



NATIONAL POWER CORPORATION

MinGen

PHILIPPINE BIDDING DOCUMENTS

(Procurement of INFRASTRUCTURE PROJECTS)

FOR

CONSTRUCTION OF CDD OFFICE
EXTENSION (PHASE 2)

P.R. No.: MG-PDD23-002

Contracts Management Office
Logistics Division

Sixth Edition

July 2020

Rev. 2

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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 – 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



NATIONAL POWER CORPORATION

MinGen

Invitation to Bid for *Construction of CDD Office Extension (Phase 2)*

1. The *NATIONAL POWER CORPORATION-MINDANAO GENERATION*, through the *approved Corporate Budget of NPC for CY 2023* intends to apply the sum of *Six Million Nine Hundred Ninety Nine Thousand Nine Hundred Seventy Eight & 38/100 Pesos (PHP6,999,978.38)* being the Approved Budget for the Contract (ABC) to payments under the contract for *Construction of CDD Office Extension (Phase 2) at MinGen Headquarters, Maria Cristina, Iligan City (INFRA2023-CDD-005)*. Bids received in excess of the ABC shall be automatically rejected at bid opening.
2. The *NATIONAL POWER CORPORATION-MINDANAO GENERATION* now invites bids for the above Procurement Project. Completion of the Works is required *One Hundred Twenty (120) 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 *BAC Secretariat, NATIONAL POWER CORPORATION-MINDANAO GENERATION* and inspect the Bidding Documents at the address given below from *8:00 AM – 5:00 PM Monday to Friday*.
5. A complete set of Bidding Documents may be acquired by interested Bidders on *December 13, 2022 – January 04, 2023* from the given address and website(s) below and upon payment of the applicable fee for the Bidding Documents, pursuant to the latest Guidelines issued by the GPPB, in the amount of *Seven Thousand Pesos (PHP 7,000.00)*. The Procuring Entity shall allow the bidder to pay online and present its proof of payment for the fees *in person, by facsimile, or through electronic means*. *For those prospective bidders who wish to pay online, below are the details of the account:*

LandbankAccount name : NPC GENCO 5 COLLECTIONS FUND
LandbankAccount number : 0321-1689-14

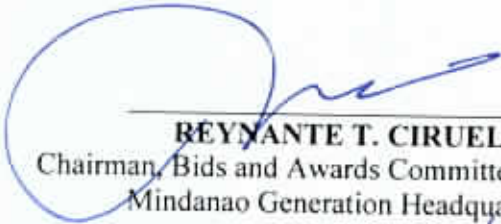
It may also be downloaded free of charge from the website of the Philippine Government Electronic Procurement System (PhilGEPS) provided that Bidders shall

- pay the applicable fee for the Bidding Documents not later than the submission of their bids.
6. The *NATIONAL POWER CORPORATION-MINDANAO GENERATION* will hold a Pre-Bid Conference on *December 23, 2022 at 9:00 AM* at *Bidding Room, NPC-Mindanao Generation Headquarters, Maria Cristina, Iligan City* and/or through videoconferencing/webcasting via *ZOOM*, which shall be open to prospective bidders. Interested online attendees are required to pre-register one (1) day before the scheduled pre-bidding conference. For pre-registration, contact tel. no. (063)-222-3459 or email logistics_afd_mingen@napocor.gov.ph.
 7. Bids must be duly received by the BAC Secretariat through manual submission at the office address as indicated below, on or before *January 04, 2023 at 9:30 AM*. 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 15.
 9. Bid opening shall be on *January 04, 2023 at 9:30 AM* at the *Bidding Room, NPC-Mindanao Generation Headquarters, Maria Cristina, Iligan City*. Bids will be opened in the presence of the bidders' representatives who choose to attend the activity.
 10. *This project requires submission of at least:*
 - *Certificate of Site Inspection*
 11. The *NATIONAL POWER CORPORATION- MINDANAO GENERATION* 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:

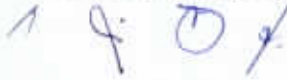
*BAC Secretariat
Contracts Management Office
Logistics Division
Mindanao Generation Headquarters
National Power Corporation
Maria Cristina, Iligan City
logistics_afd_mingen@napocor.gov.ph
Tel. No.: (063)222-3459
Fax No.: (063)223-8355/(063)223-4604
www.napocor.gov.ph*

13. You may visit the following websites:

For downloading of Bidding Documents: <https://www.philgeps.gov.ph/> or
<https://www.napocor.gov.ph/BCSD/bids.php>



REYNANTE T. CIRUELA
Chairman, Bids and Awards Committee
Mindanao Generation Headquarters



Date of PhilGEPS Publication: 13 December 2022

Section II. Instructions to Bidders

1. Scope of Bid

The Procuring Entity, **NATIONAL POWER CORPORATION-MINDANAO GENERATION** invites Bids for the **CONSTRUCTION OF CDD OFFICE EXTENSION (PHASE 2) AT MINGEN HEADQUARTER, MARIA CRISTINA, ILIGAN CITY**, with *Project Identification Number INFRA2023-CDD-005*.

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 CY 2023 in the amount of *Seven Million Pesos (PHP7,000,000.00)*
- 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 not allowed.

8. Pre-Bid Conference

The Procuring Entity will hold a pre-bid conference for this Project on the specified date and time and either at its physical address 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:*
 - 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 *One Hundred Twenty (120) Calendar Days from the Scheduled Bid Opening*. 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: Construction of Vertical Projects																					
7.1	Subcontracting is not allowed.																					
10.3	None																					
10.4	<p>The key personnel must meet the required minimum years of experience set below:</p> <table><tr><th><u>Key Personnel</u></th><th><u>General Expertise</u></th><th><u>Relevant Experience</u></th></tr><tr><td>1 - Project Engineer</td><td>Licensed Civil Engineer</td><td>At least five (5) years experience in related works</td></tr><tr><td>1 - Construction Foreman</td><td>B.S. Civil Engineering Graduate</td><td>At least three (3) years experience in similar works</td></tr><tr><td></td><td>Civil Engineering Technology Graduate</td><td>At least five (5) years experience in similar works</td></tr><tr><td></td><td>Non-graduate</td><td>At least five (5) years working experience as Construction Foreman in similar works</td></tr><tr><td>1 - Construction Safety and Health Officer (SO2)</td><td>Construction Safety Officer 2</td><td>At least forty (40) hours of Construction Safety and Health (COSH) Training from Occupational Safety and Health Center (OSHC) or Safety Training Organizations (STOs) accredited by the Department of Labor and Employment (DOLE). Must be present during the whole duration of the project)</td></tr><tr><td>2 - Welders</td><td>NC II</td><td>At least three (3) years experience in welding/cutting works</td></tr></table>	<u>Key Personnel</u>	<u>General Expertise</u>	<u>Relevant Experience</u>	1 - Project Engineer	Licensed Civil Engineer	At least five (5) years experience in related works	1 - Construction Foreman	B.S. Civil Engineering Graduate	At least three (3) years experience in similar works		Civil Engineering Technology Graduate	At least five (5) years experience in similar works		Non-graduate	At least five (5) years working experience as Construction Foreman in similar works	1 - Construction Safety and Health Officer (SO2)	Construction Safety Officer 2	At least forty (40) hours of Construction Safety and Health (COSH) Training from Occupational Safety and Health Center (OSHC) or Safety Training Organizations (STOs) accredited by the Department of Labor and Employment (DOLE). Must be present during the whole duration of the project)	2 - Welders	NC II	At least three (3) years experience in welding/cutting works
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	<table><tr><td>1 - Electrician</td><td>NC II</td><td>At least three (3) years experience in similar works</td></tr><tr><td>1 - Plumber</td><td>NC II</td><td>At least three (3) years experience in similar works</td></tr></table> <p>(1) Valid Professional Regulation Commission (PRC) license for professional personnel; (2) Certificate of Training with accreditation from DOLE for the Construction Safety & Health Officer; (3) TESDA Training Certificate (NC II) of Welders or Electrician; and (4) Diploma and/or Service Record/Certificate of Employment of previous and/or current employer for Construction Foreman, Welders, Electrician & Plumbers shall be submitted and included as an attachment in the Standard Form NPCMGNSF-INFR-05: List of Key personnel Proposed to be Assigned to the Contract.</p> <p>Project Engineer or Foreman and Construction Safety & Health Officer maybe one person, as long as he meets the requirements of the two positions. Provided however, that there is no overlapping of projects undertaken by the same contractor and supervised by the same person.</p> <p>The above key personnel must be either employed by the applicant or contracted by the applicant to be employed for the contract to be bid.</p>	1 - Electrician	NC II	At least three (3) years experience in similar works	1 - Plumber	NC II	At least three (3) years experience in similar works									
1 - Electrician	NC II	At least three (3) years experience in similar works														
1 - Plumber	NC II	At least three (3) years experience in similar works														
10.5	<p>The minimum major equipment requirements are the following:</p> <table><tr><td><u>Equipment</u></td><td><u>Capacity</u></td><td><u>Number of Units</u></td></tr><tr><td>Steel Scaffolding with comp. accessories</td><td></td><td>One (1)</td></tr><tr><td>Concrete Mixer</td><td>1-Bagger</td><td>One (1)</td></tr><tr><td>Welding Machine</td><td>300 Amp.</td><td>Two (2)</td></tr><tr><td>Cut-off Machine Metal</td><td>3 HP</td><td>One (1)</td></tr></table>	<u>Equipment</u>	<u>Capacity</u>	<u>Number of Units</u>	Steel Scaffolding with comp. accessories		One (1)	Concrete Mixer	1-Bagger	One (1)	Welding Machine	300 Amp.	Two (2)	Cut-off Machine Metal	3 HP	One (1)
<u>Equipment</u>	<u>Capacity</u>	<u>Number of Units</u>														
Steel Scaffolding with comp. accessories		One (1)														
Concrete Mixer	1-Bagger	One (1)														
Welding Machine	300 Amp.	Two (2)														
Cut-off Machine Metal	3 HP	One (1)														
12	N/A															
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 PHP139,999.57(2% of ABC), 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 PHP349,998.92(5% of ABC), if bid security is in Surety Bond.</p>															
19.2	Partial bids are allowed, as follows:															
20	<p>Additional documents to be submitted during Post-Qualification:</p> <p>1. Other appropriate licenses and permits required by law and stated in the</p>															

	<p>Bidding documents.</p> <ol style="list-style-type: none"> <i>Original Bank Statement year ending prior to bid opening;</i> <i>Valid and updated PhilGEPS Registration (Platinum Membership)(all pages);</i> <i>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;</i> <i>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;</i> <i>Valid Tax clearance per E.O. No. 398, s. 2005, as finally reviewed and approved by the Bureau of Internal Revenue (BIR). Quarterly Income Tax Returns filed and paid through the BIR Electronic Filing and Payment System (eFPS);</i> <i>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;</i> <i>Philippine Contractors Accreditation Board (PCAB) License;</i> <i>Board of Accountancy (BOA) Certificate;</i> <ol style="list-style-type: none"> <i>Contract and/or Notice of Award as supporting documents for NPC MinGen Form No. NPCMGNSF-INFR-01, if applicable;</i> <i>(a) Valid Professional Regulation Commission (PRC) license for professional personnel; (b) Certificate of Training with accreditation from DOLE for the Construction Safety & Health Officer; (c) TESDA Training Certificate (NC II) of Welders or Electrician; and (d) Diploma and/or Service Record/Certificate of Employment of previous and/or current employer for Construction Foreman, Welders, Electrician & Plumber - as supporting documents for NPC MinGen Form No. NPCMGNSF-INFR-05, if applicable,</i> <i>Certificate of Site Inspection issued by Plant/Department Manager or his authorized representative.</i>
21	<p>Additional contract documents relevant to the Project that may be required by existing laws and/or the Procuring Entity, <u>prior to contract signing</u>, such as:</p> <ol style="list-style-type: none"> Approved construction schedule and S-curve Approved manpower schedule Construction methods Approved equipment utilization schedule Construction safety and health program approved by the DOLE Approved Project Evaluation Review Technique/Critical Path Method (PERT/CPM)

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	Sectional completion is not specified.
4.1	The Procuring Entity shall give possession of the Site to the Contractor <i>on the start date.</i>
6	The site investigation reports are: NONE
7.2	Fifteen (15) years
10	Dayworks are not applicable to the contract.
11.1	The Contractor shall submit the Program of Work to the Procuring Entity's Representative <u>upon contract signing</u> or within <u>three (3) days</u> of delivery of the Notice of Award.
11.2	The amount to be withheld for late submission of an updated Program of Work is Fifty (50) % of the billed amount. The updating of Program of Work shall be done bi-monthly.
13	The amount of the advance payment is 15% of contract amount and paid in lump sum.
14	No further instruction.
15.1	The date by which operating and maintenance manuals are required is <u>upon completion of the project.</u> The date by which "as built" drawings are required is <u>upon completion of the project.</u>
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 one hundred percent (100%) of the final billing.

Section VI. Specifications



PROJECT HIGHLIGHTS

PH 1.0 GENERAL

The project is funded by NPC Mindanao Generation. This project aims to cater the number employees, Technical Document Center, Conference Room of Community Development Department.

The Contractor shall furnish all labor, materials, equipment, tools and other incidental matters necessary to complete the works in accordance with the contracts and approved detailed engineering activities; and other existing laws, rules and regulations relative thereto.

PH 2.0 PROJECT LOCATION

The project is located at NPC MinGen Headquarter, Maria Cristina, Iligan City.

PH 3.0 SCOPE OF WORK

The works and services to be performed by the Contractor for this undertaking shall essentially consist of, but not limited to the Construction of CDD Office Extension (Phase II) at NPC MinGen Headquarter, Maria Cristina, Iligan City with the following scope of works:

- I. MOBILIZATION
- II. OCCUPATIONAL SAFETY & HEALTH PROGRAM
- III. CEMENT PLASTER FINISH
- IV. ROOFING WORKS
- V. TILE WORKS
- VI. GLASS WORKS
- VII. ELECTRICAL WORKS (Installation of electrical fixtures, devices & Six (6) units 2.5hp split type aircon)
- VIII. PLUMBING WORKS (Installation of plumbing fixtures and accessories)
- IX. CANOPY, RAMP, STAIR RAILINGS, CONDENSER & SUN BUFFER
- X. CEILING WORKS
- XI. PAINTING WORKS INCLUDING WATERPROOFING OF EXTERIOR WALL
- XII. SIGNAGE
- XIII. CLEARING & DEMOBILIZATION

PH 4.0 CONTRACT PERIOD

The contractor shall complete the works as specified in Clause 3 within **One Hundred Twenty (120) calendar days**. The total contract duration is inclusive of six (6) unworkable days considered unfavorable for the execution of work at site. The contract period shall be reckoned from the date of contract effective as specified in the Notice to Proceed.

PH 5.0 CONTRACTOR'S CLASSIFICATION

The Contractor must have a valid Philippine Contractors Accreditation Board (PCAB) license of at least **Category C or D- General Building** with inter-agency registration and classification of **Small B-Building or Industrial Plant**.

The Contractor must have undertaken similar contracts that involves construction/rehabilitation/expansion of commercial, industrial or office building provided that the contract cost shall be at least equivalent to 50% of ABC.

TECHNICAL SPECIFICATIONS

TS-1.0 GENERAL CONSTRUCTION FACILITIES

Scope

This section covers the construction and/or maintenance of access roads, drainage systems and other appurtenant structures, moving-in of the Contractor's construction equipment, setting up the Contractor's camp facilities and the disposition of the Contractor's various facilities at the end of the Contract.

Moving-in

The Contractor shall bring to the site all his necessary construction equipment and plant and install all stationary construction equipment and plant at location and in the manner approved by NPC. The Contractor shall submit sufficient detailed plans showing the proposed location of such stationary equipment and plant and other pertinent data. No installation of such stationary equipment shall be undertaken unless the corresponding plans have been approved by NPC.

Contractor's Camp Facilities

The Contractor shall construct and maintain the service roads, and related work that may be necessary, to the various work area, and other areas such as access to the camps, stores, plants, disposal areas and other facilities related to the work.

The Contractor shall provide and grade his camp site, construct his camp, employee housing, warehouse, machines and repair shops, fuel storage tanks and provide such related facilities and sanitary conveniences that the Contractor deems necessary for maintaining health, peace and order in the camp and work areas. The areas that may be used by the Contractor within the plant site shall be designated by NPC.

The Contractor shall provide, maintain, and operate, under competent direction, such camps and facilities as are necessary for the housing, feeding and accommodation of his employees.

Water Supply

The Contractor shall, at his own expense, be responsible for the supply, installation, operation and maintenance of a safe and adequate supply of drinking and domestic water. Whenever there is a possibility of contamination of the water supply for drinking and domestic purposes, chlorination or some other approved methods of sterilization shall be carried out. The installation and maintenance of these services shall be subject to the approval NPC.

Sewerage Disposal and Sanitation

The Contractor shall, at his own expense, be responsible for the installation, operation and maintenance of an adequate sewerage disposal and sanitation system and shall provide adequate toilet and wash-up facilities for his employees at his camp and in the areas where work is being carried out. The Contractor shall execute the work with

due regard to adequate sanitary provisions and applicable codes and shall take all necessary steps to prevent the pollution of water in any spring, river, or other sources of water supply. All toilets or wash-up facilities shall be subject to the prior and continuing approval of NPC.

Fire Protection

The Contractor shall observe all necessary precautions against fire shall provide and maintain at his own expense, portable firefighting equipment he may deem necessary, and shall comply with all applicable laws of the Philippines relating thereto.

In the event of an uncontrollable fire occurring in the area of the Contractor's operation, the Contractor shall have to extinguish the fire immediately at his own expense, to the full extent of the manpower and equipment employed under the contract at the time of the fire.

The Contractor shall indemnify NPC against all liabilities, claims, damages and/or lawsuits arising thereto.

Construction Power

The Contractor shall be responsible for providing his own electric power supply required for construction and erection/installation. If power is available from NPC and should the contractor elect to utilise the NPC's power supply, he shall make an arrangement with NPC concerned group as to the billing rates and other requirements needed for direct connection to NPC.

Camp Security

The Contractor shall provide his own security force to the extent that he deems necessary for maintaining peace and order in the camp and work areas and to safeguard materials and equipment. Nothing under the provisions of this paragraph shall relieve the Contractor from full responsibility for the maintenance of peace and order and protection of life and property in all areas where he operates.

Construction Material Storage

The Contractor is required to put up cement warehouse (s) with capacities sufficient to store construction materials required in the work. The warehouse (s) shall be specifically for this contract notwithstanding his other facilities in the site that may serve the purpose.

Removal of Camp and Construction Facilities

After the completion of the work covered by the contract and prior to acceptance of the completed work, the entire camp facilities of the Contractor, including its water supply systems, electric distribution system, quarters, warehouses, shops, dining halls, commissaries, temporary shed and other facilities therein shall be removed by the Contractor. The site shall clear and cleaned as directed by NPC.

Measurement and Payment

No separate measurement and payment will be made for the Contractor's Construction Facilities. The entire cost thereof shall be included in the various pay items in the Bill of Quantities.

TS-2.0 CARE OF WATER DURING CONSTRUCTION

Scope

In accordance with the specifications contained in this section or otherwise directed, the Contractor shall construct and maintain all necessary temporary drainage ditches and other temporary protective works and he shall also furnish, install, maintain and operate necessary pumping equipment and other devices to protect construction operations free from water coming from any source, including rain.

Drainage and Dewatering

The Contractor shall be responsible for dewatering foundations areas so that work can be carried out on a suitably dry condition. The Contractor shall construct drainage ditches, holes, culverts, furnish, maintain and operate at his own expense all necessary pumps and other dewatering devices to keep all work areas free from water.

After the work is completed and before it is accepted by the NPC, the Contractor shall remove all pumping equipment and shall remove, fill or plug all temporary drainage structures as directed, all at his expense.

Measurement and Payment

No separate measurement and payment will be made for the Care of Water during Construction operations. The cost of furnishing, constructing, maintaining, operating and removing of temporary drainage structures, pumping systems and other dewatering devices necessary to keep construction operations free from water, shall be included in the various pay items in the Bill of Quantities for structures where such care of water is required.

TS-3.0 CONSTRUCTION SAFETY AND HEALTH PROGRAM

Scope

This section pertains to the environment and safety provisions, requirements and conditions that shall govern during the execution of all civil works under this project.

General Conditions

The Contractor shall ensure compliance with the applicable environmental and safety regulations, as well as ECC conditions, during installation/construction of this project through the implementation of measures that include, but not limited to the following:

- a. Designate a Safety Officer and a Pollution Control Officer who shall respectively handle all safety and environmental concerns of the project.
- b. Prepare and submit Construction Safety Health Plan (CSHP)
- c. Properly manage debris and various waste generated during installation/construction, such as the following:
 - Dispose of demolition and construction debris in a designated or NPC approved disposal area(s);
 - Stockpile (and cover if possible) or haul to the designated and/or pre developed dump sites that shall be provided with suitable drainage-equipped

- with sediments traps, stripped top soil, spoils from quarry/borrow sites and excavated materials
- Segregate solid wastes, such as empty cement sacks, scraps of tin or wood, used wires and other domestic garbage for recycling or storage in NPC-approved temporary storage areas and further disposal to LGU-designated disposal sites.
- Properly handle, store and dispose off, through DENR-accredited transporter/treater, hazardous waste i.e. used oils, paints, thinner and etc.
- d. Limit construction activities that generate excessive, grading and excavation during dry weather.
- e. As far as practicable, undertake site stripping, grading and excavation during dry weather.
- f. Construction/Installation shall be carried out in a manner where landslides and erosions are minimized.
- g. Avoid unnecessary opening/clearing of areas outside construction sites or destruction of vegetable cover especially cutting of existing trees; and to re-vegetate disturbed areas.
- h. Spray water, whenever and wherever necessary, to minimize dust generation.
- i. Provide PPE's and other safety provisions required by DOLE, for its project/site works.

Measurement and Payment

Measurement and payment shall be made at the contract unit price or lot price as specified in the Bid Price Schedule. Payment shall include all cost in furnishing labor, materials, tool equipment and other incidentals necessary for the satisfactory completion of the project.

TS-4.0 CEMENT PLASTER FINISH

GENERAL

This Item shall consist of furnishing all cement plaster materials integrated with cement proofing powder mix, labor, tools, and equipment required in undertaking cement plaster finish as shown on the Plans and in accordance with this specification.

MATERIAL REQUIREMENTS

Manufactured materials shall be delivered in the manufacturer's original unbroken packages or containers which are labeled plainly with the manufacturer's name and trademark.

Cement

Portland cement shall conform with the requirements as defined in Item 700, hydraulic cement.

Powdered Waterproofing Admixture for Mortar

800g, Powder Beige

Hydrated Lime

Hydrated lime shall conform with the requirements as defined in item 701, Hydrated Lime.

Fine Aggregates

Fine aggregates shall be clean, washed sharp river sand and free from dirt, clay, organic matter or other deleterious substances. Sand derived from crushed gravel or stone may be used with the NPC Engineer's approval but in no case shall such sand be derived from stone unsuitable for use as coarse aggregates.

CONSTRUCTION REQUIREMENTS

Mixture

- a) Mortar mixture for brown coat shall be freshly prepared and uniformly mixed in the proportion by volume of one part Portland Cement, three (3) parts sand and one fourth (1/4) part hydrated lime.
- b) Finish coat shall be pure Portland cement properly graded conforming to the requirements of item 700, Hydraulic cement and mixed with water to approved consistency and plasticity.
- c) Mix Ratio of water proofing: 1 bag of Powdered Water Proofing (800g) to 1 bag of Portland Cement (40kg)-1 part and 5 parts of Washed Sand.

Surface Preparation

- a) After removal of formworks reinforce concrete surfaces shall be roughened to improved adhesion of cement plaster.
- b) Surfaces to receive cement plaster shall be cleaned of all projections, dust, loose particles, grease and bond breakers. Before any application of brown coat is commenced all surfaces that are to be plastered shall be wetted thoroughly with clean water to produce a uniformly condition.

Application

- a) Brown coat mortar mix shall be applied with sufficient pressure starting from the lower portion of the surface to fill the grooved and to prevent air pockets in the reinforced concrete/masonry work and avoid mortar mix dropping. The brown coat shall be lightly broomed/ or scratched before surface had properly set and allowed to cure.
- b) Finish coat shall not be applied until after the brown coat has seasoned for seven days and corrective measures had been done by the Contractor on surfaces that are defective. Just before the application of the finish coat, the brown coat surface shall be evenly moistened with portable water. Finish coat shall be floated first to a true and even surface, then troweled in a manner that will force the mixture to penetrate into the brown coat. Surfaces applied with coat shall then be smooth with paper in a circular motion to remove trowel marks, checks and blemishes. All cement plaster finish shall be 10 mm thick minimum on vertical concrete and/or masonry walls.

Whenever indicated on the Plans to be "Simulated Red Brick Finish", the Contractor shall render brick design on plaster surface before brown coat had properly set and then allowed to dry. Cement plaster shall not be applied directly to:

- a) Concrete or masonry surface that had been coated with bituminous compound and,
- b) Surfaces that had been painted or previously plastered.

Workmanship

Cement plaster finish shall be true to details and plumb. Finish surface shall have no visible junction marks where one (1) day's work adjoins the other. Where directed by the NPC Engineer or as shown on the Plans vertical and horizontal groove joints shall be 25 mm wide and 10 mm deep.

METHOD OF MEASUREMENT

All cement plaster finish shall be measured in square meters or part thereof for work actually completed in the building.

BASIS OF PAYMENT

The work quantified and determined as provided in the Bills of Quantities shall be paid for at the Contract Unit Price which price constitutes full compensation including labor, materials, tools, and equipment and incidentals necessary to complete this item. Payment will be made per square meter.

TS-5.0 ROOFING WORKS

GENERAL

The work to be executed under this section shall include the furnishing of all labor, tools and other facilities necessary for the satisfactory performance of all work necessary to complete the works as shown on the Plans and in accordance with this specification

MATERIAL REQUIREMENTS

Manufactured materials shall be delivered in the manufacturer's original unbroken packages or containers which are labeled plainly with the manufacturer's name and trademark. All materials shall be subjected for inspection and shall be approved by NPC Inspector/Engineer before installation.

Materials to be used shall be the following but not limited to:

- 2"x4"x1.5mm Tubular
- 10x10mm Square Bar
- Ravak Roof (see approved plans details)
- 60/11 Welding rod fuji
- Teks Screw

CONSTRUCTION REQUIREMENTS

1. Before any installations begin, the Contractor shall ascertain that the top faces of the tubular are in proper alignment.
2. Correct the alignment as necessary in order to have the top faces of the tubular on an even plane.
3. Sheets shall be handled carefully to prevent damage to the paint coating. Lift all sheets or sheet packs on to the roof frame with the overlapping down-turned edge facing towards the side of the roof where installation will commence, otherwise the sheets will have to be turned end to end during installation.
4. Start roofing installation by placing the first sheet in position with the down turned edge in line with other building elements and fastened to supports as recommended.
5. Place the down-turned edge of the next sheet over the edge of the first sheet, to provide side lap and hold the side lap firmly in place. Continue the same procedure for the subsequent sheets until the whole roofing area is covered and or adopt installation procedure provided in the instruction manual for each type of molded rib profile.
6. For walling applications follow the procedure for roofing but allow a minimum end lap of 10 cm. for vertical walling.
7. End lap. In case handling or transport consideration requires to use two or more end lapped sheets to provide full length coverage for the roof run, install each line of sheets from bottom to top or from eave line to apex of roof framing. Provide 15 cm. minimum end lap.
8. For steel Frame up to 4.5 mm thick, use self-drilling screw No.12 by 3.5 cm. long hexagonal head with neoprene washer.
9. For steel support up to 5mm thick or more, use threaded cutting screw No.12 by 4.0 cm. long hexagonal head with neoprene washer.
10. For side lap fastener use self-drilling screw No. 10 by 1.6 cm. long hexagonal head with neoprene washer.
11. In cutting pre-painted steel sheets place the exposed color side down, cutting shall be carried out on the ground and not over the top of other painted roofing product.
12. Power cutting or drilling to be done or carried out on pre-painted products already installed or laid in position, the area around holes or cuts shall be masked to shield the paint from hot filings.
13. Storage and Protection. Pre-painted steel roofing, walling products and accessories should be delivered to the job site in strapped bundles.
14. Sheets and or bundles shall be neatly stacked in the ground and if left in the open it shall be protected by covering the stack materials with loose tarpaulin.

METHOD OF MEASUREMENT

Roofing shall be measured in square meters or part thereof for work actually completed in the building.

BASIS OF PAYMENT

The work quantified and determined as provided in the Bills of Quantities shall be paid for at the Contract Unit Price which price constitutes full compensation including labor, materials, tools, and equipment and incidentals necessary to complete this item. Payment will be made per square meter.

TS – 6.0 TILES WORKS

GENERAL

This item shall consist of furnishing all tiles and cementitious materials, tools, and equipment including labor required in undertaking the proper installation of walls and floor tiles as shown on the Plans and in accordance with this specification.

MATERIAL REQUIREMENTS

Materials to be used shall be the following but not limited to:

- 60cmx60cm Porcelain-Granite Floor Tiles
- 30cmx100cm Stair Tiles
- Brass Stair Nosing, 2mmx 1-1/2"x20'
- 120cmx20cm Wood Ceramic Planks Tiles (CR Walling & Flooring)
- 30cmx30cm Porcelain-Granite Tiles (Mop & Ablution)
- 90x180 Slab Counter Tiles (Lavatory)
- Aluminum Tile Trim
- 60cmx240cm Engineered Quartz Stone Counter Top (Moonstone)
- 60x60cm Outdoor Tiles
- Cement shall be Portland conforming to the specification requirements defined in Item 700, Hydraulic Cement of DPWH Standard Specifications for Highways, Bridges and Airports 2012 revised edition.
- Washed Sand shall be well-graded fine aggregate clean river sand, free from soluble salts and organic impurities.
- Floor Tile Adhesive
- Wall Tile Adhesive (Heavy Duty), 25kg
- Tile Grout

CONSTRUCTION REQUIREMENTS

Tile work shall not be started until roughing-ins for plumbing, electrical and other trades have been completed and tested. The work of all other trades shall be protected from damage.

Surface Preparation

- a) Mortar mix for scratch coat and setting bed shall consist of one part Portland cement and three parts sand by volume. Surface to receive tile must be level, true to elevation, dry, 14 free from dirt, oil and other ointments. Allow at least seven days curing of scratch coat

and setting bed. Installation work shall not be allowed to proceed until unsatisfactory conditions are corrected.

- b) Bond coat shall be Floor Tile Adhesive.
- c) Thoroughly dampen surfaces of masonry or concrete walls before scratch coat is applied.
- d) On masonry or concrete surface, first apply a thin coat with pressure, then bring it out sufficiently to compensate for the major irregularities of the surface to a thickness not less than 10 mm at any point.
- e) Evenly scratch coat to provide good mechanical key before the mortar mix has fully hardened.

Installation Procedure

Tiles shall be soaked in clean water prior to installation for a minimum of one hour.

120cmx20cm Wood Ceramic Planks Tiles

- a) Determine and mark layout of ceramic tiles, joint location, position of trims and fixture so as to minimized cut less than one-half tile in size.
- b) Thoroughly dampen surface of wall but do not saturate surface.
- c) Apply a Wall Tile Adhesive (Heavy Duty) with consistency of cream paste 1.5 mm thick to the wall surface or back of the tile to be laid.
- d) Lay the tiles true to profile then exert pressure and tamp tile surface before the bond coat mix has initially set.
- e) Continue with the next full tile to be laid and press firmly upon the setting bed tamped until flush and in place of other tiles.
- f) Intersections and returns shall be formed accurately using the appropriate trims.
- g) All tiles shall be kept straight and true to profiles, plumbed and internal corners rounded using the appropriate trims.

Floor Tiles (Outdoor, Indoor & Stair)

- a) Before tile is applied, the floor surface shall be tested for levelness or uniformity of slope by flooding with water.
- b) Established lines of borders and center of the walls at the fieldwork in both directions to permit the pattern to be laid with a minimum of cut tiles.
- c) Clean concrete subfloor, then moisten but do not soak. Then sprinkle dry cement over the surface and spread the mortar on the setting bed.
- d) Apply and spread mortar mix for setting bed and tamp to assure good bond over the entire area to be laid with tile.
- e) Pitch floor to drain as shown on Plans or as directed by the Engineer.
- f) Allow the setting bed to set sufficiently to be worked over then spread a bond coat over the surface before the tile is laid.

Grouting and Pointing

- a) Tiles shall have laid in place for at least 24 hours before grouting of the joints is started. Grouting mortar shall be white Portland cement or blended with pigments to acquire the color appropriate for the ceramic tile.
- b) Grouting mortar shall be applied over the tile by float or squeegee stroke diagonally across the joints. Remove excess mortar with a wet sponge stroke diagonally or in a circular motion after 12 – 15 minutes. Follow with a barely damp or dry sponge to remove remaining haze while smoothing all grouted joints.

Cleaning

- a) Clean ceramic tile surfaces thoroughly as possible upon completion of grouting.
- b) Remove all grout haze, observing tile manufacturer's recommendation as to use of acid or chemical cleaners.
- c) Rinse tile thoroughly with clean water before and after using chemical cleaners.
- d) Polish surface of tile with soft cloth.

Protection from Construction Dirt

- a) Apply a protective coat of neutral cleanser solution diluted with water in the proportion of 1:4 or 1 liter cleanser concentrate to 1 gallon water.
- b) In addition, cover tile flooring with heavy-duty non-staining construction paper, tape in place.
- c) Just before final acceptance of the work, remove paper and rinse protective coat of neutral cleaner from tile surface. Do not let protective paper get torn or removed.

METHOD OF MEASUREMENT

Tiles Works shall be measured in square meters or part thereof for work actually completed in the building.

BASIS OF PAYMENT

The work quantified and determined as provided in the Bills of Quantities shall be paid for at the Contract Unit Price which price constitutes full compensation including labor, materials, tools, and equipment and incidentals necessary to complete this item. Payment will be made per square meter.

TS-7.0 GLASS WORKS

GENERAL

The work under this Section shall include all labor, materials, hardware, equipment, and other facilities and the satisfactory performance of all work necessary to complete all glass walls, windows and doors shown on the Drawings and as specified herein.

MATERIAL REQUIREMENTS

Materials to be used shall be the following but not limited to:

Tempered Glass

- Kind FT, Fully Tempered Glass shall have minimum surface compression of 69MPa (10000 psi) or an edge compression of not less than 67Mpa (9700 psi)
- Thickness = 10mm. (partition, sliding doors and swing type doors)
- Break Test Requirement for Kind FT Glass
- Test and interpret in accordance with ANSI Z97.1

CONSTRUCTION REQUIREMENTS

Installation

- Safety precaution and procedure shall be taken in determining the sizes and providing the required clearances by measuring the actual opening to receive the glass. Movable items shall be kept in closed and locked position until glazing has thoroughly set.
- Set glass in aluminum frames of interior partitions in felt channel insets or edded in putty to prevent any rattle.
- Glass breakage caused in executing the work or by faulty installation shall be replaced by the contractor without extra cost.
- Improperly set glass which does not fully meet the requirements of its grade shall not be accepted and shall be replaced without extra cost.
- Putty shall be neatly run in straight lines parallel with inside of glazing rebate; corners shall be carefully made; all excess putty shall be removed and surfaces left clean.
- Clean all glass on both sides after putty has been applied completely. Do not disturb edge of putty with scrapper. At completion of work leave glass and glazing works free from cracks and rattles and clean on both sides.
- The contractor shall submit for approval duplicates sample (150mm. x 250mm.) of each type of glass bearing manufacturer's label and a can of each type of putty.

BASIS OF PAYMENT

Pay Item Number	Description	Unit Measurement
5.0	Glass and Glazing (Tempered Glass Partition, Windows, Doors, Glass & Steel Railings)	L.S.

TS-8.0 ELECTRICAL WORKS

GENERAL

The work to be undertaken here under includes the furnishing of all labor, materials, equipment, tools and supervision to the project and to be completed the good working condition of the electrical system for the proposed building. Wiring, Panel Board

All works here under shall comply with the requirement of the latest edition of the National Electrical Code of the Philippines and the Rules and Regulations of the ILPI.

Comply also with the latest applicable provision and latest recommendation of the following:

- a) Philippine Electrical Code (PEC)
- b) Illuminating Engineering Society (IES)
- c) National Electrical Manufacturers Association (NEMA)

MATERIALS and WORKMANSHIP

All materials shall be unused brand new and shall conform with the standard of the underwriter laboratories in every case where such a standard has been established for the particular type of materials to be installed.

SERVICE ENTRANCE

Service entrance shall be 220-250 volts, single phase, 2 wires, 60 cycles as indicated in the plan. The service entrance installation shall be part of the electrical works as indicated therein. The service entrance conduit and accessories shall be installed in the nearest power source up to service entrance cap and the work shall be done in accordance with the latest specification required by Electric Company.

DISTRIBUTION SYSTEM

The distribution system shall be 2 wire, 220 volts.

SWITCHES

- 1. Specification grade, flush mounting, quiet-operating AC type, with toggle operator, heat-resistant plastic housing and self-grounding metal strap. Silver alloy contact. Rated 16A at 250V and capable of full capacity on tungsten or fluorescent lamp load. Design for side or back wiring with up to AWG NO. 10 (5.5mm²) wire.
- 2. Single-pole, double-pole, 3-way, pilot or keyed type, as indicated on Drawings or required.
- 3. Red, illuminated toggle type for switches controlling lighting connected to emergency power system (illuminated when switch is in off position). 4
- 4. 3-position, momentary-contact, center-off type to match other switches for switches controlling lighting by way of low-voltage lighting control relays.
- 5. Color and type of devices shall be as selected by NPC Engineer/Inspector.

RECEPTACLE OUTLETS

- 1. Two-pole, three-wire, grounding, NEMA 5-20R and ANSI standard type, specification grade, with bronze contacts that accept plug with two parallel blades and one grounding blade. Heat-resistant plastic enclosure with nylon face. Two grounding screws. Break-off terminals for 2-circuit wiring. Rated 16 amperes at 250-volt electrical alternating current.

2. Color and type of devices shall be as selected by Architect or Project manager.
3. Ground fault circuit interrupters to interrupt leakage currents between 4-6M.A. having a maximum circuit current of 20 amperes. Employ feed through or non-feed through devices as indicated or as required.
4. Isolated ground receptacles to be same as duplex convenience receptacles but to have grounding which is isolated from mounting strap and any other path to ground, and marking on face to indicate isolated ground.

COVER PLATES

1. Provide cover plates for wall receptacles, outlets, and switches of 302 stainless steel with satin finish, unless otherwise noted. When two or more switches or devices are shown in one location, mount under a common plate.
2. Cast aluminum metal cover plate with fiber shield and spring loaded cover for exterior switches and those in mechanical rooms which act as plenums.
3. Cast aluminum metal plate with stainless steel spring-loaded, gasketed, double flap lift cover to remain locked in either open or closed position for exterior receptacles and those in mechanical rooms which act as plenums.
4. Plate cover shall be as by same manufacturer as device utilized.

ELECTRICAL LIGHTING FIXTURES

a) Pin light

LED lamp with diamond design reflector white ceiling rim recessed mounted or round LED panel light white 6-24w power variant, shall be low maintenance, rust proof, highly efficient, longer life span, environmentally friendly, less power consumption.

b) Cove lighting

Waterproof flexible strip lights warm white 12-24w power consumption, dimension 5000 x 8 x 2.4mm.

- c) Use approved quality brand for the entire led lights and slim tube led type or another equivalent brand approved by Electrical Engineer.

SUPPLY & INSTALLATION OF AIR CONDITIONING UNITS

Supply and installation of Six (6) units 2.5TR Super inverter wall mounted air conditioning including other works needed like coring, restoration and waterproofing/and application of sealant to the cored area with fire retardant sealant.

BASIS OF PAYMENT

Pay Item Number	Description	Unit Measurement
6.0	Installation of Switches, Outlets, Pin & Cove Lights an Six (6) Units Split Type Aircon	L.S.

TS-9.0 INSTALLATION OF PLUMBING FIXTURES & ACCESSORIES

GENERAL

The work covered by this section of the specifications consists in furnishing all plants, labor, equipment, and tools articles, appliances and materials, and in performing all operations in connection with the installation of all plumbing fixtures, fittings and accessories complete in strict. Accord this section of the specifications and the applicable drawings, and subject to the term and conditions of the contract.

All plumbing fixtures, fittings, accessories, materials and all work obviously necessary for the proper functioning of all installations, whether or not specifically called for in the specifications or indicated on drawings, pre-included in this work.

MATERIAL REQUIREMENTS

Materials to be used shall be the following but not limited to:

- Seamless Water Closet with stainless Bidet spray
- Two-way Stainless Faucet with Bidet Spray
- Automatic Sensor Tissue Dispenser
- Counter top Lavatory with sensor type faucet and complete accessories
- Pedestal lavatory with sensor faucet and complete accessories
- Urinal
- Stainless Kitchen Sink with complete accessories
- 1/2' thk. Phenolic w/ PVC Coated Urinal Partition (see details)
- Floor Drain
- Vanity Mirror with strip light
- Water Line Pipe with fixtures
- Wastewater Line Pipe with fixtures
- Aluminum Cabinet under Lavatory & Pantry (see details)

PLUMBING FIXTURES AND FITTINGS

All fittings and trimmings for fixtures shall be chromium-plated and polished brass unless otherwise approved. Exposed traps and supply pipes for fixtures shall be connected to the rough in, piping system at the wall unless otherwise indicated on the Plans. Built-in fixtures shall be watertight with provision of water supply and drainage outlet, fittings and trap seal. Unless otherwise specified, all plumbing fixtures shall be made of vitreous china complete with fittings.

Water closet shall be vitreous china, free standing toilet combination, round front bottom outlet siphonic washdown bowl with extended rear self and closed coupled tank with cover complete with fittings and mounting accessories. Model make and color shall be submitted for approval prior to delivery at jobsite by the Engineer.

Lavatory shall be vitreous china, wall-hung with rear overflow and cast-in soap dishes, pocket hanger with integral china brackets, complete with twin faucets, supply pipes, P-trap and mounting accessories. Where indicated on the Plans to be counter top model make and color shall be approved by the Engineer. 1002.2.6

Grab bars shall be made of tubular stainless-steel pipe provided with safety grip and mounting flange.

Floor drains shall be made of stainless-steel beehive type, measuring 100mm x 100mm, and provided with detachable stainless strainer, expanded metal lath type.

Toilet paper holder shall be vitreous china wall mounted. Color shall be reconciled with the adjacent fixture and facing tiles.

Faucet(s) shall be made of stainless steel for interior use.

Hose-bib(s) shall be made of bronze cast finish.

INSTALLATION REQUIREMENTS

FIXTURES, EQUIPMENT AND FASTENINGS

- a) All fixtures and equipment shall be supported and fastened in a safe and satisfactory workmanship as practiced.
- b) All fixtures, where required to be wall mounted on concrete or concrete hollow block wall, fasten with brass expansion bolts. Expansion bolts shall be 6mm diameter with 20mm threads to 25mm into solid concrete, fitted with loose tubing or sleeves of proper length to acquire extreme rigidity.
- c) Inserts shall be securely anchored and properly flushed into the walls. Inserts shall be concealed and rigid. d. Bolts and nuts shall be horizontal and exposed. It shall be provided with washers and chromium plate finish.

PIPE HANGERS, INSERTS AND SUPPORTS

- a) Pipe hangers shall be wrought iron or malleable iron pipe spaced not more than 3m apart for horizontal runs or pipe, except hub and spigot soil pipe which shall have hanger spaced not over 1.5 m apart located near the hub.
- b) Chains, straps perforated turn-buckles or other approved means of adjustment except the turnbuckles may be omitted for hangers on soil or waste lines or individual toilet rooms to maintain stacks when spaced does not permit.
- c) Trapeze hangers may be used in lieu of separate hangers on pipe running parallel to and close to each other. 15 Provision of Additional Pre-Fab Isolation Rooms

- d) Insert shall be cast steel and shall be of type to receive a machine bolt or nut after installation. Insert may be permitted adjustment of the bolts in one horizontal direction and shall be installed before pouring of concrete.
- e) Wrought iron clamps or collars to support vertical runs of pipe shall be placed not more than 6m apart for as indicated on the Plans.

PLATES AND FLASHING

- a) Plates to cover exposed pipes passing through floor finished walls or ceiling shall be fitted with chromium plated cast brass plates or chromium plated cast iron or steel plates on ferrous pipes.
- b) Plates shall be large enough to cover and lose the hole around the area where pipes pass. It shall be properly installed to insure permanence.
- c) Roof areas penetrated by vent pipes shall be rendered watertight by lead sheet flashing. It shall extend at least 150mm above the pipe and 300mm along the roof.

PROTECTION AND CLEANING

- a) During installation of fixtures and accessories and until final acceptance, protect items with strippable plastic or other approved means to maintain fixtures in perfect conditions.
- b) All exposed metal surfaces shall be polished clean and rigid of grease, dirt or other foreign materials upon completion
- c) Upon completion, through clean all fixtures and accessories to leave the work in polished condition.

INSPECTION, WARRANTY TEST AND DISINFECTION

All pipes, fittings, traps, fixtures, appurtenance and equipment of the plumbing and drainage system shall be inspected and approved by the NPC Engineer to insure compliance with all requirements of all Codes and Regulations referred to this Specification.

DRAINAGE SYSTEM TEST

- a) The entire drainage and venting system shall have all necessary openings which can be plugged to permit the entire system to be filled with water to the level of the highest stack vent above the roof.
- b) The system shall hold this water for a full 30 minutes during which time there shall be no drop greater than 102mm.
- c) Where only a portion of the system is to be tested, the test shall be conducted in the same manner as described for the entire system except that a vertical stack 3.00 m highest horizontal line to be tested may be installed and filled with water to maintain sufficient pressure or water pump may be used to supply the required pressure.

- d) If and when the NPC Engineer decides that an additional test is needed, such as an air to smoke test on the drainage system, the Contractor shall perform such test without any additional cost.

WATER TEST ON SYSTEM

- a) Upon completion of the rough-in and before connecting fixtures the entire cold water piping system shall be tested at a hydrostatic pressure $1 \frac{1}{2}$ times the expected working pressure in the system during operation and remained tight and leak-proofed.
- b) Where piping system is to be concealed the piping system shall be separately in manner similar to that described for the entire system and in the presence of the NPC Engineer or his duly designated representative.

DEFECTIVE WORKS

- a) All defective materials replaced and tested will be repeated until satisfactory performance is attained.
- b) Any material replaced for the satisfactory performance of the system made shall be at the expense of the Contractor.
- c) Caulking of screwed joints or holes will not be permitted.

DISINFECTION

- a) The entire water distribution system shall be thoroughly flushed and treated with chlorine before it is operated for public use.
- b) Disinfection materials shall be liquid chlorine or hypochlorite and shall be introduced in a manner approved as prescribed or approved by the NPC Engineer into the water distribution system.
- c) After a contact period of not less than sixteen hours, the heavily chlorinated water shall be flushed from the system with portable water.
- d) Valves for the water distribution system shall be opened and closed several times during the 16 hours chlorination treatment is done.

AS-BUILT DRAWINGS

Upon completion of the work, the Contractor shall submit two sets of prints with all as-built changes shown on the drawings in a neat workmanship manner. Such prints shall show changes or actual installation and conditions of the plumbing system in comparison with the original drawings.

METHOD OF MEASUREMENT

The work done under this Item shall be quantified L.S. as provided in the Bill of Quantities, tested and accepted to the satisfaction of the Engineer.

BASIS OF PAYMENT

The quantified items, installed in place shall be the basis for payment, based from the unit bid price for which prices and payments shall constitute full compensation including labor, materials and incidentals necessary to complete this item.

TS-10.0 CANOPY, RAMP, STAIR RAILINGS, CONDENSER & SUN BUFFER

GENERAL

The work includes the furnishing of all labor, materials, equipment and other incidentals necessary for the fabrication and installation concrete canopy, ramp, stair railings, condenser & sun buffer and other miscellaneous metal works as specified in relevant items of these specifications and as indicated on the drawings.

MATERIAL REQUIREMENTS

Materials to be used shall be the following but not limited to:

- a) Concrete Canopy:
 - Portland Cement
 - Washed Sand
 - Washed Gravel
 - 10mm dia. DSB
 - 1/2" thk. Marine Plywood
 - Form Lumber
 - Assorted CWN
- b) Steel Railings, Condenser & Sun Buffer:
 - 50mm dia. Stainless Pipe Handrails
 - 6mm thk. Tempered Glass with Complete Accessories
 - 2"x3"x1.5mm Stainless Tubular Steel, 4'
 - 4"x2"x1.5mm thk. Rec Tube
 - 100mmx3mm thk. Flat Bar
 - 50mmx50mmx3mm thk. Angle Bar
 - 60/11 Welding rod fuji
 - Welding Rod fo stainless
- c) All steel and deformed bars shall be painted with Epoxy Gray.
- d) All arc-welding electrodes shall conform to the requirements of the American Welding Society "SPECIFICATIONS FOR IRON AND STEEL ARC_WELDING ELECTRODES" latest edition.

CONSTRUCTION REQUIREMENTS

Concrete Works & Reinforcing Steel bars shall comply with the requirements in Structural Concrete of Works of the Technical Specifications of Construction of CDD Office Extension (Phase 1).

EXECUTION (WELDING)

Qualification Steel Fabricator

WELDING

a) General

All welders, welding operators and tackers to be employed on the Works shall have been qualified by tests prescribed by the Structural Welding Code of American Welding Society (AWS D1).

Before the work is started the welding procedure of each type of joint shall be approved by the Engineer and the Contractor shall make such trial welds and tests as required for the proposed method.

b) Equipment

Machine welding shall be used wherever possible. All shop welds shall be carried out by qualified operators under proper supervision. The work shall be properly prepared for welding and the correct sequence adhered to.

All site welding shall be carried out by the electric arc process, with coated electrodes. The welding plant shall be of modern design and with ample capacity to provide the required current to each welding point without appreciable fluctuations.

c) Welding Material

The Contractor shall employ only welding electrodes, welding wire and fluxes capable of producing satisfactory welds when used by qualified welders or welding operators using qualified welding procedures. Filler metals for welding may be any or combination of the following:

Welding	Electrode	Submerged Arc Process
A-7 to A-7	E- 60 Series	Grade SAW-2
A-7 to A-36	E- 60 Series	Grade SAW-2
A-36 to A-36	E- 60 Series	Grade SAW-2

d) Welded Construction

Welded connection shall be permitted only where indicated on the approved shop drawings. Welded construction shall conform to the following:

1. Surfaces to be welded shall be free from loose scale, slag, rust, grease, paint and any other foreign materials except that mill scale which withstands vigorous wire brushing

may remain. Joint surfaces shall be free from fins and tears. Preparation of edges by gas cutting shall, wherever practicable, be done by a mechanically guided torch.

2. Parts to be fillet welded shall be brought in as close contact as practicable and in no event shall be separated by more than 4.75 mm. If the separation is 1.6 mm or greater, the size of the filler welds shall be increased by the amount of the separation. The separation between facing surfaces of lap joints and the butt joints on a backing structure shall not exceed 1.6 mm. The fit of joints at contact surfaces which are not completely sealed by welds shall be close enough to exclude water after painting.
3. Abutting parts to be butt welded shall be carefully aligned. Misalignments greater than 3.2 mm shall be corrected and in making the correction, the part shall not be drawn into a sharper slope than 2 degrees. Prior to welding, all parts shall be held securely in position by tack welds, clamps or other means.
4. The work shall be positioned for flat welding whenever practicable.
5. The technique of welding employed, the appearance and quality of welds made, and the methods used in correcting defective work shall conform to Section 4 - Workmanship, of the Standard Code for Arc and Gas Welding in Building Construction of the American Welding Society.

FABRICATION

The Contractor shall fabricate structural steel in the shop to the greatest extent possible for transporting in accordance with AISC Building Code with the modifications and additional requirements specified in this section.

Bolted or welded connections shall be provided whether constructed in the shop or in the field as shown on the drawings or as approved by the Engineer. High strength threaded fasteners for all bolted connections shall be used unless otherwise shown on the drawings or approved by the NPC Engineer.

Connections shall be as shown on the drawings or as approved by the Engineer. Holes shall be cut, drilled, or punched at right angles to the surface of the metal and shall not be made or enlarged by burning. Draw allowance shall be made for draw in all tension bracing.

All sharp edges and corners be ground to a minimum radius of 1 mm and all sharp irregularities, burrs, slag and spatters on welds shall be removed.

Bearing plates shall be provided under beams resting on concrete walls.

TEST AND INSPECTION

Welds shall be inspected visually. A min. 10% of all butt welds and a min. 5% of all fillet welds to be designated by the Engineer shall be examined by radiographic, liquid penetrant, magnetic particle or ultrasonic method, alone or in combination to determine conformance to the acceptance specified herein. All testing shall be performed by an approved testing agency performed in the presence of the NPC Engineer. All tests shall be certified and submitted to the NPC Engineer.

Delivery to Site

Anchor bolts and other anchorage devices which are to be embedded in cast-in-place concrete construction shall be delivered to site before the start of the said work.

The Contractor shall number in accordance with shop drawings the materials tested and approved by the Engineer before delivery to the site, and prepare a list showing number, size, quality and quantities of materials.

Material shall be transported in accordance with material list and transportation schedule approved by the NPC Engineer.

Materials shall be protected to prevent damage during transportation. The Contractor shall package and label small parts such as bolts and rivets.

Galvanizing

Galvanizing, where called for, shall conform to the requirements of ASTM A 123. The required weight of the zinc coating for each type of material category with corresponding range of thickness is shown below in compliance with ASTM A 123.

Minimum Average Coating Thickness Grade by Material Category

Materials Category	All Specimens Tested (Steel Thickness Range (Measured), in. (mm))				
	<1/16 (<1.6)	1/16 to < 1/8 (1.6 to <3.2)	1/8 to <3/16 (3.2 to 4.8)	>3/16 to <1/4 (>4.8 to <6.4)	≥1/4 (≥6.4)
Structural Shapes & Plate	45	65	75	85	100
Strip & Bar	45	65	75	85	100
Pipe & Tubing	45	45	75	75	75
Wire	35	50	60	65	80

Coating Thickness Grade

Coating Grade	mils	Oz/ft ²	µm	g/m ²
35	1.4	0.8	35	245
45	1.8	1	45	320
50	2	1.2	50	355
55	2.2	1.3	55	390
60	2.4	1.4	60	425
65	2.4	1.5	65	460
75	3	1.7	75	530
80	3.1	1.9	80	565
85	3.3	2	85	600
100	3.9	2.3	100	705

Conversion Factors
Mils = µm x 0.03937
Oz/ft² = µm x 0.02316
g/m² = µm x 7.067

MEASUREMENT AND PAYMENT

Measurement and payment shall be made at the contract unit price or lot price as specified in the Bill of Quantities. Payment shall include all cost in furnishing labor, materials, tools, equipment and other incidentals necessary for the satisfactory completion of the project.

TS-11.0 CEILING WORKS

GENERAL SCOPE

This specification covers the furnishing of materials and labor including equipment necessary to complete the installation of fiber cement board panels/ceiling as shown on the drawings and as specified herein.

MATERIALS REQUIREMENT

1. FIBER CEMENT BOARD

Shall be Fiber Cement Sheets, Auto-cleaved, single faced sheets containing Portland cement, ground sand, cellulose fiber and water. Fiber Cement sheets shall be manufactured from asbestos-free materials.

- a. 3.5 mm thick for ceiling
- b. Composition: Fiber cement board shall be asbestos free, fiber-reinforced cement sheets.
- c. Density: 1380 kg/m³ minimum

2. STEEL FRAMING

Metal Furring: Ga. 25 minimum thickness of uncoated metal galvanized C-shaped or as otherwise indicated.

3. FASTENERS

- a. Provide fasteners of type, material size, corrosion resistance, holding power and other properties required for fastening furring and framing members to substrates indicated.
- b. Trim Accessories: Provide metal trims accessories of profile and materials as shown on the drawings, or as otherwise required by the NPC Engineer.

4. MISCELLANEOUS FRAMING AND SUPPORTS

- a. General: Provide steel framing and supports for applications indicated.
- b. Fabricate units to sizes, shapes, and profiles indicated and required to receive adjacent other construction retained by framing and supports. Fabricate from structural steel shapes, plates and steel bars of welded construction using mitered joints for field connection. Cut, drill, and tap units to receive hardware, hangers, and similar items.

(1) Equip units with integrally welded anchors for casting into concrete or building into masonry. Furnish insert, if units must be installed after concrete is placed.

- (2) Except as otherwise indicated, space anchors at 600 mm O.C. and provides minimum anchor units in the form of steel straps 32 mm wide by 6 mm by 200 mm long.

MISCELLANEOUS MATERIALS

- a. General: Provide auxiliary materials for fiber cement board construction, which comply with reference standards and the recommendations of the manufacturer of the fiber cement board.
- b. Fastening Adhesive for Metal: Special adhesive recommended by manufacturer.
- c. Screws: As per recommendation by manufacturer.
- d. Bedding and Topping Cement: As per recommendation by manufacturer.
- e. Perforated Paper Reinforcing Tape: As per recommendation by manufacturer.
- f. Trim Accessories: Provide galvanized steel edge corner and joint trims as shown or otherwise required by the NPC Engineer as standard details.

EXECUTION

EXAMINATION

- a. Examine substrates to which fiber cement panel construction attaches or abuts, preset hollow metal frames, cast-in anchors, and structural framing, with installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of fiber cement panel construction. Do not proceed with installation until unsatisfactory conditions have been corrected.

PREPARATION

- a. General: Follow specifications of manufacturer.

INSTALLATION OF STEEL FRAMING GENERAL

- a. General: Follow specification by manufacturer.
- b. Install supplementary framing, blocking and bracing at terminations in the work and for support of fixture, equipment services, heavy trim, furnishings, and similar construction to comply with details indicated and with recommendations of fiber cement board manufacturer.
- c. Isolate steel framing from building structure to prevent transfer of loading imposed by structural movement, at locations indicated below to comply with details shown on drawings.
- d. Do not bridge building expansion and control joints with steel framing or furring members; independently frame both sides of joints with framing or furring members or as indicated.

INSTALLATION OF STEEL FRAMING

- a. Installation Tolerances: Install each steel furring members so that fastening surface do not vary more than 3 mm from plane of faces of adjacent framing.
- b. Extend steel furring full height to structural supports or substrates above suspended ceilings, except where partitions are indicated to terminate at suspended ceilings. Continue framing over frames for doors and openings and frame around ducts penetrating partitions above ceiling to provide support for fiber cement board.

APPLICATION AND FINISHING OF FIBER CEMENT PANELS GENERAL

- a. Apply and finish fiber cement panels as per specifications by manufacturer for flush-jointed applications.
- b. Install fiber cement panels in manner which minimizes the number of end-butt joints or avoids them entirely where possible.
- c. Install exposed fiber cement panel with face side out. Do not install imperfect, damages or damp boards. Bat boards together for slight contact at edges and ends with not more than 1.5 mm open space between boards. Do not force into place.
- d. Locate either edge or end joints over supports, except in horizontal applications where intermediate support is provided behind end joints. Position boards so that like edges abut, tapered edges against tapered ends. Do no place tapered edges against cut edges or ends. Stagger vertical joints over different studs on opposite sides of partitions.
- e. Attach fiber cement panel for supplementary framing and blocking provided for additional support at openings and cutouts.
- f. Space fasteners in fiber cement boards in accordance with referenced application and finishing standard and manufacturer specifications.

METHODS OF FIBER CEMENT PANEL APPLICATION

- a. General: Follow specifications by manufacturer.
- b. Single-layer Application: Install fiber cement panel as follows, and as indicated on the drawings.
- c. Single-layer fastening Methods: Apply fiber cement panels to supports as follows: (1) Fasten to steel framing with adhesive and supplementary screws as per recommendation by manufacturer.

INSTALLATION OF TRIM ACCESSORIES

- a. General: Where feasible, use the same fasteners to anchor trim accessory flanges as required to fasten fiber cement board to the supports. Otherwise, fasten flanges to comply with specification by the manufacturer.
- b. Install corner boards at external corners.
- c. Install metal edge trim whenever edge of fiber cement board would otherwise be exposed or semi-exposed.

FINISHING OF FIBER CEMENT BOARDS

- a. General: Apply to joint treatment at fiber cement panels joints (both directions); penetrations; fasteners head, surface defects and elsewhere as required to prepare works for decoration.

b. Finish fiber cement panels as per recommendation by manufacturer. 3.9

PROTECTION

Provide final protection and maintain conditions, in a manner suitable to installer that ensures, fiber cement panel construction being without damage or deterioration at time of substantial completion.

METHOD OF MEASUREMENT

Fiber cement board shall be measured by actual area in square meters installed and accepted to the satisfaction of the NPC Engineer/End-user.

TS-12.0 PAINTING WORKS INCLUDING WATER PROOFING OF EXTERIOR WALL

GENERAL

This Item shall consist of furnishing all painting & waterproofing materials, labor, tools, equipment and other facilities in undertaking the proper installation works required as shown on the Plans and in accordance with this Specification.

DELIVERY AND STORAGE

Deliver coatings and coating materials in unopened original container bearing the manufacturer's name and brand designation, specification number, batch number, color, date of manufacture, and manufacturer's instruction for application. Restrict storage of coatings and coating materials and the mixing of coatings to the locations directed.

SELECTION OF COLORS

Colors of finish coats shall be as approved by the Architect / Engineer. Manufacturer's name and color designation, if indicated, are used for the purpose of color designations only and are acceptable for use on this project only if they conform to all specified requirements. Products of other manufacturers are acceptable if the color closely approximate the colors indicated and the product conforms to all specified requirements.

EXTERIOR PAINTING

Includes new surfaces, including water proofing of exterior part of walling by using either cement-base or liquid-base waterproofing.

INTERIOR PAINTING

Includes new surfaces, and appurtenances of the types listed. Where a space or surface, supports, hangers, and miscellaneous metalwork, except as specified otherwise herein.

METAL/STEEL STRUCTURES

All exposed metal surfaces, except metal surfaces embedded in concrete or galvanized shall be painted unless otherwise specified. All tools and equipment shall be suitable for the work and shall be maintained in good order.

MECHANICAL AND ELECTRICAL PAINTING

Includes the field coating as required of interior and exterior piping, conduit, ductwork, supports, hangers, air grilles, registers, miscellaneous, and coverings where required, except as specified otherwise herein.

MATERIAL REQUIREMENTS

- Cement-base Water Proofing, Portland Cement, Washed Sand, Skim Coat, Concrete Primer & Latex Topcoat finish for exterior Wall (For Colors, see details)
- Skim Coat, & Latex Topcoat Finish for Interior Wall (For Colors, see details)
- Acrytex Primer & Flat Latex for Ceiling
- Steel primer & dark choco QDE for metal and steel
- For texture painting, see details.

EXECUTION

WATERPROOFING

Surface Preparation

Concrete surface to be applied with waterproofing shall be structurally sound, clean and free of dirt, loose mortar particles, paints, films, oil, protective coats, efflorescence laitance, etc.

All defects shall be properly corrected and carefully formed to provide a smooth surface that is free of marks and properly cured prior to application works.

Inside corners where vertical and horizontal structure meet shall be provided with cants measuring 75 mm by 75 mm or rounded at corners a minimum of 75 mm radius.

1. Any expansion and contraction joints shall be cleaned, primed, fitted with a backing rod and caulked with sealant.
2. Provide ringlets of about 40 mm deep by 40 mm wide and 250 mm above floor finish along walls or parapets for the termination of the membrane.
3. Prepared surfaces shall be cured and kept wet by sprinkling with water at regular intervals for a period of at least three (3) days and allow surface to actually set within seven (7) days.
4. Ensure that the prepared surface has completely set and all defects repaired.

5. When there is reasonable doubt as to the presence of moisture in the surface to be applied with membrane, expose the same direct to sunlight for another two (2) days or heat all suspected area using blow torch.

CEMENT-BASE WATERPROOFING

Surface Preparation:

- Surface should be clean, dry, free from oil, grease, dust, dirt, loose materials and other contaminants.
- Remove dirt, dust, loose or excess grit or mortar with stiff brush and clean surface by high pressure water hosing.
- The loosening or fallen of concrete have to be removed and the large holes, cracks should be repaired first.
- All structural cracks must be repaired prior to waterproofing application. Use the required sealants and structural bonding agents.

Product Preparation:

- Sieve separately the sand and cement to eliminate lumps and mix thoroughly.
- While mixing DAVIES® MORTAFLEX®, add the cement/sand mixture and continue mixing for 3-5 minutes until the desired consistency obtained (refer to Product Preparation Table on DAVIES® MORTAFLEX® cement/sand mixing ratio). DO not add water.

Mixing Ratio:

Waterproofing for Verticals Surfaces

- Mix 4 liters of DAVIES® MORTAFLEX® to 5.5 kg of ordinary Portland cement
- Apply 2-3 coats using a brush or roller

Application Method:

- Before application, wet masonry surfaces with water thoroughly.
- Refer to Product Preparation on DAVIES® MORTAFLEX® Cement / Sand Mixture for the correct application method.
- For maximum durability, paint application is recommended. Cure the applied DAVIES® MORTAFLEX® for 3 days before the desired painting system. DAVIES® MORTAFLEX® Cementitious Waterproofing Membrane is highly recommended for the exterior face (positive side) to prevent moisture infiltration to the substrate from the exterior environment.

Drying Time:

- Dry to touch- 10-15 minutes Flash-off (in between coats): 30 minutes
- Dry hard (paint-ready): 3 days

PROTECTION OF AREAS AND SPACES

Remove, mask, or otherwise protect prior to surface preparation and painting operations such items as hardware, hardware accessories, machined surfaces, radiator covers, plates, lighting fixture, and similar items in contact with coated surfaces. Following completion of painting, reinstall removed items utilizing workmen skilled in the trades involved for such removal and reinstallation. Protect from contamination by coating materials all surfaces not to be coated. Restore surfaces that are contaminated by painting materials to original condition.

PREPARATION OF SURFACES

Remove all dirt, rust, scale, splinters, loose particles, grease, oil and other deleterious substance from all surfaces which are to be coated or otherwise finished. Allow putty to set one week before coating. Caulking and glazing compounds shall be allowed to cure for times stated in manufacturer's literature prior to being coated. Sandpaper entire surface of existing enamel and other glossy surfaces before application of any coatings. Inspect surfaces after preparation and receive approval before application of any coatings. On surface to be coated with water thinned coatings, spot prime with a brush all exposed nails and other ferrous metal with zinc chromate primer.

CONCRETE AND MASONRY

Remove dirt, fungus, grease, and oil prior to application of coatings. Wash new surfaces with a solution composed of from 14 to 56 grams of tri-sodium phosphate per 1 liter of hot water and rinse thoroughly with fresh water. Wash previously coated surfaces with a suitable detergent and rinse thoroughly. Remove glaze, all loose particles, and scale by wire brushing. Remove efflorescence by scraping, wire brushing, and washing with 5 to 10 percent by weight aqueous solution of hydrochloric (muriatic) acid and then wash thoroughly with fresh water, removing all traces of the acid. Give all new surfaces to be painted with other than cement-water paint a neutralizing treatment consisting of 0.23 kg. of zinc sulphate in 1 liter of warm water. Apply the neutralizer liberally and allow to dry, then rinse the surfaces thoroughly with clean water and allow to dry for not less than 48 hours before paint is applied.

PLASTER

Prior to painting, repair all joints, cracks, holes, and other surface defects with patching plaster or spackling compound and sand out smooth. New plaster to be coated shall have an instrument-measured moisture content of not more than 8 percent. In addition to moisture content requirements, allow new plaster to age a minimum of 30days before application of coating.

NEW UNPRIMED METAL SURFACES

Solvent clean zinc-coated surfaces with mineral spirits and wipe dry with clean, dry cloths. Immediately after cleaning and treating, apply pretreatment wash primer, to a dry film thickness of 0.2 to 0.5 mil on zinc-coated, and ferrous surfaces. Apply primer as soon as practicable after pretreatment has dried. Surface preparation shall be in strict compliance with Steel Structure Painting Council, SSPC SP-10, Near White Blast Cleaning also known as through blast cleaning using dry abrasive.

NEW HOT METAL SURFACES

Clean new surfaces down to clean bare metal free of mil scale, rust, oil, oxides, dust, coatings and contaminants. Apply new coatings before any new oxidation or contamination begins. Surface preparation shall be in strict compliance with steel structures. Painting SSPC-SP-10 near white metal blast cleaning also known as thorough blast cleaning using dry abrasive.

APPLICATION

Provide finished surfaces free from burns, drops, ridges, waves, laps, brush marks, and variations in colors. Avoid contamination of other surfaces and repair all damage thereto. Allow sufficient time between coats to permit thorough drying and provide each coat in proper condition to receive the next coat. Each coat shall cover the surface of the preceding coat or surface completely; there shall be an easily perceptible difference in shades of successive coats. Thoroughly clean dust-free before and during the application of coating material. Prior to erection, used two coats of the designated primer to treat and prime wood and metal surfaces, which will be inaccessible after erection. Thoroughly work painting materials into all joints, crevices, and open spaces. Finished surfaces shall be smooth, even and free of defects. Retouch damaged painting before applying succeeding coats of paint. Spray painting operations shall comply with the best procedural trade practice. Procure and utilize the engineering controls and/or personal protective equipment necessary for safe and effective application of specified paint systems. Apply strains in accordance with the manufacturer's printed instruction. Storing, thinning, mixing, handling and applications of painting materials shall be in strict compliance with the manufacturer's recommendation and instruction. Unless otherwise recommended by the paint manufacturer, painting shall be done when:

- a. Metal surface temperature is at least 3°C more than dew point temperature
- b. Ambient temperature is above 10°C
- c. Relative humidity is less than 85%
- d. Application of paints shall be done by Airless Spray Equipment. Pigmented and catalyzed materials shall be thoroughly mixed and strained before applying. Materials that have not been applied within the pot life period specified by manufacturer shall be discarded and properly disposed of.

Equipment

Apply coatings carefully with good, clean brushes or approved spray equipment, except as specified otherwise. Spray areas made inaccessible to brushing by ducts and other equipment.

Use airless type spray equipment. Use approved rollers for the application of flat latex coatings to interior walls and ceilings.

Thinning of Paints

Reduce to proper brushing consistency by adding fresh paint, except that when thinning is not mandatory for the type of paint being used.

Environmental Conditions

Do not apply exterior coatings in rainy weather or when the temperature of the air at the surface is over 35 degrees C. Apply interior coatings when the surfaces to be painted are dry and the temperature can be kept below 95 degrees F during the applications of ordinary paints, between 65 degrees F and 95 degrees F during the application of enamels and varnishes.

Special Requirements for Coating Concrete Masonry Surfaces with Acrylic Emulsion

Paint Requires containers be marked for the formulation and mixing of fill coat. The fill coat shall conform to these markings except as specified herein.

a. Mixing of Fill Coat

The formula given in Acrylic Emulsion Paint for the content of the fill coat requires a definite amount of water to be added in preparation of the mixture. This requirement shall not apply. Deliver the sand, cement, and mixing liquids pre-proportioned and packaged so that field proportioning will not be required. Field mix the mixing liquid with the sand and cement; after this mixture is thoroughly blended, add water as necessary to produce a rich, creamy mixture of proper brushing consistency. Mix the fill coat materials by hand but do not vigorously agitate. After mixing, allow to set for 10 minutes to permit air to escape before applying. The fill coat mixture will gradually thicken with time; add small amounts of water, when necessary, to keep the mixture a rich brushing consistency. Do not begin mixing more than one hour before application.

b. Wetting of Surface

Before applying filler coat, thoroughly wet the masonry and concrete to control surface suction and provide a reserve of moisture to aid in curing the paint. A garden hose nozzle adjusted to a fine spray is adequate for the purpose. Do not dampen with a brush dipped in water. Dampen the masonry and concrete in one operation not more than one hour nor less than 30 minutes before painting. Apply the spray in such manner that each part is sprayed three or four times for about 10 seconds. Allow time between applications for the water to soak into the surface. If the surface tends to dry rapidly, as in hot weather, re--dampen slightly just in advance of painting. The surface shall be moist but without free water when paint is applied.

c. Application Do not paint when the paint may be exposed to temperatures below 40 degrees F within 48 hours after application or when the temperature is over 95 degrees F. Rub the filler coat into the surface in such a manner as to fill all depressions, holes, voids, joints, and hollows. Apply the filler coat with stiff fiber bristle brushes with bristles not longer than 2-1/2 inches, using a circular motion. Give the surface a final stroke parallel to the course of

block. Provide uniform coverage and laps well brushed out. Apply the first finish coat at a rate of not less than one gallon per 250 square feet; apply the second finish coat at the rate of not less than one gallon per 300 square feet. Brush apply finish coats, except that behind large ducts and similar locations inaccessible to a brush they may be applied by rollers. Spray application will not be permitted. Deliver all paint to the job site prior to application. Compute the amount of finish coat paint required and submit calculations for approval. Do not begin painting until this amount has been approved and delivered to the job site. Apply all delivered paint. Keep paint in tightly covered containers when not in use; keep stirred to maintain uniform color and consistency during application. At least 24 hours shall lapse between coats; do not start another coat until the preceding coat has become so hard that it cannot be marked with the brushes used. In hot weather, slightly moisten the prior coat before applying the succeeding coat. Covering is not necessary.

Paint Systems

New surfaces made by cleaning operations, shall receive the following coatings. Apply paints, primers, varnishes, enamels, undercoats, and other coatings to a dry film thickness of not less than 1.0 mil. each coat except as specified otherwise. Where coating thickness is specified, it is the minimum dry film thickness.

a. Exterior Surfaces

(1) Exterior Concrete / Masonry and Plaster Surfaces

Waterproofing: Cement-Base Waterproofing

Plaster: Skim Coat

Primer: Acrylic solvent base coating primer

Putty: Acrylic solvent base putty

Two coats of 100% acrylic latex paint

(2) Metal Surfaces

1st Coat: Red Oxide Primer

2nd and Third Coat: Quick Dry Enamel

(3) Interior Concrete / Masonry and Plaster Surfaces

Plaster: Skim Coat

First Coat: Flat Latex

2nd and Third Coat: Odorless Water Base Interior Paint

METHOD OF MEASUREMENT

Painting of concrete, wood and metal surfaces shall be measured by the number of square meters applied and accepted.

BASIS OF PAYMENT

The quantity measured as provided in Method of Measurement shall be paid for at the contract unit price, respectively for each of the Pay Items listed below and shown in the Bill of Quantities, which price and payment shall constitute full compensation for furnishing and placing all materials and for all labor, equipment, tools and incidentals to complete the work prescribed in this Section. Payment will be made in accordance with the Bill of Quantities.

TS-13.0 SIGNAGES

GENERAL

This item shall consist of furnishing, fabricating and placing of the CDD Signages of the type, size, shape and grade required in accordance with the Specification and in conformity with the requirements shown on the Plans or as directed by the NPC Engineer.

MATERIALS REQUIREMENTS

- Fabricated Stainless Steel Cut-out Letters in a light gold color with thicknesses of 3mm thk.
- Size of cut-out letters (see details)
- Standard alloy C316, which provides additional corrosion and tarnishing resistance for marine and other harsh environments
- Finishes including traditional brushed and polished faces, along with orbital and random arc finishes with a unique sanding pattern
- Bead-blasted sides
- Mounting including flush to wall or raised/floating off the wall

INSTALLATION

1. Remove all contents from the packaging and place on the ground in correct order (spelling).
2. Tape paper template in place on the wall. Be sure to step back and make sure it's level and centered.
3. Cut the excess off the paper template may make things easier, but note the graphics are square to the paper.
4. Drill through all the holes indicated on the paper template using a 3/16" masonry bit.
5. Dip and end of each 'stud' into the open end of the adhesive tube (included in packaging), then screw into the back of each character hole you plan to use.

*NOTE: Pre-drilled holes in the back per character than required to hold the letter in place.

6. Once all 'studs' are in a character, dip the receiving end of each stud end into the open end of the tube, then 'pop' the character/element into position, working your way across.

*NOTE: Leave the paper template in place during this process – it will help you ensure proper placement as the outline of each element is included on the paper template.

7. Once everything is in place, rip the paper template away. Excessive adhesive can easily be cleaned up at this time.

MEASUREMENT AND PAYMENT

The unit of measure shall be in lot.

The accepted quantity, measured as prescribed in the Bid Schedule, shall be paid for at the contract unit price which price and payment shall be full compensation for furnishing and placing all materials, including all labor, equipment, tools and incidentals necessary to complete the work prescribed in this Item.

TS-14.0 CLEARING AND DEMOBILIZATION

GENERAL SCOPE

This item shall consist of the disposition of entire Contractor's camp facilities, clearing and cleaning at the work site.

WORKMANSHIP

Before moving out, the contractor shall restore the orderly state of worksite by clearing all temporary structures. Remove all excess/waste materials and store in designated areas.

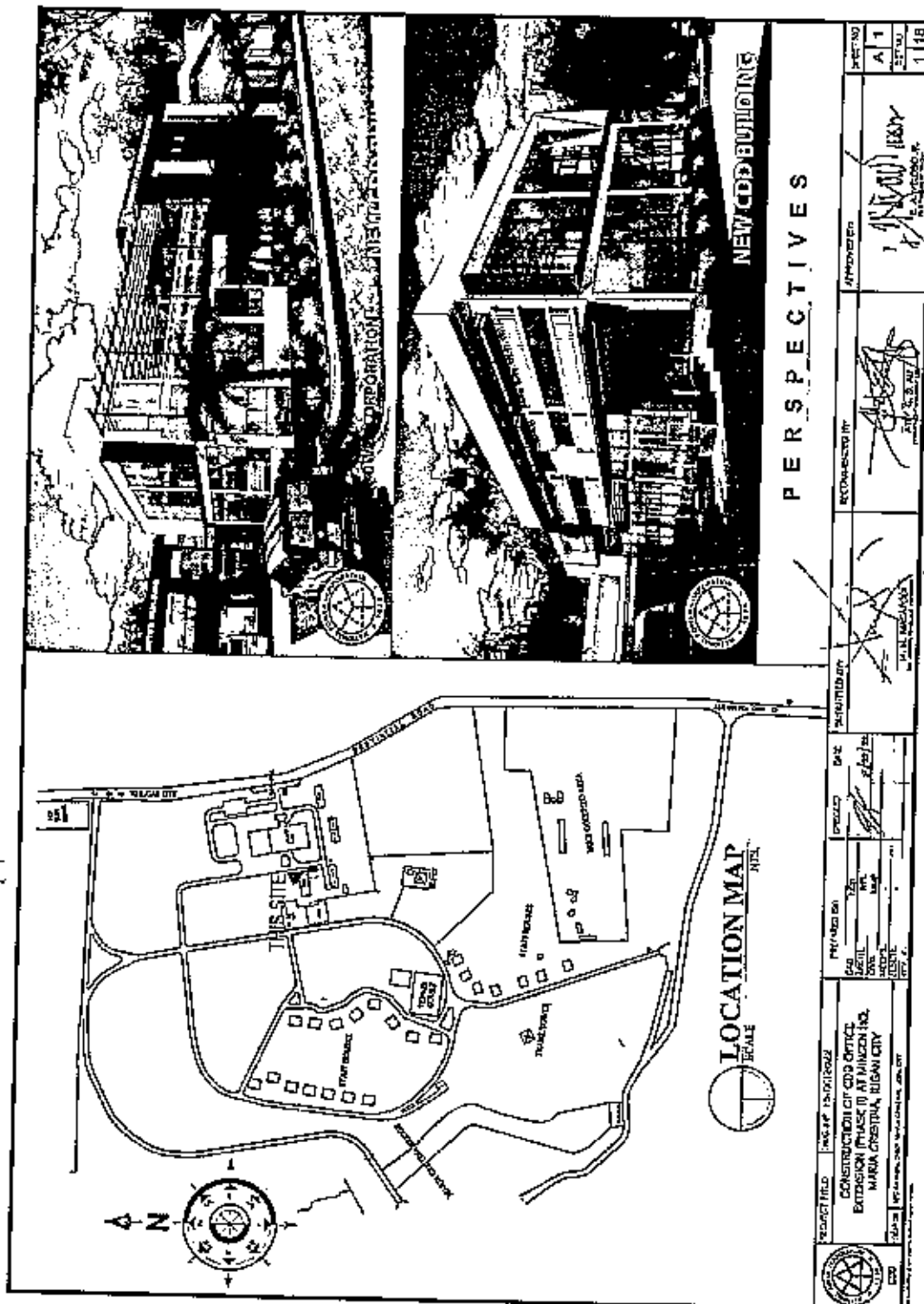
Before the Contractor will demobilize its construction equipment/tools, materials and crew, he shall secure approval from NPC and a joint inspection with the NPC inspector and Contractor will be conducted to make sure that all his accomplishment/ work that needs remedial attention or correction shall be done prior to the issuance of the Certificate of Completion.

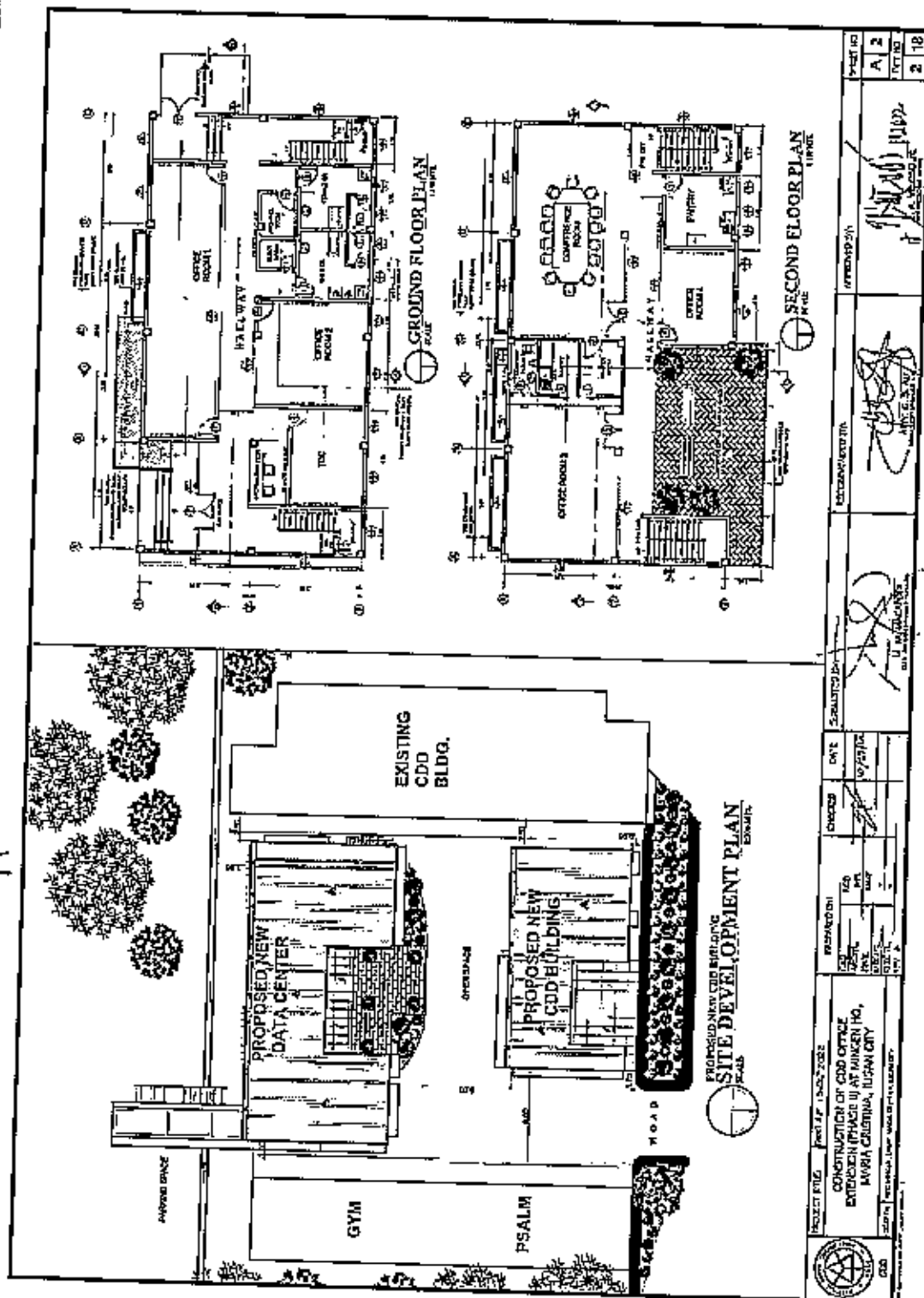
MEASUREMENT AND PAYMENT

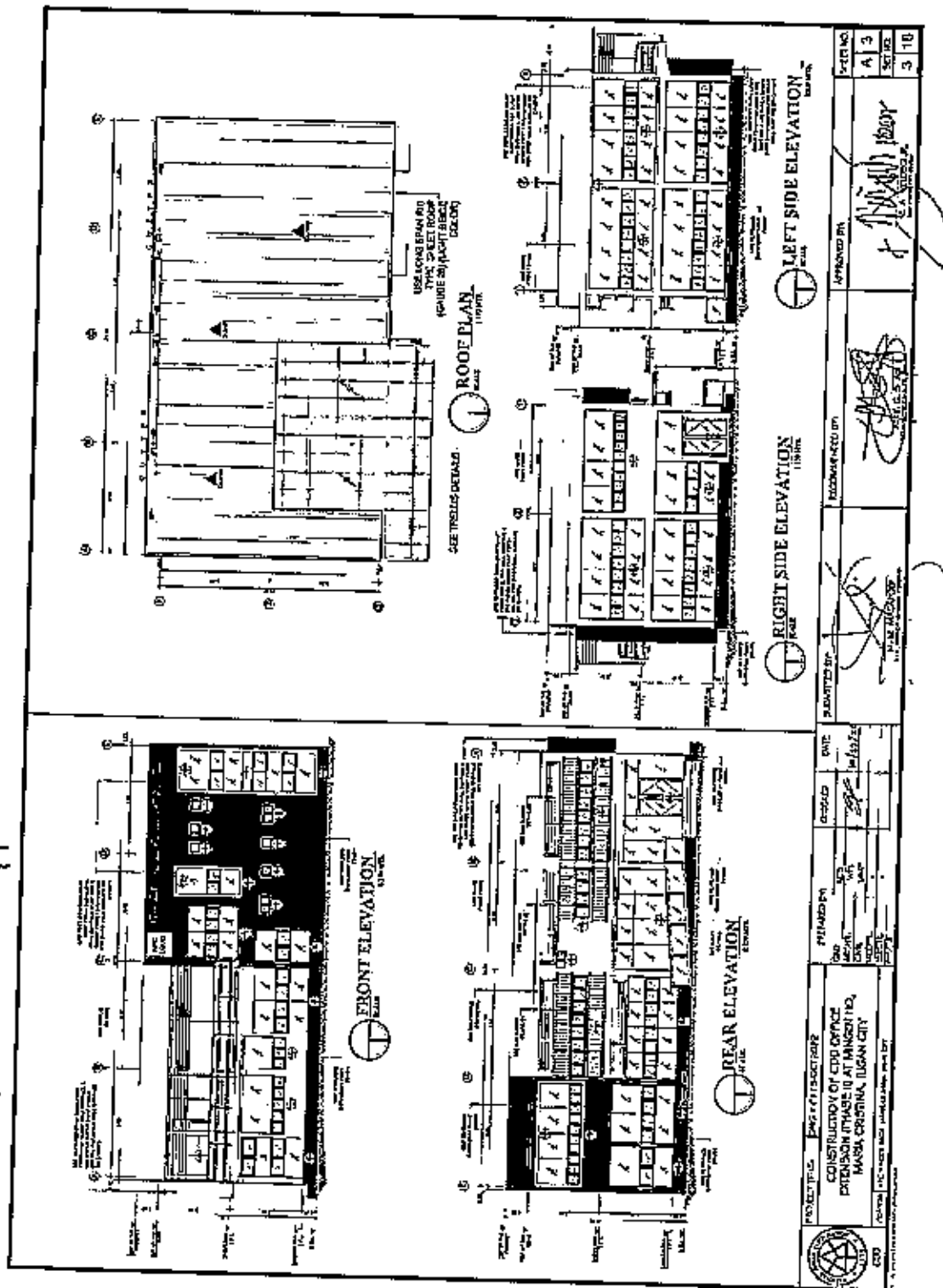
Work prescribed herein shall not be measured and paid separately; same shall be deemed to be included in pay items for other items for work.

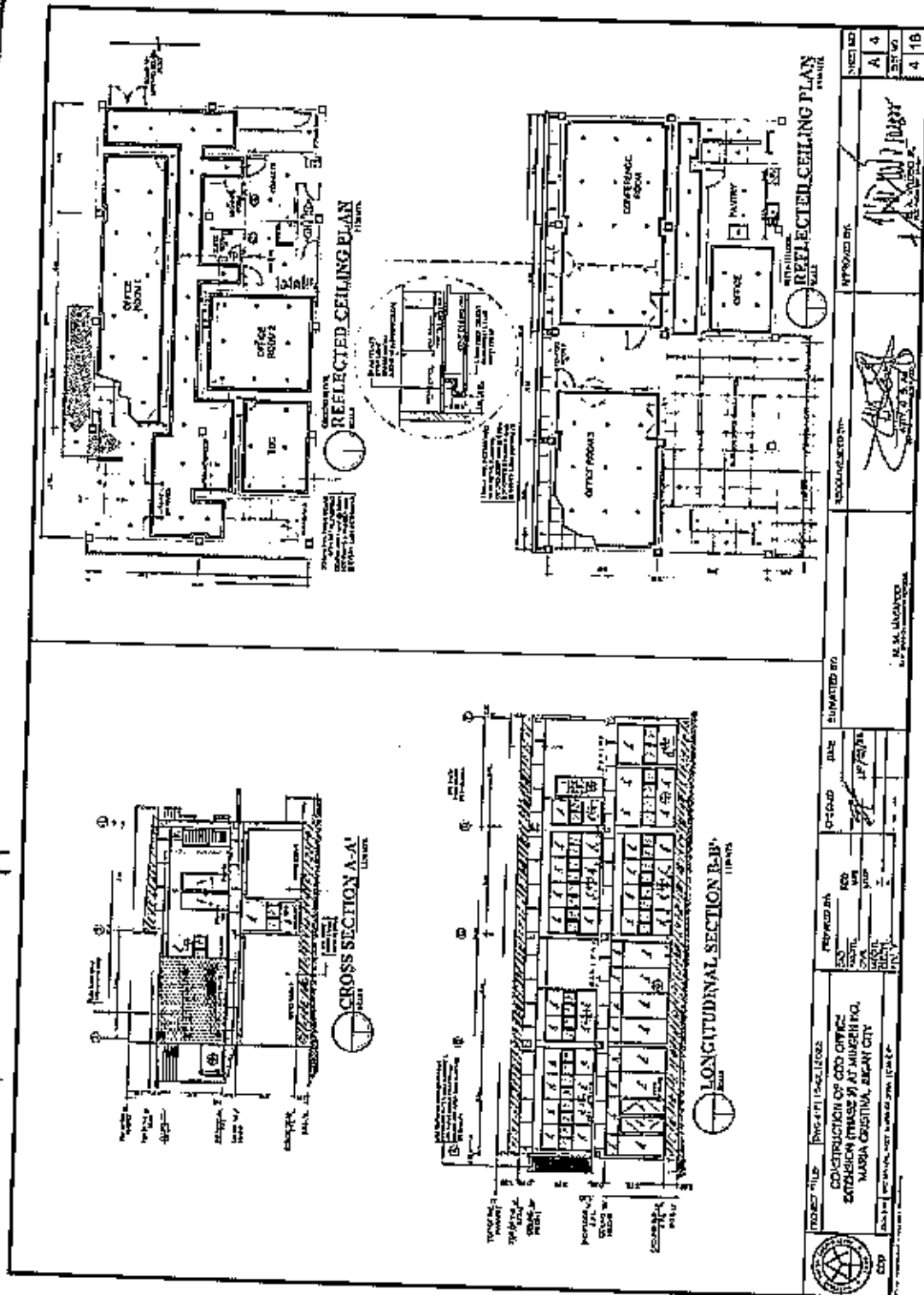
Section VII. Drawings

Sheet No. 1/18	(A1)	- LOCATION MAP & PERSPECTIVES
Sheet No. 2/18	(A2)	- SITE DEVELOPMENT PLAN, GROUND FLOOR PLAN & SECOND FLOOR PLAN
Sheet No. 3/18	(A3)	- FRONT ELEVATION, REAR ELEVATION, ROOF PLAN AND RIGHT SIDE & LEFT SIDE ELEVATION
Sheet No. 4/18	(A4)	- CROSS SECTION A-A', LONGITUDINAL SECTION B-B' AND GROUND & SECOND FLOOR REFLECTED CEILING PLAN
Sheet No. 5/18	(A5)	- GROUND & SECOND FLOOR TILE PLAN
Sheet No. 6/18	(A6)	- GLASS WALL SCHEDULE DETAILS
Sheet No. 7/18	(A7)	- WINDOWS SCHEDULE DETAILS
Sheet No. 8/18	(A8)	- DOORS, GLASS & STEEL RAILINGS SCHEDULE DETAILS
Sheet No. 9/18	(A9)	- COMFORT ROOM
Sheet No. 10/18	(A10)	- TRELLIS DETAILS & COMFORT ROOM AT 2ND FLOOR
Sheet No. 11/18	(A11)	- RAMP & SUN BUFFER 02 DETAILS
Sheet No. 12/18	(A12)	- SUN BUFFER 01, CONDENSER BOX & CDD SIGNAGE DETAILS
Sheet No. 13/18	(A13)	- STAIR PLAN & CANOPY DETAILS
Sheet No. 14/18	(P1)	- PLUMBING FIXTURES AT GROUND & SECOND FLOOR PLAN
Sheet No. 15/18	(E1)	- GROUND & SECOND FLOOR PLAN LIGHTING & POWER LAYOUT
Sheet No. 16/18	(E2)	- SCHEDULE OF LOADS & COMPUTATION (PBI) & SINGLE LINE DIAGRAM
Sheet No. 17/18	(M1)	- GROUND & SECOND FLOOR PLAN AIRCONDITION LAYOUT
Sheet No. 18/18	(M2)	- AIRCONDITION DETAIL

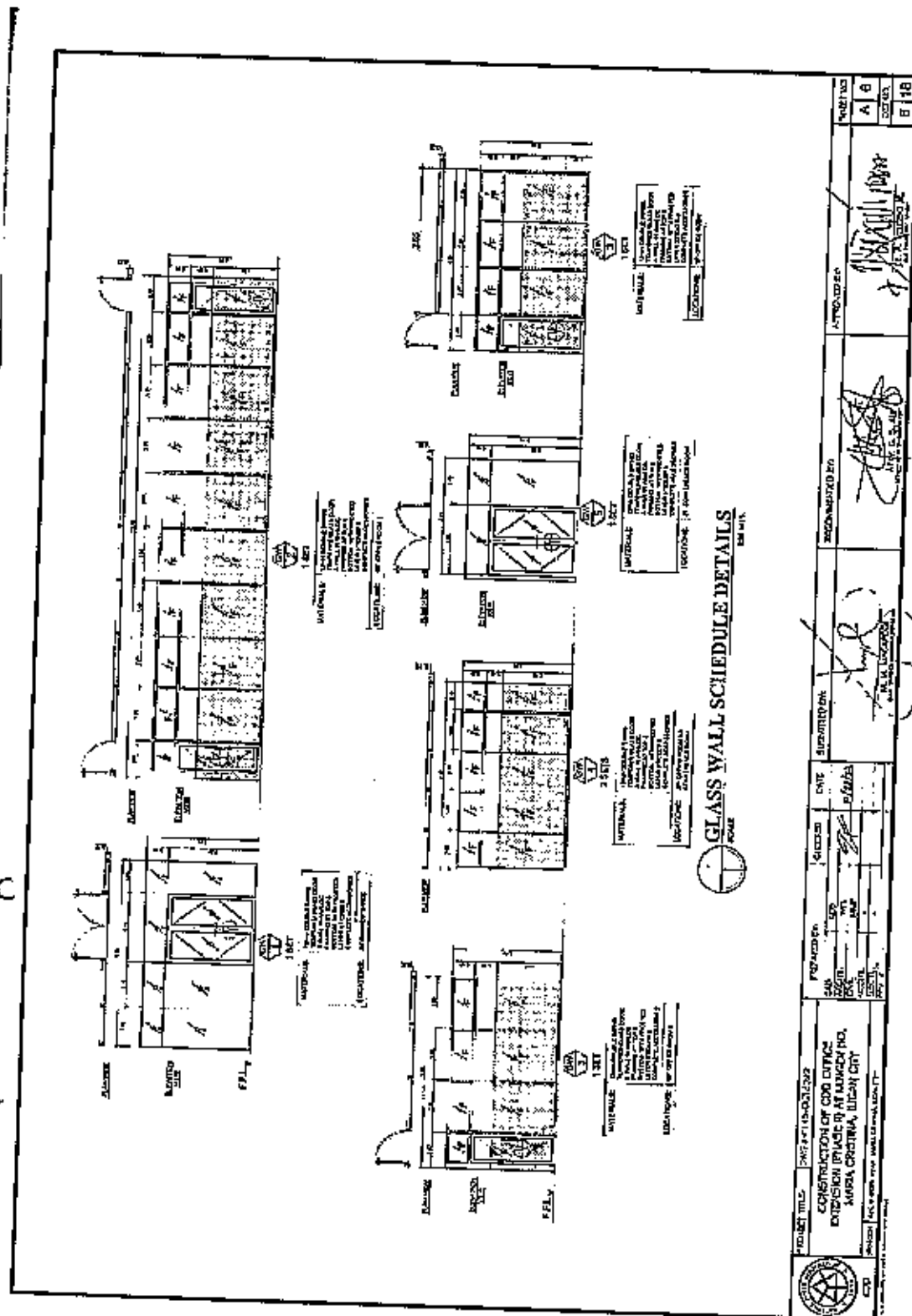








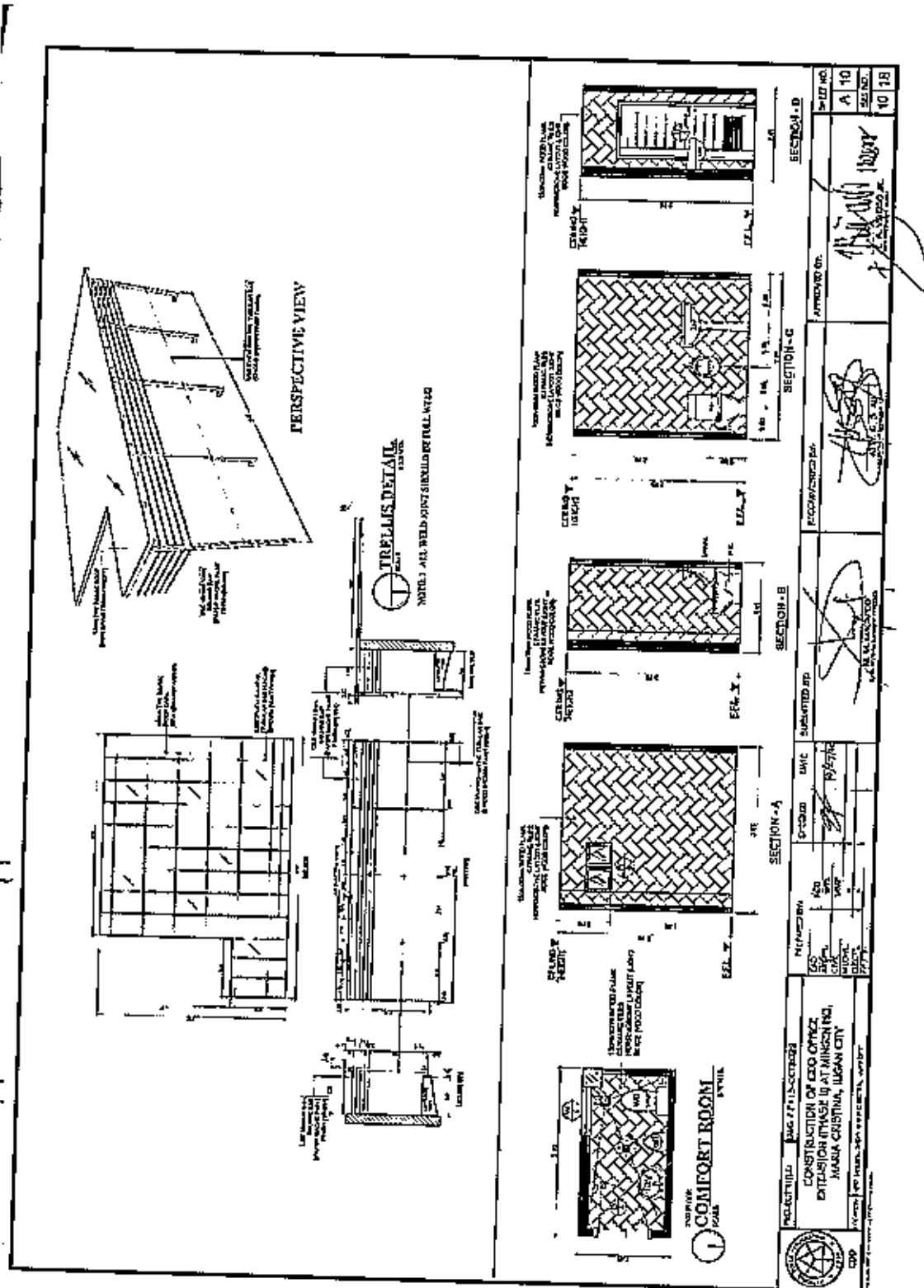






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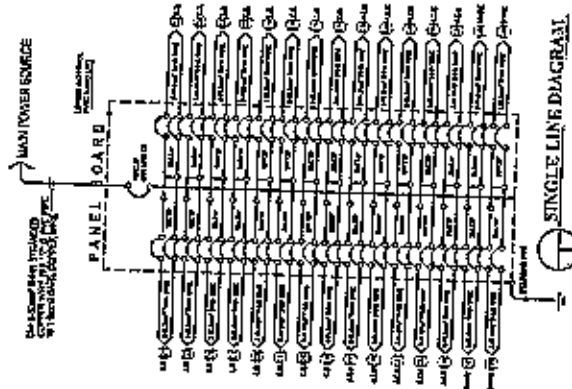




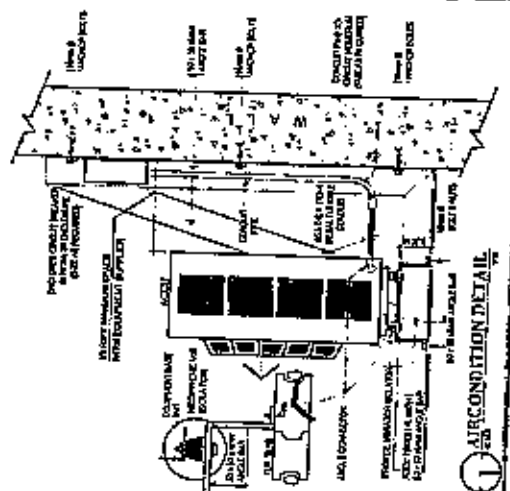




SCHEDULE OF LOADS & COMPUTATION(PB1)

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Section VIII. Bill of Quantities

BID DOCUMENTS
SECTION VIII- BILL OF QUANTITIES

NAME OF PROJECT: Construction Of CDD Office Extension (Phase 2)
PR NO./REF. NO.: MG-PDD23-002/INFR2023-CDD-005

CONSTRUCTION OF CDD OFFICE
EXTENSION (PHASE II) AT NPC MINGEN HQ,
BRGY. MARIA CRISTINA, ILAGAN CITY
MG-PDD23-002

SECTION VIII - BILL OF QUANTITIES

BILL OF QUANTITIES					Total Amount	
Item No.	Description of Work or Materials	Unit	Estimated Quantity	Unit Price in Pesos (Words and Figures)		
1	CONSTRUCTION SAFETY & HEALTH PROGRAM	lot	1.00	(PHP) _____		PHP _____
2	CEMENT PLASTER FINISH	sq.m.	947.41	(PHP) _____		PHP _____
3	ROOFING WORKS	sq.m.	59.40	(PHP) _____		PHP _____
4	TILE WORKS	sq.m.	517.56	(PHP) _____		PHP _____
5	GLASS WORKS	lot	1.00	(PHP) _____		PHP _____
6	ELECTRICAL WORKS	lot	1.00	(PHP) _____		PHP _____
7	INSTALLATION OF PLUMBING FIXTURES AND ACCESSORIES	lot	1.00	(PHP) _____		PHP _____
8	CANOPY, RAMP, STAIR RAILINGS, CONDENSER & SUN BUFFER	lot	1.00	(PHP) _____		PHP _____
9	CEILING WORKS	sq.m.	387.40	(PHP) _____		PHP _____
10	PAINING WORKS INCLUDING WATERPROOFING OF EXTERIOR WALL	sq.m.	1,314.81	(PHP) _____		PHP _____
11	SIGNAGE	lot	1.00	(PHP) _____		PHP _____
					Name and Signature of Authorized Representative	Designation

Section IX. Checklist of Technical and Financial Documents

- contract to be bid, with their complete qualification and experience data, using NPC-MinGen Standard Form No. NPCMGNSF-INFR-05, 6a, 6b & 07;
- ☒ 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, using NPC-MinGen Standard Form No. NPCMGNSF-INFR-08 and its supporting documents; and
- ☒ (g) Original duly signed Omnibus Sworn Statement (OSS), using any of the following NPC-MinGen Standard Forms No.:
NPCMGNSF-INFR-09a – for Sole Proprietorship;
or
NPCMGNSF-INFR-09b – for Partnership/Cooperative/Corporation/
Joint Venture with the following supporting documents;
- 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) using NPC-MinGen Standard Form No. NPCMGNSF-INFR-10.

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, using NPC-MinGen Standard Form No. NPCMGNSF-INFR-11;
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 *[Submit in three (3) copies- one (1) marked Original with the understanding that the Pass/Fail evaluation will be based only on the copy marked "Original"]*

- ☒ (j) Original of duly signed (each and every page) and accomplished Financial Bid Form, using NPC-MinGen Standard Form No. NPCMGNSF-INFR-12;
and

Other documentary requirements under RA No. 9184

- ☒ (k) Original of duly signed (each and every page) Bid Prices in the Bill of Quantities, using given form in Section VIII; and
- ☒ (l) Duly signed (each and every page) and accomplished Detailed Estimates Form using NPC-MinGen Standard Form No. NPCMGNSF-INFR-13, including a summary sheet indicating the unit prices of construction materials, labor rates, and equipment rentals used in coming up with the

Checklist of Technical and Financial Documents

- I. **TECHNICAL COMPONENT ENVELOPE***(Submit in three (3) copies- one (1) marked Original with the understanding that the Pass/Fail evaluation will be based only on the copy marked "Original")*

Class "A" Documents

Legal Documents

- ☒ (a) Valid and updated PhilGEPS Registration Certificate (Platinum Membership) (all pages)*in accordance with Section 8.5.2 of the IRR; or*

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, *using NPC-MinGen Standard Form No. NPCMGNSF-INFR-01; 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, *using NPC-MinGen Standard Form No. NPCMGNSF-INFR-02 supported with the following documents:*
- *Contract and/or Notice to Proceed;*
 - *For project completed within the year, submit Certificate of Completion;*
 - *For project completed after the lapse of one year, submit Owner's Certificate of Final Acceptance issued by the project owner other than the contractor, or a final rating of at least Satisfactory in the Constructor's Performance Evaluation System (CPES);*
 - *In case of contracts with the private sector, an equivalent document (Ex. Official receipt) shall be submitted.*
- ☒ (d) and 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, *using NPC-MinGen Standard Form No. NPCMGNSF-INFR-03a*, submit also a certification issued by the Insurance Commission;
or
Original copy of Notarized Bid Securing Declaration using *NPC-MinGen Standard Form No. NPCMGNSF-INFR-03b*; and
- ☒ (f) Project Requirements, which shall include the following:
- a. Organizational chart for the contract to be bid *using NPC-MinGen Standard Form No. NPCMGNSF-INFR-04;*
 - b. List of contractor's key personnel (e.g., Project Manager, Project Engineers, Materials Engineers, and Foremen), to be assigned to the

BID DOCUMENTS

SECTION IX- CHECKLIST OF TECHNICAL &

FINANCIAL DOCUMENTS

NAME OF PROJECT: Construction Of CDD Office Extension (Phase 2)

PR.NO./REF. NO.: MG-PDD22-002/INFR2022-CDD-005



- (m) *Bidusing NPC form NPCMGNSF-INFR-14; and*
Cash Flow by Quarter or Month, as applicable (duly signed each and every page)

STANDARD BIDDING FORMS
NPC-MINDANAO GENERATION

- NPCMGNSF-INFR-01 - List of all Ongoing Government & Private Construction Contracts Including Contracts Awarded but not yet Started
- NPCMGNSF-INFR-02 - Statement of the Bidder's Single Largest Completed Contract (SLCC) similar to the contract to be bid
- NPCMGNSF-INFR-03a - Form of Bid Security : Surety Bond
- NPCMGNSF-INFR-03b - Bid Securing Declaration Form
- NPCMGNSF-INFR-04 - Contractor's Organizational Chart for the Project
- NPCMGNSF-INFR-05 - List of Key Personnel Proposed to be Assigned to the Project
- NPCMGNSF-INFR-6a - Key Personnel's Certificate of Employment (Professional Personnel)
- NPCMGNSF-INFR-6b - Key Personnel's Certificate of Employment (Construction Safety and Health Practitioner)
- NPCMGNSF-INFR-07 - Key Personnel's Bio-Data
- NPCMGNSF-INFR-08 - List of Equipment, Owned or Leased and/or under Purchase Agreement, Pledged to the Proposed Project
- NPCMGNSF-INFR-09a - Omnibus Sworn Statement (Sole Proprietorship)
- NPCMGNSF-INFR-09b - Omnibus Sworn Statement (Partnership/ Cooperative/Corporation//Joint Venture)
- NPCMGNSF-INFR-10 - Computation of Net Financial Contracting Capacity (NFCC)
- NPCMGNSF-INFR-11 - Joint Venture Agreement
- NPCMGNSF-INFR-12 - Bid Form
- NPCMGNSF-INFR-13 - Detailed Cost Estimate Form
- NPCMGNSF-INFR-14 - Summary Sheets of Materials Prices, Labor Rates and Equipment Rental Rates

NAME OF PROJECT:

PR NO. REF. NO.:

List of All Ongoing Government and Private Construction Contracts Including Contract Awarded But Not Yet Started

[illegible]

The bidder shall declare in this form all his on-going government and private contracts including contracts where the bidder (either as individual or as a Joint Venture) is a partner in a Joint Venture agreement other than his current joint venture where he is a partner. Non declaration will be a ground for disqualification of bid.

(Printed Name & Signature)

100

BID DOCUMENTS

NAME OF PROJECT:

**SECTION IX- CHECKLIST OF TECHNICAL &
FINANCIAL DOCUMENTS**

PR NO./REF. NO.:

Standard Form Number : NPCMGN5F-INFR-02

The Statement of the Bidder's Single Largest Completed Contract (SLCC) similar to the contract to be bid

Business Name :
Business Address :

Name of Contract	a. Owner's Name b. Address c. Telephone Nos.	Nature of Work	Contractor's Role		a. Amount at Award b. Amount at Completion c. Duration	a. Date Awarded b. Contract Effectivity c. Date Completed
			Description	%		

Note: The bidder must state only one (1) Single Largest Completed Contract (SLCC) similar to the contract to be bid. Stating two (2) or more will disqualify his bid. This Statement shall be supported with:

1. Contract and Notice to Proceed
2. Certificate of Completion (for project completed within the year), or Owner's Certificate of Final Acceptance (for project completed after the lapse of one year) issued by the project owner other than the contractor, or a final rating of at least satisfactory in the Constructor's Performance Evaluation System (CPES). In case of contracts in the private sector, an equivalent document (Ex. Official Receipt) shall be accepted.

Submitted by : _____
(Printed Name & Signature)

Designation : _____
Date : _____

FORM OF BID SECURITY (SURETY BOND)

BOND NO.: _____ DATE BOND EXECUTED: _____

By this bond, We (Name of Bidder) (hereinafter called "the Principal") and (Name of Surety) of (Name of Country of Surety), authorized to transact business in the Philippines (hereinafter called "the Employer") as Oblige, in the sum of [amount in words & figures as prescribed in the bidding documents], callable on demand, for the payment of which sum, well and truly to be made, we, the said Principal and Surety bind ourselves, our successors and assigns, jointly and severally, firmly by these presents.

SEALED with our seals and dated this _____ day of _____ 20____

WHEREAS, the Principal has submitted a written Bid to the Employer dated the _____ day of _____ 20____, for the _____ (hereinafter called "the Bid").

NOW THEREFORE, the conditions of this obligation are:

- 1) If the Bidder withdraws his Bid during the period of bid validity specified in the Bidding Documents; or
- 2) If the Bidder does not accept the correction of arithmetical errors of his bid price in accordance with the Instructions to Bidder; or
- 3) If the Bidder, having determined as the LCB, fails or refuses to submit the required tax clearance, latest income and business tax returns and PhilGEPS registration certificate within the prescribed period; or
- 4) If the bidder having been notified of the acceptance of his bid and award of contract to him by the Entity during the period of bid validity:
 - a) Fails or refuses to execute the Contract; or
 - b) Fails or refuses to submit the required valid JVA, if applicable; or
 - c) Fails or refuses to furnish the Performance Security in accordance with the Instruction to Bidders;

Then this obligation shall remain in full force and effect, otherwise it shall be null and void.

PROVIDED HOWEVER, that the Surety shall not be:

- a) Liable for a greater sum than the specified penalty of this bond, nor
- b) Liable for a greater sum than the difference between the amount of the said Principal's Bid and the amount of the Bid that is accepted by the Employer.

BID DOCUMENTS

SECTION IX- CHECKLIST OF TECHNICAL &
FINANCIAL DOCUMENTS

Standard Form No: NPCMGNSF-INFR-03a

NAME OF PROJECT: Construction Of CDD Office Extension (Phase 2)
PR NO./REF. NO.: MG-PDD22-002/INFR2022-CDD-005

Page 2 of 2

This Surety executing this instrument hereby agrees that its obligation shall be valid for 120 calendar days after the deadline for submission of Bids as such deadline is stated in the instructions to Bidders or as it may be extended by the Employer, notice of which extension(s) to the Surety is hereby waived.

PRINCIPAL

SIGNATURE(S)

NAME(S) AND TITLE (S)

SEAL

SURETY

SIGNATURE(S)

NAME(S)

SEAL

REPUBLIC OF THE PHILIPPINES)

CITY OF _____) S.S.

BID SECURING DECLARATIONProject Identification No.: *[Insert number]*To: *[Insert name and address of the Procuring Entity]*

I/We, the undersigned, declare that:

1. I/We understand that, according to your conditions, bids must be supported by a Bid Security, which may be in the form of a Bid Securing Declaration.
2. I/We accept that: (a) I/we will be automatically disqualified from bidding for any procurement contract with any procuring entity for a period of two (2) years upon receipt of your Blacklisting Order; and, (b) I/we will pay the applicable fine provided under Section 6 of the Guidelines on the Use of Bid Securing Declaration, within fifteen (15) days from receipt of the written demand by the procuring entity for the commission of acts resulting to the enforcement of the bid securing declaration under Sections 23.1(b), 34.2, 40.1 and 69.1, except 69.1(f), of the IRR of RA No. 9184; without prejudice to other legal action the government may undertake.
3. I/We understand that this Bid Securing Declaration shall cease to be valid on the following circumstances:
 - a. Upon expiration of the bid validity period, or any extension thereof pursuant to your request;
 - b. I am/we are declared ineligible or post-disqualified upon receipt of your notice to such effect, and (i) I/we failed to timely file a request for reconsideration or (ii) I/we filed a waiver to avail of said right; and
 - c. I am/we are declared the bidder with the Lowest Calculated Responsive Bid, and I/we have furnished the performance security and signed the Contract.

IN WITNESS WHEREOF, I/We have hereunto set my/our hand/s this ____ day of *[month]* *[year]* at *[place of execution]*.*[Insert NAME OF BIDDER OR ITS AUTHORIZED REPRESENTATIVE]**[Insert signatory's legal capacity]*

Affiant

[Jurat]*[Format shall be based on the latest Rules on Notarial Practice]*

CONTRACTOR'S ORGANIZATIONAL CHART FOR THE CONTRACT

Submit Copy of the Organizational Chart that the Contractor intends to use to execute the Contract if awarded to him. Indicate in the chart the names of the Project Manager, Project Engineer, Foreman and other Key Engineering Personnel.

Attach the required Proposed Organizational Chart for the Contract as stated above

NOTES:

1. *This organization chart should represent the "Contractor's Organization" required for the Project, and not the organizational chart of the entire firm.*
2. *Each such nominated engineer/key personnel shall comply with and submit their complete qualification and experience data.*
3. *All these are required to be in the Technical Envelope of the Bidder.*

BID DOCUMENTS
SECTION IX- CHECKLIST OF TECHNICAL AND
FINANCIAL DOCUMENTS

NAME OF PROJECT: Construction of Submarine Net Barricade at Agus 2 HEP
 PR NO./REF. NO.: MA-A2M22-059/INFR2022-AG2-053

Standard Form Number : NPCMGN5F-INFR-05

LIST OF KEY PERSONNEL PROPOSED TO BE ASSIGNED TO THE CONTRACT
(Based on the Minimum Key Personnel Required in the Bidding Documents)

Business Name : _____
 Business : _____

		DESIGNATION			
1. Name					
2. Address					
3. Date of birth					
4. Employed Since					
5. Experience					
6. Previous Employment					
7. Education					
8. PRC License					

Required Attachments during Postqualification:

1. Valid PRC License of the (professional personnel)
2. Certificate of Training with accreditation from DOLE of the Construction Safety and Health Officer
3. TESDA Training Certificate (NIC II) of Welder or Electrician, whichever is applicable
4. Copy of Diploma and/or Service Record/Certificate of Employment of previous and/or current employer of Foreman, Welder, Plumber or Electrician, whichever is applicable shall be submitted during post qualification by the winning bidder.

Submitted by: _____
 (Printed name & signature)

Designation: _____
 Date: _____

One of the requirements from the bidder to be included in its Technical Envelope is a list of contractor's key personnel (based on the minimum key personnel required in the bidding documents) to be assigned to the contract to be bid, with their complete qualification and experience data (including the key personnel's signed written commitment to work for the project once awarded the contract).

KEY PERSONNEL'S CERTIFICATE OF EMPLOYMENT (PROFESSIONAL PERSONNEL)

Issuance Date

THE VICE PRESIDENT
National Power Corporation
Mindanao Generation
Maria Cristina, Iligan City

Dear Sir:

I am (Name of Nominee) a Licensed _____ Engineer with
Professional License No. _____ Issued on _____ at _____

(date of issuance) (place
of issuance)

I hereby certify that (Name of Bidder) Has engaged my services as
(Designation) for the (Name of Project), if awarded to it.

As (Designation), I supervised the following completed projects
Similar to the contract under bidding:

NAME OF PROJECT	OWNER	COST	DATE COMPLETED
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

At present, I am supervising the following projects:

NAME OF PROJECT	OWNER	COST	DATE COMPLETED
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

In case of my separation for any reason whatsoever from the above-mentioned Contractor, I shall notify the National Power Corporation at least twenty one (21) days before the effective date of separation.

As (Designation), I know I will have to stay in the job site all the time to supervise and manage the Contract works to the best of my ability, and aware that I am authorized to handle only one (1) contract at a time.

One of the requirements from the bidder to be included in its Technical Envelope is a list of contractor's key personnel (viz. Project Manager, Project Engineer, Safety & Health Practitioner, Foremen, etc.), to be assigned to the contract to be bid, with their complete qualification and experience data (including the key personnel's signed written commitment to work for the project once awarded the contract).

Standard Form No: NPCMGNSF-INFR-06a

Page 2 of 2

I do not allow the use of my name for the purpose of enabling the above-mentioned Contractor to qualify for the Contract without any firm commitment on my part to assume the post of (Designation) therefore, if the contract is awarded to him since I understand that to do so will be a sufficient ground for my disqualification as (Designation) in any future National Power Corporation bidding or employment with any Contractor doing business with the National Power Corporation.

(Name and Signature)
AFFIANT

REPUBLIC OF THE PHILIPPINES)
City/Municipality of _____)S.S.

SUBSCRIBED AND SWORN TO before me this _____, day of _____ 20____,
affiant exhibiting to me his/her Community Tax Certificate No. _____ issued on
_____ at _____, Philippines.

Notary Public
Until 31 December 20 _____
PTR No. _____
Issued at: _____
Issued on: _____
TIN No. _____

Doc. No. _____
Page No. _____
Book No. _____
Series of _____

One of the requirements from the bidder to be included in its Technical Envelope is a list of contractor's key personnel (viz. Project Manager, Project Engineer, Safety & Health Practitioner, Foremen, etc.), to be assigned to the contract to be bld, with their complete qualification and experience data (including the key personnel's signed written commitment to work for the project once awarded the contract).

Standard Form No: NPCMGNSF-INFR-06b

**KEY PERSONNEL'S CERTIFICATE OF EMPLOYMENT
(CONSTRUCTION SAFETY AND HEALTH PRACTITIONER)**

Issuance Date

THE VICE PRESIDENT
National Power Corporation
Mindanao Generation
Maria Cristina, Iligan City

Dear Sir;

I am (Name of Nominee) a Licensed Engineer with
Professional License No. Issued on (date of issuance) at (place
of issuance)

I hereby certify that (Name of Bidder) Has engaged my services as
(Designation) for the (Name of Project), if awarded to it.

As (Designation), I supervised the following completed projects
Similar to the contract under bidding:

NAME OF PROJECT	OWNER	COST	DATE COMPLETED

At present, I am supervising the following projects:

NAME OF PROJECT	OWNER	COST	DATE COMPLETED

In case of my separation for any reason whatsoever from the above-mentioned Contractor, I shall notify the National Power Corporation at least twenty one (21) days before the effective date of separation.

As Safety and Health Practitioner, I know I will have to stay in the job site all the time and aware that I am authorized to handle only one (1) contract at a time.

One of the requirements from the bidder to be included in its Technical Envelope is a list of contractor's key personnel (viz. Project Manager, Project Engineer, Safety & Health Practitioner, Foremen, etc.), to be assigned to the contract to be bid, with their complete qualification and experience data (including the key personnel's signed written commitment to work for the project once awarded the contract).

BID DOCUMENTS

SECTION IX- CHECKLIST OF TECHNICAL &

FINANCIAL DOCUMENTS

Standard Form No: NPCMGNSF-INFR-06b

Page 2 of 2

NAME OF PROJECT: Construction Of CDD Office Extension (Phase 2)

PR NO./REF. NO.: MG-PDD22-002/INFR2022-CDD-005

I do not allow the use of my name for the purpose of enabling the above-mentioned Contractor to qualify for the Contract without any firm commitment on my part to assume the post of Safety and Health Practitioner, if the contract is awarded to him since I understand that to do so will be a sufficient ground for my disqualification as Safety and Health Practitioner in any future National Power Corporation bidding or employment with any Contractor doing business with the National Power Corporation.

(Name and Signature)
AFFIANT

REPUBLIC OF THE PHILIPPINES)
City/Municipality of _____)S.S.

SUBSCRIBED AND SWORN TO before me this _____, day of _____, 20____,
affiant exhibiting to me his/her Community Tax Certificate No. _____ issued on
_____ at _____, Philippines.

Notary Public
Until 31 December 20 _____
PTR No. _____
Issued at: _____
Issued on: _____
TIN No. _____

Doc. No. _____
Page No. _____
Book No. _____
Series of _____

One of the requirements from the bidder to be included in its Technical Envelope is a list of contractor's key personnel (viz. Project Manager, Project Engineer, Safety & Health Practitioner, Foremen, etc.), to be assigned to the contract to be bld, with their complete qualification and experience data (including the key personnel's signed written commitment to work for the project once awarded the contract).

KEY PERSONNEL (FORMAT OF BIO-DATA)

Give the detailed information of the following personnel who are scheduled to be assigned as full-time staff for the project. Fill up a form for each person.

1. Name : _____
 2. Date of Birth : _____
 3. Nationality : _____
 4. Education and Degrees : _____
 5. Specialty : _____
 6. Registration : _____
 7. Length of Service with the Firm : _____
- | | | | |
|------|----------|--------|--|
| Year | | | |
| from | (months) | (year) | |
| To | (months) | (year) | |
8. Years of Experience : _____

9. If item 7 is less than the required number of years stated in BDS Section III- ITB Clause 10.4, give name and length of service with previous employers to satisfy the required number of years of experience within the last ten (10) years (attached additional sheet/s), if necessary:

<u>Name and Address of Employer</u>	<u>Length of Service</u>
_____	Year(s) from _____ to _____
_____	Year(s) from _____ to _____
_____	Year(s) from _____ to _____

10. Experience:

This should cover the past ten (10) years of experience. (Attached as many pages as necessary to show involvement of personnel in projects using the format below).

One of the requirements from the bidder to be included in its Technical Envelope is a list of contractor's key personnel (viz. Project Manager, Project Engineer, Safety & Health Practitioner, Foremen, etc.), to be assigned to the contract to be bid, with their complete qualification and experience data (including the key personnel's signed written commitment to work for the project once awarded the contract).

1. Name : _____
2. Name and Address of Owner : _____
3. Name and Address of the Owner's Engineer (Consultant) : _____
4. Indicate the Features of Project (particulars of the project components and any other particular interest connected with the project) : _____
5. Contract Amount Expressed in Philippine Currency : _____
6. Position : _____
7. Structures for which the employee was responsible : _____
8. Assignment Period : from _____ (months) _____ (years)
to _____ (months) _____ (years)

Name and Signature of
Employee

It is hereby certified that the above personnel can be assigned to this project, if the contract is awarded to our company.

(Place and Date)

(The Authorized Representative)

One of the requirements from the bidder to be included in its Technical Envelope is a list of contractor's key personnel (viz. Project Manager, Project Engineer, Safety & Health Practitioner, Foreman, etc.), to be assigned to the contract to be bid, with their complete qualification and experience data (including the key personnel's signed written commitment to work for the project once awarded the contract).

BID DOCUMENTS

NAME OF PROJECT:

SECTION IX- CHECKLIST OF TECHNICAL &
FINANCIAL DOCUMENTS

PR NO/REF. NO.:

Standard Form Number : NPCMGNISF-INFR - 08

LIST OF EQUIPMENT, OWNED OR LEASED AND/OR UNDER PURCHASE AGREEMENTS
(Based on the Minimum Equipment Required in the Bidding Documents)

Business Name :
Business :

Description	Model/Year	Capacity/ Performance / Size	Plato No.	Motor No. / Body No.	Location	Condition	Proof of Ownership / Lessor or Vendor
A. Owned							
i.							
ii.							
iii.							
iv.							
B. Leased							
i.							
ii.							
iii.							
iv.							
C. Under Purchased Agreements							
i.							
ii.							
iii.							
iv.							

Submitted by: _____

(Printed name & Signature)

Designation: _____

Date: _____

One of the requirements from the bidder to be included in its Technical Envelope is the list of its equipment units pledged for the contract to be bid, based on minimum equipment required in the bidding docs, which are owned (supported by proof/s of ownership), leased, and/or under purchase agreements (with corresponding engine numbers, chassis numbers and/or serial numbers), supported by certification of availability of equipment from the equipment lessor/vendor for the duration of the project.

Omnibus Sworn Statement (Revised)
(SOLE PROPRIETORSHIP)

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

AFFIDAVIT

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

1. I am the sole proprietor or authorized representative of [Name of Bidder] with office address at [address of Bidder];
2. As the owner and sole proprietor, or authorized representative of [Name of Bidder], I have full power and authority to do, execute and perform any and all acts necessary to participate, submit the bid, and to sign and execute the ensuing contract for [Name of the Project] of the National Power Corporation-Mindanao Generation, as shown in the attached duly notarized Special Power of Attorney;
3. [Name of Bidder] is not "blacklisted" or barred from bidding by the Government of the Philippines or any of its agencies, offices, corporations, or Local Government Units, foreign government/foreign or international financing institution whose blacklisting rules have been recognized by the Government Procurement Policy Board, by itself or by relation, membership, association, affiliation, or controlling interest with another blacklisted person or entity as defined and provided for in the Uniform Guidelines on Blacklisting;
4. Each of the documents submitted in satisfaction of the bidding requirements is an authentic copy of the original, complete, and all statements and information provided therein are true and correct;
5. [Name of Bidder] is authorizing the Head of the Procuring Entity or its duly authorized representative(s) to verify all the documents submitted;
6. The owner or sole proprietor is not related to the Head of the Procuring Entity, members of the Bids and Awards Committee (BAC), the Technical Working Group, and the BAC Secretariat, the head of the Project Management Office or the end-user unit, and the project consultants by consanguinity or affinity up to the third civil degree;
7. [Name of Bidder] complies with existing labor laws and standards; and
8. [Name of Bidder] is aware of and has undertaken the responsibilities as a Bidder in compliance with the Philippine Bidding Documents, which includes:
 - a. Carefully examining all of the Bidding Documents;
 - b. Acknowledging all conditions, local or otherwise, affecting the implementation of the Contract;

- c. Making an estimate of the facilities available and needed for the contract to be bid, if any; and
 - d. Inquiring or securing Supplemental/Bid Bulletin(s) issued for the *[Name of the Project]*.
9. *[Name of Bidder]* did not give or pay directly or indirectly, any commission, amount, fee, or any form of consideration, pecuniary or otherwise, to any person or official, personnel or representative of the government in relation to any procurement project or activity.
10. In case advance payment was made or given, failure to perform or deliver any of the obligations and undertakings in the contract shall be sufficient grounds to constitute criminal liability for Swindling (Estafa) or the commission of fraud with unfaithfulness or abuse of confidence through misappropriating or converting any payment received by a person or entity under an obligation involving the duty to deliver certain goods or services, to the prejudice of the public and the government of the Philippines pursuant to Article 315 of Act No. 3815 s. 1930, as amended, or the Revised Penal Code.

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

[Insert NAME OF BIDDER OR ITS AUTHORIZED REPRESENTATIVE]

[Insert signatory's legal capacity]

Affiant

[Jurat]

[Format shall be based on the latest Rules on Notarial Practice]

Standard Form No: NPCMGNSF-INFR-09b

Omnibus Sworn Statement (Revised)
PARTNERSHIP/COOP/CORP/JOINT VENTURE

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

AFFIDAVIT

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

1. I am the duly authorized and designated representative of [Name of Bidder] with office address at [address of Bidder];
2. I am granted full power and authority to do, execute and perform any and all acts necessary to participate, submit the bid, and to sign and execute the ensuing contract for [Name of the Project] of the National Power Corporation-Mindanao Generation, as shown in the attached [state title of attached document showing proof of authorization (e.g., duly notarized Secretary's Certificate, Board/Partnership Resolution, or Special Power of Attorney, whichever is applicable)];
3. [Name of Bidder] is not "blacklisted" or barred from bidding by the Government of the Philippines or any of its agencies, offices, corporations, or Local Government Units, foreign government/foreign or international financing institution whose blacklisting rules have been recognized by the Government Procurement Policy Board, by itself or by relation, membership, association, affiliation, or controlling interest with another blacklisted person or entity as defined and provided for in the Uniform Guidelines on Blacklisting;
4. Each of the documents submitted in satisfaction of the bidding requirements is an authentic copy of the original, complete, and all statements and information provided therein are true and correct;
5. [Name of Bidder] is authorizing the Head of the Procuring Entity or its duly authorized representative(s) to verify all the documents submitted;
6. *[If a partnership or cooperative:]* None of the officers and members of [Name of Bidder] is related to the Head of the Procuring Entity, members of the Bids and Awards Committee (BAC), the Technical Working Group, and the BAC Secretariat, the head of the Project Management Office or the end-user unit, and the project consultants by consanguinity or affinity up to the third civil degree;

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

Standard Form No: NPCMGNSF-INFR-09b

7. [Name of Bidder] complies with existing labor laws and standards; and
8. [Name of Bidder] is aware of and has undertaken the responsibilities as a Bidder in compliance with the Philippine Bidding Documents, which includes:
 - a. Carefully examining all of the Bidding Documents;
 - b. Acknowledging all conditions, local or otherwise, affecting the implementation of the Contract;
 - c. Making an estimate of the facilities available and needed for the contract to be bid, if any; and
 - d. Inquiring or securing Supplemental/Bid Bulletin(s) issued for the [Name of the Project].
9. [Name of Bidder] did not give or pay directly or indirectly, any commission, amount, fee, or any form of consideration, pecuniary or otherwise, to any person or official, personnel or representative of the government in relation to any procurement project or activity.
10. In case advance payment was made or given, failure to perform or deliver any of the obligations and undertakings in the contract shall be sufficient grounds to constitute criminal liability for Swindling (Estafa) or the commission of fraud with unfaithfulness or abuse of confidence through misappropriating or converting any payment received by a person or entity under an obligation involving the duty to deliver certain goods or services, to the prejudice of the public and the government of the Philippines pursuant to Article 315 of Act No. 3815 s. 1930, as amended, or the Revised Penal Code.

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

[Insert NAME OF BIDDER OR ITS AUTHORIZED REPRESENTATIVE]

[Insert signatory's legal capacity]
Affiant

[Jurat]

[Format shall be based on the latest Rules on Notarial Practice]

Standard Form No: NPCMGNSF-INFR-10

NET FINANCIAL CONTRACTING CAPACITY (NFCC)

- A. Summary of the Bidder's/Contractor's assets and liabilities on the basis of the income tax return and audited financial statement for the immediately preceding calendar year are:

		Year 20
1.	Total Assets	
2.	Current Assets	
3.	Total Liabilities	
4.	Current Liabilities	
5.	Net Worth (1-3)	
6.	Net Working Capital (2-4)	

- B. The Net Financial Contracting Capacity (NFCC) based on the above data is computed as follows:

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

NFCC – P _____

Herewith attached is certified true copy of the audited financial statement, stamped "RECEIVED" by the BIR or BIR authorized collecting agent for the immediately preceding calendar year.

Submitted by:

Name of Bidder/Contractor

Signature of Authorized Representative

Date: _____

JOINT VENTURE AGREEMENT**KNOW ALL MEN BY THESE PRESENTS:**

That this JOINT VENTURE AGREEMENT is entered in to by and between:
 _____, of legal age, (civil status), authorized representative of
 _____ and a resident of _____.

- and -

_____, of legal age, (civil status), authorized representative of
 _____ and a resident of _____.

That both parties agree to join together their capital, manpower, equipment, and other resources and efforts to enable the Joint Venture to participate in the Bidding and Undertaking of the hereunder stated Contract of the National Power Corporation.

NAME OF FIRM**CAPITAL CONTRIBUTION**

That the capital contribution of each member firm:

NAME OF FIRM**CAPITAL CONTRIBUTION**

1	DHD
2	PHP

That both parties agree to be jointly and severally liable for their participation in the Bidding and Undertaking of the said contract.

That both parties agree that _____ and/or _____ shall be the Official Representative/s of the Joint Venture, and are granted full power and authority to do, execute and perform any and all acts necessary and/or to represent the Joint Venture in the Bidding and Undertaking of the said contract, as fully and effectively and the Joint Venture may do and if personally present with full power of substitution and revocation.

That this Joint Venture Agreement shall remain in effect only for the above stated Contract until terminated by both parties.

 Name & Signature of Authorized Representative

 Official Designation

 Name of Firm

 Name & Signature of Authorized Representative

 Official Designation

 Name of Firm

 Witnesses

If the bidder is a joint venture, one of the requirements is the submission of a valid joint venture agreement.

ACKNOWLEDGEMENT

BEFORE ME, a Notary Public for and in _____, Philippines, this _____ day of _____, 20____, personally appeared _____, authorized representative, of _____ with Community Tax Certificate No. _____, issued at _____ on _____, AND _____ authorized representative, of _____ with Community Tax Certificate No. _____, issued at _____ on _____ known to me to be the same person who executed the foregoing instrument consisting of two (2) pages, including the page whereon the acknowledgements are written, all pages signed by both parties and their instrumental witnesses and they acknowledged before me that the same are their free and voluntary acts and deeds and that of the Corporations they represents.

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

Notary Public

Until 31 December 20 _____

PTR No. _____

Issued at: _____

Issued on: _____

TIN No. _____

Doc. No. _____

Page No. _____

Book No. _____

Series of _____

If the bidder is a joint venture, one of the requirements is the submission of a valid joint venture agreement.
Standard Form No: NPCMGNSF-INFR-12

Bid Form for the Procurement of Infrastructure Projects

BID FORM

Date : _____

Project Identification No. : _____

To: **The Vice President**
National Power Corporation
Mindanao Generation
Maria Cristina, Iligan City

Having examined the Philippine Bidding Documents (PBDs) including the Supplemental or Bid Bulletin Numbers [insert numbers], the receipt of which is hereby duly acknowledged, we, the undersigned, declare that:

- a. We have no reservation to the PBDs, including the Supplemental or Bid Bulletins, for the Procurement Project: [insert name of contract];
- b. We offer to execute the Works for this Contract in accordance with the PBDs;
- c. The total price of our Bid in words and figures, excluding any discounts offered below is: [insert information];
- d. The discounts offered and the methodology for their application are: [insert information];
- e. The total bid price includes the cost of all taxes, such as, but not limited to: [specify the applicable taxes, e.g. (i) value added tax (VAT), (ii) income tax, (iii) local taxes, and (iv) other fiscal levies and duties], which are itemized herein and reflected in the detailed estimates,
- f. Our Bid shall be valid within the a period stated in the PBDs, and it shall remain binding upon us at any time before the expiration of that period;
- g. If our Bid is accepted, we commit to obtain a Performance Security in the amount of [insert percentage amount] percent of the Contract Price for the due performance of the Contract, or a Performance Securing Declaration in lieu of the the allowable forms of Performance Security, subject to the terms and conditions of issued GPPB guidelines¹ for this purpose;
- h. We are not participating, as Bidders, in more than one Bid in this bidding process, other than alternative offers in accordance with the Bidding Documents;
- i. We understand that this Bid, together with your written acceptance thereof included in your notification of award, shall constitute a binding contract between us, until a formal Contract is prepared and executed; and

Standard Form No: NPCMGNSF-INFR-12

Page 2 of 2

¹ currently based on GPPB Resolution No. 09-2020

- j. We understand that you are not bound to accept the Lowest Calculated Bid or any other Bid that you may receive.
- k. We likewise certify/confirm that the undersigned, is the duly authorized representative of the bidder, and granted full power and authority to do, execute and perform any and all acts necessary to participate, submit the bid, and to sign and execute the ensuing contract for the [Name of Project] of the National Power Corporation-Mindanao Generation.
- l. We acknowledge that failure to sign each and every page of this Bid Form, including the Bill of Quantities, shall be a ground for the rejection of our bid.

Name: _____

Legal Capacity: _____

Signature: _____

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

Date: _____

NAME OF PROJECT:

PR NOJREF. NO.:

DETAILED COST ESTIMATE FORM

Name, Signature of Authorized Representative

Designation

[illegible]

*Standard Form No: NPCMGNSF-INFR-14***SUMMARY SHEETS OF MATERIALS PRICES, LABOR RATES AND
EQUIPMENT RENTAL RATES**

Name of Bidder: _____

I. Unit Prices of Materials

Materials Description	Unit	Unit Price
-----------------------	------	------------

II. Manpower Hourly Rates

Designation	Rate/Hr.
-------------	----------

III. Equipment Hourly Rental Rates

Equipment Description	Rental Rate/Hr.
-----------------------	-----------------

Name, Signature of Authorized Representative_____
Designation

Performance Securing Declaration (Revised)

[if used as an alternative performance security but it is not required to be submitted with the Bid, as it shall be submitted within ten (10) days after receiving the Notice of Award]

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

PERFORMANCE SECURING DECLARATION

Invitation to Bid: [Insert Reference Number indicated in the Bidding Documents]

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

I/We, the undersigned, declare that:

1. I/We understand that, according to your conditions, to guarantee the faithful performance by the supplier/distributor/manufacture/contractor/consultant of its obligations under the Contract, I/we shall submit a Performance Securing Declaration within a maximum period of ten (10) calendar days from the receipt of the Notice of Award prior to the signing of the Contract.
2. I/We accept that: I/we will be automatically disqualified from bidding for any procurement contract with any procuring entity for a period of one (1) year for the first offense, or two (2) years for the second offense, upon receipt of your Blacklisting Order if I/We have violated my/our obligations under the Contract;
3. I/We understand that this Performance Securing Declaration shall cease to be valid upon:
 - a. issuance by the Procuring Entity of the Certificate of Final Acceptance, subject to the following conditions:
 - i. Procuring Entity has no claims filed against the contract awardee;
 - ii. It has no claims for labor and materials filed against the contractor; and
 - iii. Other terms of the contract; or
 - b. replacement by the winning bidder of the submitted PSD with a performance security in any of the prescribed forms under Section 39.2 of the 2016 revised IRR of RA No. 9184 as required by the end-user.

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

*[Insert NAME OF BIDDER OR ITS
AUTHORIZED REPRESENTATIVE]
[Insert signatory's legal capacity]
Affiant*

[Jurat]

[Format shall be based on the latest Rules on Notarial Practice]

**Contract Agreement Form for the
Procurement of Infrastructure Projects (Revised)**

[not required to be submitted with the Bid, but it shall be submitted within ten (10) days after receiving the Notice of Award]

CONTRACT AGREEMENT

THIS AGREEMENT, made this *[insert date]* day of *[insert month]*, *[insert year]* between *[name and address of PROCURING ENTITY]* (hereinafter called the "Entity") and *[name and address of Contractor]* (hereinafter called the "Contractor").

WHEREAS, the Entity is desirous that the Contractor execute *[name and identification number of contract]* (hereinafter called "the Works") and the Entity has accepted the Bid for *[contract price in words and figures in specified currency]* by the Contractor for the execution and completion of such Works and the remedying of any defects therein.

NOW THIS AGREEMENT WITNESSETH AS FOLLOWS:

1. In this Agreement, words and expressions shall have the same meanings as are respectively assigned to them in the Conditions of Contract hereinafter referred to.
2. The following documents as required by the 2016 revised Implementing Rules and Regulations of Republic Act No. 9184 shall be deemed to form and be read and construed as part of this Agreement, viz.:
 - a. Philippine Bidding Documents (PBDs);
 - i. Drawings/Plans;
 - ii. Specifications;
 - iii. Bill of Quantities;
 - iv. General and Special Conditions of Contract;
 - v. Supplemental or Bid Bulletins, if any;
 - b. Winning bidder's bid, including the Eligibility requirements, Technical and Financial Proposals, and all other documents or statements submitted;

Bid form, including all the documents/statements contained in the Bidder's bidding envelopes, as annexes, and all other documents submitted (e.g., Bidder's response to request for clarifications on the bid), including corrections to the bid, if any, resulting from the Procuring Entity's bid evaluation;

- c. Performance Security;
- d. Notice of Award of Contract and the Bidder's conforme thereto; and
- e. Other contract documents that may be required by existing laws and/or the Procuring Entity concerned in the PBDs. Winning bidder agrees that additional contract documents or information prescribed by the GPPB that are subsequently required for submission after the contract execution, such as the Notice to Proceed, Variation Orders, and Warranty Security, shall likewise form part of the Contract.

3. In consideration for the sum of *[total contract price in words and figures]* or such other sums as may be ascertained, *[Named of the bidder]* agrees to *[state the object of the contract]* in accordance with his/her/its Bid.
4. The *[Name of the procuring entity]* agrees to pay the above-mentioned sum in accordance with the terms of the Bidding.

IN WITNESS whereof the parties thereto have caused this Agreement to be executed the day and year first before written.

[Insert Name and Signature]

[Insert Name and Signature]

[Insert Signatory's Legal Capacity]

[Insert Signatory's Legal Capacity]

for;

for:

[Insert Procuring Entity]

[Insert Name of Supplier]

Acknowledgment

[Format shall be based on the latest Rules on Notarial Practice]

