

	<ul style="list-style-type: none"> a. Successful operation of each alarm and supervisory initiating device. b. Successful operation of each signaling device. c. Successful operation of automatic smoke control sequences. d. Successful operation of FACP e. Successful operation of Fireman’s Telephone Systems f. Successful operation of line supervision devices. g. Successful operation of offsite alarm monitoring system connection (optional). h. Successful operation of unlocking electronically locked doors. 	
	<p>1.8 IDENTIFICATION</p> <p>A. Provide an identification nameplate for each equipment cabinet.</p>	
	<p>1.9 SEQUENCE OF OPERATION</p> <p>A. A computerized intelligent addressable, non-coded, two stage evacuation system complete with integrated emergency voice two-way communications system will be provided. The system will be designed using National Building Code and Fire Code of the Philippines and other related standards such as NFPA as reference.</p> <p>B. The main design principle of the proposed system is to provide localized microprocessor based intelligent Fire Alarm Control Panel, FACP with Emergency Voice Evacuation System, Detectors and system are able to identify maintenance points, malfunctioning and line discontinuity.</p> <p>C. The primary means of detection/suppression will be a system of smoke detectors integrated with the automatic sprinkler system. Smoke detectors will be provided in all areas of the building to comply with local codes,</p>	

	<p>and will be supplemented by the following types of early warning detection.</p> <p>D. All detectors and zone control and monitor modules will be connected on an addressable loop and will each possess a unique address to allow specific identification in the case of alarm or malfunction and environmental sensitivity adjustment.</p> <p>E. Upon activation of any alarm, initiating devices the system will send signal to:</p> <ol style="list-style-type: none"> 1. Transmit an evacuation broadcast to the fire floor and floor above. 2. Transmit an alert broadcast, IF: <ol style="list-style-type: none"> a. Fire alarm within the floor is not acknowledged within 5 minutes. b. Manual pull station is activated within the fire alarm floor. c. Sprinkler flow switch/ supervisory switch is activated. d. Another detector is triggered/ activated within the floor. 3. Automatically stop all building floors recirculating air handling systems(fans). 4. Automatically start all smoke removal and pressurization fan systems as well as open/close appropriate dampers. 5. Activate all fire shutters to stage position. 6. Release all secured door magnetic locks. 7. Annunciate all functions at the Fire Alarm Control Panel at the Ground Floor. 8. Should the initial alarm not be acknowledged within five minutes, an evacuation broadcast will be transmitted to the entire building complex. 9. Transmit signal to the local fire department. 10. A hard copy printout to be initiated at the printer. <p>F. A selective paging system will be integrated with the signaling system to allow authorized announcements.</p>	
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	<p>G. An integrated UL or equivalent listed dedicated two-way firefighter’s telephone system will be provided at each exit stair entry to allow direct communication between the fire fighters and the Fire Command Center.</p> <p>H. The main control panel will consist of a central processing unit, printer and color LCD unit annunciator with a complete graphics package identifying all fire zone status.</p> <p>I. The printer shall be as an event and status printer, it shall be laser jet type with a minimum speed of 200 characters per second at 10 characters per inch.</p>	
	<p>1.10 SYSTEM ZONING <i>(To be further coordinated with the fire and life safety consultant)</i></p> <p>A. Firefighter's Telephone System:</p> <ol style="list-style-type: none"> 1. Plug in jacks: Each stairwell shall be a separate, individual zone. 2. Emergency telephones: Each stairwell shall be a separate, individual zone. 3. Each bank of elevator cabs shall be a separate, individual zone. 4. Each elevator lobby bank riser shall be a separate, individual zone. <p>B. Damper Override Control and Status Indication:</p> <ol style="list-style-type: none"> 1. Separate zone for each damper actuator. Damper switches each with open close and auto functions as well as positive indication shall be provided at each floor and are to be provided at the main control panel. 	
	<p>1.11 SCOPE</p> <p>The scope of work under this head shall include design, supply, and installation of additional Fire Alarm System devices to the whole building complex. The work under this system shall consist of supply, installation, testing, training & handing over of all materials, equipment’s and appliances and labor necessary to commission the said system, complete with Addressable fire alarm system for all common areas. The system</p>	

	<p>shall comprise of Smoke Detectors, Heat Detectors, Alarm Notification Devices, Manual Pull Stations, Modules, and Relays for interfacing with other systems. It shall also include laying of cabling, necessary for installation of the system as indicated in the specification and Bill of Quantities. Any openings/chasing in the wall/ceiling required to be made for the installation shall be made good in an appropriate manner.</p>	
	<p>1.12 OTHER APPROVALS</p> <p>The system shall have proper listing and/or approval from the following nationally recognized agencies:</p> <ul style="list-style-type: none"> UL Underwriters Laboratories Inc ULC Underwriters Laboratories Canada FM Factory Mutual MEA Material Equipment Acceptance (NYC) CSFM California State Fire Marshal 	
	<p><u>PART II: PRODUCTS</u></p>	
	<p>2.1 ACCEPTABLE MANUFACTURERS</p> <ul style="list-style-type: none"> A. Fire Alarm and Detection System components shall be of the same manufacturer, unless otherwise noted. B. Contractor must have at least ten (10) years of experience and existence. 	
	<p>2.1 GENERAL</p> <ul style="list-style-type: none"> A. Alarm and trouble signals shall be digitally encoded by listed electronic devices onto a NFPA Style 6 or 7 (Class A) looped multiplex communication system. B. Alarm and trouble signals from all addressable devices shall be digitally encoded NFPA Style 6 or 7 (Class A) signaling line conduit. C. Digitized electronic signals shall employ check digits or multiple polling. D. Response time between alarm initiation and recording is not to exceed five (5) seconds. E. The fire alarm control panel (FACP) shall consist of low current, solid-state 	

	<p>integrated circuits, and shall be powered from centralized emergency power line source and centralized standby battery power source.</p> <p>F. Power for initiating and signaling devices may be from the fire alarm control panel to which they are connected.</p> <p>G. A single ground or open on any system signaling line circuits, i.e., communication network (multiplex loop) shall not cause system malfunction or loss of operating power.</p> <p>H. Alarm signals arriving at the FACP shall not be lost following a power failure (or outage) until the alarm signal is transmitted and recorded.</p> <p>I. Speaker circuits shall be electrically supervised for open and short circuit per smoke zone.</p> <p>J. Two-way telephone communication circuits shall be arranged so as to allow communication between the fire command center and remote telephone locations.</p> <p>K. It shall be possible to connect the telephone circuits to the speaker circuits to allow voice communication over the speaker circuit from a telephone handset.</p>	
	<p>2.3 LINE SUPERVISION</p> <p>A. All system equipment and wiring shall be supervised.</p> <p>B. Style 7 wiring shall be arranged so that the system shall not be affected by a single open, short, or ground condition. Report trouble condition and automatically switch over to alternate wiring path.</p> <p>C. Style Y wiring shall utilize end of line resistors.</p> <p>D. Addressable Channel Wiring: Style 6.</p> <p>E. Multiplex Channel Wiring: Style 7.</p> <p>F. Non-Addressable Initiating Device Wiring: Style Y.</p> <p>G. VCS and FTS Device Wiring: Style Y.</p>	
	<p>2.4 STANDBY BATTERIES</p>	

	<ul style="list-style-type: none"> A. Provide sufficient battery (sealed lead-acid type) capacity to operate the entire system upon loss of power under maximum normal load for a minimum period of 24 hours with a minimum of 5 minutes of alarm operation at the end of this period. B. The system shall automatically transfer to the standby batteries upon power failure. Battery charging and recharging shall be automatic. 	
	<p>2.5 FIRE ALARM CONTROL PANEL (FACP)</p> <ul style="list-style-type: none"> A. Solid state, microprocessor based, modular design, fully supervised. Steel enclosure in standard finish, with hinged, locking door. Integral power supply, standby batteries, and battery charger. B. Provide power on LED, power failure LED, system trouble LED, system reset switch, alarm silence switch, trouble silence switch, manual evacuation switch, alarm acknowledge switch, trouble acknowledge switch, supervisory service acknowledge switch, lamp test button, tone alert, battery supervision LED, auxiliary relays, and other system indicators and controls necessary for processing alarm and signaling functions. Indicating lamps shall be LED type. C. Provide appropriate permanent identification labeling of control and indicating functions. D. Annunciation: Serial annunciator with back lit, alphanumeric, 80-character liquid crystal display indicating clear language information as to the type of alarm (device type), point status (alarm or trouble), number of alarms on the system, and a custom location label. Ability to scroll back through prior system actions. E. System shall utilize addressable type smoke detection with alarm verification, self-test feature, individual sensor automatic timed sensitivity adjustment, individual smoke sensor field adjustable sensitivity set from FACP, and automatic maintenance alarm feature. 	

	<p>F. Provide at least one (1) spare loop for maintenance purposes.</p> <p>G. Networking Capable Panel (for FACP Interconnection) for integration with other building facilities, for future expansion or for addition of initiating and notification devices during fit-out.</p>	
	<p>2.6 FIRE ALARM INITIATING DEVICES</p> <p>A. General:</p> <ol style="list-style-type: none"> 1. Intelligent Addressable type. 2. Provide auxiliary relays where required to satisfy system operational requirements. 3. Smoke detectors shall be intelligent addressable type. <p>B. Manual Pull Stations:</p> <ol style="list-style-type: none"> 1. Furnish and install where indicated on plan. 2. All manual pull station shall be single action non-coded break glass type. 3. Manual station shall be constructed of Die Cast Metal or Lexan with clearly visible operating instructions. 4. Station shall be suitable for surface mounting on matching back box. 5. Pulling the alarm handle shall activate the toggle switch which shall cause the station in alarm position. 6. Push button type manual station shall not be acceptable. <p>C. Smoke and Heat Detectors:</p> <ol style="list-style-type: none"> 1. Photoelectric smoke detector (Addressable): <ol style="list-style-type: none"> a. LED light source, silicon photodiode receiving element. Line filter and time delay circuitry to prevent transient false alarms. b. 360° smoke entry, locking tamper screw, pulsating on power LED indicator, UL 268. c. Adjustable obscuration/smoke detection levels. d. Provides maintenance identification alarm. e. Provides two LED function/working indication. 	

	<ul style="list-style-type: none"> f. The Detector shall have UL/FM/EN approval. <p>2. Photoelectric smoke detector (Conventional)</p> <ul style="list-style-type: none"> a. The detector shall be able to send detection signal to the zone input module where this will give the zone address to FACP. b. This conventional optical smoke detector provides efficient reliable detection utilizing the light scatter sensing principle with rapid response to a fire signal. c. LED light source, silicon photodiode receiving element. Line filter and time delay circuitry to prevent transient false alarms. d. 360° smoke entry, locking tamper screw, pulsating on power LED indicator, UL 268. e. Adjustable obstruction/smoke detection levels. f. Provides maintenance identification alarm. g. Provides two LED function/working indication. h. The detector shall have UL/FM/EN approval. <p>3. Heat detector:</p> <ul style="list-style-type: none"> a. 135oF to 194oF Combination fixed temperature and rate of rise heat detector b. Locking tamper screw, UL 521. c. Provides maintenance identification alarm. d. Provides two LED function/working indication. e. The Detector shall have UL/FM/EN approval. <p>4. Detector Base:</p> <ul style="list-style-type: none"> a. All detector base shall fit into a common standard type base. Every base shall have a built-in option allowing mechanical locking of the detector head to prevent unauthorized removal or tampering. 	
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	<ul style="list-style-type: none"> b. Detector insertion and removal shall be by simple push-twist movement through the use of an extended tool by one person at the floor level with the detector mounting height up to 7 meter even with the mechanical locking device activated. c. The base shall be equipped with screw-less terminals capable of securely retaining wires up to 1.5 sq.mm. The base shall be suitable for use for both Class A & Class B wiring. d. The standard base shall consist of a sealing plate to prevent dirt, dust, condensation or water from the conduit reaching the terminals or detector contact points. e. The standard base shall be supplied with a removable base cover to protect the contact area during installation stage and to allow checking and commissioning of the individual loops before insertion of the detectors. The dust cover shall be removable by an extended tool up to 7 meters from the floor level. f. Special base assemblies with sounders from the same manufacturer shall have minimum of 75dBA output. <p>D. Device Monitoring Module</p> <ul style="list-style-type: none"> 1. The device monitoring module shall permit the use of conventional detecting devices including sprinkler flow switches and supervisory switches on the addressable system. The module can be mounted together in the fire alarm cabinet or be in the standard outlet boxes located near the device being monitored. <p>E. Control Module</p> <ul style="list-style-type: none"> 1. Interfaces a controlled device to the addressable system, This enables the fire alarm panel to direct an instruction only to the intended device by addressing to its control module. 	
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	<p>F. ASPIRATING SMOKE DETECTOR (AIR SAMPLING DETECTOR)</p> <ol style="list-style-type: none"> 1. The aspirating smoke detector should have combination of dual-source optical smoke detection with advanced algorithms to detect a wide range of fires while maintaining enhanced immunity to nuisance particulates. 2. The detector should be able to detect incipient fire conditions as early as 30 to 60 minutes before a fire actually starts for Early Warning Fire Detection and Very Early Warning Fire Detection. 3. The detector should be connected to the SLC loop to communicate five levels of events for display and use in control-by-event system programming. Using the SLC connection, the system operator can also review real-time information on percent of alarm, drift compensation percent, and temperature. The system operator can also put the detector into service mode, or reset airflow baselines from the main FACP. 4. Maximum air sample transport time from the farthest sampling port to the detector shall not exceed 120 seconds. 5. Air-sampling detectors shall give a trouble signal if the airflow is outside the manufacturer's specified range. 6. The sampling ports and in-line filter, if used, shall be kept clear in accordance with the manufacturer's published instructions. 7. Air-sampling network piping and fittings shall be airtight and permanently fixed. 8. Sampling system piping shall be conspicuously identified as "SMOKE DETECTOR SAMPLING TUBE — DO NOT DISTURB," as follows: <ol style="list-style-type: none"> a. At changes in direction or branches of piping b. At each side of penetrations of walls, floors, or other barriers c. At intervals on piping that provide visibility within the 	
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	<p style="text-align: center;">space, but no greater than 20ft (6.1m)</p> <p>9. A single device should detect as precise as 0.00046%/ft obscuration To 4%/ft obscuration and protects from 8,000 square feet (740 square meters) to large scale 21,500 square feet (2,000 square meters). The total pipe length should be at least 80 meters and should be able to expand up to 4,000 linear meters.</p>	
	<p>2.7 FIRE ALARM NOTIFICATION APPLIANCE</p> <p>A. Speaker-Strobes</p> <ol style="list-style-type: none"> 1. Fire lights shall be a xenon-strobe type or equivalent. It shall be low-voltage (24VDC). <ol style="list-style-type: none"> a. The maximum pulse duration shall be 2/10ths of one second (0.2 second with a maximum duty cycle of 40%). A pulse duration is defined as the time interval between initial and final points of 10% of maximum signal. b. The intensity shall be minimum of 75 candela. c. The flash rate shall be minimum of 1Hz and a maximum of 3Hz. 2. The color shall be clear or nominal white (i.e. unfiltered or clear filtered white light). 3. Electric, utilizing solid state electronic technology operating on a nominal 24 VDC, with a nominal rating of 82 dBA at 3m. <p>B. Annunciator Panel- Back Lit Graphic Type</p> <ol style="list-style-type: none"> 1. Graphic annunciator showing the site plan, and access way shall be provided and installed in FCC room and every Elevator lobby in each floor. 2. Indicating Lamps <ol style="list-style-type: none"> a. Provide supervised light emitting diodes (LED's) for indication. 	

	<p>2.8 FIREFIGHTER’S TELEPHONE SYSTEM (FTS)</p> <ul style="list-style-type: none"> A. Solid state, microprocessor based, modular design, fully supervised. Steel enclosure in standard finish, with hinged, locking door. Integral power supply, standby batteries, and battery charger. Wall mount in FCC Room. B. Two-way voice communication between the FCC Room firefighter's phone jacks and emergency telephones. Selective zone paging to all or any combination of telephone zones. Provide sound powered type system where required by the Fire Department, otherwise, provide electrical type system. C. Each telephone zone shall have a manual selection switch, red LED to indicate active zone, and yellow LED to indicate speaker zone trouble. D. Acknowledge switch, system trouble, reset, and lamp test switch. E. Red telephone handset. F. Provide a remote handset in a lockable recessed cabinet. G. Auxiliary Devices: <ul style="list-style-type: none"> 1. Firefighter's phone jack: Recessed wall mounted telephone jack, stainless steel faceplate engraved FIRE EMERGENCY PHONE. 2. Emergency telephone: Recessed wall mounted cabinet, hinged locking door engraved LOCAL FIRE EMERGENCY PHONE, permanent handset with armored cable, and bread red glass. 3. Telephone handset cabinet: Surface mounted cabinet in FCR. Provide plug in type phones with coil cord and jack, quantity as required by the Fire Department. H. Provide a dedicated telephone outlet with a direct line for fireman connection. 	
	<p>2.9 EMERGENCY VOICE EVACUATION PANEL (EVAC)</p> <ul style="list-style-type: none"> A. A fully automatic combination voice communication and fire fighters’ 	

	<p>intercom system which provides automatic and alarm signaling per the NFPA 72.</p> <ul style="list-style-type: none"> B. One or two-way communications system for relocation/evacuation of building personnel and assisting fire-fighting efforts in controlling smoke and fire. C. “ALL-CALL” tone and Voice Signaling. D. Selective Tone and Voice Signaling with Redundant tone generators. E. Module removal supervision F. Service Diagnostic Center. G. “ALARM/RESOUND/RESTORE” Feature H. Short Circuit Speaker Disconnect I. “On/Normal/Off” Auxiliary controls J. Local annunciation with Time-out of selective alarm signal to general alarm “ALL CALL” K. Fully integratable with any Public Address system. 	
	<p>2.10 CABLES</p> <ul style="list-style-type: none"> A. Refer to Wires and Cables Specifications for approved brand of cables. B. Cabling between UPS point to the controllers/devices shall be in the scope of the Vendor. All PVC insulated copper, multi strand, FRLS, Twisted Pair, Shielded cables shall be 650V grades and shall generally conform to IS –1554 – 1988 and meet the signal cabling requirement of the system manufacturer C. The strands of cable shall not be cut to accommodate & connect the terminals. Terminals shall have sufficient cross-sectional area to take in all the strands. Cables shall be laid by skilled and experienced workmen. Great care shall be taken while laying cables to avoid kinks. At all changes in directions (vertical & horizontal planes) the cables shall be bent smooth with a radius as recommended by the manufacturers. 	
	<p>2.11 SHORT CIRCUIT ISOLATOR</p> <ul style="list-style-type: none"> A. This unit shall be placed on the loop preferably after every 20 devices and 	

	<p>shall be able to isolate electrical short circuit in the wiring. All the other detectors shall remain functional because of the Class A wiring of the loop</p> <p>B. Isolator modules/Base shall be provided to automatically isolate wire-to-wire short circuits on an SLC Class A or Class B branch. The isolator module shall limit the number of modules or detectors that may be rendered inoperative by a short circuit fault on the SLC loop segment or branch. At least one isolator module shall be provided for each floor or protected zone of the building.</p> <p>C. If a wire-to-wire short occurs, the isolator module / Base shall automatically open circuit (disconnect) the SLC. When the short circuit condition is corrected, the isolator module shall automatically reconnect the isolated section. The isolator module / Base shall not require any address-setting, and its operations shall be totally automatic. It shall not be necessary to replace or reset an isolator module after its normal operation.</p> <p>D. It shall provide a single LED that shall flash to indicate that the isolator is operational and shall illuminate steadily to indicate that a short circuit condition has been detected and isolated. The Isolator shall have UL approval.</p>	
	<p>2.12 OPERATOR WORKSTATION</p> <p>The network reporting terminal shall be a high-performance desktop computer with printer located in the Security Office at the ground floor.</p> <p>The system shall be capable of supporting simultaneous operator workstation connections using A TCP/IP local area network (LAN) subject to hardware capacity on the server computer.</p> <p>The high-performance desktop computer shall consist of the following as minimum requirements:</p> <ul style="list-style-type: none"> - Intel Corei53.0 GHz Processor or higher - 4 GB DDR2 RAM - 1GB VRAM (Video Adaptor Card) 	

	<ul style="list-style-type: none"> - 1TB HDD - Keyboard; mouse and CD Rom Drive - Latest Windows Operating System and Fire Alarm System Software. - 21' Color LCD Monitor 	
	<p>2.12 BATTERY AND CHARGER</p> <p>A. Battery: Sealed Lead-Acid type, 24 volt nominal with sufficient capacity to power the fire alarm system for not less than twenty four (24) hours upon a normal AC power failure.</p> <p>B. Charger: Automatic with constant potential charger maintaining the battery fully charged under all service conditions. Charger will operate at 230 volt, 60 Hz source.</p>	
	<p>2.14 SYSTEM SOFTWARE</p> <p>A. Automatic detector addressing and status indication.</p> <p>B. Secure signal transmission on unshielded cables.</p> <p>C. Intelligence distributed across the detectors and the fire control panel.</p> <p>D. Drag & drop graphics and GUI interface.</p> <p>E. Graphic screens are created with a built-in drawing utility of the protected area and are linked to fire alarm devices.</p> <p>F. Should a device got to alarm, the appropriate graphic floor plan is displayed along with operator instructions.</p> <p>G. History manager which tracks and stores events.</p> <p>H. Must be able to control and monitor the system.</p> <p>I. Must be able to connect to other networks using TCP/IP Local Area Network (LAN)</p>	
	<p>2.15 SPECIAL DETECTION SYSTEM AND DEVICES</p> <p>Where specified, special detection system, addressable and non-addressable type, such as beam detectors, linear detector, aspirating smoke detection system, gas detector, etc. shall be used. The detection system shall be of a type approved</p>	

	<p>by Bureau of Fire Department/Authorities Having Jurisdiction and shall be suitable for a particular application, environmental condition and hazard. The Contractor shall submit detailed equipment catalogue, description, technical data and test certificate for approval. The Contractor shall submit information proving the suitability of the special detection system and devices for a particular application and hazard for approval. Where detection system is required in open-air/outdoor applications, the Contractor shall use and submit suitable detection system approved by Bureau of Fire Department/Authorities Having Jurisdiction for approval. Special detection system shall also be used where necessary to avoid unwanted alarm.</p>	
	<p><u>PART III: EXECUTION</u></p>	
	<p>3.1 GENERAL</p> <ul style="list-style-type: none"> A. All equipment shall be installed and connected in accordance with the manufacturer's recommendations. Following the required specifications indicated here. B. Wiring shall be color coded, and in accordance with the manufacturer's recommendations and Fire Department requirements. Install wiring in an independent, dedicated metallic raceway system. C. Connections to devices installed in accessible tile ceilings shall be in flexible conduit. Device back boxes shall be securely attached to framing members. D. Provide wireways above and/or below equipment cabinets to accommodate large concentrations of wiring. Conductors within equipment cabinets shall be carefully formed and harnessed. E. Connect equipment to emergency power system. F. Furnish a fire alarm speaker and a firefighter's plug in jack for each elevator. Coordinate installation with elevator equipment supplier. G. FCIP and smoke control sequence wiring shall be dedicated and independent from other systems. 	

	<p>H. Provide a 25 mm empty conduit from the FACP to the nearest telecom terminal backboard.</p> <p>I. Speaker circuits on individual floor are to be wired in alternate pattern e.g. ‘a’-‘b’-‘a’-‘b’-‘a’.</p>	
	<p>3.2 TESTING AND COMMISSIONING</p> <p>A. Provide the service of a competent factory-trained engineer or technical authorized by the manufacturer of the fire detection and alarm system equipment to technically supervise and participate during all of the adjustments and tests for the system. Make all adjustments and tests in the presence of the Project Manager.</p> <p>B. When the system has been completed, and prior to the final inspection, furnish testing equipment and perform the following tests in the presence of the Engineer and the Local authority having jurisdiction.</p> <ol style="list-style-type: none"> 1. Check installation, supervision and operation to ascertain that they will function as specified. 2. When any defects are detected, make repairs or install replacement components, and repeat the test. <p>C. At the final inspection, a factory-trained representative of the manufacturer of the major equipment shall perform the required test. In addition, the representative shall demonstrate that the systems function properly in every respect. The demonstration shall be made in the presence of the Owner’s Representative, Project Manager, Consultant and the local authority having jurisdiction.</p>	
	<p>3.3 ADDRESSABLE FIRE ALARM TESTING</p> <p>The correctness of cabling with continuity as per the approved shop drawings. System design & configuration check, Access Control & P.A System integration test</p> <p>A. PHOTOELECTRIC SMOKE DETECTOR</p>	

	<p>The testing shall be carried out for each loop / zone, initially one detector in a zone and subsequently 2 or more are disassociated detectors in each zone with time lapse between the detectors to test for Alarm Priority, Alarm Queuing and Call Logging.</p> <p>An identified detector will be subjected to smoke aspiration from burning paper/cigarette puffs, rubber and other materials which give dense smoke held at 0.3 M distance from the detector. The FACP should indicate increased analogue output for that address and after the programmed delay time, a fire alarm signal shall be indicated. This delay shall be utilized for alarm verification.</p> <p>The same test shall be carried out for two detectors in the same Loop but in different rooms. The FACP shall indicate Pre-Alarm higher analogue levels for both detectors in its display with separate identification for both fires. One of the detectors in question be subjected to higher and longer levels of smoke aspiration. The FACP should give priority alarm for this address. The printout shall indicate individual addresses of the detectors with achieved analogue values and the time of event. This test shall be carried out for different Loops as well as for 2 Loops simultaneously. One detector of each type will be disconnected and subjected to slow dust build – up by means as desired by the Bidder and again connected in the circuit. The FACP shall indicate the changed ambient levels and automatically adjust the analogue values for the same. These Detectors shall then be replaced by new Detectors of identical type and the FACP shall then be programmed accordingly and checked. The Bidder will take custody of the removed detectors without additional cost to the Owner.</p> <p>B. MANUAL PULL STATION</p>	
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	<p>Manual Pull Station in each area is opened & tested for its alarm. Every manual call point will be actuated in every zone in all locations to check for the alarm response.</p> <p>One half of the testing shall be made on a stand by battery power.</p> <p>C. LOOP Any part of the Loop shall be short circuited. The FACP shall indicate the communication failure of all the devices connected in the short circuited segment. After the short circuit is corrected, the Fault Isolator shall return to its normal status automatically, this being reflected in the FACP. The Loop shall then be in normal operation again. Any part of the Loop shall be de wired and tested as given above.</p> <p>Any other test that is required for checking the quality & performance of the system and all other tests as required by the client at the time of handing over.</p>	
	<p><u>GENERAL REQUIREMENTS:</u></p>	
	<p>A. Project Schedule/Timeline</p> <p>The contractor shall finish and turn-over the project within one hundred twenty (120) calendar days upon receipt of Notice to Proceed. Schedule of work shall be properly coordinated to the PSHS-MC's Authorized Representative.</p> <p>The contractor shall submit a project schedule that will show the timetable of the project in the form of Gantt chart.</p> <p>B. Safety Officer</p> <p>A DOLE accredited safety officer/practitioner should be present on site</p>	

	<p>C. Workmen</p> <p>The contractor shall execute all works in a skillful and workmanlike manner and shall engage qualified workmen with equivalent experience required in the installation works.</p> <p>D. Temporary Facilities</p> <p>Location of temporary storage shall be within the Administration Building premises which will be identified by the PSHS-MC prior to the mobilization.</p> <p>The contractor shall provide sub-meter for the temporary power supply, tapping point will be provide by PSHS-MC.</p> <p>The contractor shall pay the corresponding energy consumption upon completion of the project.</p> <p>E. Security and safety protections</p> <p>The contractor shall provide warning signs, sufficient lighting, fire extinguishers and personal protective equipment.</p> <p>F. Wires and conduits</p> <p>Use thick PVC conduit for pipes and fittings and shielded twisted cable TF type for wires. Refer to the approved drawings for the sizes and color.</p> <p>G. As-Built Plans</p> <p>The contractor shall submit five (5) sets as-built plan using one (1) set 20” x 30” tracing paper and four (4) sets blue print signed and sealed by Professional Electronics Engineer and Professional Mechanical Engineer respectively.</p> <p>H. Operation and Maintenance Manual</p> <p>The contractor shall submit three (3) sets of operation and maintenance manual within fifteen (15) calendar days after the completion of the project. The manual</p>	
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	<p>shall have: table of contents, troubleshooting flowchart for all kinds of possible trouble, fault diagnostics and basic repair of defective components.</p> <p>I. Posted Operating Instructions:</p> <p>Furnish approved operating instructions for each system and principal item of equipment as specified in each individual section for the use of the operation and maintenance personnel. The operating instructions shall include wiring diagrams, control diagrams, and control sequence for each principal item of equipment. Operating instructions shall be printed or engraved, and shall be framed under glass or in approved laminated plastic and posted where directed.</p> <p>Operating instructions shall be attached to or posted adjacent to each principal item of equipment and include directions for start-up, proper adjustment, operating lubrication, shutdown, safety precautions, procedures in the event of equipment failure, and other areas as recommended by the manufacturer of each item of equipment.</p> <p>J. Standards Products/Service Availability:</p> <ul style="list-style-type: none"> ○ Materials and equipment shall be standard products of a manufacturer regularly engaged in the manufacture of such products, which are of similar material, design and workmanship. The standard products shall have been in satisfactory commercial or industrial use for two (2) years prior to bid opening. ○ Service support: the equipment items shall be supported by service organizations. The contractor shall submit a certified list of qualified permanent service organizations for support of the equipment which includes their addresses and qualifications. These service 	
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	<p>organizations shall be reasonably convenient to the equipment installation and able to render satisfactory service to the equipment on a regular and emergency basis during the warranty period of the contract.</p> <ul style="list-style-type: none"> ○ Manufacturer's nameplate: each item of equipment shall have a nameplate bearing the manufacturer's name, address, model number, and serial number securely affixed in a conspicuous place; the nameplate of the distributing agent will not be acceptable. <p>K. Training</p> <p>The contractor shall conduct training on the detailed operation, maintenance and troubleshooting of the FDAS and Fire Pumps.</p> <p>Contractor shall provide printed training materials (maximum of 10 copies).</p> <p>L. Testing and Commissioning</p> <p>The contractor shall perform among others, the following:</p> <ul style="list-style-type: none"> • Testing of all smoke detectors, heat detectors, manual pull stations and alarm bells. • Line to ground testing of the system • Actual testing of back-up batteries • Actual testing and simulation of the system such as, smoke test in smoke detectors, etc. <p>M. Acceptance Of The Work:</p> <p>The authorized PSHS-MC Representatives shall witness the formal test and approve all systems before they are accepted by the Head Of Procuring Entity.</p>	
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	<p>N. Work done by others:</p> <ol style="list-style-type: none"> a. All building works including beams, floor and wall penetrations for pipework, etc. The contractor shall be responsible for setting out penetrations to insure conformity with installation requirements. b. Provision of flashing upstands (concrete) for pipework penetrations through floor slabs and roof. The contractor shall provide all necessary flashing collars. c. Provision of concrete base and foundation for equipment except otherwise indicated. The sub-contractor shall submit shop drawings prior to implementation of the bases and foundations. d. All power supply up to the equipment control panels. <p>O. WARRANTY</p> <p>All equipment and installation shall be guaranteed for two (2) years from the date of acceptance against failure of components resulting from normal use or factory defects. Any parts of the system or equipment that becomes defective during the term of the guarantee shall be repaired or replaced by the contractor at his own expense.</p> <p>P. Other Provisions</p> <ul style="list-style-type: none"> • The contractor shall submit the list of its personnel that will be assigned to the project • The contractor shall provide uniforms to its workers assigned to the project • The contractor shall provide all tools and materials that will be needed to perform the required installations works including the scaffolding 	
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	<p>and/or platform to work in elevated areas</p> <ul style="list-style-type: none">• The contractor shall replace or restore to its original condition any part of the building or equipment and other properties of PSHS-MC that may be damaged due to poor workmanship• It is the contractor's responsibility to verify actual site conditions prior to the submission of their bids	
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Section VIII. Checklist of Technical and Financial Documents

Notes on the Checklist of Technical and Financial Documents

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

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

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

Checklist of Technical and Financial Documents

I. TECHNICAL COMPONENT ENVELOPE

Class "A" Documents

Legal Documents

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

Technical Documents

- (f) Statement of the prospective bidder of all its ongoing government and private contracts, including contracts awarded but not yet started, if any, whether similar or not similar in nature and complexity to the contract to be bid; **and**
- (g) Statement of the bidder's Single Largest Completed Contract (SLCC) similar to the contract to be bid, except under conditions provided for in Sections 23.4.1.3 and 23.4.2.4 of the 2016 revised IRR of RA No. 9184, within the relevant period as provided in the Bidding Documents; **and**
- (h) Original copy of Bid Security. If in the form of a Surety Bond, submit also a certification issued by the Insurance Commission;
or
Original copy of Notarized Bid Securing Declaration; **and**
- (i) Conformity with the Technical Specifications, which may include production/delivery schedule, manpower requirements, and/or after-sales/parts, if applicable; **and**
- (j) Original duly signed Omnibus Sworn Statement (OSS);
and if applicable, Original Notarized Secretary's Certificate in case of a corporation, partnership, or cooperative; or Original Special Power of Attorney of all members of the joint venture giving full power and authority to its officer to sign the OSS and do acts to represent the Bidder.

Financial Documents

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

or

A committed Line of Credit from a Universal or Commercial Bank in lieu of its NFCC computation.

Class "B" Documents

- (m) If applicable, a duly signed joint venture agreement (JVA) in case the joint venture is already in existence;

or

duly notarized statements from all the potential joint venture partners stating that they will enter into and abide by the provisions of the JVA in the instance that the bid is successful.

Other documentary requirements under RA No. 9184 (as applicable)

- (n) *[For foreign bidders claiming by reason of their country's extension of reciprocal rights to Filipinos]* Certification from the relevant government office of their country stating that Filipinos are allowed to participate in government procurement activities for the same item or product.
- (o) Certification from the DTI if the Bidder claims preference as a Domestic Bidder or Domestic Entity.

25 FINANCIAL COMPONENT ENVELOPE

- (a) Original of duly signed and accomplished Financial Bid Form; **and**
- (b) Original of duly signed and accomplished Price Schedule(s).

Annexes

Annex “A”

Statement of All Ongoing Government and Private Contracts

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

Annex “B”

Statement of Single Largest Completed Contract

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

Bid Securing Declaration

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

x-----x

BID SECURING DECLARATION Invitation to Bid: *[Insert Reference number]*

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

I/We³, 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 the written demand by the procuring entity for the commission of acts resulting to the enforcement of the bid securing declaration under Sections 23.1(b), 34.2, 40.1 and 69.1, except 69.1(f), of the IRR of RA 9184; without prejudice to other legal action the government may undertake.
3. I/We understand that this Bid Securing Declaration shall cease to be valid on the following circumstances:
 - (a) Upon expiration of the bid validity period, or any extension thereof pursuant to your request;
 - (b) I am/we are declared ineligible or post-disqualified upon receipt of your notice to such effect, and (i) I/we failed to timely file a request for reconsideration or (ii) I/we filed a waiver to avail of said right;
 - (c) I am/we are declared the bidder with the Lowest Calculated Responsive Bid, and I/we have furnished the performance security and signed the Contract.

³ Select one and delete the other. Adopt the same instruction for similar terms throughout the document.

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. _____ 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 _____

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 [*Name of the Project*] of the [*Name of the Procuring Entity*], as shown in the attached duly notarized *Special Power of Attorney*;

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

3. [*Name of Bidder*] is not “blacklisted” or barred from bidding by the Government of the Philippines or any of its agencies, offices, corporations, or Local Government Units, foreign government/foreign or international financing institution whose blacklisting rules have been recognized by the Government Procurement Policy Board;
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
 - d) Inquire or secure Supplemental/Bid Bulletin(s) issued for the [Name of the Project].
9. [Name of Bidder] did not give or pay directly or indirectly, any commission, amount, fee, or any form of consideration, pecuniary or otherwise, to any person or official, personnel or representative of the government in relation to any procurement project or activity.

IN WITNESS WHEREOF, I have hereunto set my hand this ___ day of ___, 20__ 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.

Annex “E”

Bid Form

Date: _____
Invitation to Bid⁴ N^o: _____

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

Gentlemen and/or Ladies:

Having examined the Bidding Documents including Bid Bulletin Numbers *[insert numbers]*, the receipt of which is hereby duly acknowledged, we, the undersigned, offer to *[supply/deliver/perform]* *[description of the Goods]* in conformity with the said Bidding Documents for the sum of *[total Bid amount in words and figures]* or such other sums as may be ascertained in accordance with the Schedule of Prices attached herewith and made part of this Bid.

We undertake, if our Bid is accepted, to deliver the goods in accordance with the delivery schedule specified in the Schedule of Requirements.

If our Bid is accepted, we undertake to provide a performance security in the form, amounts, and within the times specified in the Bidding Documents.

We agree to abide by this Bid for the Bid Validity Period specified in [BDS](#) provision for **ITB Clause Error! Reference source not found.**² and it shall remain binding upon us and may be accepted at any time before the expiration of that period.

Commissions or gratuities, if any, paid or to be paid by us to agents relating to this Bid, and to contract execution if we are awarded the contract, are listed below:⁵

Name and address of agent	Amount and Currency	Purpose of Commission or gratuity
_____	_____	_____
_____	_____	_____
_____	_____	_____

(if none, state “None”)

Until a formal Contract is prepared and executed, this Bid, together with your written acceptance thereof and your Notice of Award, shall be binding upon us.

We understand that you are not bound to accept the Lowest Calculated Bid or any Bid you may receive.

⁴ If ADB, JICA and WB funded projects, use IFB.

⁵ Applicable only if the Funding Source is the ADB, JICA or WB.

We certify/confirm that we comply with the eligibility requirements as per **ITB Clause Error! Reference source not found.** of the Bidding Documents.

We likewise certify/confirm that the undersigned, *[for sole proprietorships, insert: as the owner and sole proprietor or authorized representative of Name of Bidder, has the full power and authority to participate, submit the bid, and to sign and execute the ensuing contract, on the latter's behalf for the Name of Project of the Name of the Procuring Entity] [for partnerships, corporations, cooperatives, or joint ventures, insert: is granted full power and authority by the Name of Bidder, to participate, submit the bid, and to sign and execute the ensuing contract on the latter's behalf for Name of Project of the Name of the Procuring Entity].*

We acknowledge that failure to sign each and every page of this Bid Form, including the attached Schedule of Prices, shall be a ground for the rejection of our bid.

Dated this _____ day of _____ 20_____.

[signature]

[in the capacity of]

Duly authorized to sign Bid for and on behalf of _____

Annex “F”

Price Schedule

For Goods Offered from Abroad

Name of Bidder _____ . Invitation to Bid⁶ Number ____ . Page ____ of _____ .

1	2	3	4	5	6	7	8	9
Item	Description	Country of origin	Quantity	Unit price CIF port of entry (specify port) or CIP named place (specify border point or place of destination)	Total CIF or CIP price per item (col. 4 x 5)	Unit Price Delivered Duty Unpaid (DDU)	Unit price Delivered Duty Paid (DDP)	Total Price delivered DDP (col 4 x 8)

[signature]

[in the capacity of]

Duly authorized to sign Bid for and on behalf of _____

⁶ If ADB, JICA and WB funded projects, use IFB.

For Goods Offered from Within the Philippines

Name of Bidder _____ Invitation to Bid⁷ Number ____ Page of ____.

1	2	3	4	5	6	7	8	9	10
Item	Description	Country of origin	Quantity	Unit price EXW per item	Transportation and Insurance and all other costs incidental to delivery, per item	Sales and other taxes payable if Contract is awarded, per item	Cost of Incidental Services, if applicable, per item	Total Price, per unit (col 5+6+7+8)	Total Price delivered Final Destination (col 9) x (col 4)

[signature]

[in the capacity of]

Duly authorized to sign Bid for and on behalf of _____

⁷ If ADB, JICA and WB funded projects, use IFB.

