**PHILIPPINE BIDDING DOCUMENTS** 

(As Harmonized with Development Partners)

# Procurement of GOODS

Government of the Republic of the Philippines

## SUPPLY AND DELIVERY OF VARIOUS ENGINEERING LABORATORY EQUIPMENT FOR THE COLLEGE OF ENINEERING (PR 23-01-050 Rebid)

Sixth Edition July 2020

## 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.

#### 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.



Republic of the Philippines WESTERN MINDANAO STATE UNIVERSITY BIDS AND AWARDS COMMITTEE Normal Road, Baliwasan Zamboanga City Telefax.: 062-991-7875 <u>www.wmsu.edu.ph</u>

## **INVITATION TO BID FOR Supply and Delivery of Various** Engineering Laboratory Equipment for the College of Engineering (PR 23-01-050 Rebid)

The Western Mindanao State University, through the Fiduciary Fund intends to apply the sum of Three Million One Hundred Ninety Five Thousand Pesos (3,195,000.00) being the ABC to payments under the contract for Supply and Delivery of Various Engineering Laboratory Equipment for the College of Engineering (PR 23-01-050 Rebid). Bids received in excess of the ABC shall be automatically rejected at bid opening.

- 1. The *Western Mindanao State University* now invites bids for the above Procurement Project. Delivery of the Goods is required within *Seventy Five* (75) *Calendar Days*. Bidders should have completed, within *Reasonable Period* 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).
- 2. Bidding will be conducted through open competitive bidding procedures using a nondiscretionary "*pass/fail*" criterion as specified in the 2016 revised Implementing Rules and Regulations (IRR) of Republic Act (RA) No. 9184.
- 3. Prospective Bidders may obtain further information from *WMSU BAC Office* and inspect the Bidding Documents at the address given below from *8:00am to 5:00pm*.
- 4. A complete set of Bidding Documents may be acquired by interested Bidders on July 3, 2023 to July 25 23, 2023 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 *Five Thousand Pesos (5,000.00)*. The Procuring Entity shall allow the bidder to present its proof of payment for the fees will be presented in person, by facsimile, or through electronic means.
- 5. Bids must be duly received by the BAC Secretariat through manual submission at the office address indicated below. Late bids shall not be accepted.
- 6. All Bids must be accompanied by a bid security in any of the acceptable forms and in the amount stated in **ITB** Clause 14.
- 7. Bid opening shall be on *July 25, 2023 at 9:30 am* at the *BAC Office, 2nd Floor Admin Building, Western Mindanao State University, Baliwasan, Zamboanga City and/*or via Zoom . Bids will be opened in the presence of the bidders' representatives who choose to attend the activity.
- 8. The *Western Mindanao State University* reserves the right to reject any and all bids, declare a failure of bidding, or not award the contract at any time prior to contract award in accordance with 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.

9. For further information, please refer to:

Maria Josefina M. Bacalla Head Secretariat – For Goods Administration Building, BAC Office Western Mindanao State University Normal Road, Baliwasan Zamboanga City Tel. No.: (062)991-7875 Email: <u>bacsecretariate@wmsu.edu.ph</u>

10. You may visit the following websites:

For downloading of Bidding Documents: wmsu.edu.ph

July 3, 2023

#### JOSELITO D. MADROÑAL, DPA BAC Chairperson

#### 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, Western Mindanao State University wishes to receive Bids for Supply and Delivery of Various Engineering Laboratory Equipment for the College of Engineering (PR 23-01-050 Rebid).

The Procurement Project (referred to herein as "Project") is composed of *Fourteen (14) Items*, 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 *Fiduciary Fund* 2023 in the amount of *Three Million One Hundred Ninety Five Thousand Pesos* (3,195,000.00).
- 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. [Select one, delete other/s]
  - a. 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.
- b. Foreign ownership limited to those allowed under the rules may participate in this Project.
- 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.
  - b. For the procurement of Expendable Supplies: The Bidder must have completed a single contract that is similar to this Project, equivalent to at least twenty-five percent (25%) of the ABC.
  - c. For procurement where the Procuring Entity has determined, after the conduct of market research, that imposition of either (a) or (b) will likely result to failure of bidding or monopoly that will defeat the purpose of public bidding: the Bidder should comply with the following requirements:
    - i. Completed at least two (2) similar contracts, the aggregate amount of which should be equivalent to at least *fifty percent* (50%) in the case of non-expendable supplies and services or twenty-five percent (25%) in the case of expendable supplies] of the ABC for this Project; and
    - ii. The largest of these similar contracts must be equivalent to at least half of the percentage of the ABC as required above.
- 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,

The Procuring Entity has prescribed that:

a. Subcontracting is not allowed.

#### 8. Pre-Bid Conference

The Procuring Entity will hold a pre-bid conference for this Project on the specified date and time and either at its physical address July 11, 2023 at 9:30 am at the BAC Office, 2nd Floor Admin building, Western Mindanao State University, Baliwasan, Zamboanga City and/or through videoconferencing/webcasting} as indicated in paragraph 6 of the IB.

#### 9. Clarification and Amendment of Bidding Documents

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

#### **10.** Documents comprising the Bid: Eligibility and Technical Components

- 10.1. The first envelope shall contain the eligibility and technical documents of the Bid as specified in Section VIII (Checklist of Technical and Financial Documents).
- 10.2. If the eligibility requirements or statements, the bids, and all other documents for submission to the BAC are in foreign language other than English, it must be accompanied by a translation in English, which shall be authenticated by the appropriate Philippine foreign service establishment, post, or the equivalent office having jurisdiction over the foreign bidder's affairs in the Philippines. 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. Any bid exceeding the ABC indicated in paragraph 1 of the **IB** shall not be accepted.
- 11.3. For Foreign-funded Procurement, a ceiling may be applied to bid prices provided the conditions are met under Section 31.2 of the 2016 revised IRR of RA No. 9184.

#### 12. 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, exwarehouse, 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).
- 12.2. *[Include if Framework Agreement will be used:]* For Framework Agreement, the following should also apply in addition to Clause 12.1:
  - a. For a single year Framework Agreement, the prices quoted by the Bidder shall be fixed during the Bidder's performance of the contract and not subject to variation or escalation on any account. Price schedules required under Clause 12.1 shall be submitted with the bidding documents.
  - b. For a multi-year Framework Agreement, the prices quoted by the Bidder during submission of eligibility documents shall be the ceiling and the price quoted during mini-competition must not exceed the initial price offer. The price quoted during call for mini-competition shall be fixed during the Bidder's performance of that Call-off and not subject to variation or escalation on any account. Price schedules required under Clause 12.1 shall be submitted with the bidding documents.

#### **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 Declaration<sup>1</sup> 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 *One Hundred Twenty (120) Calendar Days from Opening of Bids*. Any Bid not accompanied by an acceptable bid security shall be rejected by the Procuring Entity as non-responsive.
- 14.3. *[Include if Framework Agreement will be used:]* In the case of Framework Agreement, other than the grounds for forfeiture under the 2016 revised IRR, the bid security may also be forfeited if the successful bidder fails to sign the Framework Agreement, or fails to furnish the performance security or performance securing declaration. Without prejudice on its forfeiture, bid securities shall be returned only after the posting of performance security or performance securing declaration, as the case may be, by the winning Bidder or compliant Bidders and the signing of the Framework Agreement.

#### 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**.
- 16.2. *[Include if Framework Agreement will be used:] For* multi-year Framework Agreement, the submission of bids shall be for the initial evaluation of their technical and financial eligibility. Thereafter, those declared eligible during the said initial eligibility evaluation and entered into a Framework Agreement with the Procuring Entity shall submit anew their best financial offer at the address and on or before the date and time indicated in the Call for each mini-competition.

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

<sup>&</sup>lt;sup>1</sup> 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.

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.
- 18.2. *[Include if Framework Agreement will be used:] For* multi-year Framework Agreement, determination of margin of preference shall be conducted every call for Mini-Competition.

#### **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:
  - One Project having several items, which shall be awarded as separate contracts per item.
- 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, the Bidder shall submit its latest income and business tax returns filed and paid through the BIR Electronic Filing and Payment System (eFPS) and other appropriate licenses and permits required by law and stated in the **BDS**.

#### 21. Signing of the Contract

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**.

#### 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.

ITB	
Clause	
5.3	For this purpose, contracts similar to the Project shall be:
	a. Supply, Delivery and Installation of Various Engineering Laboratory Equipments.
	b. completed within <i>reasonable period</i> prior to the deadline for the submission and receipt of bids.
7.1	Not Applicable
12	The price of the Goods shall be quoted DDP <i>WMSU</i> or the applicable International Commercial Terms (INCOTERMS) for this Project.
14.1	The bid security shall be in the form of a Bid Securing Declaration, or any of the following forms and amounts:
	a. The amount of not less than two percent (2%) <i>of ABC</i> , if bid security is in cash, cashier's/manager's check.
19.3	1.) One (1) unit of Digital Planimeter
	Specifications:
	Roller Type
	- Display: Liquid Crystal, 8 digit figures
	- Accumulated Measuring Value: Maximum 10 square meter (scale 1:1)
	- Measuring Range: Maximum vertical width 325 mm Horizontal roller, rotating length: 30m
	- Accuracy: within $\pm 0.2\%$ (within $\pm 2/1,000$ pules)
	- Power: Built in rechargeable NiCd battery and AC Adapter 100 - 240v (Auto power-off provided)
	- Operating hour: Approximately 35 hr Maximum
	- with carrying case
	- with on site training
	ABC: Php 60,000.00
	2.) One (1) unit of Automatic Digital Level
	Specifications:
	- 0.7 mm Digital Reading for Height Accuracy

## **Bid Data Sheet**

- 2.0 mm Optical Reading for Height Accuracy
- D<10mm; D>10m: D*0.001 for Distance Accuracy
- Telescope that is 32 x magnification
- Magnetic - Damped Compensator and an accuracy of 0.30"/1"
- Data Storage of 16MB (20,000 points)
- External Storage of SD Card
- Display of 160*64 DPI LCD with Illumination
ABC: Php 100,000.00
3.) One (1) unit of Spectrum Analyzer
- Interfaces = RS 232, USB, VGA
- Input Impedance = $50\Omega$
- Frequency range = 150kHz to 3 GHz
-Center Frequency = Setting Resolution - 0.1MH
Accuracy within ±50kHz
(frequency span: 0.3GHz to 2.6 GHz, 20±5?C
-Power Supply = 220V AC/60 Hz
- Frequency Span = Setting Range 1MHz to 3GHz Accuracy within ±3% (frequency span:0.3GHz to 2.6GHz, 20±5 Degree Celsius)
- Resolution Bandwidth = Setting Range 30KHz, 100KHz, 300KHz, 1MHz
- SSB Phase Noise = -85dBc/Hz (typical, 500kHz offset, RBW: 30kHz Sweep time: 1.5s, Span 1MHz @ 1GHz.
ABC: Php 70,000.00
4.) One (1) unit of Portable Floc / Jar Tester
Specification:
- Stirring place: 4
- Digital Speed Setting: 10-300 rpm
- Timer: at least 24hrs continuous stirring
-Power Supply: 220V, 50-60 Hz
-Beaker Capacity: 1000ml

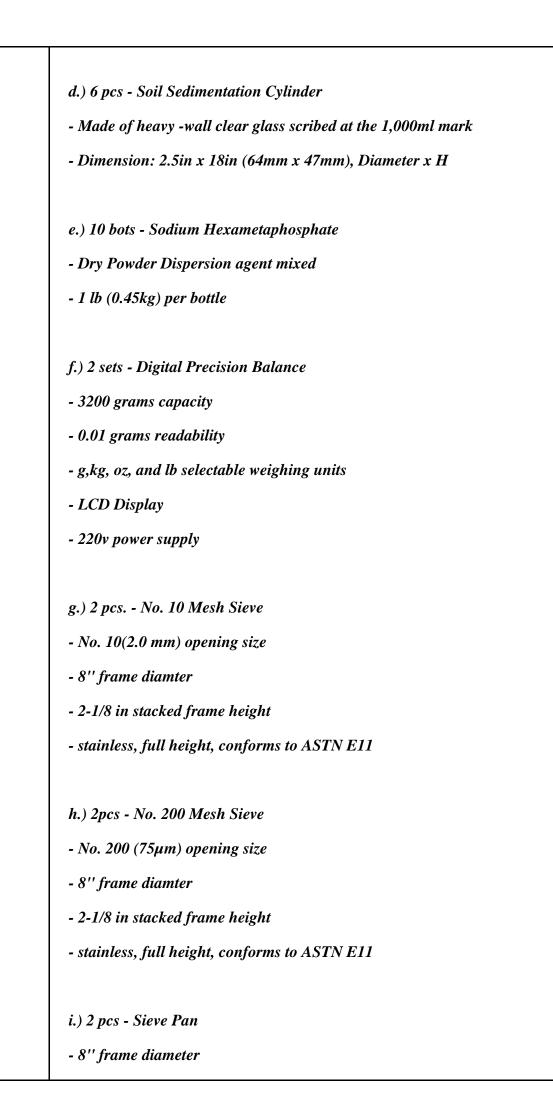
- With on site training
ABC: Php 170,000.00
5.) One (1) unit of Glass Filter with pump
Glass Filter
- 1 piece 500ml, 24/40 ground joint, glass Erlenmeyer flask
- 1 piece 200ml, 24/40 ground joint, glass Bunchner funnel
- 50 pieces filter paper with pore diameter less than 2 microns
- 1 piece 24/40 plastic clip
- 1 piece vacuum hose
Pump
- Peristaltic dosing pump
- adjustable flow rate control
- Flow rate less than 100ml/minute
- Power requirement: 220V/60Hz.
ABC: Php 25,000.00
6.) One (1) unit of Bench Top Centrifuge
- Digital Centrifuge
- Input and Output Display in English Language
- Capacity: 50ml x 6
- Maximum Speed: 4000rpm
- Timer: up to 60 minutes
- 6 pieces 50ml test tubes
- Power requirements: 220V/60Hz.
ABC: Php 75,000.00
7.) One (1) unit of Deionized Water Machine, Type 2
- Water Output 10L/hour

- Ionic rejection rate 99%
- Organic matter rejection rate > 99%
- Particles and bacteria rejection rate > 99%
- Fully automatic microcomputer control system
- With pressure tank
- Includes consumables (filters, membrane and ion exchange column)
- Power requirement : 220V/60Hz
- With on site training
ABC: Php 80,000.00
8.) One (1) unit of UV-Visible SPECTROPHOTOMETER
Specifications:
- Double beam spectrophotomteter scanning system
- Measurement range 190-1100 nanometers (nm)
-Wavelength accuracy +/- 1nm
-Scanning speed of up to 500nm/min, with high speed 1nm step
- concentration range: 0.000 to 9999 ppm
- Minimum of four (4) cell holders
-Automatic lamp changing
- Automatic calculations
- Automatic wavelength setting
- USB ports
- LCD digital display data
- with built-in software that can be linked to computer and printer to LCD digital display data
- Power shut-down test data protection
- Complete accessories included (power and computer cables, cells, manuals, software, lamps, etc)
- Input and Output display in English language
- Power requirements: 220V/60Hz
- Quartz cuvette

- Onsite demo training
- with Compatible continuous colored ink tank system printer with scanner
* Printer Type: Print, Scan, and Copy
* Copy Quality: Draft, Standard, Best
* Maximum Print Size: A3
* Borderless Printing
* 1 set ink
ABC: Php 550,000.00
9.) One (1) unit of Digital Laboratory Refrigerator
- Capacity: Minimum of 300 Liters
- Cabinet Type: Vertical
- Single Door
- Adjustable temperature
- Can be set to 2 Degree Celsius and 20 Degree Celsius
- Microprocessor controller to ensure consistent cabinet temperature
- Digital Display (in English Language)
- Adjustable shelves
- With 4 casters and Stoppers
- Chemically stable, CFC-free, commercially available and environmentally safe refrigerant
- Visual and Audible alarm system: High/low temperature, power failure, sensor error, door ajar, Thermostat failure
- Power failure protection: turn on delay of the cooling system when power failure
Backup battery to ensure that power alarm after 8 hours
- with Automatic Voltage Regulator
- Power requirements: 220V/60Hz
ABC: Php 140,000.00
10.) One (1) unit of Chemical Oxygen Demand (COD), Total Nitrogen and Total Phosphorus Analyzer

- Integrated Multi-parameter Machine Water Quality Analyzer/Rapid Tester
- High Precision
- Can measure (at least) Chemical Oxygen Demand (COD), Ammonia Nitrogen, Total Phosphorus
-LCD Display
- Digital input and output display (in English Language)
-Built-in calibration function
- With data storage function
-with USB interface
-COD detection range up to 10,000 mg/L or ppm
- Ammonia Nitrogen Detection range up to 100mg/L
- Total Phosphorous detection range up to 10mg/L
- Maximum error: 5%
-Can be connected to printer
- 2 sets of reagents
- 2 sets of colorimetric tubes
- Laboratory plastic pipette
- Test tube rack
- Power requirements: 220V/60Hz
-with onsite training
ABC: Php 250,000.00
11.) One (1) unit of Total Organic Carbon (TOC) Analyzer
- Can measure at least Total Organic Carbon
- TOC Measurement Range up to 30,000mg/L
- Built-in LCD
- Digital Input and Output (in English Language)
-With data storage function
-Application: Liquid, Solid and Gas Samples
-With USB port and export data
- Detection method - non-dispersive infrared detection (NDIR) method

-U	V lamp oxidation
Ma	x TOC accuracy error: 5%
-An	alysis time: under 10minutes
- A	utomatic sample introduction
-Po	wer requirements: 220V/60Hz
-wi	th onsite training
-wi	th software, and Printer
	*Specifications:
	Compatible continuous colored ink tank system printer with scanner
	Printer Type: Print, Scan and Copy
	Copy Quality: Draft, Standard, Best
	Maximum Print Size: A3
	1 set ink
AB	C: Php 550,000.00
con	esist of:
	.) 6 pcs -Soil Hydrometer 152H
- len	It has a range of 0.995 - 1.038 in 0.001 divisions and 11 in (280mm) in gth
b.	.) 1 set - Soil Dispersion Mixer
	1/3 hp motor, has selectable 13,000, 16 000, and 18000 rpm speeds plus a nual pulse switch
-	includes a stainless steel dispersion cup
	dimension: 6.5 in x 6.75in x 20.5in (165mm x 171mm x 521mm) W x umeter x H
c.	) 2 pcs - Dispersion Cup
-	1 liter capacity
-	Dimension: 4in x 7in (102mm x 178mm) Diameter x H



	-stainless
	j.) 2pcs - Sieve Cover
	- 8'' frame diameter
	- Stainless
	ABC: Php275,000.00
	13.) 1 unit of Handheld Outdoor Air Quality Test Kit
	Sensor Specification:
	Particulate Matter (PM10 & PM2.5)
	- Range: 0.000 to 1.00 mg/m <sup>3</sup>
	- Resolution: 0.001 mg/m <sup>3</sup>
	- Response Time: 5sec.
	- Minimum Detection Limit (MDL): 0.001mg/m <sup>3</sup>
	- Relative Humidity (RH): 0 to 90%
	Ozone: (03)
	- Range: 0-015 ppm)
	- Resolution: 0.001 ppm
	-Response Time: 60 sec
	- MDL: 0.001ppm
	- RH: 10 to 90%
	Nitrogen Dioxide (NO2)
	- Range: 0-1ppm
	- Resolution: 0.001 ppm
	-Response Time: 30 sec
	-MDL: 0.005ppm
l	- RH: 15 to 90%

Carbon Monoxide ( $\overline{CO}$ ) - Range: 0-25ppm - Resolution: 0.01 ppm -Response Time: 60 sec -MDL: 0.05ppm - RH: 15 to 90% Volatile Organic Compound (VOC) - Range: 0-20ppm - Resolution: 0.01 ppm -Response Time: 30 sec -MDL: 0.01ppm - RH: 0 to 95% Monitor Specification: - Display: Digital LCD -Sensor Calibration: Zero and Gain Calibration - Digital Interface: RS-232 to USB -Analog Output: 0-5V -Power Supply: 12V DC (Power adapter/charger supplied 100-250 VAC) -Rechargeable battery: Lithium Polymer 12 V DC 2700 mA/h - With on site training Enclosure material and Rating: PC and ABS: IP20 and NEMA 1 equivalent PC Software Monitor to USB Cable built in data logger (at least 8,000 records) ABC: Php 300,000.00 14.) One (1) unit of Soil Consolidation Test Equipment

consist of:
a.) 1 set - Peumatic Consolidation Load Frames
- load capacity of 6, 128kPa
- minimum of 188(13bar) of compressed air
- dimension: 12 inches width x 14.5inches breadth x 21in height)
- conforms ASTM D2435, ASTM D4546
- digital readout
- loading ball included
b.) 1 set - Fixed Ring Consolidometer
- 100mm (3.94in) specimen size
- Type: fixed ring
- dimension: 6'' diamter x 2.5'' Height)
- with 100mm cutting sample ring and loading ball
c.) 1 pc - Calibration Disc
- 100mm (3.94 in) specimen size
- dimension: 3.937 x 1.0in (100 x 25.4 mm). D x H
d.) 1 set - Digital Dial Indicator
- 0.6 inch x 0.0001 inch
- Inches/mm switchable
e.) 1 set- Magnetic Gauge Holder for Dial Indicators
- Base: 1.125inhces width x 3.5inches Breadth x 1inch Height
- Rod: 0.25 x 6 in (6.3 x 152 mm) D x L
- Swivel Adapter: 3in (76mm)
f.) 1 set - Linear Variable Displacement Transducers

- 0-2in (0to 51mm) range
- Repeatability to 0.002 mm
- dimension: 0.75 inch Length x 1.75 inches width x 7.75 inches height
g.) 4 pcs - Porous Stone
- 100mm (3.94 in) size in diameter
- 6.35 mm (0.25in) thick
- material: alumimum oxide
- shape: disc
h.) 2 packs- filter Paper
- 4.0 in diameter
- Grade 55
- flow rate: 220 ml/min
-100pcs per pack
i.) 1 set - Consolidation Data Acquisition Software
- Automatically records the rate of consolidation during the incremental loading of soil samples
- real time graphing and calculations are performed
j.) 1 set - Data Readout Box
- Four -Channel data readout
k.) 1 set - Pore Pressure Transducer with Deairing Block
- Pressure rating : Up to 150psi (1,034.21 kPa) with 0.01psi (0.07kPa) resolution
- Transducer Operating Temperature: -40degrees - 125degrees Celcius
l.) 1 pc - Data Readout Mounting Bracket
- fitrs Load Frames with 1.25 in (31.8mm) nominal diameter vertical load rods

	m.) 1 set S-Type Load Cell - Load capacity: 20,000lb (88.96kN) - rated output: 3.0 mV/V - with loading button of 1-1/4 in x 12tpi thread size ABC: Php 550,000.00
20.2	All licenses and permits relevant to the Project and the corresponding law requiring it.
21.2	All additional contract documents relevant to the Project that may be required by existing laws and/or the Procuring Entity.

# 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**.

#### [Include the following clauses if Framework Agreement will be used:]

- 2.3. For a single-year Framework Agreement, prices charged by the Supplier for Goods delivered and/or services performed under a Call-Off shall not vary from the prices quoted by the Supplier in its bid.
- 2.4. For multi-year Framework Agreement, prices charged by the Supplier for Goods delivered and/or services performed under a Call-Off shall not vary from the prices quoted by the Supplier during conduct of Mini-Competition.

#### **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.*[Include if Framework Agreement will be used:]* In the case of Framework Agreement, the Bidder may opt to furnish the performance security or a Performance Securing Declaration as defined under the Guidelines on the Use of Framework Agreement.*]* 

#### 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 *{[Include if Framework Agreement will be used:]* or Framework Agreement*]* 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	
	[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:]
	Delivery and Documents –
	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:
	"The delivery terms applicable to this Contract are <i>WMSU Supply Office</i> . Ris and title will pass from the Supplier to the Procuring Entity upon receipt and final acceptance of the Goods at their final destination."
	Delivery of the Goods shall be made by the Supplier in accordance with th terms specified in Section VI (Schedule of Requirements).
	For purposes of this Clause the Procuring Entity's Representative at the Project Site is <i>Alfredo D. Montero, Supply Officer</i> .
	Incidental Services –
	The Supplier is required to provide all of the following services, includin additional services, if any, specified in Section VI. Schedule of Requirements <i>Select appropriate requirements and delete the rest.</i>
	a. performance or supervision of on-site assembly and/or start-up of the supplied Goods;
	<ul> <li>b. furnishing of tools required for assembly and/or maintenance of th supplied Goods;</li> </ul>
	<ul> <li>c. furnishing of a detailed operations and maintenance manual for eac appropriate unit of the supplied Goods;</li> </ul>
	<ul> <li>d. performance or supervision or maintenance and/or repair of th supplied Goods, for a period of time agreed by the parties, provide that this service shall not relieve the Supplier of any warrant obligations under this Contract; and</li> </ul>
	e. training of the Procuring Entity's personnel, at the Supplier's plan and/or on-site, in assembly, start-up, operation, maintenance, and/or repair of the supplied Goods.
	The Contract price for the Goods shall include the prices charged by th Supplier for incidental services and shall not exceed the prevailing rates charge to other parties by the Supplier for similar services.
	Spare Parts –

and	the Supplier is required to provide all of the following materials, notifications, d information pertaining to spare parts manufactured or distributed by the applier:
	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.
(Se	the spare parts and other components required are listed in <b>Section VI chedule of Requirements</b> ) and the cost thereof are included in the contract ice.
con	he Supplier shall carry sufficient inventories to assure ex-stock supply of nsumable spare parts or components for the Goods for a period of three times e warranty period.
-	pare parts or components shall be supplied as promptly as possible, but in any se, within the appropriate time period of placing the order.
Pa	nckaging –
the inc wit ten cas rer	he Supplier shall provide such packaging of the Goods as is required to prevent eir damage or deterioration during transit to their final destination, as dicated in this Contract. The packaging shall be sufficient to withstand, thout limitation, rough handling during transit and exposure to extreme mperatures, salt and precipitation during transit, and open storage. Packaging se size and weights shall take into consideration, where appropriate, the moteness of the Goods' final destination and the absence of heavy handling cilities at all points in transit.
sha pro	he packaging, marking, and documentation within and outside the packages all comply strictly with such special requirements as shall be expressly ovided for in the Contract, including additional requirements, if any, specified low, and in any subsequent instructions ordered by the Procuring Entity.
Th	ne outer packaging must be clearly marked on at least four (4) sides as follows:
Na Co Fir Gr	ame of the Procuring Entity ame of the Supplier ontract Description nal Destination ross weight ny special lifting instructions

	Any special handling instructions Any relevant HAZCHEM classifications
	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.
	Transportation –
	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.
	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.
	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 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.
	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.
	Intellectual Property Rights –
	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.
2.2	Not Applicable
4	The inspections and tests that will be conducted are: all the applicable inspections and tests.

# 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.) One (1) unit of Digital Planimeter	One (1) unit		
	Specifications:			
	Roller Type			
	- Display: Liquid Crystal, 8 digit figures			
	- Accumulated Measuring Value: Maximum 10 square meter (scale 1:1)\			
	- Measuring Range: Maximum vertical width 325 mm Horizontal roller, rotating length: 30m			
	- Accuracy: within ±0.2% (within ±2/1,000 pules)			
	- Power: Built in rechargeable NiCd battery and AC Adapter 100 - 240v (Auto power-off provided)			
	- Operating hour: Approximately 35 hr Maximum			
	- with carrying case			
	- with on site training			
	2.) One (1) unit of Automatic Digital Level	One (1) unit		
	Specifications:			
	- 0.7 mm Digital Reading for Height Accuracy			
	- 2.0 mm Optical Reading for Height Accuracy			

- D<10mm; D>10m:				
D*0.001 for Distance				
Accuracy				
- Telescope that is 32 x magnification				
- Magnetic - Damped Compensator and an accuracy of 0.30"/1'				
- Data Storage of 16MB (20,000 points)				
- External Storage of SD Card				
- Display of 160*64 DPI LCD with Illumination				
3.) One (1) unit of Spectrum Analyzer	One unit	(1)		
- Interfaces = RS 232, USB, VGA				
- Input Impedance = $50\Omega$				
- Frequency range = 150kHz to 3 GHz				
-Center Frequency = Setting Resolution - 0.1MH				
Accuracy within ±50kHz				
(frequency span: 0.3GHz to 2.6 GHz, 20±5?C				
-Power Supply = 220V AC/60 Hz				
- Frequency Span = Setting Range 1MHz to 3GHz Accuracy within ±3% (frequency span:0.3GHz to 2.6GHz, 20±5 Degree Celsius)				
- Resolution Bandwidth = Setting Range 30KHz, 100KHz, 300KHz, 1MHz				
- SSB Phase Noise = - 85dBc/Hz (typical, 500kHz				

offset, RBW: 30kHz Sweep time: 1.5s, Span 1MHz @ 1GHz.				
4.) One (1) unit of Portable Floc / Jar Tester	One unit	(1)		
Specification:				
- Stirring place: 4				
- Digital Speed Setting: 10- 300 rpm				
- Timer: at least 24hrs continuous stirring				
-Power Supply: 220V, 50-60 Hz				
-Beaker Capacity: 1000ml				
- With on site training				
5.) One (1) unit of Glass Filter with pump	One unit	(1)		
Glass Filter				
- 1 piece 500ml, 24/40 ground joint, glass Erlenmeyer flask				
- 1 piece 200ml, 24/40 ground joint, glass Bunchner funnel				
- 50 pieces filter paper with pore diameter less than 2 microns				
- 1 piece 24/40 plastic clip				
- 1 piece vacuum hose				
Pump				
- Peristaltic dosing pump				
- adjustable flow rate control				

	1		-	1	
- Flow rate less than 100ml/minute					
- Power requirement: 220V/60Hz.					
6.) One (1) unit of Bench Top Centrifuge	One unit	(1)			
- Digital Centrifuge					
- Input and Output Display in English Language					
- Capacity: 50ml x 6					
- Maximum Speed: 4000rpm					
- Timer: up to 60 minutes					
- 6 pieces 50ml test tubes					
- Power requirements: 220V/60Hz.					
7.) One (1) unit of Deionized Water Machine, Type 2	One unit	(1)			
- Water Output 10L/hour					
- Ionic rejection rate 99%					
- Organic matter rejection rate > 99%					
- Particles and bacteria rejection rate > 99%					
- Fully automatic microcomputer control system					
- With pressure tank					
- Includes consumables (filters, membrane and ion exchange column)					
- Power requirement : 220V/60Hz					
- With on site training					

	8.) One (1) unit of UV-	One	(1)		
	Visible SPECTROPHOTOMETER	unit			
	Sa a ifi a nti anna				
	Specifications:				
	- Double beam				
	spectrophotomteter scanning system				
	- Measurement range 190- 1100 nanometers (nm)				
	-Wavelength accuracy +/- 1nm				
	-Scanning speed of up to 500nm/min, with high speed 1nm step				
	- concentration range: 0.000 to 9999 ppm				
	- Minimum of four (4) cell holders				
	-Automatic lamp changing				
	- Automatic calculations				
	- Automatic wavelength setting				
	- USB ports				
	- LCD digital display data				
	- with built-in software that can be linked to computer and printer to LCD digital display data				
	- Power shut-down test data protection				
	- Complete accessories included (power and computer cables, cells, manuals, software, lamps, etc)				
	- Input and Output display in English language				
	- Power requirements: 220V/60Hz				
	- Quartz cuvette				
L					

	Dugita dama tugining				
- (	Onsite demo training				
со	vith Compatible ntinuous colored ink tank stem printer with scanner				
	* Printer Type: Print, an, and Copy				
	* Copy Quality: Draft, andard, Best				
:	* Maximum Print Size: A3				
:	* Borderless Printing				
:	* 1 set ink				
	) One (1) unit of Digital boratory Refrigerator	One unit	(1)		
	Capacity: Minimum of 300 ters				
- (	Cabinet Type: Vertical				
- S	Single Door				
- A	Adjustable temperature				
Ce	Can be set to 2 Degree elsius and 20 Degree elsius				
to	Aicroprocessor controller ensure consistent cabinet nperature				
	Digital Display (in English Inguage)				
- A	Adjustable shelves				
	<i>With 4 casters and</i> oppers				
fre an	Chemically stable, CFC- ee, commercially available d environmentally safe frigerant				
sys ter set	/isual and Audible alarm stem: High/low nperature, power failure, nsor error, door ajar, permostat failure				

- Power failure protection:			
turn on delay of the cooling			
system when power failure			
Backup battery to ensure			
that power alarm after 8			
hours			
nours			
- with Automatic Voltage			
0			
Regulator			
D			
- Power requirements:			
220V/60Hz			
	One (1)		
10.) One (1) unit of	unit		
Chemical Oxygen Demand			
(COD), Total Nitrogen and			
Total Phosphorus Analyzer			
- Integrated Multi-			
parameter Machine Water			
Quality Analyzer/Rapid			
Tester			
Tester			
- High Precision			
- mgn r recision			
- Can measure (at least)			
Chemical Oxygen Demand			
(COD), Ammonia Nitrogen,			
Total Phosphorus			
-LCD Display			
- Digital input and output			
display (in English			
Language)			
-Built-in calibration			
function			
- With data storage function			
-with USB interface			
J			
-COD detection range up to			
10,000 mg/L or ppm			
- Ammonia Nitrogen			
Detection range up to			
100mg/L			
Total Dhamhanasa			
- Total Phosphorous			
detection range up to			
10mg/L			
- Maximum error: 5%			

Can be connected to printer				
-Can be connected to printer				
- 2 sets of reagents				
- 2 sets of colorimetric tubes				
- Laboratory plastic pipette				
- Test tube rack				
- Power requirements: 220V/60Hz				
-with onsite training				
11.) One (1) unit of Total Organic Carbon (TOC) Analyzer	One unit	(1)		
- Can measure at least Total Organic Carbon				
- TOC Measurement Range up to 30,000mg/L				
- Built-in LCD				
- Digital Input and Output (in English Language)				
-With data storage function				
-Application: Liquid, Solid and Gas Samples				
-With USB port and export data				
- Detection method - non- dispersive infrared detection (NDIR) method				
-UV lamp oxidation				
Max TOC accuracy error: 5%				
-Analysis time: under 10minutes				
- Automatic sample introduction				
-Power requirements: 220V/60Hz				

-with onsite training					
-with software, and Printer					
*Specifications:					
Compatible continuous colored ink tank system printer with scanner					
Printer Type: Print, Scan and Copy					
Copy Quality: Draft, Standard, Best					
Maximum Print Size: A3					
1 set ink					
12.) One (1) unit of Hydrometer Test Equipment consist of:	One unit	(1)			
a.) 6 pcs -Soil Hydrometer 152H					
- It has a range of 0.995 - 1.038 in 0.001 divisions and 11 in (280mm) in length					
b.) 1 set - Soil Dispersion Mixer					
- 1/3 hp motor, has selectable 13,000, 16 000, and 18000 rpm speeds plus a manual pulse switch					
- includes a stainless steel dispersion cup					
- dimension: 6.5 in x 6.75in x 20.5in (165mm x 171mm x 521mm) W x Diameter x H					
c.) 2 pcs - Dispersion Cup					
	<ul> <li>-with software, and Printer <ul> <li>*Specifications:</li> <li>Compatible</li> <li>continuous colored ink tank</li> <li>system printer with scanner</li> <li>Printer Type: Print,</li> <li>Scan and Copy</li> <li>Copy Quality: Draft,</li> <li>Standard, Best</li> <li>Maximum Print Size:</li> <li>A3</li> <li>I set ink</li> </ul> </li> <li>12.) One (1) unit of <ul> <li>Hydrometer Test Equipment</li> <li>consist of:</li> </ul> </li> <li>a.) 6 pcs -Soil Hydrometer <ul> <li>152H</li> <li>It has a range of 0.995 - <ul> <li>1.038 in 0.001 divisions and</li> <li>11 in (280mm) in length</li> </ul> </li> <li>b.) 1 set - Soil Dispersion <ul> <li>Mixer</li> <li>- 1/3 hp motor, has</li> <li>selectable 13,000, 16 000,</li> <li>and 18000 rpm speeds plus</li> <li>a manual pulse switch</li> <li>- includes a stainless steel</li> <li>dispersion cup</li> <li>- dimension: 6.5 in x</li> <li>6.75in x 20.5in (165mm x</li> <li>171mm x 521mm) W x</li> <li>Diameter x H</li> </ul> </li> </ul></li></ul>	<ul> <li>with software, and Printer <ul> <li>*Specifications:</li> <li>Compatible</li> <li>continuous colored ink tank</li> <li>system printer with scanner</li> <li>Printer Type: Print,</li> <li>Scan and Copy</li> <li>Copy Quality: Draft,</li> <li>Standard, Best</li> <li>Maximum Print Size:</li> <li>A3 <ul> <li>I set ink</li> </ul> </li> <li>12.) One (1) unit of</li> <li>Hydrometer Test Equipment</li> <li>consist of:</li> <li>A) 6 pcs -Soil Hydrometer</li> <li>152H</li> <li>I has a range of 0.995 -</li> <li>1.038 in 0.001 divisions and</li> <li>I1 in (280mm) in length</li> </ul> </li> <li>b.) 1 set - Soil Dispersion</li> <li>Mixer <ul> <li>I/3 hp motor, has</li> <li>selectable 13,000, 16 000, and 18000 rpm speeds plus a manual pulse switch</li> <li>includes a stainless steel</li> <li>dispersion cup</li> <li>dimension: 6.5 in x</li> <li>6.75 in x 20.5 in (165mm x)</li> <li>T1mm x 521mm) W x</li> </ul> </li> </ul>	<ul> <li>with software, and Printer</li> <li>*Specifications:</li> <li>Compatible</li> <li>continuous colored ink tank</li> <li>system printer with scanner</li> <li>Printer Type: Print,</li> <li>Scan and Copy</li> <li>Copy Quality: Draft,</li> <li>Standard, Best</li> <li>Maximum Print Size:</li> <li>A3 <ul> <li>I set ink</li> </ul> </li> <li>12.) One (1) unit of</li> <li>Hydrometer Test Equipment</li> <li>consist of:</li> <li>a.) 6 pcs -Soil Hydrometer</li> <li>152H <ul> <li>It has a range of 0.995 -</li> <li>1.038 in 0.001 divisions and</li> <li>I1 in (280mm) in length</li> </ul> </li> <li>b.) 1 set - Soil Dispersion</li> <li>Mixer <ul> <li>I/3 hp motor, has</li> <li>selectable 13,000, 16 000, and 18000 rpm speeds plus a manual pulse switch</li> <li>includes a stainless steel</li> <li>dispersion cup</li> <li>dimension: 6.5 in x</li> <li>6.75 in x 20.5in (165mm x</li> <li>171mm x 521mm) W x</li> <li>Diameter x H</li> </ul> </li> </ul>	-with software, and Printer*Specifications:Compatiblecontinuous colored ink tanksystem printer with scannerPrinter Type: Print,Scan and CopyCopy Quality: Draft,Standard, BestMaximum Print Size:A31 set ink12.) One (1) unit ofHydrometer Test Equipmentconsist of:a.) 6 pcs -Soil Hydrometer152H- It has a range of 0.995 -1.038 in 0.001 divisions and11 in (280mm) in lengthb.) 1 set - Soil DispersionMixer- 1/3 hp motor, hasselectable 13,000, 16 000,and 18000 rpm speeds plusa manual pulse switch- includes a stainless steeldispersion cup- dimension: 6.5 in x6.75 in x 20.5 in (165mm x171mm x 521mm) W xDiameter x H	-with software, and Printer *Specifications:Compatible continuous colored ink tank system printer with scannerPrinter Type: Print, Scan and CopyCopy Quality: Draft, Standard, BestMaximum Print Size: A3I set ink12.) One (1) unit of Hydrometer Test Equipment consist of:a.) 6 pcs -Soil Hydrometer TS2H- 1h has a range of 0.995 - 1.038 in 0.001 divisions and 11 in (280mm) in lengthb.) 1 set - Soil Dispersion Mixer- 1/3 hp motor, has selectable 13,000, 16 000, and 18000 rpm speeds plus a manual pulse switch- includes a stainless steel dispersion cup- dimension: 6.5 in x 6.75 in x 20.5in (105mm x T/1mm x 521mm) W x Diameter x H

- 1 liter capacity		
- Dimension: $4in \times 7in$		
(102mm x 178mm) Diameter x H		
d.) 6 pcs - Soil Sedimentation Cylinder		
- Made of heavy -wall		
clear glass scribed at the 1,000ml mark		
- Dimension: 2.5in x 18in (64mm x 47mm), Diameter x		
H		
e.) 10 bots - Sodium Hexametaphosphate		
- Dry Powder Dispersion		
agent mixed		
- 1 lb (0.45kg) per bottle		
f.) 2 sets - Digital		
Precision Balance		
- 3200 grams capacity		
- 0.01 grams readability		
- g,kg, oz, and lb selectable weighing units		
- LCD Display		
- 220v power supply		
g.) 2 pcs No. 10 Mesh Sieve		
- No. 10(2.0 mm) opening size		
- 8" frame diamter		
- 2-1/8 in stacked frame height		
Ť		

- stainless, full height, conforms to ASTN E11		
h.) 2pcs - No. 200 Mesh Sieve		
- No. 200 (75µm) opening size		
- 8" frame diamter		
- 2-1/8 in stacked frame height		
- stainless, full height, conforms to ASTN E11		
i.) 2 pcs - Sieve Pan		
- 8" frame diameter		
-stainless		
j.) 2pcs - Sieve Cover		
- 8" frame diameter		
- Stainless		
13.) 1 unit of Handheld Outdoor Air Quality Test Kit	One (1) unit	
Sensor Specification:		
Particulate Matter (PM10 & PM2.5)		
- Range: 0.000 to 1.00 mg/m <sup>3</sup>		
- Resolution: 0.001 mg/m <sup>3</sup>		
- Response Time: 5sec.		
- Minimum Detection Limit (MDL): 0.001mg/m <sup>3</sup>		
- Relative Humidity (RH): 0 to 90%		

Ozone: (0 <sub>3</sub> )		
- Range: 0-015 ppm)		
- Resolution: 0.001 ppm		
-Response Time: 60 sec		
- MDL: 0.001ppm		
- RH: 10 to 90%		
Nitrogen Dioxide (NO2)		
- Range: 0-1ppm		
- Resolution: 0.001 ppm		
-Response Time: 30 sec		
-MDL: 0.005ppm		
- RH: 15 to 90%		
Carbon Monoxide (CO)		
- Range: 0-25ppm		
- Resolution: 0.01 ppm		
-Response Time: 60 sec		
-MDL: 0.05ppm		
- RH: 15 to 90%		
Volatile Organic Compound (VOC)		
- Range: 0-20ppm		
- Resolution: 0.01 ppm		
-Response Time: 30 sec		
-MDL: 0.01ppm		
- RH: 0 to 95%		
Monitor Specification:		

	- Display: Digital LCD			
	-Sensor Calibration: Zero and Gain Calibration			
	- Digital Interface: RS-232 to USB			
	-Analog Output: 0-5V			
	-Power Supply: 12V DC (Power adapter/charger supplied 100-250 V AC)			
	-Rechargeable battery: Lithium Polymer 12 V DC 2700 mA/h			
	- With on site training			
	Enclosure material and Rating: PC and ABS: IP20 and NEMA 1 equivalent PC Software Monitor to USB Cable built in data logger			
1	(at least 8,000 records )			
	14.) One (1) unit of Soil Consolidation Test Equipment consist of:	One (1) unit		
	a.) 1 set - Peumatic Consolidation Load Frames			
	- load capacity of 6, 128kPa			
	- minimum of 188(13bar) of compressed air			
	- dimension: 12 inches width x 14.5inches breadth x 21in height)			
	- conforms ASTM D2435, ASTM D4546			

- digital readout		
- loading ball included		
b.) 1 set - Fixed Ring Consolidometer		
- 100mm (3.94in) specimen size		
- Type: fixed ring		
- dimension: 6" diamter x 2.5" Height)		
- with 100mm cutting sample ring and loading ball		
c.) 1 pc - Calibration Disc		
- 100mm (3.94 in) specimen size		
- dimension: 3.937 x 1.0in (100 x 25.4 mm). D x H		
d.) 1 set - Digital Dial Indicator		
- 0.6 inch x 0.0001 inch		
- Inches/mm switchable		
e.) 1 set- Magnetic Gauge Holder for Dial Indicators		
- Base: 1.125inhces width x 3.5inches Breadth x 1inch Height		
- Rod: 0.25 x 6 in (6.3 x 152 mm) D x L		
- Swivel Adapter: 3in (76mm)		
f.) 1 set - Linear Variable Displacement Transducers		

- 0-2in (0to 51mm) range
- Repeatability to 0.002 mm
- dimension: 0.75 inch Length x 1.75 inches width x 7.75 inches height
g.) 4 pcs - Porous Stone
- 100mm (3.94 in) size in diameter
- 6.35 mm (0.25in) thick
- material: alumimum oxide
- shape: disc
h.) 2 packs- filter Paper
- 4.0 in diameter
- Grade 55
- flow rate: 220 ml/min
-100pcs per pack
-100pcs per pack
i.) 1 set - Consolidation Data Acquisition Software
- Automatically records
the rate of consolidation during the incremental
loading of soil samples
- real time graphing and calculations are performed
j.) 1 set - Data Readout Box
- Four -Channel data readout

### 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.

Item	Specification	Statement of Compliance
		[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.]
	1.) One (1) unit of Digital Planimeter	
	Specifications:	
	Roller Type	
	- Display: Liquid Crystal, 8 digit figures	
	- Accumulated Measuring Value: Maximum 10 square meter (scale 1:1)\	

# **Technical Specifications**

- Measuring Range: Maximum vertical width 325 mm Horizontal roller, rotating length: 30m	
- Accuracy: within ±0.2% (within ±2/1,000 pules)	
- Power: Built in rechargeable NiCd battery and AC Adapter 100 - 240v (Auto power-off provided)	
- Operating hour: Approximately 35 hr Maximum	
- with carrying case	
- with on site training	
2.) One (1) unit of Automatic Digital Level	
Specifications:	
- 0.7 mm Digital Reading for Height Accuracy	
- 2.0 mm Optical Reading for Height Accuracy	
- D<10mm; D>10m: D*0.001 for Distance Accuracy	
- Telescope that is 32 x magnification	
- Magnetic - Damped Compensator and an accuracy of 0.30"/1'	
- Data Storage of 16MB (20,000 points)	
- External Storage of SD Card	
- Display of 160*64 DPI LCD with Illumination	
3.) One (1) unit of Spectrum Analyzer	
- Interfaces = RS 232, USB, VGA	
- Input Impedance = $50\Omega$	
- Frequency range = 150kHz to 3 GHz	
-Center Frequency = Setting Resolution - 0.1MH	

Accuracy within ±50kHz	
(frequency span: 0.3GHz to 2.6 GHz, 20±5?C	
-Power Supply = 220V AC/60 Hz	
- Frequency Span = Setting Range 1MHz to 3GHz Accuracy within $\pm 3\%$ (frequency span:0.3GHz to 2.6GHz, 20 $\pm 5$ Degree Celsius)	
- Resolution Bandwidth = Setting Range 30KHz, 100KHz, 300KHz, 1MHz	
- SSB Phase Noise = -85dBc/Hz (typical, 500kHz offset, RBW: 30kHz Sweep time: 1.5s, Span 1MHz @ 1GHz.	
4.) One (1) unit of Portable Floc / Jar Tester	
Specification:	
- Stirring place: 4	
- Digital Speed Setting: 10-300 rpm	
- Timer: at least 24hrs continuous stirring	
-Power Supply: 220V, 50-60 Hz	
-Beaker Capacity: 1000ml	
- With on site training	
5.) One (1) unit of Glass Filter with pump	
Glass Filter	
- 1 piece 500ml, 24/40 ground joint, glass Erlenmeyer flask	
- 1 piece 200ml, 24/40 ground joint, glass Bunchner funnel	
- 50 pieces filter paper with pore diameter less than 2 microns	
- 1 piece 24/40 plastic clip	
- 1 piece vacuum hose	

Pump	
- Peristaltic dosing pump	
- adjustable flow rate control	
- Flow rate less than 100ml/minute	
- Power requirement: 220V/60Hz.	
6.) One (1) unit of Bench Top Centrifuge	
- Digital Centrifuge	
- Input and Output Display in English Language	
- Capacity: 50ml x 6	
- Maximum Speed: 4000rpm	
- Timer: up to 60 minutes	
- 6 pieces 50ml test tubes	
- Power requirements: 220V/60Hz.	
7.) One (1) unit of Deionized Water Machine, Type 2	
- Water Output 10L/hour	
- Ionic rejection rate 99%	
- Organic matter rejection rate $> 99\%$	
- Particles and bacteria rejection rate > 99%	
- Fully automatic microcomputer control system	
- With pressure tank	
- Includes consumables (filters, membrane and ion exchange column)	
- Power requirement : 220V/60Hz	
- With on site training	
8.) One (1) unit of UV-Visible	
SPECTROPHOTOMETER	

Specifications:	
- Double beam spectrophotomteter scanning system	
- Measurement range 190-1100 nanometers (nm)	
-Wavelength accuracy +/- 1nm	
-Scanning speed of up to 500nm/min, with high speed 1nm step	
- concentration range: 0.000 to 9999 ppm	
- Minimum of four (4) cell holders	
-Automatic lamp changing	
- Automatic calculations	
- Automatic wavelength setting	
- USB ports	
- LCD digital display data	
- with built-in software that can be linked to computer and printer to LCD digital display data	
- Power shut-down test data protection	
- Complete accessories included (power and computer cables, cells, manuals, software, lamps, etc)	
- Input and Output display in English language	
- Power requirements: 220V/60Hz	
- Quartz cuvette	
- Onsite demo training	
- with Compatible continuous colored ink tank system printer with scanner	
* Printer Type: Print, Scan, and Copy	
* Copy Quality: Draft, Standard, Best	
* Maximum Print Size: A3	
* Borderless Printing	
* 1 set ink	
	1

9.) One (1 Refrigerat	!) unit of Digital Laboratory tor	
- Capacity	y: Minimum of 300 Liters	
- Cabinet	Type: Vertical	
- Single D	Door	
- Adjustał	ble temperature	
- Can be s Degree C	set to 2 Degree Celsius and 20 elsius	
-	rocessor controller to ensure t cabinet temperature	
- Digital I	Display (in English Language)	
- Adjustał	ble shelves	
- With 4 c	asters and Stoppers	
commerci	ally stable, CFC-free, ially available and entally safe refrigerant	
High/low	nd Audible alarm system: temperature, power failure, ror, door ajar, Thermostat	
•	ailure protection: turn on delay ling system when power failure	
Backup bo alarm afte	attery to ensure that power er 8 hours	
- with Aut	omatic Voltage Regulator	
- Power r	equirements: 220V/60Hz	
Demand (	(1) unit of Chemical Oxygen (COD), Total Nitrogen and osphorus Analyzer	
0	ed Multi-parameter Machine ality Analyzer/Rapid Tester	
- High Pr	ecision	
Oxygen D	asure (at least) Chemical Demand (COD), Ammonia Total Phosphorus	

-LCD Display	
- Digital input and output display (in English Language)	
-Built-in calibration function	
- With data storage function	
-with USB interface	
-COD detection range up to 10,000 mg/L or ppm	
- Ammonia Nitrogen Detection range up to 100mg/L	
- Total Phosphorous detection range up to 10mg/L	
- Maximum error: 5%	
-Can be connected to printer	
- 2 sets of reagents	
- 2 sets of colorimetric tubes	
- Laboratory plastic pipette	
- Test tube rack	
- Power requirements: 220V/60Hz	
-with onsite training	
11.) One (1) unit of Total Organic Carbon (TOC) Analyzer	
- Can measure at least Total Organic Carbon	
- TOC Measurement Range up to 30,000mg/L	
- Built-in LCD	
- Digital Input and Output (in English Language)	
-With data storage function	
-Application: Liquid, Solid and Gas Samples	
-With USB port and export data	

- Detection method - non-dispersive infrared detection (NDIR) method	
-UV lamp oxidation	
Max TOC accuracy error: 5%	
-Analysis time: under 10minutes	
- Automatic sample introduction	
-Power requirements: 220V/60Hz	
-with onsite training	
-with software, and Printer	
*Specifications:	
Compatible continuous colored ink tank system printer with scanner	
Printer Type: Print, Scan and Copy	
Copy Quality: Draft, Standard, Best	
Maximum Print Size: A3	
1 set ink	
12.) One (1) unit of Hydrometer Test Equipment	
consist of:	
a.) 6 pcs -Soil Hydrometer 152H	
- It has a range of 0.995 - 1.038 in 0.001 divisions and 11 in (280mm) in length	
b.) 1 set - Soil Dispersion Mixer	
- 1/3 hp motor, has selectable 13,000, 16 000, and 18000 rpm speeds plus a manual pulse switch	
- includes a stainless steel dispersion cup	
1	

- dimension: 6.5 in x 6.75in x 20.5in (165mm x 171mm x 521mm) W x Diameter x H	
c.) 2 pcs - Dispersion Cup	
- 1 liter capacity	
- Dimension: 4in x 7in (102mm x 178mm) Diameter x H	
d.) 6 pcs - Soil Sedimentation Cylinder	
- Made of heavy -wall clear glass scribed at the 1,000ml mark	
- Dimension: 2.5in x 18in (64mm x 47mm), Diameter x H	
e.) 10 bots - Sodium Hexametaphosphate	
- Dry Powder Dispersion agent mixed	
- 1 lb (0.45kg) per bottle	
f.) 2 sets - Digital Precision Balance	
- 3200 grams capacity	
- 0.01 grams readability	
- g,kg, oz, and lb selectable weighing units	
- LCD Display	
- 220v power supply	
g.) 2 pcs No. 10 Mesh Sieve	
- No. 10(2.0 mm) opening size	
- 8" frame diamter	
- 2-1/8 in stacked frame height	
- stainless, full height, conforms to ASTN E11	

h.) 2pcs - No. 200 Mesh Sieve	
- No. 200 (75µm) opening size	
- 8" frame diamter	
- 2-1/8 in stacked frame height	
- stainless, full height, conforms to ASTN E11	
i.) 2 pcs - Sieve Pan	
- 8" frame diameter	
-stainless	
j.) 2pcs - Sieve Cover	
- 8" frame diameter	
- Stainless	
13.) 1 unit of Handheld Outdoor Air Quality Test Kit	
Sensor Specification:	
Particulate Matter (PM10 & PM2.5)	
- Range: 0.000 to 1.00 mg/m <sup>3</sup>	
- Resolution: $0.001 \text{ mg/m}^3$	
- Response Time: 5sec.	
- Minimum Detection Limit (MDL): 0.001mg/m <sup>3</sup>	
- Relative Humidity (RH): 0 to 90%	
<i>Ozone: (0<sub>3</sub>)</i>	
- Range: 0-015 ppm)	
- Resolution: 0.001 ppm	
-Response Time: 60 sec	

- MDL: 0.001ppm	
- RH: 10 to 90%	
Nitrogen Dioxide (NO2)	
- Range: 0-1ppm	
- Resolution: 0.001 ppm	
-Response Time: 30 sec	
-MDL: 0.005ppm	
- RH: 15 to 90%	
Carbon Monoxide (CO)	
- Range: 0-25ppm	
- Resolution: 0.01 ppm	
-Response Time: 60 sec	
-MDL: 0.05ppm	
- RH: 15 to 90%	
Volatile Organic Compound (VOC)	
- Range: 0-20ppm	
- Resolution: 0.01 ppm	
-Response Time: 30 sec	
-MDL: 0.01ppm	
- RH: 0 to 95%	
Monitor Specification:	
- Display: Digital LCD	
-Sensor Calibration: Zero and Gain Calibration	
- Digital Interface: RS-232 to USB	
-Analog Output: 0-5V	

	er Supply: 12V DC (Power er/charger supplied 100-250 V AC)	
	argeable battery: Lithium Polymer DC 2700 mA/h	
- With	n on site training	
Enclo	sure material and Rating: PC and	
	<i>IP20 and NEMA 1 equivalent</i>	
	oftware Monitor to USB Cable built a logger	
(at lea	<i>ist 8,000 records</i> )	
	Dne (1) unit of Soil Consolidation Equipment	
consis	st of:	
a.) Fram	l set - Peumatic Consolidation Load es	
- 100	ad capacity of 6, 128kPa	
- mi air	nimum of 188(13bar) of compressed	
	nension: 12 inches width x aches breadth x 21in height)	
- <i>co</i>	nforms ASTM D2435, ASTM D4546	
- dig	gital readout	
- 100	ading ball included	
<i>b</i> .)	l set - Fixed Ring Consolidometer	
- 10	0mm (3.94in) specimen size	
	pe: fixed ring	
	nension: 6" diamter x 2.5" Height)	
- wi	th 100mm cutting sample ring and ang ball	
1		

	c.) 1 pc - Calibration Disc
	- 100mm (3.94 in) specimen size
n	- dimension: 3.937 x 1.0in (100 x 25.4 nm). D x H
	d.) 1 set - Digital Dial Indicator
	- 0.6 inch x 0.0001 inch
	- Inches/mm switchable
I	e.) 1 set- Magnetic Gauge Holder for Dial Indicators
E	- Base: 1.125inhces width x 3.5inches Breadth x 1inch Height
	- Rod: 0.25 x 6 in (6.3 x 152 mm) D x L
	- Swivel Adapter: 3in (76mm)
7	f.) 1 set - Linear Variable Displacement Fransducers
	- 0-2in (0to 51mm) range
	- Repeatability to 0.002 mm
iı	- dimension: 0.75 inch Length x 1.75 nches width x 7.75 inches height
	g.) 4 pcs - Porous Stone
	- 100mm (3.94 in) size in diameter
	- 6.35 mm (0.25in) thick
	- material: alumimum oxide
	- shape: disc
	h.) 2 packs- filter Paper
	- 4.0 in diameter

 - Grade 55	
- flow rate: 220 ml/min	
-100pcs per pack	
i.) 1 set - Consolidation Data	
Acquisition Software	
- Automatically records the rate of	
consolidation during the incremental loading of soil samples	
- real time graphing and calculations	
are performed	
j.) 1 set - Data Readout Box	
- Four -Channel data readout	
k.) 1 set - Pore Pressure Transducer	
with Deairing Block	
- Pressure rating : Up to 150psi (1,034.21 kPa) with 0.01psi (0.07kPa)	
resolution	
- Transducer Operating Temperature: - 40degrees - 125degrees Celcius	
l.) 1 pc - Data Readout Mounting	
Bracket	
- fitrs Load Frames with 1.25 in	
(31.8mm) nominal diameter vertical load rods	
m.) 1 set S-Type Load Cell	
- Load capacity: 20,000lb (88.96kN)	
- rated output: 3.0 mV/V	
- with loading button of 1-1/4 in x 12tpi	
thread size	
	1

## 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

#### <u>Legal Documents</u>

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

#### Technical Documents

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

- (e) Conformity with the Technical Specifications, which may include production/delivery schedule, manpower requirements, and/or after-sales/parts, if applicable; **and** 
  - (f) 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

(g) 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

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

<u>or</u>

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)

- (i) [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.
- (j) 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).

