

**PHILIPPINE BIDDING DOCUMENTS**

**Procurement of  
INFRASTRUCTURE  
PROJECTS**

Government of the Republic of the Philippines

**Proposed Drilling of New  
Exploratory/Production Well at Sitio Banlic,  
Barangay Cabalantian, Bacolor, Pampanga**

**Sixth Edition  
July 2020**

# Preface

These Philippine Bidding Documents (PBDs) for the procurement of Infrastructure Projects (hereinafter referred to also as the “Works”) through Competitive Bidding have been prepared by the Government of the Philippines for use by all branches, agencies, departments, bureaus, offices, or instrumentalities of the government, including government-owned and/or -controlled corporations, government financial institutions, state universities and colleges, local government units, and autonomous regional government. 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 (IRR) of Republic Act (RA) No. 9184.

The PBDs are intended as a model for admeasurements (unit prices or unit rates in a bill of quantities) types of contracts, which are the most common in Works contracting.

The Bidding Documents shall clearly and adequately define, among others: (i) the objectives, scope, and expected outputs and/or results of the proposed contract; (ii) the eligibility requirements of Bidders; (iii) the expected contract duration; 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 Works 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 Infrastructure Projects. However, they should be adapted as necessary to the circumstances of the particular 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, BDS, General Conditions of Contract, Special Conditions of Contract, Specifications, Drawings, and Bill of Quantities 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 names of the Project, Contract, and Procuring Entity, in addition to 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.

# TABLE OF CONTENTS

<b>Glossary of Terms, Abbreviations, and Acronyms.....</b>	<b>5</b>
<b>Section I. Invitation to Bid .....</b>	<b>8</b>
<b>Section II. Instructions to Bidders.....</b>	<b>9</b>
1. Scope of Bid.....	12
2. Funding Information .....	12
3. Bidding Requirements.....	12
4. Corrupt, Fraudulent, Collusive, Coercive, and Obstructive Practices .....	12
5. Eligible Bidders.....	12
6. Origin of Associated Goods .....	13
7. Subcontracts .....	13
8. Pre-Bid Conference.....	14
9. Clarification and Amendment of Bidding Documents.....	14
10. Documents Comprising the Bid: Eligibility and Technical Components.....	14
11. Documents Comprising the Bid: Financial Component .....	15
12. Alternative Bids .....	15
13. Bid Prices .....	15
14. Bid and Payment Currencies.....	15
15. Bid Security.....	15
16. Sealing and Marking of Bids.....	16
17. Deadline for Submission of Bids .....	16
18. Opening and Preliminary Examination of Bids .....	16
19. Detailed Evaluation and Comparison of Bids.....	16
20. Post Qualification.....	17
21. Signing of the Contract .....	17
<b>Section III. Bid Data Sheet.....</b>	<b>18</b>
<b>Section IV. General Conditions of Contract .....</b>	<b>21</b>
1. Scope of Contract.....	22
2. Sectional Completion of Works .....	22
3. Possession of Site.....	22
4. The Contractor’s Obligations.....	22
5. Performance Security .....	23
6. Site Investigation Reports .....	23

7.	Warranty.....	23
8.	Liability of the Contractor.....	23
9.	Termination for Other Causes.....	23
10.	Dayworks.....	24
11.	Program of Work.....	24
12.	Instructions, Inspections and Audits.....	24
13.	Advance Payment.....	<b>Error! Bookmark not defined.</b>
14.	Progress Payments.....	<b>Error! Bookmark not defined.</b>
15.	Operating and Maintenance Manuals.....	24
<b>Section V. Special Conditions of Contract.....</b>		<b>25</b>
<b>Section VI. Specifications.....</b>		<b>28</b>
<b>Section VII. Drawings.....</b>		<b>45</b>
<b>Section VIII. Bill of Quantities.....</b>		<b>46</b>
<b>Section IX. Checklist of Technical and Financial Documents.....</b>		<b>48</b>

# *Glossary of Terms, Abbreviations, and Acronyms*

**ABC** – Approved Budget for the Contract.

**ARCC** – Allowable Range of Contract Cost.

**BAC** – Bids and Awards Committee.

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

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

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

**BIR** – Bureau of Internal Revenue.

**BSP** – Bangko Sentral ng Pilipinas.

**CDA** – Cooperative Development Authority.

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

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

**Contractor** – is a natural or juridical entity whose proposal was accepted by the Procuring Entity and to whom the Contract to execute the Work was awarded. Contractor as used in these Bidding Documents may likewise refer to a supplier, distributor, manufacturer, or consultant.

**CPI** – Consumer Price Index.

**DOLE** – Department of Labor and Employment.

**DTI** – Department of Trade and Industry.

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

**GFI** – Government Financial Institution.

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

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

**GOP** – Government of the Philippines.

**Infrastructure Projects** – Include the construction, improvement, rehabilitation, demolition, repair, restoration or maintenance of roads and bridges, railways, airports, seaports, communication facilities, civil works components of information technology projects, irrigation, flood control and drainage, water supply, sanitation, sewerage and solid waste management systems, shore protection, energy/power and electrification facilities, national buildings, school buildings, hospital buildings, and other related construction projects of the government. Also referred to as *civil works or works*. (2016 revised IRR, Section 5[u])

**LGUs** – Local Government Units.

**NFCC** – Net Financial Contracting Capacity.

**NGA** – National Government Agency.

**PCAB** – Philippine Contractors Accreditation Board.

**PhilGEPS** - Philippine Government Electronic Procurement System.

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

**PSA** – Philippine Statistics Authority.

**SEC** – Securities and Exchange Commission.

**SLCC** – Single Largest Completed Contract.

**UN** – United Nations.



## ***Section I. Invitation to Bid***



# BACOLOR WATER DISTRICT

Sta. Ines, Bacolor, Pampanga

Tel. No. (045) 900 2911  
0917-175-9462 / 0931-038-9378  
[www.bacolorwaterdistrict.gov.ph](http://www.bacolorwaterdistrict.gov.ph)  
[bacolorwaterdistrict1981@yahoo.com.ph](mailto:bacolorwaterdistrict1981@yahoo.com.ph)

## Invitation to Bid for the Proposed Drilling of New Exploratory/Production Well at Sitio Banlic, Barangay Cabalantian, Bacolor, Pampanga

1. The *Bacolor Water District (BWD)*, through its Corporate Funds 2023 intends to apply the sum of *Five Million Five Hundred Eighty-Three Thousand Six Hundred Pesos (P5,560,000.00)* being the Approved Budget for the Contract (ABC) to payments under the contract for the *Proposed Drilling of One (1) Exploratory Well at Sitio Banlic, Barangay Cabalantian, Bacolor, Pampanga*. Bids received in excess of the ABC shall be automatically rejected at bid opening.
2. The *Bacolor Water District* now invites bidders for the *Proposed Drilling of New Exploratory Well at Sitio Banlic, Barangay Cabalantian, Bacolor, Pampanga*. Completion of the Works is required *within ninety (90) calendar days*. Bidders should have completed a contract similar to the Project. The description of an eligible bidder is contained in the Bidding Documents, particularly, in Section II Instructions to Bidders
3. Bidding will be conducted through open competitive bidding procedures using non-discretionary “pass/fail” criterion as specified in 2016 Revised Implementing Rules and Regulations (IRR) of Republic Act 9184 (RA 9184), otherwise known as the “Government Procurement Reform Act.”

Bidding is restricted to Filipino citizens/sole proprietorships, cooperatives, and partnerships or organizations with at least seventy five percent (75%) interest or outstanding capital stock belonging to citizens of the Philippines.

4. Interested bidders may obtain further information from *Bacolor Water District* and inspect the Bidding Documents at the address given below during office hours (*Monday to Friday*) from 8:00 a.m. to 5:00 p.m.
5. A complete set of Bidding Documents may be acquired by interested bidders on *March 6, 2024, to March 26, 2024*, from the address below *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 (P5, 000.00)*.

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

Procuring Entity, provided that bidders shall pay the applicable fee for the Bidding Documents not later than the submission of their bids.

6. BWD will hold a Pre-Bid Conference on **March 14, 2024** – at 2:00 P.M. in *BWD Conference Room*, which shall be open to prospective bidders.
7. Bids must be duly received by the BAC Secretariat at the address below on or before **10:00 A.M. on March 26, 2024**. All bids must be accompanied by a bid security in any of the acceptable forms and in the amount stated in **ITB** Clause 18.
8. Bid opening shall be on **March 26, 2024- 10:00 A.M.** in *BWD Conference Room*. Bids will be opened in the presence of the bidders' representatives who choose to attend at the address below. Late bids shall not be accepted.
9. BWD reserves the right to reject any and all bids, declare a failure of bidding, or not award the contract at any time prior to contract award in accordance with Section 41 of RA 9184 and its IRR, without thereby incurring any liability to the affected bidder or bidders.
10. For further information, please refer to:

*ABEGAIL P. MORALES*

*BAC Secretary*

*Bacolor Water District*

*Sta. Ines, Bacolor, Pampanga*

*Tel. No. (045) 900-2911*

*Email address: bacolorwaterdistrict1981@yahoo.com.ph*

*Website: www.bacolorwaterdistrict.gov.ph*

*ANGELITO M. SICAT*

*BAC Chairman*

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

### **Notes on the Instructions to Bidders**

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

## **1. Scope of Bid**

The Procuring Entity named in the **BDS** invites Bids for the Construction of Works, as described in Section VI. Specifications.

## **2. Funding Information**

2.1. The GOP through the source of funding as indicated below for 2024 in the amount of *Five Million Five Hundred Sixty Thousand Pesos (P5,560,000.00)*.

2.2. The source of funding is:

- a. GOCC and GFIs, the proposed Corporate Operating Budget.

## **3. Bidding Requirements**

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

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

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

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

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

## **5. Eligible Bidders**

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

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

## 6. Origin of Associated Goods

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

## 7. Subcontracts

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

The Procuring Entity has prescribed that:

- a. Subcontracting is allowed. The portions of Project and the maximum percentage allowed to be subcontracted are indicated in the **BDS**, which shall not exceed fifty percent (50%) of the contracted Works.
- 7.1. The Bidder must submit together with its Bid the documentary requirements of the subcontractor(s) complying with the eligibility criteria stated in **ITB** Clause 5 in accordance with Section 23.4 of the 2016 revised IRR of RA No. 9184 pursuant to Section 23.1 thereof.
- 7.2. The Supplier may identify its subcontractor during the contract implementation stage. Subcontractors identified during the bidding may be changed during the implementation of this Contract. Subcontractors must submit the documentary requirements under Section 23.1 of the 2016 revised IRR of RA No. 9184 and comply with the eligibility criteria specified in **ITB** Clause 5 to the implementing or end-user unit.

- 7.3. Subcontracting of any portion of the Project does not relieve the Contractor of any liability or obligation under the Contract. The Supplier will be responsible for the acts, defaults, and negligence of any subcontractor, its agents, servants, or workmen as fully as if these were the Contractor's own acts, defaults, or negligence, or those of its agents, servants, or workmen.

## **8. Pre-Bid Conference**

The Procuring Entity will hold a pre-bid conference for this Project on the specified date and time and either at its physical address as indicated in paragraph 6 of the **IB**.

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

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

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

- 10.1. The first envelope shall contain the eligibility and technical documents of the Bid as specified in **Section IX. Checklist of Technical and Financial Documents**.
- 10.2. If the eligibility requirements or statements, the bids, and all other documents for submission to the BAC are in foreign language other than English, it must be accompanied by a translation in English, which shall be authenticated by the appropriate Philippine foreign service establishment, post, or the equivalent office having jurisdiction over the foreign bidder's affairs in the Philippines. For Contracting Parties to the Apostille Convention, only the translated documents shall be authenticated through an apostille pursuant to GPPB Resolution No. 13-2019 dated 23 May 2019. The English translation shall govern, for purposes of interpretation of the bid.
- 10.3. A valid special PCAB License in case of Joint Ventures, and registration for the type and cost of the contract for this Project. Any additional type of Contractor license or permit shall be indicated in the **BDS**.
- 10.4. A List of Contractor's key personnel (e.g., Project Manager, Project Engineers, Materials Engineers, and Foremen) assigned to the contract to be bid, with their complete qualification and experience data shall be provided. These key personnel must meet the required minimum years of experience set in the **BDS**.
- 10.5. A List of Contractor's major equipment units, which are owned, leased, and/or under purchase agreements, supported by proof of ownership, certification of availability of equipment from the equipment lessor/vendor for the duration of

the project, as the case may be, must meet the minimum requirements for the contract set in the **BDS**.

## **11. Documents Comprising the Bid: Financial Component**

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

## **12. Alternative Bids**

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

## **13. Bid Prices**

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

## **14. Bid and Payment Currencies**

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

- a. Philippine Pesos.

## **15. Bid Security**

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



- 15.2. The Bid and bid security shall be valid until **July 26, 2024**. Any bid not accompanied by an acceptable bid security shall be rejected by the Procuring Entity as non-responsive.

## **16. Sealing and Marking of Bids**

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

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

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

## **17. Deadline for Submission of Bids**

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

## **18. Opening and Preliminary Examination of Bids**

- 18.1. The BAC shall open the Bids in public at the time, on the date, and at the place specified in paragraph 9 of the **IB**. The Bidders' representatives who are present shall sign a register evidencing their attendance. In case videoconferencing, webcasting or other similar technologies will be used, attendance of participants shall likewise be recorded by the BAC Secretariat.

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

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

## **19. Detailed Evaluation and Comparison of Bids**

- 19.1. The Procuring Entity's BAC shall immediately conduct a detailed evaluation of all Bids rated "*passed*" using non-discretionary pass/fail criteria. The BAC shall consider the conditions in the evaluation of Bids under Section 32.2 of 2016 revised IRR of RA No. 9184.

- 19.2. If the Project allows partial bids, all Bids and combinations of Bids as indicated in the **BDS** shall be received by the same deadline and opened and evaluated simultaneously so as to determine the Bid or combination of Bids offering the lowest calculated cost to the Procuring Entity. Bid Security as

required by **ITB** Clause 15 shall be submitted for each contract (lot) separately.

- 19.3. In all cases, the NFCC computation pursuant to Section 23.4.2.6 of the 2016 revised IRR of RA No. 9184 must be sufficient for the total of the ABCs for all the lots participated in by the prospective Bidder.

## **20. Post Qualification**

Within a non-extendible period of five (5) calendar days from receipt by the Bidder of the notice from the BAC that it submitted the Lowest Calculated Bid, the Bidder shall submit its latest income and business tax returns filed and paid through the BIR Electronic Filing and Payment System (eFPS), and other appropriate licenses and permits required by law and stated in the **BDS**.

## **21. Signing of the Contract**

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

## ***Section III. Bid Data Sheet***

### **Notes on the Bid Data Sheet (BDS)**

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

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

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

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

# Bid Data Sheet

ITB Clause																						
5.2	For this purpose, contracts similar to the Project refer to contracts which have the same major categories of work, which shall be: Well drilling (exploratory well) projects.																					
7.1	<i>Subcontracting is not allowed.</i>																					
10.3	<p><i>A Valid PCAB License shall have the following requirements:</i></p> <p><i>PCAB Principal Classification:</i></p> <p><i>LICENSE PARTICULARS:</i> <i>Classification: Well Drilling Work</i> <i>Category: D</i></p> <p><i>REGISTRATION PARTICULARS:</i> <i>Kinds of Project: Well Drilling Work</i> <i>Respective Size Range: SMALL B</i></p> <p><i>In case of JV, it must be the Special PCAB license for JV partners. The PCAB License and Registration must be valid at the time of opening of bids.</i></p>																					
10.4	<p>The key personnel must meet the required minimum years of experience set below:</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;"><u>Key Personnel</u></th> <th style="text-align: center;"><u>General Experience</u></th> <th style="text-align: center;"><u>Relevant Experience</u></th> </tr> </thead> <tbody> <tr> <td>Project Engineer</td> <td style="text-align: center;">15 years</td> <td style="text-align: center;">15 years</td> </tr> <tr> <td>Drilling Supervisor</td> <td style="text-align: center;">15 years</td> <td style="text-align: center;">15 years</td> </tr> <tr> <td>Driller</td> <td style="text-align: center;">15 years</td> <td style="text-align: center;">15 years</td> </tr> <tr> <td>Welders</td> <td style="text-align: center;">15 years</td> <td style="text-align: center;">15 years</td> </tr> <tr> <td>First Aider</td> <td style="text-align: center;">5 years</td> <td style="text-align: center;">5 years</td> </tr> <tr> <td>Const. Safety Officer</td> <td style="text-align: center;">5 years</td> <td style="text-align: center;">5 years</td> </tr> </tbody> </table>	<u>Key Personnel</u>	<u>General Experience</u>	<u>Relevant Experience</u>	Project Engineer	15 years	15 years	Drilling Supervisor	15 years	15 years	Driller	15 years	15 years	Welders	15 years	15 years	First Aider	5 years	5 years	Const. Safety Officer	5 years	5 years
<u>Key Personnel</u>	<u>General Experience</u>	<u>Relevant Experience</u>																				
Project Engineer	15 years	15 years																				
Drilling Supervisor	15 years	15 years																				
Driller	15 years	15 years																				
Welders	15 years	15 years																				
First Aider	5 years	5 years																				
Const. Safety Officer	5 years	5 years																				
10.5	<b>No further instructions</b>																					
12	<b>Not Allowed</b>																					
15.1	<p>The bid security shall be in the form of a Bid Securing Declaration or any of the following forms and amounts:</p> <p>a. The amount of not less than <b>Php.111,200.00</b> <i>[Insert two percent (2%) of ABC]</i>, if bid security is in cash, cashier's/manager's check, bank draft/guarantee or irrevocable letter of credit;</p> <p>b. The amount of not less than <b>Php.278,00.00</b> <i>[Insert five percent (5%) of ABC]</i> if bid security is in Surety Bond.</p>																					
16	<p>Physical Submission of Bids: <b>Each Bidder shall submit one (1) original and one (1) duplicate copy of the first and second components of its bid.</b></p> <p>For authentication purposes, all pages of the bidding documents for submission must be certified by the authorized signatory of the participating Bidder/Company. The bidders are also reminded to <b>PUT PROPER TAB ON</b></p>																					

	<b>EACH BIDDING DOCUMENTS.</b>
19.2	<b>Partial bids are not allowed.</b>
20	<b>NWRB Accreditation</b> <b>Permit to Drill</b> <b>Environmental Compliance Certificate</b>
21	Additional contract documents relevant to the Project that may be required by existing laws and/or the Procuring Entity, such as construction schedule and S-curve, manpower schedule, construction methods, equipment utilization schedule, construction safety and health program approved by the DOLE, and other acceptable tools of project scheduling.

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

### **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 Contractor, 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.

## 2. Sectional Completion of Works

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

## 3. Possession of Site

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

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

## 4. The Contractor's Obligations

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

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

## **5. Performance Security**

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

## **6. Site Investigation Reports**

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

## **7. Warranty**

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

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

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

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

## **9. Termination for Other Causes**

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



## **10. Dayworks**

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

## **11. Program of Work**

11.1. The Contractor shall submit to the Procuring Entity’s Representative for approval the said Program of Work showing the general methods, arrangements, order, and timing for all the activities in the Works. The submissions of the Program of Work are indicated in the **SCC**.

11.2. The Contractor shall submit to the Procuring Entity’s Representative for approval an updated Program of Work at intervals no longer than the period stated in the **SCC**. If the Contractor does not submit an updated Program of Work within this period, the Procuring Entity’s Representative may withhold the amount stated in the **SCC** from the next payment certificate and continue to withhold this amount until the next payment after the date on which the overdue Program of Work has been submitted.

## **12. Instructions, Inspections and Audits**

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

## **13. Payment Scheme**

13.1. 50% of the Total Contract Price shall be paid upon the completion of the projet

13.2. The remaining balance shall be paid on a monthly basis (equally within 4 months)

## **14. Operating and Maintenance Manuals**

15.1. If required, the Contractor will provide “as built” Drawings and/or operating and maintenance manuals as specified in the **SCC**.

15.2. If the Contractor does not provide the Drawings and/or manuals by the dates stated above, or they do not receive the Procuring Entity’s Representative’s approval, the Procuring Entity’s Representative may withhold the amount stated in the **SCC** from payments due to the Contractor.

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

### **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 Works procured. 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	
2	<b>The Intended Completion Date is Ninety Days (90) Calendar Days which will commence on the date of receipt of the Notice to Proceed.</b>
4.1	<b>The schedule of delivery of the possession of the site to the Contractor, shall be in full to carry out the projects on its intended completion date</b>
6	None required
7.2	<b>Five (5) years</b>
10	No dayworks are applicable to the contract.
11.1	The Contractor shall submit the Program of Work to the Procuring Entity's Representative within ten (10) calendar days of delivery of the Notice of Award.
11.2	The amount to be withheld for late submission of an updated Program of Work is <b>Five Thousand Pesos (Php. 5,000.00)</b> for every day of delay.
13	Schedule of Payment will be as follows: <ul style="list-style-type: none"> <li>• 50% of the total contract price shall be paid upon the completion of the project.</li> <li>• The remaining balance shall be paid on a monthly basis (equally within 4 months)</li> </ul>
14	Materials and equipment delivered on the site but not completely put in place shall not be included for payment.
15.1	The date by which operating and maintenance manuals are required is not applicable.  The Final Well Drilling Report is required 15 calendar days upon completion of work. It should contain at least the following information: <ul style="list-style-type: none"> <li>• Introduction <ul style="list-style-type: none"> <li>• Description of the Well</li> <li>• Well Location (Site and Map Location)</li> <li>• Well Construction</li> <li>• Well Development</li> <li>• Well Testing <ol style="list-style-type: none"> <li>1. Step Drawdown Test</li> <li>2. Constant Discharge and Recovery Test</li> </ol> </li> <li>• Plumbness Test</li> <li>• Water Quality <ol style="list-style-type: none"> <li>1. Physical and Chemical Analysis Result</li> <li>2. Microbiological Test Result</li> </ol> </li> <li>• Calculation of Drawdown</li> <li>• Conclusion and Recommendation</li> <li>• Geophysical Borehole Logging Data</li> <li>• Week Development Monitoring Sheet</li> <li>• Well Testing Data Sheet/Constant Discharge Test</li> <li>• Well Testing Data Sheet/ Recovery Test</li> <li>• Tentative Well Design</li> </ul> </li> </ul>

	<ul style="list-style-type: none"> <li>• Work Schedule</li> <li>• Lithology and Penetration Rate</li> <li>• Mud Viscosity and Mud Weight</li> <li>• Mud Volume and Mud Conductivity</li> <li>• Geophysical Borehole Logging</li> <li>• Sieve Analysis</li> <li>• Final Well Design</li> <li>• Step Drawdown Test Graph</li> <li>• Calculation of B and C Values</li> <li>• Constant Discharge and Recovery Tests Graphs</li> <li>• Plumbness and Alignment Test</li> <li>• Progress Photographs</li> </ul> <p>The said report is required for final billing.</p> <p>The date by which “as built” drawings are required is fifteen (15) calendar days after the date of physical completion.</p>
15.2	<p>The amount to be withheld for failing to produce “as built” drawings and/or operating and maintenance manuals by the date required is Php.5,000.00.</p>

## *Section VI. Specifications*

## **TERMS OF REFERENCE**

for the

### **PROPOSED DRILLING OF NEW EXPLORATORY/PRODUCTION WELL**

Located at

#### **SITIO BANLIC, BARANGAY CABALANTIAN, BACOLOR, PAMPANGA**

#### **DIVISION 1: GENERAL REQUIREMENTS**

The work completed under this specification shall consist of the furnishing of all labors, tools and equipment including satisfactory performance of all work necessary for the Drilling of One (1) Exploratory Well.

#### **DRILLING OF NEW EXPLORATORY/PRODUCTION WELL**

##### **1.0 GENERAL**

##### **1.1 Scope**

The work includes the drilling of one (1) exploratory/production well at Sitio Banlic, Barangay Cabalantian, Bacolor, Pampanga for Bacolor Water District, including installation of casing/screens, well development, well testing, well completion and the submission of Final Well Drilling Report.

##### **1.2 Technical Standards**

All Materials or workmanship shall comply with the specifications. Other standards equal or superior to those enumerated in this specification, shall be acceptable, subject to the approval of the Procuring Entity's Engineer. The opinion of the Procuring Entity's Engineer must be obtained prior to utilizing such materials or workmanship on or off the site.

##### **1.3 Water Supply and Illumination**

In the absence of adequate quantities of water or illumination required for sdrilling at the drill site, the Contractor shall make such arrangements including the provisions for mobile tanks or fixed tanks as may be necessary to ensure a supply of water and illumination sufficient for drilling operations.

##### **1.4 Electrical Power Supply**

1. The Contractor will make arrangement as may be necessary for the connection of supply of power on site.

2. Payment for the provisions of electrical power supplies as specified in sub-clause

1.4 (1) shall be deemed to be included in the rates entered in the Bill of Quantities (BOQ) for setting up equipment at the site, drilling rates and rates entered for operation of pumping unit.

1.6 Boundaries of Work

The Procuring Entity shall provide land or rights of way for the work specified in this Contract and make suitable provisions for ingress and egress, and the Contractor shall not enter or occupy with men, tools, equipment or material, any ground outside the property of the Procuring Entity without the written consent of the Procuring Entity of such property. Other Contractors and employees or agents of the Procuring Entity may, for all necessary purposes, enter upon the work so as not to impede unnecessarily any work being done by others on or adjacent to the site.

1.7 Access Roads

Construction or improvement of access roads to the wells shall, unless otherwise agreed, be done by the Contractor at his own cost, which is deemed to be included in the contract SUM. The access road shall be kept in proper condition during the entire construction period.

1.8 Protection of Site

1. Excepting as otherwise provided herein, the Contractor shall protect all structures, walks, pipelines, trees, shrubbery, laws, etc. during the progress of his work, shall remove from the site all drill cuttings, debris and unused materials, and shall upon the completion of the work restore the site as early as possible to its original condition, including removal of access tracks and the replacement, at the Contractor's sole expense, of any facility or landscaping which has been damaged beyond restoration to its original condition as to the satisfaction of the Procuring Entity's Engineer.

2. Water pumped from the well shall be conducted to a place approved by the Procuring Entity's Engineer where it will be possible to dispose the water without damage to property or creation of a nuisance.

1.9 Site to be kept Tidy

The Contractor shall at all times keep the site and all working areas in a tidy and workmanship condition and free from rubbish and waste materials.

1.10 Well Head Protection

1. At all times during the progress of the work, the Contractor shall protect the well in such manner as to effectively prevent either tampering with the well or the entrance of foreign matter into it, and upon its completion he shall provide and install a well cap satisfactory to the consultant.

2. In the event that the well becomes contaminated or that water having undesirable physical or chemical characteristic has entered the well due to the negligence of the Contractor, he shall at his own expense perform such work or supply casings, seals, sterilizing agents or other materials as may be necessary to eliminate the contamination to exclude any undesirable water in the well.

### 1.11 Transport of Personnel and Equipment

1. The Contractor shall supply and operate all transport required for transporting his employees, materials and equipment.
2. The cost of movement of personnel, materials and equipment shall be included in the rates given for drilling, development and pump operation.

### 1.12 Site Preparation and Reinstatement

1. The Contractor shall prepare the site, provide all necessary tanks and pits and make all necessary arrangements for erecting and dismantling the drilling unit and shall reinstate the site on completion of such phase of work to the satisfaction of the Procuring Entity.
2. Payment shall be deemed to be included in the items entered in the BOQ for erection and dismantling.

### 1.13 Standby Time

Standby time will be paid only when drilling is suspended upon written instruction of the Procuring Entity or Authorized Representative.

### 1.14 Water Level Sounding

The Contractor shall provide a functioning and accurate water sounding instrument acceptable to the Procuring Entity to measure the water level during all drilling, development and testing of the well. Failure to provide such will subject the Contractor to a penalty of Php.5,000.00 per day.

## 2.0 WELL DRILLING

### 2.1 Equipment

The Contractor shall provide and operate at least two (2) drilling rig including all auxiliary equipment, lubricants, fuels and spares necessary to complete the work within the contract period.

The rig shall have sufficient capacity to drill the specified boreholes in the diameters specified in the tentative well design to a depth which is minimum 25% higher than indicated in the design.

### 2.2 Drilling Method

All drilling shall, have unless otherwise specified, be performed with rotary drilling method.

The Contractor shall drill the hole to such depth and with such a diameter in which shall enable and easy installation of casing and screen and placement of gravel pack with uniform thickness as specified.

### 2.3 Strata Sampling



Soil sample shall be taken every meter of penetration or less change of formation occurs. Samples shall be placed in plastic or other appropriate bags in which the sampling depth and the date of sampling is written in such a manner that it is permanently readable. Each sample shall be placed in a wooden box with enough space for storage.

A record of samples taken with the details described above shall be submitted to the Procuring Entity everyday.

Payment for sampling shall be deemed to be included in the rates entered for drilling in the BOQ.

The failure on the part of the Contractor to obtain, preserved and deliver samples or records, satisfactory to the Procuring Entity's Engineer, shall be considered as actual damage to the Procuring Entity. Such a failure shall be considered authorized the Procuring Entity's Engineer to retain from money due or to become due the Contractor the sum of P1, 500.00 as liquidated damages for each sample that the Contractor shall fail to obtain, preserve or deliver, or for each length of pipe not properly measured and recorded in the order in which it was placed in the well. In the event that, in the opinion of the Procuring Entity's Engineer, the failure of the Contractor to take and preserve the samples may affect the proper design of the well, the Contractor may be required to perform such work as the Procuring Entity's Engineer deems necessary to remedy such failure at no cost to the Procuring Entity.

It is understood that the liquidated damages herein provided are fixed, agreed and not by way of penalty; and that the Procuring Entity shall not be required to prove that he has incurred actual damages. If possible, water level should be monitored every shifting of personnel.

#### 2.4 Drilling Mud

Bentonite, if used, shall be of premium quality in accordance with API Standard

13A with 150 kg/cum of makeup water yielding a mud with viscosity of between

35 and 40 seconds using a Marsh Funnel and a mud weight of less than 1.10 kg/l (9.2lb/US gal.)

Makeup water shall be treated with caustic soda (soda ash) to maintain the pH between 8.0 and 9.0 prior to mixing mud.

During drilling with mud, the Contractor shall perform hourly measurements of the following mud characteristics.

- pH value
- Funnel viscosity
- Specific gravity
- Sand content
- Filtration loss

- Filter cake thickness

The recorded mud characteristics shall not exceed the following values, without the prior approval of the Owner:

- Specific gravity : 9.5lb/gal
- Sand content : 4%
- Filter loss : 10ml
- Filter cake : 1.5mm

## 2.5 Working Hours

All work from start of drilling of the borehole until completion of well development shall be on a round the clock basis.

## 3.0 GEOPHYSICAL LOGGING

### 3.1 Equipment

The geophysical logs may be recorded either by automatic recording on a chart strip or by manual reading of recorded values. In case the logs are by the manual method, reading shall be taken every meter of borehole depth.

## 4.0 WELL CASING

### 4.1 Blank Casing

1. The Contractor, shall before commencement of work, submit for the approval of the Engineer the following details of all casing:

- a. Type of material
- b. Minimum Internal and External diameter
- c. Minimum Wall Thickness
- d. Method of Jointing

2. All permanent casing materials shall be seamless and of new stock unless otherwise specified in these documents.

3. The Contractor shall assume responsibility for any casing failure and shall correct such failure, as approved by the Procuring Entity's Engineer, at no cost to the Procuring Entity. In the event that the Contractor cannot correct a casing failure, the Contractor shall replace the casing with material complying with the specifications or if necessary, better casing as approved by the Procuring Entity's Engineer at no extra cost to the Procuring Entity.

### 4.2 Temporary Casing

The Contractor shall provide such temporary casing as may be necessary to prevent the collapse of any formation during the drilling operation to allow the well to be sunk to the specified depth and to allow the insertion of permanent lining material as required. The Contractor shall remove the temporary casing before completing the well unless otherwise specified.

#### 4.3 Lining Installation

1. Lining material shall be assembled and located in well at the required depth in a continuous operation. The lining material shall be set concentric within the borehole by centralizing bars unless otherwise agreed with the Procuring Entity's Engineer.

2. If the lining jams or is lost before it is set to the specified depth, the Contractor shall endeavor to remove:

The lining material from the well or, if unable to effect removal, shall re-drill the well and replace the lining material at his own expense.

#### 4.4 Lining Materials Accessories

1. The Contractor shall provide as necessary the following accessories to see the lining material to the required depth.

a. Centralizers to be affixed to the lining material at intervals of 12m to locate the lining material in the center of the drill hole

b. Supporting clamps, equipment and tools;

c. Reducing cones and connecting pieces;

d. Casing Hangers;

e. All others necessary equipment

2. Except where expressly provided, all accessories shall be deemed to be included in the BOQ for the provision and insertion of lining material.

#### 4.5 Testing for Plumbness and Alignment

1. All boreholes shall be constructed, plumb and true to line as defined herein. To demonstrate the compliance of his work with this requirement, the Contractor shall furnish all labor, tools and equipment and shall provide the detailed drawing and the description of the test to the satisfaction of the Procuring Entity's Engineer.

2. Test for plumbness and alignment must be made before lining installation. Additional test however, may be made by the Contractor during the performance of the work. No specific no of test shall be made for making these test.

#### 5.0 WELL SCREEN

##### 5.1 Type of Screen

1. The type of screens shall be specified in the tentative well design and the Special Provisions.

2. Slotted screens, if specified for installation, shall be so manufactured as to ensure the maximum yield of the well and prevent clogging and incrustation and shall be free from jagged edges and irregularities that may be accelerate clogging or corrosion.

#### 5.2 Responsibility for Malfunction

1. The Contractor shall assume full responsibility for any malfunction of the screen caused by inadequate installation procedure and shall undertake any corrections as approved at no extra cost to the Procuring Entity.

2. The screen must have no change of alignment at any of its joints after installation. If requested by the Procuring Entity, the Contractor shall undertake any correction as approved by the Procuring Entity at no extra cost.

3. In the event that the Contractor cannot correct the screen failure, the Contractor shall replace the screen with material complying with the specifications of this Contract at no extra cost to the Procuring Entity.

#### 5.3 Screen Strength

The screens shall have adequate strength to resist the external forces that may be applied during and after installation.

#### 5.4 Screen Accessories

All fittings, packers, coupling, joints plugs and seals used during installation of well screen together with the installation procedure, shall be to the approval of the Procuring Entity's Engineer.

### 6.0 FORMATION STABILIZER/GRAVEL PACK

#### 6.1 Scope

The Contractor shall provide centralizers to be affixed to the lining material at intervals of 12m to locate the lining material in the center of the drill hole and a well-rounded, water-worn siliceous grain gravel pack in the annulus shall be such that separation of gravel and bridging is avoided. Gravel pack shall be installed immediately upon completion of lining installation. Installation of gravel pack shall be done by circulation of drilling water.

### 7.0 WELL DEVELOPMENT

#### 7.1 Scope

Well development shall consist of treatment of polyphosphate solution, high velocity water jetting, airlifting and surging and bailing utilizing surge block plus washing with clean water as specified in the BOQ.

The Contractor shall furnish compressor, electric generators surging tools and others equipment required for satisfactory well development and re-development under the supervision of the Procuring Entity.

#### 7.2 Treatment of Polyphosphate Solution

Mud displacement shall immediately be followed by injection and/or jetting through the screened section with polyphosphate solution or equivalent to deflocculates the mud cake on the borehole wall. The well shall be left for 24 hours before developing is continued to allow the polyphosphate to react.

#### 7.3 High Velocity Jetting

The Contractor shall develop the well on all screen sections by high velocity jetting. The jetting tool shall be equipped with nozzles as properly placed to the satisfaction of the Procuring Entity's Engineer.

The development shall be carried out by slowly rotating the jetting tool and gradually lowering it in order to cover the entire surface of the screen.

Each section of the screen shall be jetted until the return water is free from drilling mud for 24 hours or as specified in the BOQ.

#### 7.4 Development by Airlifting

Upon completion of high velocity jetting, the well shall be discharged by airlifting method. Development shall continue to ensure that all sand has been cleaned out of the sump pipe.

#### 7.5 Well Cleaning

Upon completion of the development operations, the Contractor shall demonstrate to the satisfaction of the Consultant that the bottom of the well is clear of all sand, mud and other foreign materials.

#### 7.6 Freedom from Sand

The Contractor shall develop the well with methods specified herein until the water pumped from the well is substantially free from sand and until the turbidity is less than the Silica scale described in the Standard Methods of Water Analysis (latest edition as published by AWWA, APHA and WPCT).

The water pump from the well shall not contain an amount of the material in excess of 1.0 mg/liter when the well is pumped at its maximum expected yield. The equipment for measurement of the sand content shall be furnished by the Contractor.

The development by the specified method shall be repeated and continued until the well is thoroughly developed in accordance with the criteria specified in Sub-Section 7.6.

If after well development works has been completed and the well is found to be sand free in accordance with Section 7.7, but the well production is still below the anticipated well yield, then the Engineer may instruct the Contractor to perform further well development.

#### 7.8 Expected Yield

The Contractor shall develop the well to its maximum expected yield in the range of 15-25lps.

#### 7.9 Well Testing 8.0 Scope

The Contractor shall, unless otherwise specified, provide and operate a Pumping Unit for the following purposes:

- a. Step-drawdown pumping test on the completed well
- b. 72 hours constant discharge pumping test on the completed well and
- c. 12 hours recovery test or when water level reaches its original static water level, whichever comes first.

#### 8.1 Equipment Capacity

1. The Contractor shall provide and operate pumping machinery capable of carrying out the specified pumping and shall provide adequate controls to allow discharge rates to be kept constant at varying pumping water levels and to permit pumping with a variation of more than 5% of the designated discharge rate during any period of yield or aquifer testing.
2. The pumping unit must be able to deliver a discharge rate 50% higher than the expected yield of the well when suitably throttled by use of a gate valve.
3. Suitable pumping machinery will be deemed to be:

Submersible electric pump unit together with the generator and such accessories needed to run the pump.

#### 8.2 Equipment Operation

1. The Contractor shall supply and operate all equipment and accessories necessary for installation and removal of pumps.
2. The Contractor shall maintain on site sufficient fuels, lubricants, spares and other accessories needed to run the Pumping Unit for whatever period may be specified by the Procuring Entity's Engineer.
3. The Contractor shall provide sufficient competent personnel including a qualified mechanic and electricians, as may be necessary to install and operate the Pumping Unit.

#### 8.3 Control of Discharge Rate

The Contractor shall, during the pumping tests, provide a suitable gate valve on the discharge pipeline, to facilitate easy control of the discharge rate.

#### 8.4 Water Level Sounding Pipe

1. The Contractor shall, if instructed by the Procuring Entity's Engineer, provide and install a temporary tube of at least 1" diameter from the top of the well to 2" above the pump bowl assembly to facilitate easy measurements of water level. The tube shall be open only at the bottom and top.
2. Payment for providing, installing and removing the tube shall be deemed to be included in the rates given for pumping tests.

#### 8.5 Discharge Rate Monitoring

Discharge rates may be measured by drum filling or a water meter. All items are subject to the Procuring Entity's Engineer's approval before start of pumping test.

#### 8.6 Definition of Pumping Unit

The equipment specified in Clause 8.2-8.6 in hereto referred as the pumping equipment used to draw water from the well during pumping test.

#### 8.7 Pumping Procedure

The Procuring entity will determine the pumping procedure necessary to obtain the objectives of the Contract.

#### 8.8 Suspension of Pumping

If the Procuring Entity's Engineer considers that the absence or condition of any equipment, personnel, fuel, lubricants or accessories will prejudice the quality of data obtained from any pumping test, then he may suspend the work in accordance with the provision of the Contract.

#### 8.9 Equipment Breakdown during Pumping

1. The pumping must be continuous and at a constant rate during the pumping tests. The Procuring Entity will instruct the Contractor as to the expected maximum duration of each pumping test before start of each test.
2. If the pimping is interrupted or the discharge rate fluctuates by more than 5% of the designated discharge rate, the test may be repeated after a period of recovery determined by the Procuring Entity.
3. If any pumping test is interrupted because of equipment breakdown or inadequate supervision or discharge control, no payment will be made for any pumping period before recommending the re-test.

#### 8.10 Duration of Tests

1. The step-drawdown test shall be performed on 5 steps with duration of 60 minutes each.

2. The constant discharge pumping tests shall be performed for a period of 72hours, unless otherwise instructed by the Procuring Entity.

#### 8.11 Temporary Pipeline

1. The Contractor shall provide a temporary pipeline as directed by the Procuring Entity during pumping tests, to convey pumped water to a suitable water course or drain.

2. Under certain circumstances when re-infiltration cannot be avoided, the Procuring Entity's Engineer shall determine to what distance from the well, pumped water may be discharged to the ground.

### 9.0 WATER QUALITY TEST

#### 9.1 Procedure

The Contractor shall collect water samples for analysis to determine the suitability for domestic consumption. During the step-drawdown test, the chloride content and electrical conductivity shall be done in the field twice for each step, 20 minutes after each step commenced and 5 minutes before each step is completed. A1-gallon sample shall be taken after 20 minutes of the first step and also 5 minutes before the last step is done for more complete analysis in the laboratory.

Likewise, during the constant discharge test, water sample should also be collected for every hour to determine chloride concentration and electrical conductivity /total dissolved solids on site. One (1) gallon sample shall be obtained for laboratory analysis 20 minutes after the start of pumping and another one-gallon sample 4 minutes before putting off the pump.

Some analysis shall also be done in the field by the Contractor, immediately after the water is discharged. This analysis shall include pH and temperature.

All samples shall be sent to approve laboratory where the following test will be conducted:

#### A. PHYSICAL ANALYSIS

- a. Color
- b. Turbidity
- c. Odor

#### B. CHEMICAL ANALYSIS

##### Chemical Characteristics

- a. Total Hardness
- b. pH
- c. Total Dissolved Solids



## Chemical Constituents

- a. Calcium
- b. Magnesium
- c. Sodium
- d. Potassium
- e. Bicarbonate
- f. Chloride
- g. Sulfate
- h. Nitrate
- i. Iron
- j. Manganese
- k. Lead
- l. Mercury
- m. Arsenic

## C. BACTERIOLOGICAL ANALYSIS

### Coliform

#### 9.2 Sample Presentation and Preparation

The Contractor shall ensure the integrity of the samples collected. As much as possible all the samples for laboratory analysis shall be submitted within 24 hours from sampling without preservative, provided samples are kept in cooler. If samples cannot be submitted within 24 hours, preserved the samples as indicated below.

PARAMETER	MINIMUM VOLUME	PRESERVATION
ODOR	500 ml	Analyze as soon possible, refrigerate
COLOR	500 ml	Refrigerate
TURBIDITY	From other sample	Analyze same day store in dark up to 24h, refrigerate
ALKALINITY	200 ml	Refrigerate

HARDNESS	100 ml	Add HNO <sub>2</sub> , to Ph <sub>2</sub>
NITRATE	100 ml	Analyze as soon as possible, refrigerate
CHLORIDE	-	Refrigerate
SULFATE	-	Refrigerate
METALS	-	Refrigerate
TDS	-	Refrigerate

The samples containers should be such when filled with the desired amount of sample, space roughly equivalent to 1 percent of the volumetric capacity of the container is available for expansion of the liquid.

Stopper or cap closing the sample container must be fixed in place by wire, tape or cord to prevent leakage during transit. It should be wrapped with a relatively inert metal foil.

Sample containers must be properly labelled. A tag security affixed to the container should be provided with the following information:

- a) Date and time of sampling
- b) Source of sample
- c) Type of pumping test and discharge rate
- d) Name of collector

### 9.3 Grouting Material

1. Cement grout shall consist of a mixture of 95% Portland Cement, 5% bentonite and clean water, mixed in the proportion of 52.5 kg of Portland Cement/Bentonite to max. 30 liters of water.

2. All cement shall, unless otherwise specified in the Contract Documents, conform to the "Specifications for Portland Cement" (ASTM C150-latest revision).

### 9.4 Method of Placing Grout Material

1. The method and equipment for placing the grout shall be to the approval of the Procuring Entity. No method will be approved that does not provide for the forcing of grout from the bottom of the casing/hole/annulus to be grouted, to the surface. Flushing of the annular space with fluid to assure the space is open and to remove loose material will be required by the Procuring Entity before grouting is commenced.

2. Any grouting operation shall be continuous and before starting, sufficient grout shall be mixed to complete the whole operation. During the grouting operation, the mixed grout shall be continuously stirred. The Contractor shall provide such tanks, hoppers and other equipment as may be necessary to meet these requirements.

#### 9.5 Starting Time

No work will be allowed on the well within a period of 72 hours after completion of grouting unless quick setting cement is used. In such case, the idle period may be reduced to 24 hours subject to the Procuring Entity's approval.

#### 10.0 WELL CLEANING

The Contractor shall upon completion of well construction and well testing thoroughly clean the well of all foreign substance including tools, timbers, rope, and debris of any kind, cement, oil, grease and scum.

#### 11.0 WELL COMPLETION

##### 11.1 Scope

The Contractor shall provide and operate all equipment necessary to restore the site as near as possible to its original condition before commencement of drilling and shall furnish and install a well head cap as specified in the Contract.

##### 11.2 Site Restoration

The site shall be restored to a condition as nearly as possible to that which existed before the well drilling and testing activities commented. This work shall include, but not limited to, restoration of fences and structures, removal of drill cuttings, levelling of the disturbed ground surfaces and replacement or compensation for the destroyed plants and landscaping.

##### 11.3 Well Head Capping

The well shall be completed with a well head assembly as well as water level sounding tube with screw cap in order to prevent any unauthorized tampering of the well.

#### 12.0 SUBMITTAL OF REPORTS, BOREHOLE DATA AND WATER QUALITY ANALYSIS

The Contractor shall submit to the Procuring Entity the daily time records containing the following information:

Site:

Date:

Description of each stratum encountered:

Depth below ground of each change of stratum:

The Contractor shall be required to keep a record of penetration rate, mud losses and mud conditions.

At the end of the well construction and before final payment is made, sewage, the Contractor shall submit to the Procuring Entity a final report containing the following information:

- a. The total depth
- b. Description of strata encountered
- c. The size and lengths/specifications of the casings installed
- d. The date of the start and the completion of the well construction
- e. The location and description of the casings and screens
- f. The location of the gravel, the size and the amount of cement installed
- g. Records of discharge rates and drawdown during well development together with the description of the methods of development
- h. The well yield, the dates and duration of the tests
- i. The method of measuring the discharges rates and the drawdown
- j. The complete water quality analysis

### 13.0 PROTECTION OF THE ENVIRONMENT

The Contractor shall not discharge into or pollute nearby rivers, creek, or surface waters with fuels, oil bitumen, chemicals, acids, sewage, wastewater, and other harmful materials, debris or foreign materials. Such materials shall not be stored beneath and adjacent to any rivers, creek, stream or other body of water.

Flora within the contract boundaries, but outside the limits of the work mentioned under the contract as indicated in the drawings shall be preserved insofar as practicable in its present conditions. The Contractor shall confine his construction activities to the areas defined by the drawings or technical specifications, and to the disposal borrow areas indicated in the drawings as approved by the Procuring Entity.

All temporary facilities and buildings shall be located at places approved by the Procuring Entity's Engineer. Upon completion of the Contract, except as otherwise authorized by the Procuring Entity, all temporary facilities shall be removed and its site shall be restored by the Contractor at his own expense to the presentable conditions.

### 14.0 PROCURING ENTITY- CONTRACTOR'S RESPONSIBILITY

A. The Procuring Entity shall observe and approve the sequence of work up to its successful execution. When necessary, it shall have the authority to order its suspension, cancellation or termination, or to direct that changes be made which approval or direction shall, however, in no way affect the responsibility of the Contractor in the conduct of his work.

B. The Contractor shall assign a qualified superintendent and provide competent supervision of the project until its completion.

The superintendent shall work in full coordination with the Procuring Entity.

The Contractor shall submit their Organizational Chart and the C.V.'s of all personnel involved in the project.

C. The Water District shall provide the availability of the drilling sites.

#### 15.0 MEASUREMENT AND PAYMENT

Payments shall be considered full compensation for furnishing all materials, labor, tools, and equipment and for performing all works contemplated under this Contract.

Mobilization and site preparation shall be paid in lump sum amount after certified and approved by the Procuring Entity.

Borehole drilling and reaming of borehole shall be paid in unit price quoted and on actual depth of drilling performed.

Well casings centralizers, gravel pack, gravel fill pipe and installation of casing and screens shall be paid in unit price quoted and on actual depth performed after the completion of the well.

Geophysical logging, treatment of polyphosphate solution, well development, well testing, grouting, well cleaning, well completion and water sampling shall be paid in lump sum amount after its completion, certified and accepted by the Procuring Entity.

The Procuring Entity may reject payment for any particular item if the works completed and materials delivered are not in accordance with the Contract.

Payments shall be made when works provided in the Contract shall have been completely performed and all parts of the works have been approved and accepted by the Procuring Entity. Final reports, borehole and water quality analysis shall be submitted prior to final payment.

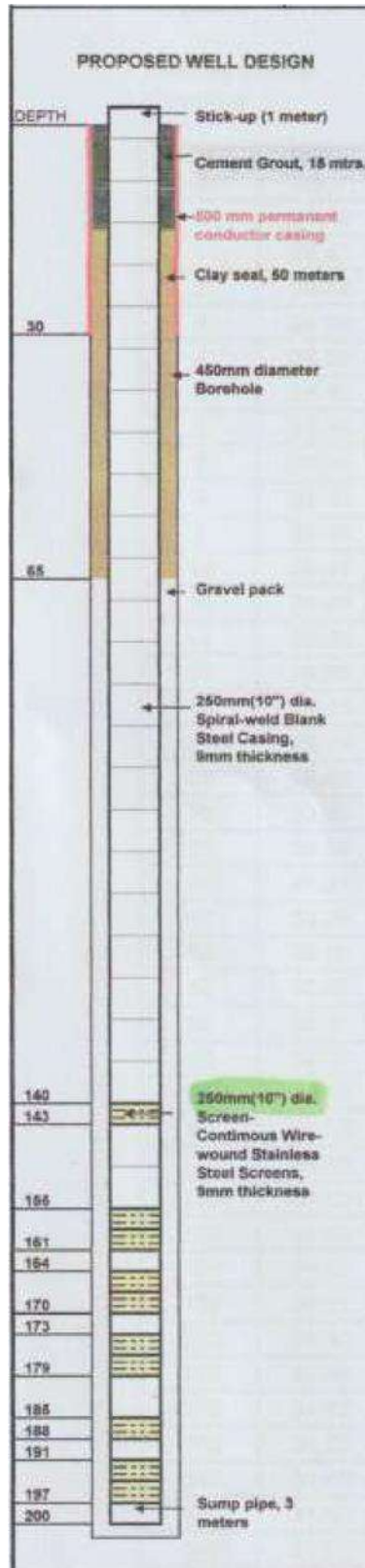
Final acceptance shall be understood as the acceptance of the project by the Procuring Entity after completion of works stipulated in the Contract.

In all cases, withholding tax shall be deducted from all payments made to the Contractor.

Engineer otherwise he shall be responsible for the un-acceptance of the work done without details. In such case, the Contractor shall make the work good at his expense.

# Section VII. Drawings

## Preliminary Design of Well







## *Section VIII. Bill of Quantities*



### BACOLOR WATER DISTRICT

**Sta. Ines, Bacolor, Pampanga**

 Tel. No. (045) 900 2911  
 0917-175-9462 / 0931-038-9378  
 [www.bacolorwaterdistrict.gov.ph](http://www.bacolorwaterdistrict.gov.ph)  
 [ba.colorwaterdistrict1981@yahoo.com.ph](mailto:ba.colorwaterdistrict1981@yahoo.com.ph)

Project : Proposed Drilling of New Exploratory/Production Well  
 Location : Sitio Banlic, Cabalantian, Bacolor, Pampanga  
 ABC : **₱ 5,560,000.00**

#### BILL OF QUANTITY

NO	ITEM OF WORK	QTY	UNIT	UNIT COST	TOTAL AMOUNT
1	Mobilization of one (1) Rotary Drilling Unit, all accessories and staff to project site	1	Lot		
2	Preparation of site and setting-up of all equipment, including construction of temporary facilities (electricity & water) and temporary security fence	1	Lot		
3	Drilling of 200mm dia. Pilot hole from ground surface to 200 meters, including sampling every meter of penetration or less when information occurs	200	Meters		
4	Geophysical borehole to 400mm dia. hole	1	Lot		
5	Reaming of pilot hole to 450mm dia. Hole	200	Meters		
6	Furnishing of 250mm dia. spiral welded steel casings, with minimum wall thickness of 6mm, including 1-meter stick-up pipe from original ground level and 10 meters sump pipe	173	Meters		
7	Furnishing of 250mm nominal dia. stainless steel continuous slot wedge wire wound screens, slot 1.5mm, 3 meters each length	30	Meters		
8	Installation of casing and screens	200	Meters		
9	Furnishing and installation of casing centralizers every 12 meters interval	12	Meters		
10	Furnishing and installation of gravel pack materials at annulus around casings and screens	135	Meters		
11	Furnishing and installation of clay seal from 15 meters to 65 meters	50	Meters		
12	Deflocculate drilling mud by jetting 3%	1	Lot		

	polyphosphate solution at 10 bags (50kgs/bag) per application				
13	Development by high velocity water jetting	12	Hours		
14	Development by high air-lift method, Q= _____ lps	12	Hours		
15	Step-drawdown pumping test with five steps at one hour duration, each step carried out in succession with discharge rate increasing in equal fractions of expected maximum discharge of Q= _____ lps.	1	Lot		
16	Continuous constant discharge rate pumping test, Q= _____ lps	72	Hours		
17	Cement grouting of annulus around 250mm dia. Casings (0-15m+1m)	16	Meters		
18	Furnishing and installation of well head cap and 50mm dia. water level sounding tube with screw cap	1	Lot		
19	Conduct Camera Logging	1	Lot		
20	Demobilization and site clean-up	1	Lot		



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

### **Notes on the Checklist of Technical and Financial Documents**

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

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

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

# Checklist of Technical and Financial Documents

## I. TECHNICAL COMPONENT ENVELOPE

### *Class “A” Documents*

#### Legal Documents

- (a) Valid PhilGEPS Registration Certificate (Platinum Membership) (all pages) 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 under the rules; **and**
- (d) Special PCAB License in case of Joint Ventures **and** registration for the type and cost of the contract to be bid; **and**
- (e) 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**
- (f) Project Requirements, which shall include the following:
- a. Organizational chart for the contract to be bid;
  - b. List of contractor’s key personnel (*e.g.*, Project Manager, Project Engineers, Materials Engineers, and Foremen), to be assigned to the contract to be bid, with their complete qualification and experience data;
  - c. List of contractor’s major equipment units, which are owned, leased, and/or under purchase agreements, supported by proof of ownership or certification of availability of equipment from the equipment lessor/vendor for the duration of the project, as the case may be; **and**
- (g) 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

- (h) The prospective bidder’s computation of Net Financial Contracting Capacity (NFCC).

### *Class “B” Documents*

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

**II. FINANCIAL COMPONENT ENVELOPE**

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

Other documentary requirements under RA No. 9184

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

