

PRE-BID CONFERENCE

Project No. 2019-20: Construction of General Santos City Water District Warehouse Building

October 11, 2019, 1:30pm

GSCWD Bldg., Boardroom, General Santos City

MINUTES OF THE PROCEEDINGS

I. Attendance

BAC Members

Ferdinand S. Ferrer, MPA	-	Chairperson
Engr. Rogelio A. Besana, Jr.	-	Vice Chairperson
Francisco R. Alolod Jr., CPA	-	Member
Engr. Cornelio T. Turija, Jr	-	Member
Samcelle B. Valenzuela	-	Member
Maritess P. Primaylon	-	Member
Engr. Michael Gabales	-	TWG Head
Judy Lim-Pasman	-	TWG
Engr. Ma. Celia N. Dandan	-	TWG

BAC Secretariat

Agnes P. Tampico
Rauline Kaye F. Autida

Bidders

Jay G. Recorte	-	DUBC
Floyd Andrew F. Castillo	-	Crosmak Inc.
Charity Sasil	-	Hanna Via Construction Inc.
Merry Joy Leyiglo	-	Hanna Via Construction Inc.
Ellen Japos	-	AL Acharon Construction & Supply
Jimmuel Villamor	-	System Processor & Construction Corp.
Loeric Teves	-	Lawrence Erik Construction
Jim G. Clamor	-	Jiclam Builders & Ent.
April Loie L. Asunto	-	RSLorenzo Construction
Rudy S. Lorenzo	-	RSLorenzo Construction
Victoria Salaum	-	Kevin Yoshi Builders
JhonneferS. Macala	-	Fastruct

II. Call to Order

The conference was called to order at 1:30 pm and was presided by the BAC Chairperson, Ferdinand S. Ferrer, MPA.

BAC Secretary Rauline Kaye F. Autida went over the attendees. 10 (ten) prospect bidders attended the pre-bid conference, namely: DUBC, Crosmak Inc., Hanna Via Construction Inc., AL Acharon Const. & Supply, System Processor & Construction Corp., Lawrence Erik Construction, Jiclam Builders & Ent., RSLorenzo Construction, Kevin Youshi Builders, Fastruct.

There were no representatives from the Commission on Audit, Kiwanis and PSME who were invited to observe and witness the conduct of the Pre-Bid Conference.

III. Highlights of the Proceedings

As to the Bidding Process

BAC Member, Engr. Cornelio Turija discussed the following points:

- The Approved Budget for the Contract (ABC) is ***Nine Million Three Hundred Sixty Six Thousand Two Hundred Ninety Four & 71/100 Pesos Only (Php 9,366,294.71)***.
- It was discussed to the prospective bidder the two-envelope system and the components for each envelope. The First envelope is composed of the Class A Eligibility & Technical Documents and the second envelope is the Financial component.
- The following are the Class A Eligibility Documents:
 - **Notarized Authority of Signatory**
 - This shall indicate and authorize the name of the authorized representative of the supplier, who will transact with the General Santos City Water District. It must be notarized.
 - If Corporation, additional attachment of Notarized Secretary's Certificate
 - **Platinum PhilGEPS Certificate of Registration and Membership (with Annex A)** in accordance with Section 8.5.2 of the IRR
 - In case any of the items are expired, bidder must present copy of the renewed certificate; official receipts or any proof of payment shall not be accepted. However, Tax Clearance & PCAB License as reflected in Annex A must not be expired.
 - **Statement of all its ongoing government and private contracts awarded but not yet started, if any, whether similar or not similar in nature and complexity to the contract to be bid.**
 - **Statement of the bidder's SLCC similar to the contract to be bid, in accordance with ITB Clause 5.4, within the relevant period as provided in the ITB Clause 12.1(a)(ii)**
 - ITB Clause 5.4 states, "The bidder must have completed, within the period specified in the Invitation to Bid and ITB Clause 12.1 (a)(ii), a single contract that is similar to this project, equivalent to at least 50% of the ABC. For this purpose, similar contracts shall refer to "civil structural steel works."
 - Bidder shall include in their bid:
 - A photocopy of Single Largest Completed Contract or Purchase Order
 - Notice of Award and / or Notice to Proceed
 - Project Owner's Certificate of Final Acceptance issued by the Owner other than the Contractor or the Constructors Performance Evaluation System (CPES) Final Rating, which must be at least satisfactory. In case of contracts with the private sector, an equivalent document shall be submitted.
 - ITB Clause 12.1 (a)(ii) states, "The bidder's SLCC similar to the contract to be bid should have been completed within 5 (five) years prior to the deadline for the submission and receipt of bids."
 - **PCAB Registration**
 - Category C & D with size range small B
 - Must not be expired during the deadline of submission of bids
 - **Net Financial Contracting Capacity (NFCC)** computation in accordance with ITB Clause 5.5 or a committed line of credit from a universal or commercial bank
 - Computation is as presented in ITB 5.5

- The values of the domestic bidder's current asset and current liabilities shall be based on the latest Audited Financial Statement (AFS) submitted to the BIR
- Here are the composition of the Technical Documents:
 - **The Bid Security** shall be limited to Bid Securing Declaration or at least one (1) other form in accordance with the following amount;
 - Cash (2% of ABC) = Php 187,325.89
 - Cashier's / Manager's Check issued by a Universal or Commercial Bank (2% of ABC) = Php 187,325.89
 - Bank Draft / guarantee or irrevocable letter of credit issued by a Universal or Commercial Bank. (2% of ABC) = Php 187,325.89
 - Surety Bond (5% of ABC) = Php 268,314.74 valid *until* February 24, 2020 and shall be accompanied by a certification by the Insurance Commission that the surety or insurance company is authorized to issue such instruments. Only those bid securities procured from commercial and universal banks shall be allowed.
 - **Project Requirements**
 - Organizational Chart
 - List of Contractor's Personnel (ref. BDS clause 12.1 (b)(ii.2))
 - The contractor's personnel must be professionals that are supported with corresponding unexpired licenses.
 - List of Contractor's Equipment (ref. BDS clause 12.1 (b)(iii.3))
 - The contractor shall be required to include the list of their equipment in the technical documents and specify whether the same is leased or owned.
 - During post-qualification, GSCWD shall conduct inspection to verify the availability of the listed equipment. Absence of any one of the required equipment is ground for disqualification
 - **Sworn Statement** in accordance with Section 25.2(a)(iv) of the IRR of RA 9184 and using the form prescribed in Section IX of Bidding Forms
 - Must be Notarized
 - Proforma found in the Bid Docs
- Other reminders:
 - Bids that exceed the ABC shall not be accepted.
 - Bid Prices in Bill of Quantities in the prescribed form shall comprise:
 - Bid Prices in the Bill of Quantities
 - Detailed estimates, including summary sheet indication the unit prices of construction materials, labor rates, and equipment rentals used in coming up with the bid; and
 - Cash flow by quarter by quarter or payment schedule
 - Prospective bidders are instructed to provide one (1) original and four (4) photocopies of the documents for each component. The BAC prefers bid documents be identified with ticklers for easy location of file/s to be evaluated during opening of bids.
 - Other bidders can still join the bidding even if they have not attended the Pre-bid Conference.
 - Deadline of Bids: **October 24, 2019, 12:00nn**; late bids shall be declared "late" and shall not be accepted.

As to the Technical Specifications

Engr. Ma. Celia N. Dandan discussed the Technical Specifications:

A. GENERAL PROVISIONS AND REQUIREMENTS

The intent of the Specifications and Drawings is that the contractor shall furnish all the required shop, labor, materials, equipment and services, unless otherwise specifically provided.

The plans, detail drawings and technical specifications shall be considered as completing each other, so that what is mentioned or shown in one, although not mentioned or shown in the other, shall be considered as appearing on both. In case of conflict between the two, the same shall be referred to General Santos City Water District (GSCWD) for resolution.

2. SCOPE OF WORK

The work cover under this contract shall include:

2.1 Complete construction of the structure including supervision, labor and the supply of materials, equipment and service necessary to properly conduct produce the desired work/product. Included herein are site preparation and earthworks, concrete works, masonry works, mill/steel works, hard wares, electrical works, painting, clearing and all temporary works and structures necessary for an efficient, smooth up-to-date completion of the contract.

2.2 At the completion of the work under this contract, the contractor shall furnish One (1) complete set hardcopy of all drawings as actually installed or the As-built Plan.

2.3 Site/Land development required around proposed structure (if any).The area around the proposed project as indicated, specified and shown in the site development plan for each particular site must be cleared of rubbish, loam, refuse, roots, and other perishable or objectionable matter, and must be filled and compacted or cut out and graded to the established grade line elevation specified by the General Santos City Water District (GSCWD) Engineer as indicated in the plans and drawings for the particular project site.

3. BIDDERS QUALIFICATION

Bidders/Contractors should be fully experienced and reputable in the field of construction. Contractor's minimum License Category is C&D with Size Range Small B with at least Two (2) year experience in civil, structural steel works and completed at least Two (2) related construction projects in any Government or Private Institutions from the date of submission and receipt of bids.

4. ENVIRONMENTAL PROTECTION WORKS

The environment means surrounding area including human and natural resources to be affected by execution and after completion of works. The Contractor shall take all precautions for safeguarding the environment during the course of construction of the works. He shall abide by all prevalent laws, rules and regulations governing pollution and environmental protection. The Contractor shall prohibit its employees from cutting of trees and the former without approval from the District and shall be responsible for the action of the latter.

Waste materials must be collected, stored and transported to approved dump/disposal area.

The GSCWD Engineer shall have the power to disallow the method of construction and/or the use of any borrow/quarry area, if the stability and safety of the works or any adjacent structure is endangered, or there is undue interference with the natural or artificial drainage, or the method or use of the area will promote undue erosion.

5. INSPECTION OF SITE

The tender may be deemed to have been based on data, regarding physical condition at the sites. The contractor acknowledged and warrants that he has inspected and examined such site and their surroundings and has satisfied himself by submission of this tender as to form and nature of the sites, the quantities, and the nature of work and materials necessary for the completion of the works, and the means of access of the sites, the accommodation he may require and that he has obtained for himself, all other circumstances which may have influenced or affected his tender. No increase in cost or extension of time will be considered for failure to inspect and examine the site condition.

6. CONTRACTOR'S EMPLOYEE

The employees of the Contractor are not employees of GSCWD. Hence, GSCWD shall not be liable or responsible for any personal injury or damage including death caused by any of the employees of the contractor during the lawful performances of their duties.

The contractor shall, at all times, stand solely liable and/or responsible for the enforcement of and compliance with all existing laws, rules and regulations applicable, and the contractor hereby agrees and binds itself to save and hold the Owner free and harmless from any or all liabilities in respect thereto and/or arising therefrom.

The organizational chart shall be submitted together with the contractor's bid, subject to checking during post qualification.

7. CONTRACTOR SUPERVISION

The contractor shall provide continuous supervision of the work with his best skill and attention. The contractor's supervisor shall carefully examine all the plans, specifications and contract documents. The contractor shall perform all works necessary to carry out the intent of the plans and specifications and shall immediately report to the GSCWD any error, inconsistency or omission, which he discovers in the plans and contract, documents.

- The contractor shall also provide a project Engineer to check, for continuous supervision, of work with his best skill and attention.

8. MONTHLY COORDINATION MEETING

There will be a regular coordination meeting that will be conducted twice a month to discuss issues and concerns of the project.

9. CONTRACT DURATION

The Contract duration is **One Hundred Eighty (180) Calendar Days and shall commence Five (5) Days** after the receipt of Notice to proceed.

Once the project reaches an accomplishment of 95% of the total contract amount, upon the request of the Contractor, GSCWD shall create an inspectorate team to make the preliminary joint inspection to assess the project status and submit a punch-list to the Contractor in preparation for the final turnover of the project. Said punch-list will contain, among others, the remaining works, works deficiencies for necessary corrections and the specific duration / time to fully complete the project as agreed upon by the GSCWD and the Contractor

10. ACCEPTANCE OF THE PROJECT

The Certificate of completion shall be issued to the contractor. The Certificate of Final Acceptance shall be issued after the warranty period of one (1) year. The release of 10% retention money shall be requested by the contractor after the issuance of Certificate of Completion and posting of corresponding surety bond on the part of the Contractor.

11. PERMITS, BONDS, INSURANCE AND LEGAL RESPONSIBILITY AND PUBLIC SAFETY

11.1 PERMITS AND LICENSES

The processing and payment of all necessary permits shall be the responsibility of the GSCWD. However, during the project implementation any coordination or compliance required to the concerned agencies shall be the sole responsibility of the Contractor. The Owner shall provide all assistance whenever necessary.

11.2 CONTRACTOR'S RESPONSIBILITY

The Contractor shall comply with safe work practices and all health and safety regulations of the state and the locality. Furnish protective and lifesaving equipment for persons working at the site and provide a **Contractor's All Risk Insurance** for all his workers.

The Contractor shall provide and maintain such sanitary accommodation for the use of its employees as may be necessary to comply with all applicable national and local laws and ordinances, regulations, customs and practices.

The Contractor must observe and fully comply to the GSCWD Safety Code and works which is not compliant upon assessment of GSCWD Safety Officer and recommendation will be handled accordingly.

The Contractor shall observe and comply with all National, Provincial and Local laws, ordinances, and regulations, which on the manner affect those engaged or employed in the work, the material used in the work, or in the conduct of the work.

11.3 THIRD PARTY LIABILITY

GSCWD shall in no case be held civilly or criminally liable due to the act or omission of the Contractor during the contract period or during the implementation of the required work thereof. Any liability that may arise to the third party shall be the sole responsibility of the contractor.

12. CODES AND REFERENCES

The following documents are hereby made as part of the specifications:

13.1 Provisions of the National Building Code

- 13.2 Provisions of the National Structural Code of the Philippines (NSCP)
- 13.3 AISC- American Institute of Steel Construction Specification for the design, fabrication and erection of structural steel for buildings, Six Edition.
- 13.4 ACI - American Concrete Institute (ACI 318-63) Building Code Requirements for Reinforced Concrete.
- 13.5 The Philippine Electrical Code published by the Code Committee, Institute of Integrated Electrical Engineers.
- 13.6 The National Electrical Code published by the National Fire Protection Association.
- 13.7 Other standard codes as they are specifically cited in the ensuing section of these specifications.

B. CONSTRUCTION REQUIREMENTS AND METHODS

1. SITE WORK

1.1 PREPARATION AND CLEARANCE OF SITE

1.1.1 SCOPE OF WORK

The work shall include the furnishing of all labor, equipment, materials and other facilities required and to undertake the stripping of top soil, removal of shrubs, stumps roots and other vegetation, cleaning and disposal of all debris on site within a distance as specified and indicated in site/development plans for this project.

1.1.2 SITE INSPECTION AND ESTABLISHED GRADE LINE

The contractor shall inspect and examine the individual site conditions. No increase in cost or extension of time will be considered for failure to examine site condition

1.1.3 PROTECTION AND DISPOSAL

Care should be taken to protect and maintain adjacent properties, trees, materials and such other facilities such as conduits, drains, sewers, pipes and other wires that are to remain in the property.

1.1.4 STRIPPING OF TOPSOIL

1.1.4.1 Remove all traces of topsoil, loam, organic and alluvial materials, including mud, pest and swamp materials.

1.1.4.2 Remove all earth and sub-grade materials unsuitable for the preparation of the subgrade for the various item of construction.

1.1.4.3 Clear and remove shrubs, stumps roots and other unnecessary vegetation from the site.

1.1.5 STAKING OUT

1.1.5.1 The building shall be staked out and all lines and grade shown on the drawings shall be established before any excavation is started.

1.1.5.2 Basic batter boards and reference work shall be erected at such places where they will not be disturbed during the construction of the foundation.

1.1.5.3 Store materials and conduct work in such a manner as to protect all reference marks

1.2 EARTHWORKS

1.2.1 SCOPE OF WORKS

The work shall include the furnishing of all labor, equipment, materials and other facilities required and to undertake for excavation and back filling, hauling excavated materials, grading including preparation of sub-grade for concrete pouring, trenching and all other works necessary to complete all earthworks as shown on the drawing or as specified herein.

1.2.2 MATERIALS

Excavated materials approved for use as back fill shall be free of fibers, vegetables or organic materials, boulders, lumps, debris or cinders. No fill materials shall be placed when free water is standing in the area where fill is to be placed.

1.2.3 PROTECTION

The contractor shall provide adequate bracing and shoring to protect existing construction as may be required. Protective measure for materials, men and adjoining property shall be provided. The contractor shall be liable for any damages as a cause of his negligence in the execution of his contract work.

1.2.4 EXCAVATION

All excavation for foundations and footings shall be made to the depths of excavation on grade indicated in drawing. Where excavations for footing will rest on fill, excavation shall be carried deeper until the desired situation is reached as shown in the approved plans.

Whenever water is encountered in the excavations process, it shall be removed by pail or pumping, care being taken that the surrounding soil are not disturbed or removed. All excavation for footings and excavations are indicated in the drawings shall be assumed as the depth used by the contractor in the estimate of his volume of excavation works.

Excavate with proper allowance made for floor slabs, formworks, erection, shoring, water proofing, masonry and adequate space for inspection of foundations and utilities connected to it.

1.2.5 BACK FILLING AND GRADING

Back fill after approval of construction below finish grade, forms removed, and excavation cleaned of trash and debris. Back fill shall be based in layers not exceeding 0.15 m in thickness, each layer being thoroughly wetted and compacted by tamping or rolling until the correct grade is attained. The top 0.05 m of back fill shall consist of sand cinders, gravel and other approved materials thoroughly compacted by wetting and tamping.

2.0 CONCRETE CONSTRUCTION

2.1 SCOPE OF WORK

The work consists of furnishing all labors, equipment, materials and other services for the construction of forms and shoring, fabrication, and placing or reinforcement bars, proportioning, mixing, conveying, placing, finishing curing of concrete. All pertinent provisions of the general conditions form part of this section.

2.2 GENERAL

Unless otherwise specified herein concrete work shall conform to the requirement of the ACI Building Code (ACI 318-63). Materials such as cement, water, aggregates and reinforcing bars shall conform to ASTM standards and requirements.

2.3 STORAGE OF MATERIALS

2.3.1 Cement and aggregates shall be stored in such a manner to prevent their deterioration or the intrusion of foreign matter. Any material which has deteriorated or which has been damaged shall not be used for concrete. Cement whose quality is questionable shall be tested by standard mortar tests to determine its suitability for use.

2.3.2 Reinforcing bars shall be stored in a manner that will prevent excessive rusting or coating with grease, oil, dirt, and other objectionable matters. They shall be supported in such manner to eliminate unnecessary bonds.

2.3.3 Water shall be stored in clean containers without rust or other objectionable substances deleterious to concrete mixes.

2.4 MATERIALS REQUIREMENTS

2.4.1 Portland Cement shall conform to "Specifications for Portland Cement" (ASTM C 150 latest revision). The cement shall be in accordance with Department of Public Works and Highways (DPWH) standards e.g. "Holcim" and subject for inspection and approval of GSCWD Engineer before the scheduled concrete pouring.

2.4.2 Concrete Aggregates shall conform to "Specifications for Aggregates" (ASTM C latest revision). The maximum size of the aggregates shall be not larger than one-fifth of the narrowest dimension between sides of the form of the members for which the concrete is to be used nor longer than three-fourths of the minimum clear spacing between individual reinforcing bars, and in no case larger than two inches in diameter.

2.4.3 Water used in mixing concrete shall be clean and free from injurious amounts of soil, acids, and alkalis. Organic materials or other substances that may be deleterious to concrete or steel.

2.4.4 REINFORCING STEEL

2.4.4.1 Reinforcing steel shall conform to ASTM designation A-615-68 specifications for structural grade or equivalent as approved by Bureau of Product Standards of the Philippines.

2.4.4.2 Reinforcing steel bars to be used shall be new and free from dust, oil grease, defects or kinks.

2.4.4.3 Reinforcing steel for columns, beams, footings pedestals, walls, etc. shall be structural grade deformed bars. Ties and stirrups for beams and columns as well as slab reinforcement shall be deformed bars unless noted in the plans or specified herein.

2.4.5 FORMS

- 2.4.5.1 Forms shall conform to the shape, lines, and dimensions of the members as called for on the plans and shall be substantial and sufficiently tight to prevent leakage of mortar. They shall be properly braced or tied together so as to maintain position and shape.
- 2.4.5.2 Plywood, metal, plastic materials or surfaced lumber forms shall be used where it will best give the most advantage in the specific concrete work involved.

2.5 CONCRETE FORMWORK

- 2.5.1 Work shall be done in accordance with specifications for concrete and reinforced concrete as adopted by Department of Public Works and Highways (DPWH) and the corresponding National Building Code requirements for reinforced concrete formwork.
- 2.5.2 Forms shall be used whenever necessary to confine the concrete and shape it to the required lines, or to ensure the concrete of contamination with materials caving or sloughing, form adjacent, excavated materials. Withstands the pressure resulting from placement and vibration of the concrete, shall be maintained rigidly in correct position. Forms for exposed surfaces shall be lined with form grade plywood. Bolts and rod used for internal ties shall be arranged such that when the forms are removes all metal will not be less than Five (5) centimeters from the formed surface. Before placing the concrete, the contact surfaces of the forms shall be cleaned for encrustation of mortar, grout, or other foreign material, and shall be coated with a commercial form oil that will effectively prevent sticking and will not stain the concrete surface.
- 2.5.3 No construction load shall be supported upon, nor shoring removed from any part of the structure under construction until that portion of the structure has attained sufficient strength to support safely its weight and the loads place thereon.
- 2.5.4 Temporary opening shall be provided at the base of the columns and wall forms, and to facilitate inspection and cleaning before the depositing of concrete.
- 2.5.5 Unless otherwise ordered, forms and shoring shall not be disturbed and shall remain in place for a minimum period of time in accordance with the following schedule.

PARTS OF STRUCTURE	TIME REQUIRED
a. Massive Footings	a. 7 days (168 hours)
b. Cantilever Footings	b. 4 days (96 hours)
c. Thin walls less than 300 mm	c. Up to 2.4m high 7 days (168 hours) Add 1/2 days (36 hours) for even additional 1.0 m of height or fraction thereof but not more than 28 days (672 hours)
d. Beams (sides)	d. 3 days (72 hours)
e. Beams (bottom)	e. Up to 4.30m - 15 days (360 hours) Add one day for every additional 0.30 m height or fraction thereof but not more than 28 days (672 hours)
f. Columns whose ratio of heights	f. 4 days (96 hours) least diameter up to 4 times
g. Columns whose ratio of heights	g. Add to the above number 1 day least diameter up from 4 to 6 (24 hours) for every additional 0.90m height or fraction thereof but not more than 28 days (672 hours)

- 2.5.6 Forms and shoring may be removed earlier than specified by standard government specifications, provided that test samples concrete is taken and are shown to be adequately strong to carry safety and construction loads to the satisfaction of the GSCWD Engineer.

2.6 CONCRETE REINFORCEMENT WORK

- 2.6.1 Before placing reinforcement and before pouring of concrete, remove all loose rust, mill scale, oil or other adhering materials, which tend to reduce or destroy bond between concrete and reinforcement.

- 2.6.2 Reinforcing bars shall be cut, bent, lapped or spliced as recommended by CRSI Handbooks and ACI codes.
- 2.6.3 Reinforcement shall be placed accurately and secured in place by used of concrete or metal supports, spacers or ties to firmly hold them in their proper positions during pouring and setting of concrete.
- 2.6.4 Metal Reinforcement shall not be bent or straightened in any manner that will injure the material. Bars with kinks or bends shall not be used.
- 2.6.5 Splices of tensile reinforcement at points of maximum stresses will be allowed only when expressly authorized by the GSCWD. Splices are permitted, provided sufficient lap (not less than 60 times the diameter of the bar for deformed bars) to transfer the stress between bars by bond and shear, and shall be secure in place by the used of tie wires not smaller than no. 16 gauge. Splices in adjacent bars shall be staggered.
- 2.6.6 Metal reinforcement shall have protective covering not less than 0.05 m for beams, girders, columns and walls, and not less than 0.075 m in concrete slabs and footing.
- 2.6.7 The minimum spacing between parallel bars shall be 2 ½ times the diameter of round bars and 3 times the side dimension of square bars but in no case shall the spacing between bars be less than 25 mm in beams and girders and 37.5 mm in columns, not less than 1 1/2 times the maximum size of coarse aggregates.
- 2.6.8 Testing of steel bars shall conform to ASTM designation for specified materials. Samples of materials for testing shall be provided by the contractor without additional cost to GSCWD. Likewise, the contractor shall pay for the cost of testing the samples.
- 2.6.9 **MEASUREMENT AND PAYMENT**
For addition to or deduction from the contract sum to extra work or deletion of extra work involved, the steel reinforcement shall be measured by weight either in kilograms or in tons. The contractor measured by weight either in kilograms or in tons. The contractor shall be paid based on the steel weight as per unit prices submitted on the proposal form. Steel bars not installed shall not be paid for the GSCWD.

2.7 CONCRETE PROPORTION AND CONSISTENCY

2.7.1 CLASSES OF CONCRETE

2.7.1.1 Minimum Class "A" concrete mixtures shall be used for all footings, slabs, beams columns, wall and shall attain a compressive strength of 21 mPa (3000 psi) after 28 days.

A Class "B" concrete mixture shall be used for septic vault, catch basins and drain canals, and shall attain a compressive strength of 17 mPa (2500 psi) after 28 days.

2.7.2 MEASUREMENT

2.7.2.1.1 The unit of measure shall be the cubic meter. One bag of cement (40 kg) shall be considered as one cubic foot. Water shall be measured as to ensure the desired quantity of successive batches and in no case, water shall use not to exceed 24 liters per one bag of cement of 40 kg.

Slumps shall be within the following limits:

- 1. Concrete wall & footing 50 mm - 125 mm
- 2. Slabs, columns, beams, thin walls 75 mm-150mm
- 3. Floor on fill 25 mm - 75 mm

2.8 MIXING CONCRETE

All concrete shall be machine-mixed and all cement and aggregates are in the mixer shall not be less than one minute for mixers of larger capacities, the minimum time shall be increased 15 seconds for each additional bag or fraction thereof or additional capacity. Water used for mixing shall be introduced in the drum before one fourth of the mixing time has elapsed. The mixing drum shall rotate at a peripheral speed of about 61 meter per minute throughout the

mixing period. The entire contents of the mixer drum shall be discharged mixing water to the cement and aggregates and placing the concrete in final position in forms shall not exceed 45 minutes. The re-tempering of concrete, i.e., mixing with additional cement, aggregate or water shall not be permitted.

- Hand mixing is not allowed; only machine mixing.

2.9 CONVEYING AND PLACING OF CONCRETE

- 2.9.1 Water shall be removed from excavation before concrete is deposited. Any continuous flow of water into the excavation shall be directed through side drains to a slump, or be removed by other approved methods to avoid washing the freshly deposited concrete. Debris shall be removed from the space to be occupied by the concrete and forms shall be thoroughly wetted.
- 2.9.2 Concrete shall be conveyed from mixer to form as rapidly as practicable, by method which will prevent segregation or loss of ingredients. There shall be no free vertical drop greater than 1.5 meters. Approval of GSCWD shall be obtained before starting any concrete pour. Concrete shall be worked readily into the corners and angles of the forms and around all reinforcement and embedded items by depositing the concrete as close as possible to its final position in the forms and consolidating it with the aid of mechanical vibrating equipment, supplemented by hand spading and tamping. In no case vibrators be used to transport concrete inside the forms. Vibrating equipment shall not be overdone to cause segregation of particles and disturbance of setting concrete but enough to produce an even heterogeneous distribution of ingredients.
- 2.9.3 When concrete is conveyed using chute, the angle with respect to horizontal shall be such to allow the concrete to flow without separation of the ingredients. The delivery end of the chute shall be as close as possible to the point of deposit. The chute shall be thoroughly flushed with water before and after each run. The water used for this purpose shall be discharged outside the forms.
- 2.9.4 Construction Joints - If possible, concreting shall be done continuous until section is complete. When stoppage of concrete operations occurs, construction joints shall be placed either horizontally or vertically as indicated by the GSCWD and provided with shear keys or dowels to develop bond. Construction joints shall be as per plan or shall be approved or as directed by the GSCWD Engineer.
- 2.9.5 Pouring of concrete for foundations shall be done after the GSCWD Engineer have verified the actual soil conditions at the site and approved the start of concreting. No footing shall rest on fill.
- 2.9.6 Measurement and Payment - For deduction and addition, on the contract sum due to deletion or extra work involved, cast-in-place concrete shall be measured in cubic meter and payment shall be based on actual poured volume using the unit prices on the proposal form.

2.10 CURING

All concrete shall be moist cured for a period not less than seven (7) consecutive days by an approved method of curing applicable to local conditions. Surface of the concrete shall be kept continuously wet by covering with water, by continuously spraying, or by covering with burlap or other approved material thoroughly saturated with water and keeping the covering wet by spraying or hosing. Water for curing shall be free from any elements which might cause objectionable staining or discoloration of the concrete.

2.11 REPAIR OF CONCRETE

2.11.1 Imperfection

2.11.1.1 Repair shall be completed within 24 hours after removal of forms.

2.11.1.2 Fins shall be removed from exposed surfaces.

2.11.1.3 Damage or honeycombed concrete must be removed to reach sound concrete and should be replaced with dry pack, rich mortar, or concrete with pea gravel.

2.11.1.4 Voids which appear upon the removal of forms shall be drenched with water and immediately filled with material of the same composition as that used in the surface, and smooth with a wood spatula or float.

2.11.2 Large bulges - where large bulges and abrupt irregularities protrude, shall be removed by bushing, hammering and grinding.



- 2.11.3 All materials, procedures and operations used in the repair of concrete shall be removed by the contractor.
- 2.11.4 The cost of all materials, labor, and equipment used in the repair shall be borne by the contractor.

2.12 FLOOR FINISHES

Unless otherwise indicated in the plans, floor shall be ordinary plain cement finished. The mortar shall be 1:2 mixture one (1) centimeter thick and shall be spread and wooden trowel well to a smooth and even surface with sufficient slope for drainage whenever necessary.

Before applying mortar finish to the roughened floor slab, the floor shall be thoroughly cleaned and wetted and shall be grouted with 1:1 grout. Platform shall be rough finish with sufficient slope for drainage.

2.13 CONCRETE SLAB ON FILL

Concrete slabs on fill shall be laid on a prepared foundation consisting of a sub-grade and granular fill with thickness equal to the thickness of overlying slab except as indicated otherwise. Sub-grade shall be rolled, rammed, or tamped layer by layer to a thoroughly compacted foundation. Granular fill shall consist of sound gravel, well graded and of size that will pass a 0.0375 m diameter ring and will be retained on a no. 4 screen. Gravel fill with binder shall be compacted to provide an unyielded base. Concrete slab on fill on general storage area and flat-form shall not be less than 0.125 m and with a minimum 9 mm diameter steel bars spaced at 0.60 m on center both ways.

2.14 INSPECTION

Concrete shall be proportional, mixed and placed in the presence of GSCWD Engineer; ample notice shall be given before mixing is commenced.

2.15 TEST ON CONCRETE

2.15.1 Reasonable number of tests on the concrete may be required by the GSCWD during the progress of the work. Not less than Six (6) cylindrical specimens per pouring shall be made. For each test of which at least two (2) samples shall be tested on the 7th, 14th, 28th days respectively. Samples shall be secured and molded in accordance with "METHOD OF SAMPLING CONCRETE " (ASTM Designation C-33) with necessary pond or drum. The contractor shall provide the samples to be taken at the testing laboratory as specified without cost to GSCWD.

2.15.2 To conform to the requirements of these specifications, the average strength of test samples representing each class of concrete shall be equal to or greater than specified strength.

2.15.3 Should the test fail to give the required strength, the GSCWD shall have the right to order a change in the proportions in the procedures of curing of the concrete for the test of the structure.

2.16 FAILURE OF TEST SAMPLES

In case of failure of test cylinder for slab on grade to meet the specified strength, the contractor may at his expenses, obtain concrete core samples from the poured concrete and the compressive strength of the same be taken by a competent testing authority to determine the conclusive strength and integrity of the concrete poured. Coring shall be done in a manner, which shall make possible satisfactory replacement of cored samples.

To determine the adequacy of the affected parts for footings, columns, beams, concrete walls and slab. The GSCWD shall have the option to order load/hammer tests on parts of the structure where concrete strength test is below 90% of the strength specified.

These tests shall be in accordance with ACI-63 recommendations and cost shall be borne by the contractor. Poured concrete with strength less than that required by the specifications shall be demolished and provided with an acceptable replacement at the contractor's expense.

3. MASONRY

3.1 SCOPE

The work includes, furnishing labor, equipment and materials performing all operations required to complete the masonry work as shown and specified.

3.1.1 Hollow Concrete Blocks shall be non-load bearing and shall conform to ASTM standards and shall have standard dimensions. Cement sand ratio to be approved by GSCWD Engineer.

- 3.1.2 Mortar shall be workable cement-sand mixture and attaining a 28 days compressive strength of 10 mPa (1500 psi).
- 3.1.3 Reinforcing steel, cement, sand and water shall be as specified in the section for concrete construction of this specifications.

3.2 REINFORCEMENT AND SUPPORTS

- 3.2.1 The minimum thickness for masonry walls shall be 0.15 m unless otherwise indicated.
- 3.2.2 The minimum size of reinforcement shall be 10 mm in diameter.
- 3.2.3 Vertical reinforcement and horizontal reinforcement shall be as indicated in the plans. Vertical and horizontal reinforcement bars shall be continuous, lapped or spliced.
- 3.2.4 All horizontal and vertical bars as the case maybe, shall be anchored 20 bars diameters into the concrete footings, columns and beams.
- 3.2.5 All horizontal reinforcement shall be tied to the vertical reinforcement at every intersection with No. 16 GI Wire.

3.3 INSTALLATION

Hollow concrete blocks shall be thoroughly wetted with water and bedded-in and cemented together with mortar. All blocks shall be laid plumb, true to line with level and accurately spaced courses, with each course breaking joints with the course below. Horizontal and vertical mortar joints shall be 9 mm thick with full mortar coverage on the face shells and on the webs surrounding the cells to be completely filled. All block joints shall be struck flush to a smooth even surface. Provide reinforcement as shown or specified and completely fill the cell with mortar to completely encase the reinforcement. Mortar shall be Portland cement mortar, (1:2 mix) well mixed in a clean mechanical mixer with only sufficient water to produce the required plasticity.

3.4 WATER PROOFING

The exterior of all masonry walls shall be damp-proofed integrally by the Plaster Coat Method to be done as follows:

Cement mortar shall consist of water proofing compound, cement, sand and sufficient water form a workable mix; 453.60 grams of water proofing compound shall be added to every bag of cement used.

Water proofing compound shall be in powdered form. All surfaces to receive plaster shall roughen with proper tools to insure satisfactory bond. Lean all surfaces to be damp - proofed by washing rising thoroughly not more than 24 hours application of plaster.

Walls shall be damp - proofed with a scratch coat and a finished coat which shall not be more than 0.20 m thick. The finished oat shall be floated and steel toweled to a smooth, true and even surface, free from imperfections.

4.0 STRUCTURAL STEEL

4.1 SCOPE OF WORK

The work consists of furnishing all labor, tools, equipment, and the performance of all operations relative to the fabrication, delivery to site, erection and painting of structural steel, complete as required and specified.

4.2 REQUIREMENTS

All structural steel work shall be in accordance with AISC "SPECIFICATION FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS" materials and parts necessary to complete each item, though such work is not shown or specified shall be included, such as miscellaneous bolts and anchor supports, braces and connections, etc. Shop drawings as well as erection drawings shall be submitted by the contractor for approval by the GSCWD Engineer before any fabrications is made.

4.3 MATERIALS

- 4.3.1 All structural steel shapes and plates shall conform to ASTM A-36 steel and shall have a thickness as specified in the plans.

- 4.3.2 Welding electrode shall conform to AWS ASI or A 5.5 E70 xx electrodes. Manufacturer's certification shall conform to this specification.
- 4.3.4 Bolt and nuts for main members shall be high strength bolts conforming to ASTM A-325 or its equivalent. Bolt shall be marked for that such kind of bolt. For secondary members ASTM A-307 bolts or its equivalent may be used. Care shall be taken so that different types of bolts do not get interchanged. All bolts shall be provided with plain washers.
- 4.3.5 Shop coat of paint shall be Red Oxide primer unless GSCWD approves of a substitute.

4.4 FABRICATION

4.4.1 WELDING

- 4.4.1.1 The technique, appearance and quality of welds and the method of correcting defective work shall conform with the American Building Society Code for the Arc-Welding in building construction. Welding in Shop and field shall be done only by certified welders to perform the work required as shown in the approved drawings. Surfaces to be welded shall be free from the loosed side, rust, grease, paint and other foreign materials.
- 4.4.1.2 Temporary weld and assembly attachment shall be kept to a minimum. All temporary attachment that are welded shall be removed by a flame torch above the parent metal surface and round to smooth surface by power grinding.
- 4.4.1.3 If for any reason, the GSCWD Engineer believes that the defect exists in any weld, it shall be the contractor's responsibility to repair questioned weld, to the satisfaction of the GSCWD.

4.4.2 CONNECTION AND HOLES

- 4.4.2.1 Connections shall be shown in the drawings and shall develop the fully capacity of the members.
- 4.4.2.2 Surfaces or joints prepared for welded or which strength bolted connections shall comply with the cleanliness requirements of all joint's surfaces and contract surfaces within the friction type joints as specified in section 3, " Bolted Parts of the AISC Specifications " .
- 4.4.2.3 Holes shall be punched or drilled at right angles to the surface of the metals and shall not be enlarge by burning. Holes shall be clean-out without rugged edges. Outside burst resulting from drilling or reaming operations shall be removed with a tool, which reaches a 1.6 mm level around the bolt holes.
- 4.4.2.4 **QUALITY CONTROL PROCEDURES**
Quality Control Procedures shall be practiced by the fabricator to assure high quality in the work. In addition to the fabrication to the fabricator's quality control procedures, materials and workmanship shall be subject to inspection by qualified inspectors representing the GSCWD. Fabricator shall cooperate harmoniously with the inspector to avoid interruption of the work, when correction will be needed.

4.5 MARKING

Shop fabricated members shall be marked for delivery to facilitate the erection of the members. Markings shall be listed and given description and copies of which be furnished to the field and the GSCWD. Markings shall be neatly painted on the members with a distinctive color of enamel paint.

4.6 ERECTION

The steel structure shall be erected plumb and true to line and grade. Bracing and supports shall be introduced whenever necessary to take care of all loads to which the structure may be subjected. Such bracing shall be left in place as long as may be required for safety.

4.7 SHOP PAINTING

Steel works to be encased in concrete shall not be painted. All other steel works shall be given one coat of shop paint of red oxide primer of high-quality brand applied thoroughly and evenly to dry surface, which have been cleaned by brush, spray roller coating, flow coating or dipping at the section of the fabricator. Steel work prior to painting and after inspection and approval shall be cleaned of loose mill scale, weld slag of flux deposit, dirt and other foreign material. Oil and grease shall be removed by solvent rusted parts shall be de-rusted. Parts of the steel work which shall be field welded or connected shall not be painted. All steelworks specified to have no shop paint shall likewise be thoroughly cleaned.

4.8 FIELD PAINTING

All steel work after complete erection shall be field painted with the type and color specified in the section of painting of this specification. Paintings shall not be done on any steel surface that is not clean and dry.

5.0 TINSMITH WORKS

5.1 SCOPE OF WORKS

5.1.1 Complete construction of all tinsmith works including supply of all materials, labor, equipment and supervision necessary to properly conduct and produce the desired work product. Included herein are supply and installation of all roofing, ventilator sheets (if any), flashing, gutters, down spouts (up to catch basin and canal), sealant, fasteners, insect screens, and all temporary works and structures necessary for the efficient, smooth and up-to-date completion of the project.

5.1.2 All other items that may not be shown on the plans but are absolutely necessary for the successful completion of the project shall be considered as part of the works and shall be implemented following accepted and best engineering procedures without additional cost to GSCWD.

5.2 ROOFING WORKS

5.2.1 Roofing shall be 0.600 mm thick (base metal) rib-type, pre-painted, long span galvanized iron (G.I.) sheet with a feed width of not more than 0.915m (3 feet).

5.2.2 Roofing natural lighting must also be provided using 820mm x 3048mm x 1.8mm thick **SKYLIGHT TRANSLUCENT TWIN RIB TYPE ROOFING**

5.2.3 Roof thermal insulator must also be provided using **double sided 10mm Polyethylene (PE) Foam Insulation** with gauge 16 tie wire bracing.

5.2.4 Laying of roofing sheets should start from the end opposite the direction of the prevailing wind, overlap the next sheet to the first sheet and fix according to fastening procedures.

5.2.5 Where roofing is to rest on steel purlins, use tekscrew at every rib. In between washer and roof sheet, provide neoprene washer as water seal.

5.2.6 In addition, fasteners at the first corrugation of ever side lap shall be provided.

5.3 FLASHING AND RIDGE ROLLS

5.3.1 All flashing and ridge rolls shall be min. 0.500 mm thick (base metal) plain, factory pre-painted and shape to dimensions indicated in the plans.

5.3.2 Fasten all flashing to the roofing sheets by means of rivets at every 0.30 m to 0.35 m on centers. Apply water-sealant on all rivets. Provide a minimum of 0.30 lapping for all flashing.

6.0 PAINTING

6.1 SCOPE OF WORK

The principal items of work shall be the following:

6.1.1 Cleaning, sanding, sealing, preparing and painting of all wooden and masonry surfaces exposed to view on exterior and interior part of the building.

6.1.2 Cleaning, washing and/or treating, preparing of all GI sheet roofing, gutters, ventilator, down spouts, ridge rolls flashing, GI fascia before any final coat is applied.

6.1.3 Cleaning, sanding, preparing, sealing, and painting of all visible metal work surfaces including steel windows, doors, grills, railings, louvers and steel ladders.

6.1.4 Cleaning, sanding, preparing, sealing and painting of ceilings, eaves, fascia boards, visible exterior and interior surfaces of wood partitions, jambs, cabinets, counters, and other woodworks.

6.1.5 Cleaning, sanding, sealing, preparing, staining and varnishing of all visible surfaces of inferior wood works as specified to be varnished.

6.2 GENERAL

Unless otherwise specified, the whole building shall be given One (1) coat primer and Two (2) coat finish of paints, in accordance to the color schemes to be provided by the GSCWD.

6.2.1 MATERIALS

All paints to be used shall be of high-quality brand. Whenever applicable, the following kind of paints are scheduled for:

For wrought iron grill works, steel frames and other exposed metal, use:

Primer: 1 coat Red Oxide

Finish: 2 coat, quick-drying enamel paint

For concrete:

Primer: 1 coat Flat Water Based-Latex Interior and Exterior Multi-Surface Primer/Sealer Paint

Finish: 2 coat, Finish Gloss Latex Paint

6.3 WORKMANSHIP

Painting works shall be done in the best workmanship and complying with the following before and after painting applications:

6.3.1 Concrete Works

before any paint is applied, all surfaces shall be thoroughly dry and free from alkali, dirt or grease, mortar spots dried on the surfaces, shall be thoroughly cleaned and scrapped to an even and smooth surface. All salts or fluorescence on the surface shall be carefully removed and wash with a solution consisting of 1 kg of zinc sulfate to a gallon of water. Crystals formed on the surface shall be wiped off before any coat or primer is applied. All cracks and surface dents must be patched of with latex putty after the first coat is applied. A minimum of 24 hours or as directed by GSCWD Engineer shall be given before applying the succeeding costs. No exterior paintings shall be done when the weather is damp or raining now and then during the day.

6.3.2 Metal Works

before any paint is applied, all surfaces shall be thoroughly clean, free from dirt, oil or grease, remove all scale, rust, and other foreign matter by de-rusting chemical, wire brushed, sand papered, and if so required, should be sandblasted, GI gutters down spouts and fascia shall receive a coat of red oxide primer.

6.4 The GSCWD reserve the right to sample all paint shipments at the final destination and to withhold acceptance of the paint until it is approved to be used. Failure of the samples to meet any or all requirements of the specifications shall be considered cause for the rejection of the paints tested.

7.0 ROLL UP DOOR

The contractor shall fabricate and install Four (4) roll up doors, two (2) units of which shall be motorized operated roller shutter and manual push up for the remaining items as shown in the approved plans. It shall be operated by a push button; wall mounted key switch with hand held remote control unit provided with a manual haul chain in the event of a power failure.

Roll up door provided must be made of 0.5mm thick G.I. panel curtain with paint finish.

8.0 ELECTRICAL WORK

WIRING SPECIFICATION

8.1 GENERAL SPECIFICATION

8.1.1 Work covered by this specification shall include furnishing all labor, materials, equipment and services required to construct and install the complete electrical system shown on accompanying plans and specified herein. All works shall

be in accordance with the Latest Edition of Philippine Electrical Code, and rules and regulation of the Bureau of Standard and Specifications except where conflict with such codes, etc., In which case the latter shall govern.

- 8.1.2 Work Covered - under this section of specifications, the contractor shall provide all materials and equipment and perform all the works necessary for the complete execution of all the electrical works as shown on the electrical drawings as herein specified; except as otherwise excluded, and which without excluding the generality of the foregoing, shall include, but not limited to, the following principal items of work:
- 8.1.2.1 A complete wiring of the exteriors lighting and proper system including all feeders, branch circuits and connections to all lighting power outlets.
- 8.1.2.2 All general lighting fixtures and lamps.
- 8.1.2.3 Temporary service installation as require by other crafts during the construction.
- 8.1.2.4 Complete testing of all electrical system.
- 8.1.2.5 Grounding system.
- 8.1.2.6 Optional items of work.
- 8.1.2.7 Painting of electrical works and equipment.
- 8.1.2.8 If anything has been omitted on any item of work on materials usually furnished which are necessary for the completion of the electrical works as outlined herein before, then such items must be and are hereby in this section of the work.

9.0 SPECIAL PROVISION

9.1 RESIDENT ENGINEER'S OFFICE

The Contractor shall provide space as temporary office (Bamboo House or "Payag") in the field for use by the Resident Engineer.

9.2 TESTING FEE

All laboratory testing fee and transportation shall be shouldered by the contractor.

9.3 EQUIPMENT

The Contractor shall provide the following **minimum** equipment intended for the project.

Quantity	Description
1	Crane
1	Boom Truck
1	Backhoe
2	Engine Driven Welding Machine
2	Grinder
2	Power Tools
1	Service Truck
1	One Bagger Mixer
1	Concrete Vibrator
1	Oxy-Acetylene cutting outfit
6	Concrete Sample Cylinder

The Contractor shall be required to include the list of their equipment in the technical documents and specify whether the same is leased or owned. If leased, the Contractor shall provide a Memorandum of Agreement.

- If equipment is owned, must provide Official Receipt, ORCR or Purchase Order.

During post-qualification, GSCWD shall conduct inspection to verify the availability of the listed equipment. Absence of any one of the required equipment is ground for disqualification.

9.4 WELDER'S REQUIREMENT

The winning bidder shall employ welders with certificate issued by TESDA.

9.5 PROJECT SIGNS / COA SIGNBOARD

The Contractor shall furnish, erect and maintain one (1) project sign and one (1) COA signboard in accordance with the Standard Drawings. The location for the erection of these signs by the Contractor shall be as directed by the Engineer.

9.6 LOGBOOK AND WEATHER CHART

A logbook and weather chart shall be maintained by the Contractor at all times in the project site reflecting the daily work activity, weather condition, manpower, equipment, visitors and circumstances affecting the program of work to be signed by both the Engineer and Contractor.

9.7 VARIATION IN QUANTITIES

Bidders are reminded that the quantities are estimated and are for the purpose of comparing bids. The successful bidder shall complete all work items at the unit prices quoted in his bid, regardless of the variation between bid quantities and actual quantities required for completion of the work. Payment will be based on actual quantities furnished, installed or constructed.

4.0 Clarification

Queries	BAC Response
Bidder inquired as to what are the tools included in the Power Tools	BAC responded that Power Tools are in the likes of Small Grinder or other tools needed to finish the specific works / activity of the project.
Bidder inquired whether the Project Engineer and Materials Engineer can be under the responsibility of one personnel	The BAC considered that one personnel may handle two (2) responsibilities for the project. Issued Addendum No. 8 (s. 2019)
Bidder inquired regarding the provision in RA 9184 for Small B Contractors that don't have atleast 50% of this project, but can be allowed to bid for as long as the contract to be bid is not more than the Allowable Range of Contract Cost (ARCC)	The BAC quoted from ITB 5.4, "The bidder must have an experience of having completed a Single Largest Completed Project, equivalent to at least fifty percent (50%) of the ABC adjusted, if necessary, by the Bidder to current prices using the Philippine Statistics Authority (PSA) consumer price index. However, contractors under Small A & Small B categories without similar experience on the contract to be bid may be allowed to bid if the cost of such contract is not more than the Allowable Range of Contract Cost (ARCC) of their registration based on the guideline as prescribed by the PCAB." Thus, the BAC acknowledged the provision.
Bidder inquired the composition of the Financial Proposal	The BAC recapped, that the Financial Proposal (Second Envelope) shall compose of the following: a. Bid Prices in the Bill of Quantities b. Detailed Estimates, including a summary sheet indicating the unit prices of construction materials, labor rates, and equipment rentals used in coming up with the Bid; and c. Cash Flow by Quarter or Payment Schedule
Bidder inquired as to why the Bill of Quantities form is in lump sum and not per item	The BAC & Technical responded that the agency has its own estimate but for comparison purposes, the bidder should have its own estimate – which also shows that the bidder has the over-all how / understanding of the project before tendering their bid.

5.0 Addendum

Amendment	From	To
III. Bid Data Sheet 12.1(b)(ii.2)	The minimum work experience requirements for key personnel are the following: Key Personnel – General Experience – Relevant Experience 1) Civil Engineer – Civil Works – Civil Works	The minimum work experience requirements for key personnel are the following: Key Personnel – General Experience – Relevant Experience 1) Civil Engineer – Civil Works – Civil Works 2) Master Plumber

**GENERAL SANTOS CITY WATER DISTRICT**

E. Fernandez St., Brgy. Lagao, General Santos City

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	2) Master Plumber 3) Electrical Engineer 4) Materials Engineer 5) Safety Officer The contractor's personnel must be professionals that are supported with corresponding licenses.	3) Electrical Engineer 4) Materials Engineer 5) Safety Officer The contractor's personnel must be professionals that are supported with corresponding unexpired licenses. Personnel in the Organizational Chart must hold a maximum of two (2) positions / responsibilities only.
VII. Technical Specifications 9.3 Equipment	The Contractor shall be required to include the list of their equipment in the technical documents and specify whether the same is leased or owned. If leased, the Contractor shall provide a Memorandum of Agreement.	The Contractor shall be required to include the list of their equipment in the technical documents and specify whether the same is leased or owned. If leased, the Contractor shall provide a Memorandum / Lease of Agreement. If owned, shall provide Official Receipts, Purchase Order or ORCR.


6.0 Adjournment

There having no other remaining topic to be discussed, the Pre-Bid Conference was adjourned at 4:00pm.

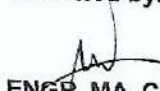
Prepared by:


RAULINE KAYE F. AUTIDA
BAC Secretary

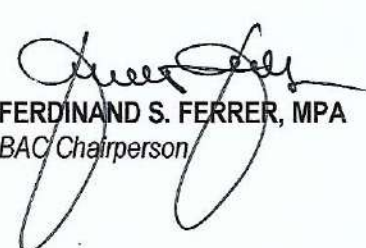
Checked by:


AGNES P. TAMPICO
Head, BAC Secretariat

Reviewed by:


ENGR. MA. CELIA N. DANDAN
TWG Member
ENGR. MICHAEL GABALES
Head, TWG

Attested and approved by:


FERDINAND S. FERRER, MPA
BAC Chairperson

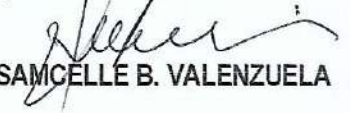
In conformity with the Bids and Awards Committee:

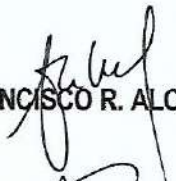

ENGR. ROGELIO A. BESANA, JR.
Vice Chairperson



BAC Members:


ENGR. CORNELIO T. TURIJA, JR.


SAMCELLE B. VALENZUELA


FRANCISCO R. ALOLOD, JR. CPA


MARITESS B. PRIMAYLON