PHILIPPINE BIDDING DOCUMENTS

(As Harmonized with Development Partners)

Procurement of a contract for

Construction of Electrical Room and Connections

AFPRSBS Office

Camp Aguinaldo, Quezon City

Government of the Republic of the Philippines

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 contract, 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.

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Glossary of Terms, Abbreviations, and Acronyms

ABC –Approved Budget for the Contract.

ARCC – Allowable Range of Contract Cost.

BAC – Bids and Awards Committee.

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

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

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

BIR – Bureau of Internal Revenue.

BSP – BangkoSentral 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

INVITATION TO BID FOR PROCUREMENT OF A CONTRACT FOR CONSTRUCTION OF ELECTRICAL ROOM AND CONNECTIONS

1. The **AFPRSBS**, through the **Corporate Budget for CY 2022** intends to apply the sum of **Eight Million Pesos (Php8, 000,000.00)** being the Approved Budget for the Contract (ABC) to payments under the contract for **Procurement of a Contract for Construction of Electrical Room and Connections**. Bids received in excess of the ABC shall be automatically rejected at bid opening.

2. The **AFPRSBS** now invites bids for the above Procurement Project. Completion of the Works is required for **Sixty (60) 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 the 2016 revised Implementing Rules and Regulations (IRR) of Republic Act (RA) No. 9184.

4. Interested bidders may obtain further information from **AFPRSBS** and inspect the Bidding Documents at the address given below from 8:00 a.m. to 5:00 p.m., Monday to Friday.

5. A complete set of Bidding Documents may be acquired by interested bidders on 21 March 2022, from given address and website/s below upon payment of the applicable fee for the Bidding Documents, pursuant to the latest Guidelines issued by the GPPB, in the amount of **Ten Thousand (Php10,000.00) Pesos**. The Procuring Entity shall allow the bidder to present its proof of payment for the fees in person, by facsimile, or through electronic means.

6. The **AFPRSBS** will hold a Pre-Bid Conference[1] on 28 March 2022, 9:00 a.m. at the **AFPRSBS Boardroom, AFPRSBS Building, 424 Capinpin Avenue, and Camp Aguinaldo Quezon City** and/or through videoconferencing/webcasting via Google Meet, which shall be open to prospective bidders.

7. Bids must be duly received by the BAC Secretariat on or before 9:00am, 11 April 2022 through (i) manual submission at the office address as indicated below, (ii) online or electronic submission to this email address: rsbsafpbac@gmail.com. Late bids shall not be accepted.

8. All bids must be accompanied by a bid security in any of the acceptable forms and in the amount stated in **ITB** Clause 16.

9. Bid opening shall be on 11 April 2022, 9:00am at the **AFPRSBS Boardroom, AFPRSBS Building, 424 Capinpin Avenue, Camp Aguinaldo, Quezon City**. and/or through Google Meet. Bids will be opened in the presence of the bidders' representatives who choose to attend the activity.

10. *[Insert such other necessary information deemed relevant by the Procuring Entity such as the use of a back-up data or cloud storage for large files uploaded for online bid submissions]*

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

12. For further information, please refer to:

    MARIA GRACITA C GARCIA
    BAC Secretariat
    AFPRSBS
    AFPRSBS Building, 424 Capinpin Avenue,
    Camp General Emilio Aguinaldo, Quezon City
    rsbsafpbac@gmail.com
    Tel Nos. (02)89121858/(02)89121868

13. You may visit the following websites:

    For downloading of Bidding Documents: ***www.afprsbs.com*** *and PhilGEPS website*

    For online bid submission: *rsbsafpbac@gmail.com*

Mar 17, 2022

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RODERICK A LUNA
Chairperson
Bids and Awards Committee

Section II. Instructions to Bidders

1. Scope of Bid

The Procuring Entity, **AFPRSBS** invites Bids for the **PROCUREMENT OF A CONTRACT FOR CONSTRUCTION OF ELECTRICAL ROOM AND CONNECTIONS**, with Project Identification **PROCUREMENT OF A CONTRACT FOR CONSTRUCTION OF ELECTRICAL ROOM AND CONNECTIONS** Number 2022-001

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

The Procurement Project (referred to herein as "Project") is 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 *[indicate funding year]* in the amount of *[indicate amount]*.

2.2. The source of funding is:

[If an early procurement activity, select one and delete others:]

a. NGA, the National Expenditure Program.

b. GOCC and GFIs, the proposed Corporate Operating Budget.

c. LGUs, the proposed Local Expenditure Program.

[If not an early procurement activity, select one and delete others:]

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GOCC and GFIs, the 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 subcontracting is not allowed.

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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 AFPRSBS Boardroom, AFPRSBS Building, 424 Capinpin Avenue, Camp Aguinaldo, Quezon 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 IX. Checklist of Technical and Financial Documents**.

10.2. If the eligibility requirements or statements, the bids, and all other documents for submission to the BAC are in foreign language other than English, it must be accompanied by a translation in English, which shall be authenticated by the appropriate Philippine foreign service establishment, post, or the equivalent office having jurisdiction over the foreign bidder's affairs in the Philippines. For Contracting Parties to the Apostille Convention, only the translated documents shall be authenticated through an apostille pursuant to GPPB Resolution No. 13-2019 dated 23 May 2019. The English translation shall govern, for purposes of interpretation of the bid.

10.3. A valid PCAB License is required, and in case of joint ventures, a valid special PCAB License, and registration for the type and cost of the contract for this Project. Any additional type of Contractor license or permit shall be indicated in the **BDS**.

10.4. A List of Contractor's key personnel (e.g., Project Manager, Project Engineers, Materials Engineers, and Foremen) assigned to the contract to be bid, with their complete qualification and experience data shall be provided. These key personnel must meet the required minimum years of experience set in the **BDS**.

10.5. A List of Contractor's major equipment units, which are owned, leased, and/or under purchase agreements, supported by proof of ownership, certification of availability of equipment from the equipment lessor/vendor for the duration of the project, as the case may be, must meet the minimum requirements for the contract set in the **BDS**.

11. Documents Comprising the Bid: Financial Component

11.1. The second bid envelope shall contain the financial documents for the Bid as specified in **Section IX. Checklist of Technical and Financial Documents**.

11.2. Any bid exceeding the ABC indicated in paragraph 1 of the **IB** shall not be accepted.

11.3. For Foreign-funded procurement, a ceiling may be applied to bid prices provided the conditions are met under Section 31.2 of the 2016 revised IRR of RA No. 9184.

12. Alternative Bids

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

13. Bid Prices

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

14. Bid and Payment Currencies

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

14.2. *Payment of the contract price shall be made in* Philippine Pesos.

15. Bid Security

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

15.2. The Bid and bid security shall be valid until *[indicate date]*. Any bid not accompanied by an acceptable bid security shall be rejected by the Procuring Entity as non-responsive.

16. Sealing and Marking of Bids

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

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

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

17. Deadline for Submission of Bids

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

18. Opening and Preliminary Examination of Bids

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

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

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

19. Detailed Evaluation and Comparison of Bids

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

19.2. If the Project allows partial bids, all Bids and combinations of Bids as indicated in the **BDS** shall be received by the same deadline and opened and evaluated simultaneously so as to determine the Bid or combination of Bids offering the lowest calculated cost to the Procuring Entity. Bid Security as required by **ITB** Clause 16 shall be submitted for each contract (lot) separately.

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

20. Post Qualification

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

21. Signing of the Contract

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

Section III. Bid Data Sheet

Bid Data Sheet

ITB Clause	
5.2	For this purpose, contracts similar to the Project refer to contracts which have the same major categories of work, which shall be: *A.* Construction of New Electrical Room *B.* Supply and Installation of Electrical Wiring *C.* Construction of New Pedestal Post *D.* Installation of Underground Utilities *E.* Meralco reconnection services
7.1	*Subcontracting is not allowed*
10.3	The bidder must have an updated PCAB license with a minimum classification of Category B with specialty SP-EE
10.4	The key personnel must meet the required minimum years of experience set below:
	<u>Key PersonnelGeneral ExperienceRelevant Experience</u> Project Manager Ten(10) year Electrical works Project Engineer Five(5) year Electrical works
10.5	Use of heavy equipment is not allowed in the area.
12	No further instructions
15.1	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 **One Hundred Sixty Thousand Pesos (Php 160,000.00)**, if bid security is in cash, cashier's/manager's check, bank draft/guarantee or irrevocable letter of credit; b. The amount of not less than **Four Hundred Thousand Pesos(Php 400,000.00)** if bid security is in Surety Bond.
19.2	No further instructions
20	Contractor must secure all required permits/clearance for reconnection of AFPRSBS office electrical connections to Meralco.
21	No further instructions.

Section IV. General Conditions of Contract

1. Scope of Contract

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

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

2. Sectional Completion of Works

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

3. Possession of Site

4.1. 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.

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

4. The Contractor's Obligations

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

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

5. Performance Security

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

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

6. Site Investigation Reports

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

7. Warranty

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

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

8. Liability of the Contractor

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

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

9. Termination for Other Causes

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

10. Dayworks

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

11. Program of Work

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

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

12. Instructions, Inspections and Audits

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

13. Advance Payment

The Procuring Entity shall, upon a written request of the Contractor which shall be submitted as a Contract document, make an advance payment to the Contractor in an amount not exceeding fifteen percent (15%) of the total contract price, to be made in lump sum, or at the most two installments according to a schedule specified in the **SCC**, subject to the requirements in Annex "E" of the 2016 revised IRR of RA No. 9184.

14. Progress Payments

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

15. Operating and Maintenance Manuals

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

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

Section V. Special Conditions of Contract

Special Conditions of Contract

GCC Clause	
2	*[If different dates are specified for completion of the Works by section, i.e. "sectional completion," these dates should be listed here.]*
4.1	*[Specify the schedule of delivery of the possession of the site to the Contractor, whether full or in part.]*
6	No further Instructions
7.2	Two (2) years.
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 Sixty calendar days of delivery of the Notice of Award.
11.2	No further instructions
13	The amount of the advance payment is One Million Two Hundred Thousand Pesos (Php 1,200,000.00)
14	*No further instructions*
15.1	The date by which "as built" drawings are required is July 25, 2022.
15.2	The amount to be withheld for failing to produce "as built" drawings and/or operating and maintenance manuals by the date required is *[amount in local currency]*.

Section VI. Terms of Reference

AFP RETIREMENT AND SEPARATION BENEFITS SYSTEM
424 Capinpin Avenue, Camp Gen. Emilio Aguinaldo, Quezon City

TERMS OF REFERENCE

CONSTRUCTION OF ELECTRICAL ROOM AND CONNECTIONS AFPRSBS, CAMP AGUINALDO, QUEZON CITY

1.0 Introduction

The intent of this document is to outline the requirements of this project and to solicit proposals for the PROCUREMENT OF CONSTRUCTION OF ELECTRICAL ROOM AND CONNECTIONS at the AFPRSBS Office, Camp Aguinaldo, Quezon City, in accordance with Republic Act (R.A.) No. 9184 (The Government Procurement Reform Act) and its implementing rules and Regulations.

2.0 AFPRSBS OFFICES AND ROAD WIDENING PROJECT

AFPRSBS is an established government office for more than forty-five (45) years, serving the Filipino soldiers. The Office is located inside Camp Aguinaldo, Quezon City, and Boni Serrano Avenue. A perimeter wall of Camp Aguinaldo separates the road to the Office.

Due to increasing volume of vehicles going to C5 and EDSA, the demand for transportation access of the mentioned Avenue has increased. The Department of Public Works and Highways(DPWH), the designated office for road development, procured a project, the Road Widening of Boni-Serrano Avenue. The project starts from EDSA extending Boni-Serrano Avenue exiting to Kalayaan and C5 road. The project will widen the road of ten meters (10.0m). The project will affect to the existing walls of Camp Aguinaldo.

As per evaluation of technical team of DPWH and AFPRSBS, a large area of the Office will be affected by this project. The Electrical room of AFPRSBS, which handles the day-to-day Electrical operations of the Office, will also be affected.

To provide uninterrupted electrical supply, it is recommended to provide immediate construction of electrical room and connections.

3.0 Project

- This project aims to provide rehabilitation of electrical facilities affected by road widening project. It includes the construction of new electrical room,

relocated existing wiring connection to Meralco, and reconnection/Energization of newly Installed Control Panel/Panel Boards.

4.0 Approved Budget for the Contract (ABC)

The procuring entity's Approved Budget for the Contract (ABC) is Eight Million Pesos (Php 8,000,000.00). The ABC is inclusive of the value added tax, withholding tax, and other forms of taxes that may be imposed by the Philippine government and/or concerned government agencies in relation to the procurement of a contract for Construction of Electrical room and connections, AFPRSBS Office, Camp Aguinaldo, Quezon city.

5.0 Scope of Work

PROJECT: PROCUREMENT OF CONSTRUCTION OF ELECTRICAL ROOM AND CONNECTIONS

Project Duration: Sixty (60) days

Project Cost: Php 8,000,000.00

A. General Requirements

a. Construction of warehouse with temporary perimeter covering/blue sack enclosure at least 1.50m in height. Warehouse shall store materials in room temperature. A daily monitoring sheets shall be provided for incoming supply of materials. Coordinate with the AFPRSBS Engineer for the warehouse location.
b. Owner shall provide tapping connection for Electric and Water utilities. Charges from that connection shall be charged to Contractor.
c. The Contractor shall clear the working area and warehouse from waste materials or any form of garbage.
d. A manpower monitoring check shall be submitted weekly by the Contractor to the Owner.
e. Monitoring chart of th day is required for weather and manpower verification.
f. Project Engineer of the Contractor must be available during job progression for status inquiry.
g. Secure clearance from the Ownerprior to demobilization.
h. Use of Heavy equipment is not allowed

B. Construction of new Electrical room

a. Refer to plans and specifications of new Electrical Room
a. House shall have enclose to permit water penetration

C. Supply of Materials and Installation of Electrical Wiring

a. Wirings and connection shall conform to approved electrical wiring.
b. Control Panels shall be installed as per specifications

D. Construction of New Pedestal Post

a. Construct Post as per indicated specifications
b. Installed underground utilities of electrical connection

E. Installation of Underground Utilities

a. Construct manhole and canal as underground connection for electrical connections
b. Depth should not be lower than required plans
c. Bedding on Canal and Manhole and protective cover is required

F. Meralco reconnection services

a. Reconnection of Meralco is required for rehabilitated electrical wirings and connection.
b. Meter should be checked from energization

G. Testing and Commissioning

For Control Panel and Circuit Breakers:

A. Insulation and dielectric strength tests
B. Inspection of the switchboard
C. Compliance with the installation diagram
D. Inspection of mechanical equipment
E. Mechanical operation
F. Check of electronic control units

For Electrical Wiring:

A. Continuity Test;
B. Insulation Resistance Test;
C. Polarity Test;

J. Demobilization

Secure Clearance from Procuring entity prior to demobilization

6.0 Deliverables

Constructed New Electrical room and relocated Electrical wiring.

7.0 Contract Duration

The work to be performed by the Contractor should be completed within Sixty (60) calendar days reckoned seven days after receipt of Notice to Proceed

8.0 Terms of Payment

8.1 The Terms of payment shall be as follows:

a. An initial payment equivalent to fifteen percent (15%) of the contract price shall be made within ten (10) working days after the effective date of the contract and submission by the Contractor of a Performance bond.

b. Monthly progress billing shall be submitted and processed after evaluation of work accomplishment.

8.2 All payments shall be subject to ten percent (10%) retention, expanded withholding taxes and other applicable taxes, and such other deductions as may be mutually agreed upon by both parties.

8.3 The ten percent (10%) retention shall be released by the AFP-RSBS thirty (30) days after the issuance of the Certificate of Completion and final Acceptance and submission by the Contractor of a Guarantee Bond.

9.0 Evaluation Guidelines

The selection of the winning bidder shall be based on the Lowest Calculated Responsive Bid pursuant to Section 32 under Rule IX, of the Implementing Rules and regulations of RA 9184.

Section VI. Specifications

SPECIFICATIONS

PROCUREMENT OF A CONTRACT FOR THE CONSTRUCTION OF ELECTRICAL ROOM AND CONNECTIONS

A. GENERAL CONDITIONS

1. The work to be executed under this contract shall include the furnishing of all materials, labor, tools, and equipment and everything listed,

2. The contractor shall store and protect all its materials at the jobsite from damage and deterioration.

3. All works shall be done by competent workers under the supervision of an Engineer and ensure strict compliance to the plans and specifications.

4. AFPRSBS Engineer shall be informed and must approve all materials to be installed and the construction procedures to be performed in the project.

B. Control Panel and Circuit Breakers

Circuit Breaker categories

1. Ambient temperature

   Circuit breakers have designed to hold 100 % In at 50 °C without tripping in normal condition (up to 250A, except earth leakage circuit breakers). Breakers may be used between -25 °C and +70 °C. The permissible storage-temperature range of circuit breakers in the original packing is -35 °C to +85 °C.

2. Installation

   Circuit breakers shall be easy to be installed in the various types of switchboards. They are mounted vertically and without any derating of characteristics.

3. Power Supply

Installation positions. Reverse feeding. Power supply of circuit breaker can be supplied from either the top or the bottom (reverse feeding) without any reduction in performance. For earth-leakage circuit breakers, reverse feeding is possible only up to 240 V AC. This capability facilitates connection when installed in a switchboard. Degree of protection

4. Earth-leakage protection

   This protection is fully integrated inside the breaker and does not require any additional space. Circuit breaker and earth leakage circuit breakers shall be interchangeable.

5. Compliance

   Compliance with standards earth leakage circuit breakers comply with all the international standards listed:

   a. IEC 60947-1
   b. EN 60947-1 b
   c. EN 60947-2 b
   d. GB 14048.2 b
   e. IEC 60255-4 and IEC 60801-2 to 60801-5 covering protection against nuisance tripping due to transient overvoltages, lightning strikes, switching of devices on the distribution system, electrostatic discharges, radiofrequency interference.

6. Power supply

   Reverse feeding earth-leakage circuit breakers shall be supplied from either the top or the bottom for voltages up to 240 V AC. For voltages over 240 V AC, only supply from the top is possible (Line-Load indication on the cover of the breaker).

   Power supply of the electronics earth-leakage circuit breakers are self-supplied by the distribution-system voltage and therefore do not require any external source. They fully comply with new IEC requirements. They are powered from the three phases and continue to function even if one phase is missing.

7. Dielectric tests

   Earth-leakage circuit breakers are equipped with a disconnecting switch in order to protect the electronics during dielectric tests. When the disconnecting switch is activated, the circuit breaker is automatically tripped. It is mechanically impossible to switch on the circuit breaker, until the earth-leakage function is re-energised.

8. Tripping features

   Circuit breakers have a yellow mechanical indicator to locally signal tripping due to an earth fault. Breakers shall be equipped with an earth-leakage alarm switch (ALV) to remotely signal tripping due to an earth fault. Resetting circuit breakers are fully reset by the operating handle. After resetting, tripping indicators (mechanical and ALV) come to normal position.

General check-up of Control Panel and Circuit breakers.

Checking removes the risk of a malfunction due to error or oversight. Many malfunctions result from non-observance of the start-up instructions or lack of knowledge concerning the equipment and/or switchgear procedures.

A check must be carried out with the entire switchboard de-energised. In switchboards with compartments, only those compartments that may be accessed by the operators must be de-energised. The list below indicates the checks and inspections to be performed according to the event:

Checks and Inspections

- Prior to start-up
- Periodically during operation
- After carrying out work on the switchboard
- Periodically during lengthy downtime
- Following lengthy downtime and modification to the switchboard

Series of test shall be performed:

- Insulation and dielectric strength tests
- Inspection of the switchboard
- Compliance with the installation diagram
- Inspection of mechanical equipment
- Mechanical operation
- Check of electronic control units

A: Insulation and dielectric strength tests Insulation and dielectric strength tests are carried out before the switchboard is delivered. These tests are subject to the currently applicable standards.

Insulation and dielectric tests must be repeated immediately after delivery of the switchboard. These tests are precisely defined by international standards and must be directed and carried out by a qualified expert. Prior to running the tests, it is absolutely necessary to: b disconnect all the electrical auxiliaries of the device (motor mechanism, MX, MN) b remove the long-time rating plug on the Micrologic E/P control units. Removal of the rating plug disconnects the voltage measurement input.

B: Inspection of the switchboard Check that the devices are installed: b in a clean environment,where no waste has been left behind from assembling the equipment (wiring, tools, shavings, metallic particles, etc) b in a properly ventilated switchboard (unobstructed ventilation grilles)

C: Compliance with the installation diagram. Check that the devices conform with the installation diagram: b identification of the feeds on the front of each device

a. Rating and breaking capacities (indicated on the rating plate)

b. Identification of the control unit (type, rating)

c. Presence of additional functions (motor mechanism, Vigirex relay, toroid, rotary handle, control or indication auxiliaries, locking, sealing)

d. Protection settings (long time, short time, instantaneous, ground fault)

e. Micrologic electronic control unit: visually check the position of the dials or the main settings and use the maintenance interface to check in detail

f. Identification of the protected circuit marked on the front of each device.

D: Inspection of mechanical equipment

a. Check the following body parts:
   - Case
   - arc chute filters
   - main contacts.

b. Check the mounting and mechanical strength:

   Of devices in the switchboard and of power connections of thefollowing auxiliaries and accessories on the devices - rotary handles or motor mechanisms

   - installation accessories (terminal shields, escutcheons, etc.)
   - Auxiliary circuit connections
   - chassis and its sliding connections
   - terminal blocks
   - electrical auxiliaries.

c. Check the tightening of power connectors and tighten any loose connections.

E: Mechanical operation

1. Check the following mechanical operations:
   a. mechanical opening and closing
   b. electrical opening and closing
   c. tripping with the push-to-trip button
   d. resetting
   e. charging

f. complete closing of device poles.

2. Check the number of operating cycles by consulting the operation counter.
3. Check the locking and unlocking of locking accessories
4. Check the operation of the motor mechanism
   a. General condition of the motor mechanism b.
   b. motor mechanism charging time.
5. Check the operation of control auxiliaries including:

   a. MX opening voltage release

   b. MN undervoltage release v-MNR delayed undervoltage release.

6. Check the auxiliary wiring and insulation of all auxiliaries.

7. Check the correct operation of the indication contacts OF

8. Check the service life of all auxiliaries.

F: Operation of electronic control units and communication system

Check the correct operation of the control unit of each device, by using the respective user manual.

a. Test device control and uploading of contact status.
b. Test the uploading of the chassis position contacts and address synchronization between BCM ULP and IO module.
c. Test data writing to the Micrologic control unit

C. Electrical Wiring

- **Legal Requirements**

PEC of the Electricity Regulations 2009 states that all wiringor rewiring of an installation or extension to an existing installation, whichshall be carried out by an Electrical Contractor or a Private Wiring Unit,have to obtain the approval in writing from a licensee or supply authority.

- **Planning of Electrical Wiring Work**

Prior to carrying out wiring work, the wireman/contractor should plan anddetermine the tasks to be undertaken so that the work carried out is tidy,neat and safe to be used. The wireman/contractor shall: -

- Undertake a site visit;
- Determine the consumer load requirements;
- Calculate the maximum load demand; and
- iv. Submit the plans, drawings and specifications.

Site Visit

The purpose of the site visit is to determine: -

- Electrical equipment suitable for use;
- Maximum load demand;
- Single or three phase incoming supply;
- Type of wiring; and
- Equipment arrangement.

Determining Consumer Load Requirements

With the aid of the building floor plans, the installation requirements such as the proposed load, placement of electrical equipment and installation design plans can be determined.

Calculating Maximum Load Demand

The estimate of the maximum load demand is for determining the specifications of the wiring equipment such as the cables and accessories and subsequently to prepare the electrical installation plans.To determine the aximum demand for each circuit while ensuring an economic and reliable design within the permitted voltage drop limits. Diversity factors may be taken into account.

The maximum current demand calculations for each circuit must beprepared. These details will show the current requirements, in amperes, for each phase and also assist in determining the cable sizes.

Submission of the Plans, Drawings and Specifications

PEC 2009 states that the eligibility to submit plans is as follows: - Wireman with Three Phase Restriction – Low voltage up to 60 Amperes

Selection of Control and Protection System for Electrical Wiring

Control and protection of a wiring is a system of separation/isolation and switching, together with the protection system which are needed in every domestic wiring installation.

1. **Isolation and Switching**

   Examples of isolation and switching are switches, power plugs, socketoutlets and circuit breakers. Their function is to manually connect andbreak the supply in a particular circuit without interfering with other circuits.They also

aim to prevent the danger of electrical shocks duringmaintenance, testing, fault finding and repair works.

2. Protection

This provides protection from dangers caused by electrical currents, such as over current, earth leakage current, short circuit, lightning, etc. to the wiring system, electrical equipment or consumer. The circuit below shows the isolation and protection devices which must be installed in a domestic electrical wiring system.

3. Current Protection

In general, protection from the dangers of current can be divided into two aspects, namely:

A. Overcurrent Protection (Over Load or Short Circuit)

Properly rated circuit breakers or fuses suitable for over load or short circuit protection must be used. The circuit breakers or fuses must be installed on the live conductors only. For three phase circuits, all the circuit breakers or fuses must be combined in one set of circuits. Selection of overcurrent devices must be based on the short circuit fault current levels of the circuit breaker or main switch (kA).

B. Earth Leakage Current Protection

Properly rated Residual Current Devices (RCD) must be used for protection from earth leakage currents (to prevent electric shocks).

4. Surge Protection Device (SPD)

SPDs are encouraged to be used for protection against heavy lightning strikes (lightning surge) or significant over voltages (overvoltage surge). They can be installed near the incoming supply (before the RCD).

Specification for Surge Protection Devices:

Discharge Current Rating ≥ 5 kA

Conductor Type-Copper

Minimum Conductor Cross Sectional Area-4 mm2

Connection Distance from IncomingSupply < 0.5 m

5. Selection of Wiring Cable Type

The selection of the cable size has to take into consideration:

- All wiring cables must be PVC or PVC/PVC insulated with copper conductors. Conductors with cross sectional areas of 16mm2 or less must be of copper. Aluminium conductors are not permitted.
- The selected cable must be capable of delivering the electrical

    - energy efficiently;
- The cable size allows it to carry the current without heating the cable;
- The voltage drop must not exceed 4% of the supply voltage.
- The cable insulation must be suitable for the surrounding conditionsof the installation, such as the ability to withstand the surrounding temperatures and the ability to provide mechanical protection;
- Each conductor in the installation must be protected from overcurrent by
    - means of overcurrent protection devices needed to prevent damage to the cable insulation

EARTHING OF ELECTRICAL INSTALLATIONS

Earthing

Earthing is a connection system between the metallic parts of an electrical wiring system and the general mass of the earth. This will provide an easy path with a low impedence or resistance to earth to enable the protection system to operate effectively. It will thus ensure safety to human beings/consumers from the dangers of electric shocks if earth leakage currents are present. In general, an electrical installation is earthed because of: -

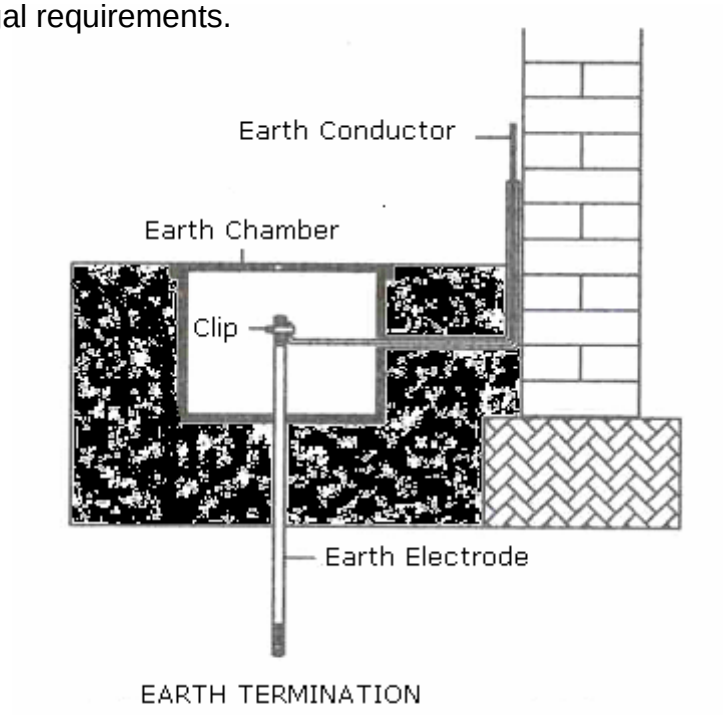
i. Safety reasons.

ii. Protection system requirements.

iii. Need to limit over voltages.

iv. Need to provide a path for electrical discharge.

v. Legal requirements.



Termination to Earth

The earth electrode is of copper jacketed steel core rod type.

Earth Electrode Resistance

The maximum permitted earth electrode resistance for different types of installations is as shown in the Table below:

a. Earth electrode for installations protected by RCDs of sensitivity 100mA - 10 ohm
b. Lightning arrestor earth electrode - 10 ohm

Testing of Electrical Wires

On completion of a wiring installation, a number of tests on the installation have to be conducted to ascertain that the wiring circuits and connected appliances are safe for use. Prior to carrying out the tests, an inspection has to be done:

1. Continuity Test;
2. Insulation Resistance Test;
3. Polarity Test;
4. Earth Electrode Resistance test; and
5. Residual Current Device Test.

D. Electrical Room

Electrical room space requirements

Basic room requirements

Minimum requirements set for the National Fire Protection Association (NFPA) in the National Electric Code (NEC) is that a person must be able to complete service duties with enclosure doors open and for two people to pass one another. If maintenance must be done at the rear of the cabinet, similar access space must be available. The NEC also requires 3 to 4 feet (1m to 1.3m) of aisle space between live electrical components of 600 volts or less, depending on whether live components are on one or both sides of the aisle. This requirement hold even if components are protected by safety enclosures or screens. Installations over 600 volts require even wider aisle space, from 3 feet (1m) to as much as 12 feet (4m) for voltages above 75kV.

Service rooms with 1,200 amps or more require two exits in case of fire or arcing. Because transformers vary, make sure minimum wall clearances are met as specified by the manufacturer. Specific rules and exceptions are spelled out by the NFPA in its recently revised NEC rules.

Controls and switchgear are best housed in a separate air-conditioned room next to the gen set with a window into the engine room. Switchgear that can't be placed in a separate room should be located to take advantage of incoming air to cool the switchgear. Consider remote option

The width should be equal to the width of the equipment and no less than 30 in., while allowing for opening any doors or hinged panels to a full 90 deg. The height should be 6 ft 6 in. from the floor, or the height of the equipment if greater than 6 ft 6 in.

Dedicated space is a zone above the electrical equipment. It's reserved to provide future access to the electrical equipment, protection of the electrical equipment from foreign systems, and for installing conduit/other raceways supporting incoming and outgoing circuits. The requirement for dedicated space applies primarily to switchgear, switchboards, panelboards, and motor control centers. The space should be equal in width and depth to the equipment size and extend from the floor to a height of 6 ft above the equipment (or to a structural ceiling, whichever is lower). No equipment or systems foreign to the electrical installation are allowed in this zone by the NEC.

The area above the dedicated space may contain foreign systems, provided proper protection prevents damage from drips, leaks, or breaks in these systems. However, it's good practice to avoid having these systems installed in electrical rooms altogether.

E. Underground connections

TRENCHING

1. The minimum cover depth for secondary service shall be 24 inches and the maximum trench depth shall be 47 inches.

2. The minimum cover required for primary, 36". The maximum trench depth for secondary or primary conductor shall be 47".

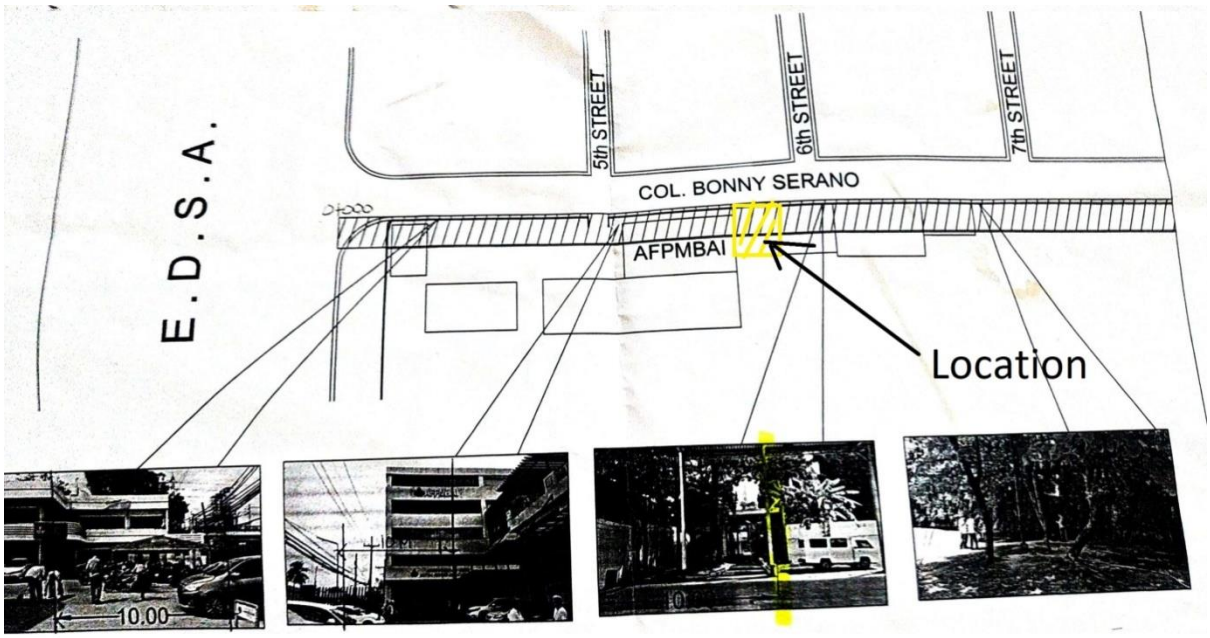
3. All secondary service conductors are to be installed in continuous conduit from the meter base

4. The bottom of the trench should be undisturbed, tamped, or relatively smooth earth. Where the excavation is in rock, the conduit should be laid on a protective layer of clean tamped backfill.

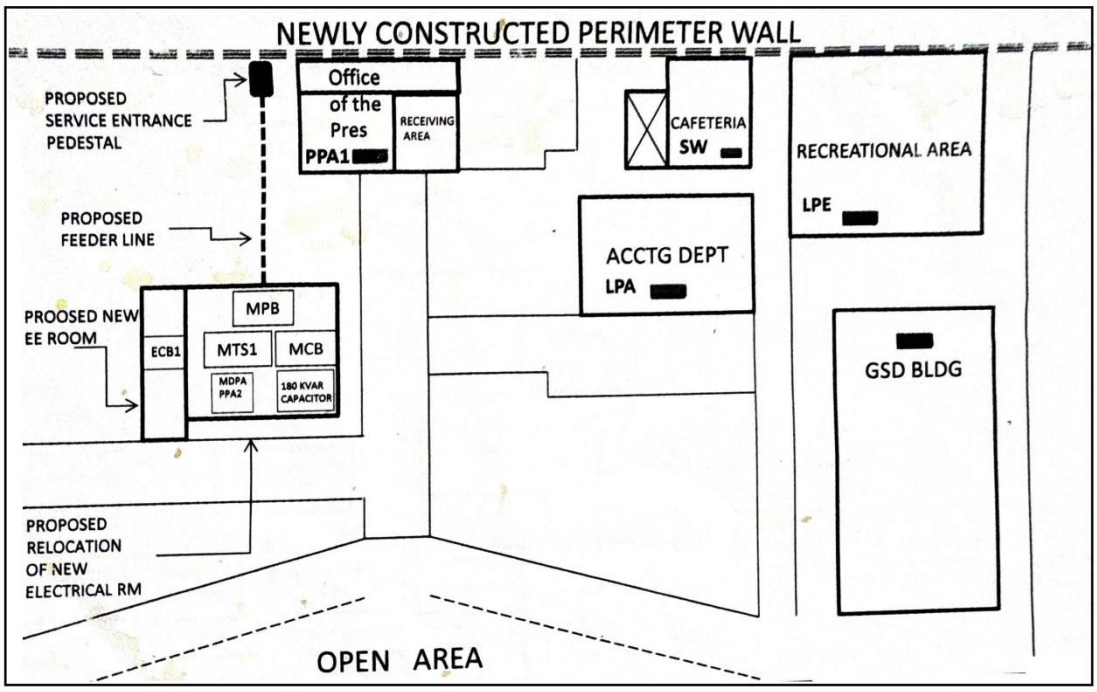
5. Backfill within 6" of the electrical conduit should be free of solid material greater than 4" maximum or sharp edges likely to damage it. The balance of backfill should be free of solid material greater than 8" in

maximum dimension. All backfill should be free of materials that may damage the conduit system (large rock or paving material, cinders, large or sharply angular substance, or corrosive material). Sand shall be required if select backfill material is not available. Select backfill or sand shall provide a 3" bedding below the conduit and a minimum cover of 3". Backfill material should be adequately compacted.

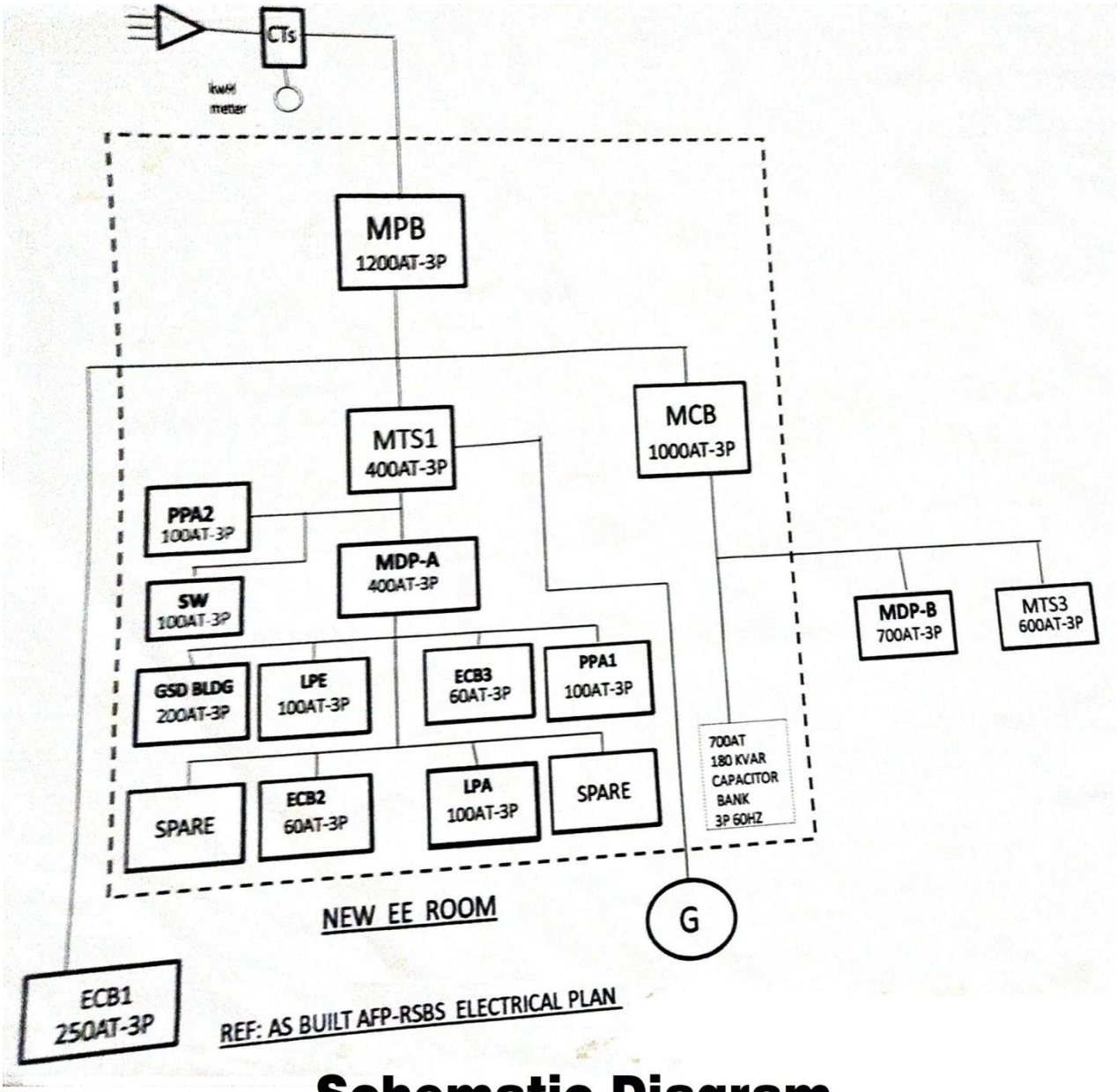
Section VII. Drawings



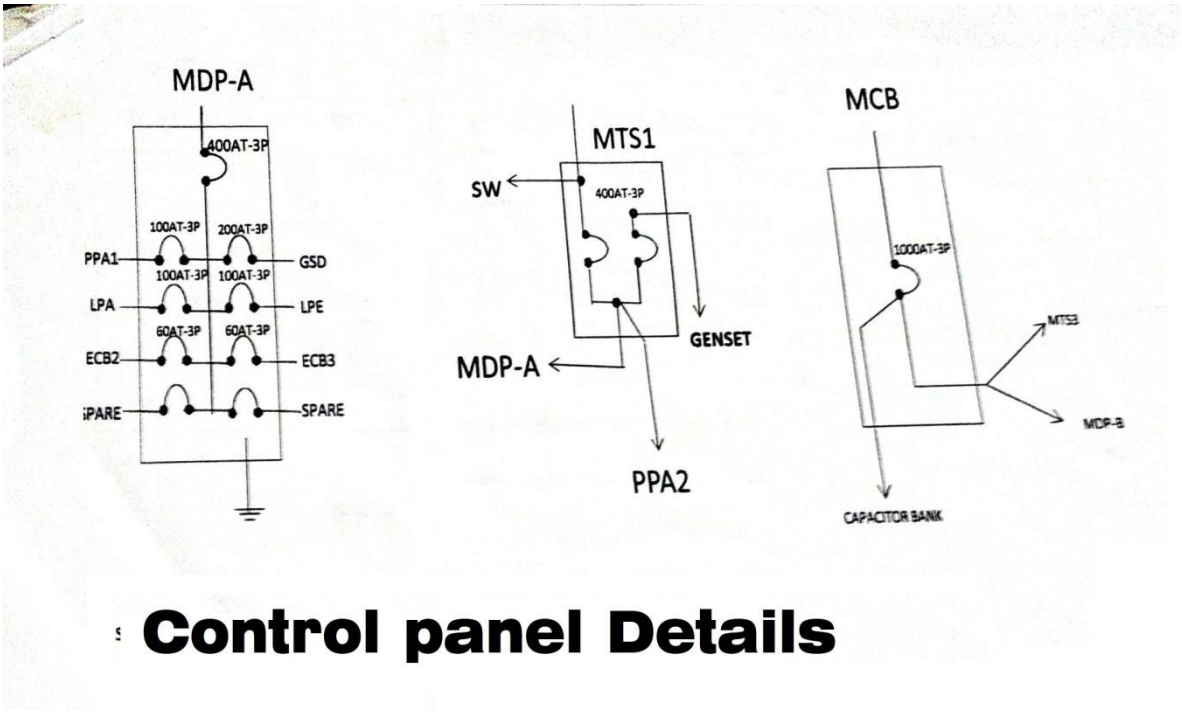
Location of Electrical Facility affected by Road Widening



Proposed Plan for Relocation of Existing Electrical Facilities affected by Road Widening



Schematic Diagram



Control panel Details

MPB 1200AT-3P 3PHASE 230V 60 HZ BOLT ON

CKT NR	DESCRIPTION	VOLTS	POLE	AMP	CKT BRKR RATING	SIZE OF WIRE	SIZE OF CONDUIT
1.	MCB	230V	3		1000AT-3P	3 sets 3 -200mm2 THHN CW 3 100mm2 THHN G	3-80mm dia PVC
2.	MTS1	230V	3		400AT-3P	3 sets –2- 80mm2THHN CW 3- 50mm2 THHN -G	3-50mm dia PVC
3.	ECB1	230V	3		250 AT-3P	3 - 125mm2 THHN CW 1 – 80 mm2 THHN G	65mm dia PVC
4.	SPARE						

USE 3 sets 4-200 mm2 THHN Cu wire in a 3-80mm dia PVC
3-125 mm2 THHN Cu wire G

MDP-A 400AT-3P 3PHASE 230V 60 HZ BOLT ON

CKT NR	DESCRIPTION	VOLTS	POLE	AMP	CKT BRKR RATING	SIZE OF WIRE	SIZE OF CONDUIT
1.	PPA1	230V	3		100AT-3P	3 - 30mm2 THHN CW 1 -14 mm2 THHN CW G	32mm dia PVC
2.	GSD	230V	3		200AT-3P	3 sets –2- 30mm2THHN CW 2- 14mm2 THHnCW G	50mm dia PVC
3.	LPA	230V	3		100AT-3P	3 - 30mm2 THHN CW 1 – 14mm2 THHn CW G	32mm dia PVC
4.	LPE	230V	3		100AT-3P	3- 30mm2 THHN 1 –14 mm2 THHN CW G	32mm dia PVC
5.	ECB2	230V	3		60AT-3P	3 - 14mm2 THHN CW 1-14 mm2 THHN CW G	25mm dai PVC
6.	ECB3	230V	3		60AT-3P	3 – 14mm2 THHN CW 1- 5.5 mm2 THHN CW G	25mm dia PVC
7,	SPARE						
8.	SPARE						

USE 3-200 mm2 THHN CW in a 80mm dia PVC
1- 125mm2 THHN CW G

REF: AS BUILT AFP-RSBS ELECTRICAL PLAN

Control Panel Details for installation

Section VIII. Bill of Quantities

PROJECT : RELOCATION OF ELECTRICAL FACILITIES DUE TO ROAD WIDENING
LOCATION : AFPRSBS OFFICE, CAMP AGUINALDO, QUEZON CITY
OWNER : AFP-RSBS
SUBJECT : B ILL OF MATERIALS & QUANTITIES (COST ESTIMATES)

ITEM		MATERIALS/DESCRIPTION	UNIT	QTY	UNIT COST (Php)	TOTAL COST (Php)
A.		**GENERAL REQUIREMENTS**				
	1	**Mobilization/Demobilization**	ls	1.00		
	2	**Bunkhouse/Temporary Facility**	ls	1.00		
	3	**Safety Provisions**	ls	1.00		
	4	**Tests and Equipment**	ls	1.00		
	5	**Temfacil and Transportation**	ls	1.00		
	6	**Miscellaneous Consumables**	ls	1.00		
	7	**Testing and Energization**	ls	1.00		
			Sub-total			
B.		**CONSTRUCTION OF NEW ELECTRICAL ROOM(with roofing)**				
	I.	**Excavation Works**	ls	1.00		
	II.	**Hauling and Disposal works**	ls	1.00		
	III.	**Footing**				
	1	16mm dia. RSB	pcs	20		
	2	Tie WIRE #16	kls	2		
	3	Cement	bags	15		
	4	Sand	load	2		
	5	Gravel	load	2		
			Sub-total			
	IV.	**Floor Slab**				
	1	12mm dia. RSB	pcs	20		
	2	10mm dia. RSB	pcs	20		
	3	Tie WIRE #16	kls	4		
	4	Cement	bags	25		
	5	Sand	load	2		
	6	Gravel	load	2		
			Sub-total			
	V.	**Walls**				
	1	CHB#5"(Exterior wall)	**pcs**	335		
	2	CHB #4"(interior wall)	pcs	150		
	3	12mm dia. RSB	pcs	15		
	4	10mm dia. RSB	pcs	20		
	5	Tie WIRE #16	kls	2		
	6	Cement	bags	5		
	7	Sand	load	2		
	8	Gravel	load	3		
	9	10mm dia. RSB	pcs	15		
			Sub-total			
	VI.	**Doors/Windows**				
	1	DOORS	set	1		
	2	windows (1mx1.2m)	set	2		
	3	windows (0.6mx0.4m)	set	2		
	4	consumables	lot	1		
			Sub-total			
	VII.	**Ceiling**				
	1	Metal furring	pcs	15		
	2	C-channel	pcs	15		
	3	wall angle	kls	10		
	4	w-clip	bags	15		
	5	blind rivit	box	2		
	6	black screw	pcs	200		
	7	Smart Board	pcs	20		
	8	gypsum tape	roll	3		
	9	gypsum patty	gal	2		
	10	boral	bags	2		
	11	consumables	lot	1		
			Sub-total			

VIII.	**Roofing**					
1	Tubular 2"x4"	pcs	10			
2	c-channel 2"x6"	pcs	5			
3	c-purlins 2"x3"	pcs	5			
4	rib-type long span(.4 Thickess)	l.m	4			
5	gutter	pcs	2			
6	flashing	pcs	2			
7	rigde roll	pcs	2			
8	consumables	lot	1			
		Sub-total				
IX.	**PLASTERING WORKS**					
1	Cement	bags	10			
2	Sand	bags	100			
		Sub-total				
X.	**FORMS**					
1	2"x3"x12' good lumber	pcs	10			
2	2"x2"x8' good lumber	pcs	10			
3	CW Nail Assorted	kls	10			
4	Concrete nail	kls	5			
5	Ordinary plywood	pcs	20			
6	Tie WIRE #16	kls	2			
		Sub-total				
XI.	**PAINTING**					
1	Flat latex	gal	4			
2	Semi gloss	gal	4			
3	thinner	bottle	2			
4	consumables	lot	1			
		Sub-total				
C. SUPPLY OF MATERIALS AND INSTALLATION OF PROPOSED AFP-RSBS ELECTRICAL WIRING RENOVATION						
I.	**INSTALLATION OF FEEDER SYSTEM**					
	PVC PIPING AND ACCESSORIES					
1.00	90 mmØ PVC pipe	lengths	15.30			
2.00	90 mmØ PVC long elbow	pcs	6.00			
3.00	90 mmØ PVC Adapter	pcs	6.00			
4.00	90 mmØ PVC End Cap	pcs	6.00			
5.00	65 mmØ PVC pipe	lengths	3.00			
6.00	65 mmØ PVC adapter	pcs	4.00			
7.00	65 mmØ PVC Elbow	pcs	3.00			
8.00	50 mmØ PVC pipe	lenghts	12.00			
9.00	50 mmØ PVC adapter	pcs	4.00			
10.00	50 mmØ PVC Elbow	pcs	4.00			
11.00	32 mmØ PVC pipe	lenghts	25.00			
12.00	32 mmØ PVC adapter	pcs	4.00			
13.00	32 mmØ PVC Elbow	pcs	4.00			
14.00	25 mmØ PVC pipe	lenghts	28.00			
15.00	25 mmØ PVC adapter	pcs	4.00			
16.00	25 mmØ PVC Elbow	pcs	4.00			
		Sub-total				
II.	**WIRES AND CABLES**					
1.00	200MM2 THHN WIRE	mtrs	#####			
2.00	100MM2 THHN WIRE	mtrs	#####			
3.00	80MM2 THHN WIRE	mtrs	20.00			
4.00	50MM2 THHN WIRE	mtrs	#####			
5.00	30MM2 THHN WIRE	mtrs	#####			
6.00	24MM2 THHN WIRE	mtrs	#####			
7.00	9.5MM2 THHN WIRE	mtrs	#####			
		Sub-total				
III.	**PANEL BOARDS**					
1.00	Pnl: MPB Model: NS1200N	Assembly	1.00			
	Main: 1200AT, 3P, 50 kaic @440V-L1					
	Moldedcase Circuit Breaker					
	- with Micrologic 2.0					
	1 set - Voltmeter w/ selector					
	1 set - Ammeter w/ selector					
	3 sets - CT'S 1200/5A					
	1lot - Extended Busbar					

	1lot - Terminal lugs				
	1 set - Pilot light , G				
	Branches:				
	1 - 1000AT, 3P, 50 Kaic @240B -I.T				
	1 -400AT, 3P, 50 Kaic @240B -I.T				
	1 - 250AT, 3P, 50 Kaic @240B -I.T				
	1 - 400AT, 3P, 40Kaic				
	1 - SPARE				
	- Moldedcase Circuit Breaker				
	- w/ grounding busbar				
	-Free Standing in NEMA-12				
	-Frame: G.I. 2.0 mmT				
	-Cover: G.I. 1.5mmT				
	- Powder coated - Wrinkled gray				
2.00	Pnl: MTS1 - 400AT	Assembly	1.00		
	Main: 2-400AT, 3P, 40kaic @240V - I.T.				
	-Moldedcase Circuit Breaker				
	-with Mechanical Interlock				
	-with common busbar				
	1 lot Terminal lugs				
	2 set - Indicator light R/G				
	-w/ grounding Boxbar				
	-Surface Mounted in NEMA-12				
	- Galvanized Iron gauges14				
	-Powder coated - Wrinkled gray				
3.00	Pol: MDP-A Model:EZC400N3400	Assembly	1.00		
	Main: 400AT, 3P, 40kalc @240V				
	-Moldedcase Circuit Breaker				
	-with Mechanical Interlock				
	Branches:				
	3-100AT, 3p, 25 Kaic@240V 4T				
	1- 200AT, 3p, 25 Kaic@240V 4T				
	3- 60AT, 3p, 25 Kaic@240V 4T				
	w/ grounding Busbar				
	-Surface Mounted in NEMA-12				
	- Galvanized Iron gauges #16				
	-Powder coated - Wrinkled gray				
4.00	Pnl: MDP Model NS1000N	Assembly	1.00		
	Main: 1000AT, 3P, 50kaic @440V - I.T				
	-Moldedcase Circuit Breaker				
	-with Micrologic 2.0				
	1 set - Voltmeter w/ selector sw				
	1 set - Anemeter w/ selector sw				
	3 set - Ct's 1000/5A				
	1 lot - Extended busbar				
	1 lot - Terminal lugs				
	1set - Pilot light, G				
	-w/ grounding Busbar				
	- Free standing in Nema-12				
	-Powder coated - Wrinkled gray				
	- Galvanized Iron gauges14				
	FrameL G.I. - 2.00 mmT				
	Cover: G.I. - 1.5 mmT				
5.00	Pol: SW/PPA2	Assembly	1.00		
	Main: 200AT, 3p, Lugs Only				
	Branches:				
	2-100AT, 3p, 25 Kaic@240V I.T				
	-Moldedcase Circuit Breaker				
	-w. grounding busbar				
	-Surface Mounted in NEMA-12				
	- Galvanized Iron gauges16				
	-Powder coated - Wrinkled gray				
6.00	Fittings and Accessories	**lot**	**1.00**		
		Sub-total			
IV,	Supply and Installation of Concrete Pedestal				
1.00	Excavation	lot	1.00		
2.00	Cement	lot	1.00		
3.00	Rebar	lot	1.00		

	4.00	Sand	lot	1.00		
			Sub-total			
	V.	Construction of Manhole and Canal Works				
	1.00	Excavation	lot	1.00		
	2.00	Cement	lot	1.00		
	3.00	Rebar	lot	1.00		
	4.00	Sand	lot	1.00		
	5.00	Chipping Works	lot	1.00		
	6.00	Restoration for path way	lot	1.00		
			Sub-total			
	VI.					
	1.00	Drafting of proposed relocation plan	lot	1.00		
	2.00	Drafting of As-Built plan	lot	1.00		
			Sub-total			
C. Reconnection of Meralco			lot	1.00		
			Sub-total			

SUMMARY / RECAPITULATION	
A. TOTAL MATERIAL COST	
B. TOTAL DIRECT COST	
C. SUB-TOTAL COST (A+B)	
D. OH, MISC (10% of C)	
E. CONTINGENCIES (10%)	
F. SUB-TOTAL REHABILITATION COST (D+E)	
G. 12% EVAT	
H. TOTAL CONSTRUCTION COST	

Section IX. Checklist of Technical and Financial Documents

Checklist of Technical and Financial Documents

I. TECHNICAL COMPONENT ENVELOPE

Class "A" Documents

Legal Documents

☐ (a) Valid PhilGEPS Registration Certificate (Platinum Membership) (all pages);

or

☐ (b) Registration certificate from Securities and Exchange Commission (SEC), Department of Trade and Industry (DTI) for sole proprietorship, or Cooperative Development Authority (CDA) for cooperatives or its equivalent document;

and

☐ (c) Mayor's or Business permit issued by the city or municipality where the principal place of business of the prospective bidder is located, or the equivalent document for Exclusive Economic Zones or Areas;

and

☐ (e) Tax clearance per E.O. No. 398, s. 2005, as finally reviewed and approved by the Bureau of Internal Revenue (BIR).

Technical Documents

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

☐ (g) Statement of the bidder's Single Largest Completed Contract (SLCC) similar to the contract to be bid, except under conditions provided under the rules; **and**

☐ (h) Philippine Contractors Accreditation Board (PCAB) License;

or

Special PCAB License in case of Joint Ventures;

and registration for the type and cost of the contract to be bid; **and**

☐ (i) Original copy of Bid Security. If in the form of a Surety Bond, submit also a certification issued by the Insurance Commission;

or

Original copy of Notarized Bid Securing Declaration; **and**

(j) Project Requirements, which shall include the following:

☐ A. Organizational chart for the contract to be bid;

☐ B. List of contractor's key personnel (*e.g.*, Project Manager, Project Engineers, Materials Engineers, and Foremen), to be assigned to the contract to be bid, with their complete qualification and experience data;

☐ C. List of contractor's major equipment units, which are owned, leased, and/or under purchase agreements, supported by proof of ownership or certification of availability of equipment from the equipment lessor/vendor for the duration of the project, as the case may be; **and**

☐ (k) Original duly signed Omnibus Sworn Statement (OSS);

and if applicable, Original Notarized Secretary's Certificate in case of a corporation, partnership, or cooperative; or Original Special Power of Attorney of all members of the joint venture giving full power and authority to its officer to sign the OSS and do acts to represent the Bidder.

Financial Documents

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

☐ (m) The prospective bidder's computation of Net Financial Contracting Capacity (NFCC).

Class "B" Documents

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

II. FINANCIAL COMPONENT ENVELOPE

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

Other documentary requirements under RA No. 9184

☐ (p) Original of duly signed Bid Prices in the Bill of Quantities; **and**

☐ (q) Duly accomplished Detailed Estimates Form, including a summary shee indicating the unit prices of construction materials, labor rates, and equipmen rentals used in coming up with the Bid; **and**

☐ (r) Cash Flow by Quarter.

Section VI. Terms of Reference

TERMS OF REFERENCE

CONSTRUCTION OF ELECTRICAL ROOM AND CONNECTIONS AFPRSBS, CAMP AGUINALDO, QUEZON CITY

10.0 Introduction

The intent of this document is to outline the requirements of this project and to solicit proposals for the PROCUREMENT OF CONSTRUCTION OF ELECTRICAL ROOM AND CONNECTIONS at the AFPRSBS Office, Camp Aguinaldo, Quezon City, in accordance with Republic Act (R.A.) No. 9184 (The Government Procurement Reform Act) and its implementing rules and Regulations.

11.0 AFPRSBS OFFICES AND ROAD WIDENING PROJECT

AFPRSBS is an established government office for more than forty-five (45) years, serving the Filipino soldiers. The Office is located inside Camp Aguinaldo, Quezon City, and Boni Serrano Avenue. A perimeter wall of Camp Aguinaldo separates the road to the Office.

Due to increasing volume of vehicles going to C5 and EDSA, the demand for transportation access of the mentioned Avenue has increased. The Department of Public Works and Highways(DPWH), the designated office for road development, procured a project, the Road Widening of Boni-Serrano Avenue. The project starts from EDSA extending Boni-Serrano Avenue exiting to Kalayaan and C5 road. The project will widen the road of ten meters (10.0m). The project will affect to the existing walls of Camp Aguinaldo.

As per evaluation of technical team of DPWH and AFPRSBS, a large area of the Office will be affected by this project. The Electrical room of AFPRSBS, which handles the day-to-day Electrical operations of the Office, will also be affected.

To provide uninterrupted electrical supply, it is recommended to provide immediate construction of electrical room and connections.

12.0 Project

- This project aims to provide rehabilitation of electrical facilities affected by road widening project. It includes the construction of new electrical room,

relocated existing wiring connection to Meralco, and reconnection/Energization of newly Installed Control Panel/Panel Boards.

13.0 Approved Budget for the Contract (ABC)

The procuring entity's Approved Budget for the Contract (ABC) is Eight Million Pesos (Php 8,000,000.00). The ABC is inclusive of the value added tax, withholding tax, and other forms of taxes that may be imposed by the Philippine government and/or concerned government agencies in relation to the procurement of a contract for Construction of Electrical room and connections, AFPRSBS Office, Camp Aguinaldo, Quezon city.

14.0 Scope of Work

PROJECT: PROCUREMENT OF CONSTRUCTION OF ELECTRICAL ROOM AND CONNECTIONS

Project Duration: Sixty (60) days

Project Cost: Php 8,000,000.00

H. General Requirements

i. Construction of warehouse with temporary perimeter covering/blue sack enclosure at least 1.50m in height. Warehouse shall store materials in room temperature. A daily monitoring sheets shall be provided for incoming supply of materials. Coordinate with the AFPRSBS Engineer for the warehouse location.
j. Owner shall provide tapping connection for Electric and Water utilities. Charges from that connection shall be charged to Contractor.
k. The Contractor shall clear the working area and warehouse from waste materials or any form of garbage.
l. A manpower monitoring check shall be submitted weekly by the Contractor to the Owner.
m. Monitoring chart of th day is required for weather and manpower verification.
n. Project Engineer of the Contractor must be available during job progression for status inquiry.
o. Secure clearance from the Ownerprior to demobilization.
p. Use of Heavy equipment is not allowed

I. Construction of new Electrical room

b. Refer to plans and specifications of new Electrical Room
b. House shall have enclose to permit water penetration

J. Supply of Materials and Installation of Electrical Wiring

c. Wirings and connection shall conform to approved electrical wiring.
d. Control Panels shall be installed as per specifications

K. Construction of New Pedestal Post

c. Construct Post as per indicated specifications
d. Installed underground utilities of electrical connection

L. Installation of Underground Utilities

d. Construct manhole and canal as underground connection for electrical connections
e. Depth should not be lower than required plans
f. Bedding on Canal and Manhole and protective cover is required

M. Meralco reconnection services

c. Reconnection of Meralco is required for rehabilitated electrical wirings and connection.
d. Meter should be checked from energization

N. Testing and Commissioning

For Control Panel and Circuit Breakers:

G. Insulation and dielectric strength tests
H. Inspection of the switchboard
I. Compliance with the installation diagram
J. Inspection of mechanical equipment
K. Mechanical operation
L. Check of electronic control units

For Electrical Wiring:

D. Continuity Test;
E. Insulation Resistance Test;
F. Polarity Test;

J. Demobilization

Secure Clearance from Procuring entity prior to demobilization

15.0 Deliverables

Constructed New Electrical room and relocated Electrical wiring.

16.0 Contract Duration

The work to be performed by the Contractor should be completed within Sixty (60) calendar days reckoned seven days after receipt of Notice to Proceed

17.0 Terms of Payment

17.1 The Terms of payment shall be as follows:

c. An initial payment equivalent to fifteen percent (15%) of the contract price shall be made within ten (10) working days after the effective date of the contract and submission by the Contractor of a Performance bond.

d. Monthly progress billing shall be submitted and processed after evaluation of work accomplishment.

17.2 All payments shall be subject to ten percent (10%) retention, expanded withholding taxes and other applicable taxes, and such other deductions as may be mutually agreed upon by both parties.

17.3 The ten percent (10%) retention shall be released by the AFP-RSBS thirty (30) days after the issuance of the Certificate of Completion and final Acceptance and submission by the Contractor of a Guarantee Bond.

18.0 Evaluation Guidelines

The selection of the winning bidder shall be based on the Lowest Calculated Responsive Bid pursuant to Section 32 under Rule IX, of the Implementing Rules and regulations of RA 9184.

Section VI. Scope of Works

AFP RETIREMENT AND SEPARATION BENEFITS SYSTEM
424 Capinpin Avenue, Camp Gen. Emilio Aguinaldo, Quezon City

SCOPE OF WORKS

PROCUREMENT OF A CONTRACT FOR THE CONSTRUCTION OF ELECTRICAL ROOM AND CONNECTIONS

1.0 General Requirements

A. Construction of warehouse with temporary perimeter covering/blue sack enclosure at least 1.50m in height. Warehouse shall store materials in room temperature. A daily monitoring sheets shall be provided for incoming supply of materials. Coordinate with the AFPRSBS Engineer for
B. the warehouse location.
C. Owner shall provide tapping connection for Electric and Water utilities. Charges from that connection shall be charged to Contractor.
The Contractor shall clear the working area and warehouse from waste materials or any form of garbage.
D. A manpower monitoring check shall be submitted weekly by the Contractor to the Owner.
E. Monitoring chart of th day is required for weather and manpower verification.
F. Project Engineer of the Contractor must be available during job progression for status inquiry.
G. Secure clearance from the Owner prior to demobilization.
H. Use of Heavy equipment is not allowed

2.0 Construction of new Electrical room

A. Refer to plans and specifications of new Electrical Room
B. House shall have enclose to permit water penetration

3.0 Supply of Materials and Installation of Electrical Wiring

A. Wirings and connection shall conform to approved electrical wiring.
B. Control Panels shall be installed as per specifications

4.0 Construction of New Pedestal Post

A. Construct Post as per indicated specifications
B. Installed underground utilities of electrical connection

5.0 Installation of Underground Utilities

A. Construct manhole and canal as underground connection for electrical connections
B. Depth should not be lower than required plans
C. Bedding on Canal and Manhole and protective cover is required

6.0 Meralco reconnection services

A. Reconnection of Meralco is required for rehabilitated electrical wirings and connection.
B. Meter should be checked from energization

7.0 Testing and Commissioning

For Control Panel and Circuit Breakers:

A. Insulation and dielectric strength tests
B. Inspection of the switchboard
C. Compliance with the installation diagram
D. Inspection of mechanical equipment
E. Mechanical operation
F. Check of electronic control units

For Electrical Wiring:

A. Continuity Test;
B. Insulation Resistance Test;
C. Polarity Test;

8.0 Demobilization

Secure Clearance from Procuring entity prior to demobilization


Republic of the Philippines
gppb
Government Procurement Policy Board