



NOTICE OF AWARD

ROCK 101 CONSTRUCTION AND SUPPLY

Barangay Cagay, Roxas City
 Tel# / Contact # 09088912753

Thru: MR. DANTE ARTUZ
 Duly Authorized Representative

Sir/Madame:

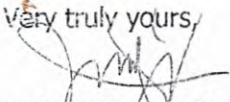
We are pleased to notify you that the PAGASA Management has approved the award to your firm the contract for the "**Renovation / Rehabilitation of HMTS Annex and Repair of Storage Room (Rebid)**" (PR No. 2019-03-0221 / ITB No. 2019-006INF) in the total calculated amount of **ONE MILLION EIGHT HUNDRED THOUSAND FIVE HUNDRED SIXTY EIGHT PESOS and 90/100 (Php1,800,568.90) ONLY.**

You are therefore requested to accept and conform to this award by affixing your signature hereunder and provide within **ten (10) calendar days**, from receipt hereof, the requisite performance security in any of the following forms:


Form of Performance Security	AMOUNT (Equal to Percentage of the Total Contract Price)	
<ul style="list-style-type: none"> Cash or Cashier's/Manager's check, Bank Draft/Guarantee confirmed by a Universal or Commercial Bank. 	10%	Php180,056.89
<ul style="list-style-type: none"> Irrevocable letter of credit issued by a Universal or Commercial Bank. 		
<ul style="list-style-type: none"> Surety bond callable upon demand issued by a surety or insurance company duly certified by the Insurance Commission as authorized to issue such security. 	30%	Php540,170.67

Failure to provide the performance security shall constitute sufficient ground for cancellation of the award and forfeiture of the bid security.

Very truly yours,


VICENTE B. MALANO, Ph.D.
 Administrator

Conforme:


DANTE ARTUZ

Date: SEPT. 13, 2019

"tracking the sky...helping the country"



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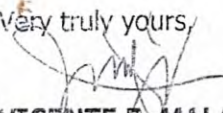
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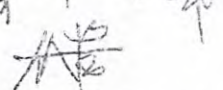
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BIDS AND AWARDS COMMITTEE (BAC)

**Resolution Declaring Lowest Calculated Responsive Bid (LCRB)
 and Recommending Award and Approval**

Resolution No. 2019-054

WHEREAS, the Philippine Atmospheric, Geophysical and Astronomical Services Administration (PAGASA), through the PAGASA Bids and Awards Committee, advertised the Invitation to Bid (IB) at the PAGASA website, the G-EPS and PAGASA Bulletin board continuously for 7 days from **25 July to 01 August 2019**, the procurement of the following goods/items described hereunder, with its corresponding Approved Budget for the Contract (ABC), under **PR#2019-03-221 and ITB 2019-006INF**, to wit:

PARTICULARS	ABC	Contract Duration
Renovation/Rehabilitation of HMTS Annex and Repair of Storage Room (Re-bid)	Php1,860,319.96	95 c.d.

WHEREAS, the provision of R.A. 9184 and its Revised Implementing Rules and Regulations (IRR), other pertinent guidelines and procedures relative to government procurement system are hereby observed and strictly implemented for the whole duration of this bidding activity;

WHEREAS, in response to the said invitation, **two (2) prospective bidders**, namely: **1) T.M. Abad Construction** and **2) Rock 101 Construction & Supply**, expressed their intentions to participate in the bidding of the aforesaid Project, purchased the requisite bidding documents, but did not attend the **Pre-Bid Conference** conducted by the PAGASA-BAC on **02 August 2019**;

WHEREAS, on **14 August 2019**, the **schedule for submission and opening** of Envelope I (Eligibility and Technical Components) and Envelope II (Financial Component), the **two (2) participating bidders** namely; **1) T.M. Abad Construction** and **2) Rock 101 Construction & Supply**, timely submitted their bid tenders for the project. However, only Rock 101 Construction & Supply passed the preliminary examination of bids while the T.M. Abad Construction did not pass due to the following reasons; 1) absence of signature in the Net Financial Contracting Capacity (Tab E) and 2) No valid ID presented in their Certificate of Employment (Tab J-2). Thus, the PAGASA-BAC declared T.M. Abad Construction as disqualified bidder.

WHEREAS, in the subsequent opening of Envelope No. II (Financial Component), the Rock 101 Construction & Supply financial proposals have been accepted by the PAGASA-BAC having complied with the financial requirements of the project while Envelope No. II (Financial Component) of T.M. Abad Construction was not opened and they opted to make a request for reconsideration. Their respective financial proposals, as "**READ**", is summarized as follows:

Name of Bidder	Bid Amount (As Read)	RANK
T.M. Abad Construction	Financial Component was not opened	
Rock 101 Construction & Supply	Php1,800,568.90	1

WHEREAS, the report on the detailed evaluation of bids conducted by the TWG resulted in the following:

Name of Bidder	Bid Amount (As Calculated)	RANK
Rock 101 Construction & Supply	Php1,800,568.90	LCB

WHEREAS, upon careful examination, validation and verification of the two (2) bidder's tender offer, including the evaluation report submitted by the TWG, the PAGASA-BAC determined that, Rock 101 Construction & Supply has complied in all the criteria for post-qualification and has been responsive in all requirements and conditions specified in the Bidding Documents. Hence, it was moved and duly seconded that **Rock 101 Construction & Supply**, be declared as the bidder with the **Lowest Calculated and Responsive Bid (LCRB)** for the implementation of the instant Project.

NOW, THEREFORE, We, the Members of the Bids and Awards Committee, hereby **RESOLVE** as it is hereby **RESOLVED**:

- a) to **DECLARE**, Rock 101 Construction & Supply, as the Bidder with the Lowest Calculated and Responsive Bid (LCRB) for the Project entitled, "**Renovation/Rehabilitation of HMTS Annex and Repair of Storage Room (Re-bid)**" in its **total calculated offer of ONE MILLION EIGHT HUNDRED THOUSAND FIVE HUNDRED SIXTY EIGHT PESOS and 90/100 (Php1,800,568.90)**;
- b) to **RECOMMEND**, the award of the contract for the implementation of the foregoing Project to **Rock 101 Construction & Supply**, and;
- c) to **RECOMMEND**, finally the **APPROVAL** of the foregoing findings and recommendations.


RESOLVED this **03RD day of September 2019** at the PAGASA Amihan Conference Room, 2nd Floor PAGASA Main Building, Science Garden Complex, Agham Road, Diliman, Quezon City.


ROY A. BADILLA
Interim Member/End-user


JOEL C. RIVERA
Member

JESSIE B. ARCE
2nd Vice-Chairperson

(on leave)
CESAR A. RAMOS
Member


EDNA L. JUANILLO
1st Vice-Chairperson


CATALINO L. DAVIS
Chairperson

APPROVED/DISAPPROVED:


VICENTE B. MALANO, Ph.D.
Administrator

Approved on _____



Republic of the Philippines

DEPARTMENT OF SCIENCE AND TECHNOLOGY
Philippine Atmospheric, Geophysical and Astronomical Services
Administration (PAGASA)

NOTICE TO PROCEED

ROCK 101 CONSTRUCTION AND SUPPLY

Barangay Cagay, Roxas City
Tel# / Contact # 09088912753

Thru: MR. DANTE ARTUZ
Duly Authorized Representative

Sir:

The attached **Contract** (Contract ID No. CI 2019-015) having been approved, notice is hereby given to your firm that, delivery of the goods and other ancillary services may proceed for the Project entitled: "**Renovation / Rehabilitation of HMTS Annex and Repair of Storage Room (Rebid)**" (PR No. 2019-03-0221/ IB No. 2019-006INF), effective upon receipt of this Notice.

You are therefore responsible for performing the services under the terms and conditions of the Contract and in accordance with the Implementation Schedule.

Please acknowledge receipt and acceptance of this notice by signing both copies in the space provided below. Keep one copy and return the other to PAGASA.

Very truly yours,


VICENTE B. MALANO, Ph.D.
Administrator

I hereby acknowledge receipt of this Notice on OCT. 21, 2019
(date of receipt)

Name of Representative of the Bidder: DANTE ARTUZ

Authorized Signature: 

"tracking the sky...helping the country"

Science Garden Compound, BIR Road, Brgy. Central, Quezon City,
Metro Manila, Philippines 1100

Tel. No. (02) 284-08-00
Website: <http://bagong.pagasa.dost.gov.ph>



Republic of the Philippines

DEPARTMENT OF SCIENCE AND TECHNOLOGY
Philippine Atmospheric, Geophysical and Astronomical Services
Administration (PAGASA)

Contract ID No. : *CI 2019-015*
Contract Name : **Renovation / Rehabilitation of HMTS Annex and Repair of Storage Room.**
Location of the Project : **1st Floor Weather and Flood Forecasting Center Building**

INFRASTRUCTURE CONTRACT

KNOW ALL MEN BY THESE PRESENTS:

This Agreement is made and entered into at Quezon City, Philippines, this 21 day of OCT 21 2019 2019, by and between:

The **PHILIPPINE ATMOSPHERIC, GEOPHYSICAL AND ASTRONOMICAL SERVICES ADMINISTRATION (PAGASA)**, a government agency under the Department of Science and Technology (DOST), with principal office located at the PAGASA Central Office, Science Garden Complex, BIR Road, Diliman, Quezon City, represented herein by **DR. VICENTE B. MALANO**, in his capacity as the Administrator and Head of the Procuring Entity (HOPE), hereinafter referred to as the "**PAGASA**";

- and -

The **ROCK 101 CONSTRUCTIONS AND SUPPLY**, a sole proprietorship business entity duly organized and existing under and by virtue of the laws of the Philippines, with office and postal address located at Barangay Cagay, Roxas City, Capiz represented herein by its General Manager, **ENGR. JOEL F. ALADO** and hereinafter referred to as the "**CONTRACTOR**".

WITNESSETH:

WHEREAS, PAGASA is desirous that certain works be undertaken, viz.: **Renovation / Rehabilitation of HMTS Annex and Repair of Storage Room-Rebid (Reference: PR# 2019-03-0221 / IB No. 2019-006INF)**, hereinafter referred to as the "**PROJECT**";

WHEREAS, by virtue of **PAGASA-BAC Resolution No. 2019-054, series of 2019** which was duly approved by the Head of the Procuring Entity (HOPE), **PAGASA** has accepted the bid proposal of the **CONTRACTOR** for the execution and completion of such work, declaring the **CONTRACTOR** as the bidder with the **Single Calculated and Responsive Bid (SCRB)** in its total calculated bid offer of **ONE MILLION EIGHT HUNDRED THOUSAND FIVE HUNDRED SIXTY EIGHT AND 90/100 (Php1,800,568.90) ONLY**;

WHEREAS, in this Infrastructure Contract, words and expressions shall have the same meanings as are respectively assigned to them in the Conditions of Contract hereinafter referred to;

WHEREAS, the following documents shall be attached, deemed to form, and be read and construed as part of this Contract, to wit:

- Attachment a) Notice to Proceed;
- Attachment b) Performance Security;
- Attachment c) Notice of Award and the Bidder's conforme thereto;
- Attachment d) PAGASA-BAC Resolution No. 2019-054;
- Attachment e) Abstract of Bids, "as Read" and "as Calculated";
- Attachment f) Addendum and/or Supplemental/Bid Bulletins (SBB);if any,
- Attachment g) Detailed Evaluation Report submitted by the TWG;
- Attachment h) Minutes of the Meeting;
- Attachment i) Eligibility, Technical and Financial documents as submitted by the Contractor, including the appropriate Bid Security, the duly approved architectural and building designs and drawings; detailed plans and program/scope of works; and, structural analysis;
- Attachment j) Invitation to Bid (ITB) / Notice to Bidders;
- Attachment k) IPP, Purchase Request including the Terms of Reference (TOR) and necessary permits issued by various government authorities;
- Attachment l) Bid Data Sheet (BDS);
- Attachment m) Instructions to Bidders;
- Attachment n) General and Special Conditions of Contract; and,
- Attachment o) Other Contract Documents deemed necessary by the Parties

The above documents shall collectively be referred to as "**Contract Documents.**"

NOW THEREFORE, for and in consideration of the foregoing premises and of the terms and conditions hereinafter set forth, the parties hereto hereby agree as follows:

ARTICLE I - SCOPE OF WORKS

The **CONTRACTOR**, in consideration of a sum of money to be paid by **PAGASA**, agrees to furnish all labor, materials, equipment, tools and other facilities described in the scope of works and specifications, instructions and their related documents for the satisfactory and faithful performance of all the works which are necessary to commence and complete the **Project**. The work shall generally consist of the following:

A. GENERAL REQUIREMENTS

- a. Mobilization/ Demobilization
- b. Permits and Clearances
- c. Temfacil

B. CIVIL WORKS

- a. HMTS Annex
 - i. Removal / Cleaning of Ceiling / Slab Soffit
 - ii. Concrete Wall Cutting
 - iii. Removal / Chipping of Existing Concrete Aircon Pedestal
 - iv. 600 mm x 600 Porcelain Polished Tiles

C. STORAGE

- a. Removal / Cleaning of Ceiling / Slab Soffit
- b. 600 mm x 60mm Acoustic Ceiling
- c. 100 mm x 900mm Vinyl Resilient

D. REPAIR ROOM

- a. Moisture Resistant Gypsum Ceiling
- b. Wall Cement Plastering
- c. 150mm CHB Laying with Grade 40 Rebar
- d. ¾' Crushed Gravel Backfilling
- e. Class A Concrete; Slab-on-fill with Grade 40 Rebar

- f. 300mm x 300mm Porcelain Polished Tiles at Repair Room
 - g. Repair Room Lavatory with cabinets / Hanging Cabinets includes all lockset and accessories
 - h. 600mm x 600mm Porcelain polished tiles counter top
 - i. Column:
 - i. Class A Concrete
 - ii. Rebar Grade 40
 - iii. Rebar Grade 60
 - iv. Formworks
 - j. Truss and roofing with 3" PVC Downspout
 - i. 2x2 x3.5mm Angle Bar truss with 45x75mm x1.5mm C purling Coated with red oxide includes rib type GI Sheet & Flushing, GI Gutter & 3" Downspout with PE Insulation foam
- E. :Painting
- a. Skim coating, Sanding and Painting
 - i. Acrylic latex paint; preparing and applying approved one coat of sealer and two coats of acrylic latex paint;
 - b. HMTS Annex Ceiling / Slab Soffit
 - c. HMTS Annex wall
 - d. Repair / Pantry area wall interior
 - e. Repair / pantry area wall exterior
 - f. Repair / Pantry area ceiling
 - g. Storage A-Interior Wall
- F. Doors and Windows
- a. Clear Tempered 12mm thick frameless swing glass door, double leaf, complete with accessories, fitting and lockset
 - i. D1 (1660mm x 2350mm)
 - b. Frosted Tempered 9mm thick frameless, swing glass door, Single leaf, complete
 - i. D2 (700 mm X 2150 mm)
 - c. 6mm thick clear glass steel, awning window frame complete with accessories, fitting and lockset
 - i. W1(3600mm x 1200mm)
 - d. 6mm thick clear glass steel, awning window frame, complete with accessories, fitting and lockset
 - i. W2 (600mm x 1200mm)
 - e. Transfer of existing door – metal panel door (1600mm x 2350mm)
- G. Mezzanine
- a. Mezzanine (includes welding and painting)
 - i. W6 x12
 - ii. W6 x 9
 - iii. Channel – 50 x 125 x 4.8mm
 - iv. Channel – 50 x 125 x 3mm
 - v. Baseplate – 150 x200 x 20mm
 - vi. Chemical Anchor Bolt – 16mm dia x 150mm
 - vii. 38mm dia. GI pipe
 - viii. 3mm Wire Mesh
 - b. Stairwell
 - i. Channel – 50 x 200 x 4mm
 - ii. Channel – 50 x 250 x 4mm
 - iii. 1200mm x 120mm x 4mm
 - iv. M10-Anchor Bolt
 - v. 38mm dia. GI Pipe
 - vi. Baseplate – 100x220x6mm
 - c. Mezzanine Steel Floor Decking, Gauge 20 Painted Steel with ¾" Marine plywood include fascia board
 - d. 100m x 900mm Vinyl Resilient Board
- H. ELECTRICAL – MECHANICAL WORKS

- a. Supply, Installation, Wiring, Chipping Works, Testing and Commissioning
- I. Plumbing Works
 - a. Supply, Installation, Renovation, Chipping Works, Testing and Commissioning
- J. Auxiliary Works
 - a. Structured cabling System for Data Connectivity with Complete accessories and Fitting

A. SCOPE OF WORK

- a. The **Contractor** shall conduct thorough inspection of the existing job site conditions.
- b. The scope of work shall include all additions necessary in order to implement the whole set of approved Plans, Working Drawings and Specifications.
- c. The **Contractor** shall secure and do all the legwork necessary for all pertinent permits needed for the Procuring Entity to occupy and use the building,
- d. The **Contractor** shall construct All Architectural, Structural, Electrical, Sanitary/ Plumbing, Mechanical / in accordance with the Plans and Specifications. All items shown on the Plans but not mentioned in the Specifications shall be included. Discrepancies shall be verified with the Procuring Entity.
- e. The **Contractor** shall submit details and shop drawings, templates, and schedules required for the coordination of the work of the various trades. Drawings should include information on all working dimensions, arrangement and sectional views, connections and materials.
- f. Final Cleaning as Pre-requisite To Final Acceptance: Final cleaning shall be by the Contractor prior to the Procuring Entity's final inspection for certification of final acceptance. Final Cleaning shall be applied on each surface or unit of work and shall be of condition expected for a first class building cleaning and maintenance program.
- g. The Contractor shall be responsible for the safety and safe working practices of its respective employees, servants and agents.

B. SITE WORK

- a. VISIT AND ACCEPT SITE, AS IS. The following works shall be included:
 - i. Site Clearing: Protection and/or removal of existing structures with the approval from the Procuring Entity.
 - ii. Removal of improvements above and below grade (if any) necessary to permit construction and other work as indicated. The Procuring Entity and Lessor must be consulted prior to any demolition. Coordination with PAGASA Authorities / Facilities Group & proper investigation is to be conducted to avoid damage on existing utilities. Rubbish shall be legally and properly disposed of. Other items for relocation / demolition will be discussed in the Pre-Bid Conference.

C. SITE SAFETY REQUIREMENTS:

- a. The Contractor shall, maintain a temporary board – up, security for the proper execution of site up-keeping. Such board-up shall be built where necessary and required by PAGASA for its full length except for such openings as may be necessary for the proper execution of the work, in such case, openings shall be provided with doors which shall be kept closed at all times except in actual use.

D. TEMPORARY SITE FACILITIES

- a. Temporary Provisions:
 - i. The Contractor shall provide all temporary lighting, power, water supply and all necessary facilities sufficient enough for the simultaneous use of all possible fields of work to complete the project.

- b. The Contractor shall provide at necessary number of units of Fire extinguishers.

E. STORAGE AND FILING OF MATERIALS

- a. Delivery: Contractor shall ensure that materials are properly turned over and delivered on site in good quality and condition. A time and delivery record shall be available.
- b. Storage: Contractor's materials shall be arranged properly and accordingly in terms of sizes, quality, quantity, category and time of use.
- c. All cement, lime and other materials affected by moisture shall be stored on platforms and protected from weather. Materials shall be stored as to insure the preservation of their quality and fitness for their work. Stored materials shall be located so as to facilitate prompt inspection.
- d. Should it be necessary at any time to move materials, sheds or storage platforms, the Contractor shall do so at his own expense.

F. MASONRY

a. CONCRETE MASONRY UNITS

- i. Masonry Units (CHB): 100mm thick for all interior walls and 150mm for all exterior walls unless otherwise indicated. Use 400 psi for non-load bearing blocks and 700 psi for load bearing blocks where required.
- ii. Where full height walls are constructed with concrete hollow blocks, these shall extend up to the bottom of beam or slab unless otherwise indicated on plans. Provide stiffener columns & lintel beams as specified in the structural drawings or as specified or as deemed required to assure a stabilized wall due to height & other considerations.
- iii. Sand: S-1, washed, clean and greenish in color.
- iv. Mortar: One part "Portland" cement and two parts sand and water but not more than three parts sand and water.
- v. Plaster bond: Apply to all wall areas prior to plastering.
- vi. DOORS AND INTERIOR WINDOWS : Refer to Schedule of Doors and Windows

G. DOORS AND FRAMES

- a. MAIN ENTRANCE DOOR – Heavy Duty Floor Hinge Glass door, 12mm thick tempered, frameless glass door.
- i. Note: The contractor shall exercise the utmost care in dismantling, transfer and installation of the Procuring Entity-supplied glass doors. In case of any damage, the contractor shall replace the glass door without additional cost to the Procuring Entity.

H. FINISHING HARDWARE

- a. The following Hardware Sets are furnished for whatever assistance it may afford the Contractor. The Contractor shall verify Plans and Specifications for hardware quality. Should any particular item be omitted, Contractor shall provide similar or equivalent item or hardware same as required. All door hardware must be ANSI A156.2 approved. 1. Locksets shall be Heavy duty lever type handles, HAFELE, Bonco or Hope Brand with locked keys and profile cylinders.
- b. All locks shall have three (3) keys with the lock number stamped for identification. Verify number of duplicates. b. Schedule: Use extra heavy duty industrial / commercial series of door hardware.
- c. All other necessary hardware such as latch bolts, catch locks, door chain fasteners, door stops, wall stops and holders, push plates, handles, etc. shall be of type, size and design suitable for the purpose.

I. GLASS AND GLAZING

- a. Schedule: The contractor shall submit glass sample with performance data and certifications from the manufacturer.

WINDOWS

- b. 6 mm thick clear tempered glass for aluminum steel awning windows on building interiors.
- c. FINISHES Refer to Architectural Plans for location. Verify plans for other finishes not specified or omitted herein. Sample of all materials shall be submitted to the Procuring Entity for approval as to color and quality workmanship.

J. FLOOR FINISHES

- a. Vinyl Tiles: Supply and installation of 2.0 mm thk. X 100 mm x 900 mm resilient vinyl .Contractor shall submit samples for Procuring Entity's approval. After work completion, vinyl tiles shall be cleaned, free from all cement, dirt, or other substances, with two coats of water emulsion wax, each coat polished to produce a well-polished finish. Manufacturer: Armstrong
- b. Tiles: Supply and installation of 600 mm x 600 mm or 800mm x 800mm unglazed tiles; polished / unpolished / textured and colored: set on tile adhesive setting with 3 - 5 mm spacing between tile. For HMTS Annex office. Submit Samples for approval.
- c. Tiles: Supply and installation of 9 to 10 mm x 400 mm x 400 mm for Repair Room. Refer to Schedule of finishes. Submit sample for Procuring Entity's approval.
- d. Tiles: Supply and installation of 600 mm x 600 mm for Wall & table top Tiles. Refer to Schedule of finishes. Submit sample for Procuring Entity's approval.

K. WALL FINISHES

- a. Plain Cement Plaster Finish: 10 mm. thick on vertical, on masonry and for all concrete hollow block surfaces, painted finish as indicated in the Drawings and for all areas not otherwise noted with other finishes.
- b. Tiles: Supply and installation of 600 mm x 600 mm for Wall & table top Tiles complete with all PVC trims 20-30mm mortars setting beds with the tile grout 3-5mm. Refer to Schedule of finishes. Submit sample for Procuring Entity's approval.

L. CEILING FINISHES

- a. Dismantling & Cleaning Works: Removal of some parts of existing ceiling as affected by the new ceiling layout and finish. 2. Acoustic Mineral Ceiling Boards: Installation of 15 mm x 600 mm x 600 mm, with 5-year warranty to withstand humidity conditions up to at least 90deg F/ 90% RH without visible sag; in white color 3. Gypsum Board: Supply and installation of moisture resistant 12mm thick Boral Gypsum board panels and metal furring and hanger rods

M. PAINTING WORKS

- a. Painting Materials:
 - i. 1. Submit various painting materials specification data and sample to be used for Procuring Entity's approval.
 - ii. All primers, thinners and putty, also waterproofing for internal and external application shall be the same brand as the specified material.
 - iii. Painting materials including its application must be covered with minimum of five- (5) year guarantee to be rendered by the painting manufacturer.
 - iv. Use BOYSEN or DAVIES only for all painted works.
 - v. Application:
 - a. All sample paint shall be submit on at least 300-mm x 300-mm plywood panel, color and shade as per approval by the Procuring Entity.
 - b. Application shall be as per paint Manufacturer's specification and recommendation.




- c. Provide all drop cloth and other covering requisite for protection of floors, walls, aluminum, glass, finishes and other works.
 - d. All applications and methods used shall strictly follow the Manufacturer's Instructions and Specifications. All surfaces including masonry wall shall be thoroughly cleaned, puttied, sandpapered, rubbed and polished; masonry wall shall be treated with Neutralizer.
- vi. All exposed finish hardware, lighting fixtures and accessories, glass and the like shall be adequately protected so that these are not stained with paint and other painting materials prior to painting works. All other surfaces endangered by stains and paint marks should be taped and covered with craft paper. Manufacturer: Boysen or Davies Paint
- b. Painting Schedule:
- i. Interior- Interior Concrete or Masonry Painted - Three (3) coats water-based masonry semi-gloss finish. Sample Shades for Procuring Entity's Approval.
 - ii. Plain Semi-gloss in Acrylic water-based Epoxy paint on interior walls, columns, on all other interior concrete surfaces. (3) coats
- c. Exterior- Exterior Concrete or Masonry Painted - Three (3) coats weather proof paint masonry plain semi-gloss finish. Sample Shades for Procuring Entity's Approval.

N. MEZZANINE & STEEL WORKS

- i. Mezzanine shall be free-standing and shall not use existing walls or building columns for vertical support.
- ii. Mezzanine shall be capable of being erected, dismantled, and relocated with hand tools.
- iii. During construction the contractor shall be responsible for maintaining the structure in a stable condition and ensuring no part shall be overstressed under construction activities. This includes all existing structure forming part of, or affected by, the works.
- iv. If during construction any part of the works shows sign of distress, excessive deflection, conflict of components or other problems. The contractor shall immediately notify the engineer who shall investigate and issue such constructions as are considered necessary.
- v. Stair Handrail: Handrail on stairs will be a welded, one-piece assembly. Stair handrails will have end returns that continue horizontally for 12" past the rear of the top tread. The same is true at the bottom except the distance is measured from the front nosing and increased to 12" plus the depth of one tread. Handrail will be provided at both sides of the stair. Handrail shall fasten to the outside of the stringers to facilitate a plumb rail without the use of any shims. Handrail shall be free of any sharp edges or protrusions. Ends of handrail shall be designed to avoid hooking on clothing and therefore avoid the possibility of that encouraging an accident.
- vi. Beam-to-Column Connections: Beam to column connections shall be capable of transferring bending moments and must be shown to have adequate capacity to insure structural stability without contribution of base plate connection.
- vii. Beam-to Beam Connections: the beam reaction shall be transferred to the support by means of bolting the purlin to a structural angle that is factory welded to the main support girder. This single-angle

Type 2 "Simple - Framing" connection shall be welded in the factory in the form of an "L" to provide the necessary.

- viii. Framing: Structural support beams shall be sized to satisfy the structural specifications.
- ix. Base Plate Connections: Base plate shall be fully welded around the entire perimeter of the mezzanine column. Base plates as a standard shall be centered on the column to facilitate a uniform transfer of axial load to the foundation. Centered base plates will also contribute to reducing sway and adding to the lateral stability of the structure.
- x. Columns: Structural support columns shall be sized to satisfy the structural specifications.
- xi. Stair: Stair assembly will have treads factory welded to stringers. Stair width shall not be less than 600mm. Treads will be designed such that the openings between treads is less than 4 inches creating a closed design. Maximum rise per tread shall not exceed 7". Minimum run per tread shall not be less than 11".
- xii. Decking Fascia: The entire perimeter of the mezzanine will be enclosed with fascia to give the structure a finished appearance.
- xiii. Paint: The surface of the steel will be cleaned of rust and dirt that will impede the adhesion of the paint. The mezzanine will receive 2 component, polyurethane acrylic enamel. All components shall be painted.
- xiv. Decking: Standard decking shall be roof deck with a plywood deck surface.
 - a. Roof decking shall be a minimum of 20 gauge, 1 ½" B-deck, painted white on the underside, with a minimum steel yield strength of 33,000 Psi.
 - b. Plywood shall be a minimum of ¾" Tongue and Groove Plywood with a minimum span rating of 24" OC.

O. ELECTRICAL SPECIFICATION

a. GENERAL DESCRIPTION

- i. The work to be done under this DIVISION of the Specifications consist of the fabrication, furnishing delivery and installation, complete in all details of the Electrical Work, at the subject premises and all work materials incidental to the proper completion of the installation, except those portions of the work which are expressly stated to be done by others. All work shall be done in accordance with the governing Codes and Regulations and with the Specifications, except where same shall conflict with such codes etc., which latter shall then govern. The requirements with regards to materials and workmanship specify the required standard for the furnishing of all labor, materials and appliances necessary for the complete installation of the work specified herein and indicated on the drawings. The Specifications are intended to provide a broad outline of the requirement and are not intended to include all details of design and construction.

b. LAWS/CODES and REGULATIONS:

- i. The work under this DIVISION shall be executed in accordance with the latest requirements of the following:
 - i. Building Code of the Philippines, Philippine Electrical Code, Laws, ordinances, and regulations of the locality having jurisdiction over the project, Power and telephone utility companies UAP Doc. 301
- ii. The requirements of the above mentioned governing laws/codes and the requirements of the companies having involvement/participation are hereby made part of this

Specifications and the ELECTRICAL CONTRACTOR is required to comply with the same.

- iii. This does not relieve the ELECTRICAL CONTRACTOR from complying with requirements of specifications or drawings in excess of above laws and ordinances, codes and requirements which are not prohibited by the same.

c. GUARANTEE

- i. The ELECTRICAL CONTRACTOR shall guarantee that the electrical system is free from all grounds and defective materials and workmanship for a period of one (1) year from the date of acceptance of the work. All defects arising within the guarantee period shall be remedied by the ELECTRICAL CONTRACTOR at his own expense.
- ii. The ELECTRICAL CONTRACTOR shall indemnify and save harmless PROCURING ENTITY from and against all claims, suits, actions, or liabilities for damages arising from injuries, disabilities or loss of life to persons or damage to public or private properties resulting from fault or any act of contractor or his representative in the execution of this work.
- iii. The partial acceptance of the work for the purpose of making partial payments, based on the estimated cost satisfactorily completed by the ELECTRICAL CONTRACTOR, shall not be considered as final acceptance of that portion of the work.

d. DRAWINGS & SPECIFICATIONS

- i. The electrical plans, which constitute an integral part of these Specifications, shall serve as the working drawings. The plans indicate the general layout and arrangement of the complete electrical system and other works.
- ii. The drawings and specifications are meant specifically to be complementary to each other and where it is called for by one shall be binding as if called for by both. Anything which is basically required to complete the installation for proper operation but not expressly mentioned on the drawings and/or specifications shall be furnished and installed by the ELECTRICAL CONTRACTOR at no extra cost to the PROCURING ENTITY as though specifically stipulated or shown in both.
- iii. Procuring Entity shall have the final decision on any apparent conflict between the drawings and specifications or on any under and controversial point in either or both.
- iv. All dimensions and locations shown on the plans are approximate and shall be verified in the field, as actual locations, distances, and levels are governed by actual conditions.

P. SCOPE OF WORK

i. Work Included

- a. The work to be done under this section of work shall include the furnishing of all tools, labor, equipment, fixtures and materials, each complete and in proper working condition unless one or other is specifically excluded or stated otherwise in these Specifications but not limited to the following principal items of work: 2.1.1 Furnish and install a complete grounding system. 2.1.2 Perform terminations for all electrical system. 2.1.3 Complete testing of all electrical systems. 2.1.4 Preparation of "As-built" drawings. 2.1.5 If any item of works or material has been omitted which are necessary for the completion of the Electrical Work as outlined herein before, then such items shall be and hereby included in this section of work.

Q. PROCEDURE



- i. Workmanship
 - a. The ELECTRICAL CONTRACTOR shall execute the work in the most thorough, prompt and workmanlike manner and in accordance with the plans and specifications. The installations shall be done thru standard methods and good engineering practices.
- ii. Materials
 - a. All materials to be installed shall be brand new except as otherwise noted on the plans or specifications. The materials shall be as specified. No substitution of materials is allowed. Should the ELECTRICAL CONTRACTOR find it necessary to use another type/brand of materials instead of the specified item, he shall first obtain approval from the PROCURING ENTITY prior to installation. Any substituted material installed without the approval of the PROCURING ENTITY shall be subject to replacement.
- iii. Coordination
 - a. It is the sole responsibility of the ELECTRICAL CONTRACTOR to conduct coordination of his activities with the following:
 - a. Other trades and suppliers
 - b. Procuring Entity/Engineer
 - c. PAGASA
- iv. Deviation From The Plans
 - a. No deviation from the plans is to be made unless given notice or approval by the PROCURING ENTITY.
- v. Record Drawings and „As-Built” plan.
 - a. The ELECTRICAL CONTRACTOR is required to keep an active record of the actual installation during the progress of the job. This shall be the reference in the preparation of the „As-Built” plans which shall include all pertinent information, complete in all aspect of the actual installation, and all new information not originally shown in the contract drawings. The „As-Built” plans shall be prepared by the ELECTRICAL CONTRACTOR at his expense and shall be submitted to the Procuring Entity for approval upon the completion of the work. The approval of the „As-Built” drawings shall be a pre-requisite for the final acceptance of the electrical works.
 - b. Submit two (2) copies of the “As-Built” drawings signed and dry sealed by the ELECTRICAL CONTRACTOR’S Registered Professional Electrical Engineer. Original tracing /reproduceable copy shall also be submitted to the PROCURING ENTITY.
- vi. Samples & Shop Drawings
 - a. 30 days prior to the installation or fabrication of materials the ELECTRICAL CONTRACTOR shall submit to Procuring Entity the following for approval.
 - b. Shop drawings of panel boards showing arrangements of circuit breakers, bus bar sizes, lugs, etc. Indicate all dimensions.
 - c. Shop drawings or samples required as noted in the drawings.
 - d. Samples and catalogs of materials intended to be installed.
- vii. The ELECTRICAL CONTRACTOR shall also submit to the Procuring Entity without delay shop drawings and other submittals which may be required by Procuring Entity during the progress of construction.

- viii. The above requirements shall be submitted to the Procuring Entity at the earliest possible time to give allowance for checking and verification. These shall be complete in all aspects.
- ix. Submit two (2) sets of each shop drawings.
- x. Electric Power
- xi. The ELECTRICAL CONTRACTOR shall be responsible for his own electric power needed for the execution of the job.
- xii. TEST
 - a. Conduit tests on all electrical conductors installed in the presence of the PROCURING ENTITY's representative.
 - b. check for grounds insulation resistance test
 - c. continuity test for all outlets
 - d. voltage level test
 - e. phase relationship
 - f. check circuit connections at panel boards, all single phase circuit shall be connected to phase as shown in the load schedule.
- xiii. Submit Reports On Tests
- xiv. All defects found during the test shall be repaired immediately by the ELECTRICAL CONTRACTOR.
- xv. All tools, equipment and instruments needed to conduct tests shall be on the account of the CONTRACTOR.

R. METHODS & MATERIALS

- a. Conduits
- b. Polyvinyl Chloride Conduit (PVC)
 - i. Standard trade sizes, schedule 40
 - ii. Coupling & fittings - standard couplings for joints by solvent weld process.
 - iii. Telephone System & other auxiliary system.

S. Installation of Conduits

- a. Installation is in accordance with PEC and of good engineering practice.
- b. Use standard trade sizes locknut and bushing at each end terminating in boxes/panel boards. Ensure electrically continuous conduit system.
- c. Provide independent conduits supports using hangers, supports or fastenings spaced in accordance with good engineering practice and PEC.
- d. conduits must be securely fastened with approved cups and screw in wall and in ceiling, nails are not acceptable
- e. Use adjustable trapeze hangers for horizontal parallel runs.
- f. Conduits bends shall not be more than the equivalent of three (3) 90 degree bends between pulling points.
- g. Conduit threads cut on job shall have same effective lengths, thread dimensions, and taper as factory threads.
- h. Cut ends of conduit square with hand or power saw and ream to remove burrs and sharp edges. Do not use wheel cutter.
- i. All new branch circuits shall be laid out up to the new panel distribution board for approximately 15 meters for each circuits.
- j. Clamps shall be galvanized malleable iron one-hole straps, beam clamps or other approved device with necessary bolts and expansion shields.
- k. Trapeze hangers shall be used for parallel runs of conduits. Install conduit clamps at end of each run and at each elbow. Paint hangers one prime coat of red lead or zinc chromate, and one finish coat of an approved color. Hangers are not detailed but must be adequate to support combined weight of conduit, conductors and hangers. Submit shop drawings for approval.
- l. All underground conduits installed shall be provided with concrete encasement at least 8cm. thick outer face of conduit.

- m. The new color coded supply/feeder wires shall be laid out properly up to the Old Electrical Room of DIC Building using the specific conduit and fittings. Submit sample for approval.
- n. The existing convenience outlet (1) in HMTS Annex office shall be relocated in the new stock room.
- o. The two existing convenience outlets shall be replaced with new devices.
- p. No wiring shall be exposed.

T. Wires

- a. Wires shall be annealed copper, 98% or better conductivity, insulated, single, except as noted in the drawings.
- b. 600 volt class type as indicated in the plans.
- c. Wires greater than no. 8 mm² shall be stranded.
- d. Minimum size shall be #3.5 TW for power circuits.
- e. Minimum size shall be #2.0 TW for lighting circuits.
- f. Telephone wires shall be no. 22 AWG jacketed type, 4 wires.
- g. Use standard methods in pulling wires.
- h. Splices of wires/cables shall be done inside junction boxes or auxiliary gutters using standard connectors. No wires shall be spliced inside conduits.
- i. All wires and cables shall be color coded as follows:

U. Connectors

- a. Use solderless mechanical pressure - type lugs, copper

i. Insulation

- a. All splices shall be properly insulated using 3M electrical tape. Application of insulation tape shall be equivalent to the insulation of the wire concerned. Use filler compound, "Scotch fill at sharp edges to provide smooth surface before taping.

ii. Panel board & Circuit Breaker

- a. NEMA type/enclosure unless noted, PEC rules and regulations, circuit breaker type shall be 230V, number of pole as required.
- b. Panel boards shall contain a single brand of circuit breakers and as manufactured by "Schneider Electric", "Cutler Hammer" or "GE".
- c. All circuit breakers used as main shall be "Bolt on" type molded case, thermal magnetic protective, quick make, quick break, trip free from handle, trip indicating, number and size as shown in the schedule. Internal common trip for 2 and 3 pole breakers.
- d. Breaker minimum interrupting capacities shall be based on NEMA and UL test procedures.
 - a. 230 volt breakers - 10,000 rms. Symmetrical amperes at 240V A/C (minimum)
- e. All circuit breakers used as branches rated at below 100 AT and specifically installed in lighting panel boards shall be "bolt-on".
- f. Word "space" indicated in the schedule shall mean that complete bus, insulators, etc. shall be included ready to accept future circuit breaker of the same frame size as the largest branch circuit breaker.

b. Lightning

- i. All lighting fixtures when installed shall be free of leaks, warps, dents and other irregularities.
- ii. The hanger, cable, supports, channel, frames and brackets of all kinds for safety and proper installation of lighting fixtures shall be furnished and installed by the contractor at his own expense.

- iii. All lighting fixtures, sample and catalogue shall be submitted for PAGASA review and approval prior to order. No lighting fixture shall be installed without approval of PAGASA.
- iv. Lighting fixtures shall be wired with approved fixture wire. Each fixture shall be wired to a single point with an adequate slack for proper connection.
- v. All lighting fixture shall be protected from damage during installation. Any broken lighting fixtures, gloves, receptacles, stems and the like, shall be replaced with new parts, at no cost to PAGASA.
- vi. Specifications: Pin Light 12W Downlight: Voltage: 86-286V, LUMENS: 720lm / 390lm; CCT: Daylight; Measurement: 150x 65mm (6inches)
- vii. Specifications: Drop Light 25Ccm single head with LED light bulb.
- c. SWITCHES AND DUPLEX 3-PIN CONVENIENCE OUTLET
 - i. Switches and three-pin outlet shall comply with NEMA Standards. The rating switches and single and three-phase outlet with one conductor shall be as specific herein. All switches and three-pin outlets shall be flushed-mounted, impact resistant and splash proof type.
- d. Switches
 - a. Switches for lighting fixture shall be on the toggle quite and flush mounted and fixed to the wall 1.30m above the finished floor level. The rating shall be 10A, 230 VAC single phase.
 - b. Duplex 3-pin Convenience Outlet
 - c. All outlets shall be provided with separate earthing pins connected to the part in the feeder cable. Outlet for 10A and with rated voltage not exceeding 250 volts shall be according to the PEC for 2-pole thee-wire (indoor).

V. PLUMBING / SANITARY WORKS

a. SCOPE OF WORKS

The work to be undertaken under this section shall consist of the furnishing of all materials, labor tools, equipment and other facilities and the satisfactory performance of all work necessary for the complete installation, testing and operation of the plumbing system accordance with the applicable drawing and this section of that specifications consisting of, but not necessarily limited to the following:

- i. Soil, waste and vents pipe system, within the building up to sewer line.
- ii. Water service connection from main building distribution system. c. Furnishing, installation and testing of lavatories, accessories including controls & piping works.
- iii. Furnishing and installation of all plumbing fixtures, fittings, trims and accessories.
- iv. All work shall be performed in accordance with the requirements of all applicable laws of the Republic of the Philippines and all local codes and ordinances.
- b. The contractor is required to refer to all mechanical, electrical, structural and architectural plans and specifications all shall investigate all possible interference and conditions affecting his work in this section and that of the other sections.
- c. All plumbing works to be done and sizes of pipe to be used shall be of the sizes, which are required and in accordance with the NATIONAL PLUMBING CODE OF THE PHILIPPINES.
- d. GENERAL
 - i. DRAWING AND SPECIFICATIONS:
 - a. The contract drawings and the specifications are complimentary to each other, and any labor or materials called for by both, if necessary for the successful operation

of any other particular types of equipment shall be furnished and installed without additional cost of Procuring Entity.

- b. All dimensional locations of fixtures, equipment, floors and roof drains risers and pipe. Chases shall be verified on the architectural drawings and manufacturer's catalogs.
- c. Upon completion of the work as described herein, the Contractor shall at his own expense furnish the Procuring Entity originals and three (3) sets of "AS BUILT" Plans for future reference and maintenance purposes.
- e. **PROTECTION:** The contractor shall protect all his work and materials loss, injury or defacement. Protection of fixtures and materials shall be provided by boards, papers and/or cloth as required and any loss, damaged or deface material shall be replaced by the Contractor at his own expense.
- f. **INSTALLATION AND WORKMANSHIP:**
 - i. All labor shall be performed in a first-class, neat and workman like manner by mechanic skilled in their work shall be satisfactory to the Project Architect.
 - ii. No piping in any location shall be closed up, furred in or covered before testing and the examination of same by the inspector, Procuring Entity or their representatives.
- g. **WATER SUPPLY**
 - i. Pipes and fittings for waterline shall be as SPECIFIED BY PAGASA.
 - ii. All valves, unless otherwise specified shall be gate valves of size as indicated in the drawings: for hot water supply, valves and fittings shall be insulated of a thickness equal to that of the insulation on the adjoining pipe, securely fastened in place.
- h. **SANITARY DRAINAGE**
 - i. Soil and waste Pipes and Fittings:
 - a. Soil and waste pipes and fittings shall be PVC pipes (POLYVINYL CHLORIDE) series 1000 Neltex.
 - b. Vent Pipes and Fittings: Vent pipes and fittings shall be PVC pipes
 - c. Shower and Floor Drains: Shower and floor drains shall be of high grade, strong, tough, and even grained metals.
 - d. Cleanouts:
 - a. Ceiling cleanouts shall be of the same material as pipe with sealed screw type, raised head plug.
 - b. Floor cleanouts shall be cast-iron body with brass plug, colt-type or countersunk head; METMA brand.
 - i. **HANGERS, INSERTS AND PIPE SUPPORTS**
 - i. Provide suitable and substantial hangers and supports for all piping. Support horizontal piping in accordingly approved sizes where pipe clamps are too short to connect to the building construction.

W. EXECUTION

a. GENERAL INSTALLATION OF PIPES

- i. Install pipes approximately as shown on the drawings, as straight and direct as possible forming right angles parallel lines with walls and other pipes, and neatly spaced unless otherwise indicated. Care shall be taken not to weaken the structural portions of the building.
- ii. Maintain minimum slope of 3mm (1/8 inch fall per foot) on all soil, waste and drain lines 100mm in diameter.
- iii. Do not install pipes or other apparatus in a manner which will interfere with full swing of the doors and windows.

- iv. The arrangement, position and connection of pipe fixtures, drains, valves and the like indicated on the drawings shall be followed as closely as possible, the right is reserved by the Procuring Entity to change location and elevations to accommodate conditions which may arise during the progress of the work prior to installation, without additional cost of the Procuring Entity for such changes. The responsibility for accurately laying out of the work rests with this Contractor. Should be found that any work if laid out caused interference, the matter shall be reported to the Engineer before connecting the work.
 - v. Ream all screwed pipes smooth before installation. Do not bend, flatten, split or injure pipes in any way.
 - vi. Use reducing fittings, in making reduction in size of pipe. Bushing will not be allowed unless specifically approved.
 - vii. Where chrome plated piping is installed, cut and thread pipe. Bushing will not be allowed unless specifically approved.
 - viii. Carry fixture connections, concealed in building constructions, to points above floor, break out close to underside of fixture and rise exposed to fixture.
 - ix. No piping shall be installed which will provide a cross or interconnection between a distribution supply of drinking water of Domestic use and pollution or waste pipe, the water line shall be placed above the waste pipe in ground installation.
- b. **INSTALLATION OF WATER SUPPLY PIPES AND FITTINGS**
- i. The piping shall be extended to all fixtures, outlets and equipment. Ends of pipes and outlets shall be capped or plugged and left ready for future connections.
 - ii. Branch pipe from service line may take off of main, bottom of main, or side of main, using such cross over fittings as may be required by structural or installation conditions.
 - iii. All service pipes, valves and fittings shall be kept at sufficient distance from other work to permit finished covering not less than 12.7mm (1/2") from such other work and not less than 12.7mm between finished coverings on the different services. No have been inspected and approved.
 - iv. Where the branch serves more than one fixture, the branch shall be increased in size in proportion to sizes as shown on the drawings.
 - v. Cast bronze unions shall be installed at the connection to all equipment so that they may be conveniently disassembles.
 - vi. Upon completion of water system, flush out lines and all valve sets to clear system of particles and dirt.
- c. **INSTALLATION OF SOIL, WASTE, VENT AND DRAINAGE PIPING**
- d. **Horizontal Drainage Pipe and Vent Piping**
- i. Horizontal waste pipe 75mm (3") and smaller shall have minimum grade of 6mm (1/4") per foot, and for 100mm (4") and larger, 3mm (1/8") per foot. Vertical vent pipes may be connected to a vent lines carrying other fixtures, the connection to be at least 1.20m (4 feet) above floor on which the fixtures and located to prevent the use of any vent lines as waste lines. Horizontal waste lines receiving the discharge from two (2) or more fixtures shall be provided with vents, unless separate venting of fixtures noted.
 - ii. Fittings - All changes in pipes sizes on soil waste line shall be made with reducing fittings or recessed reducers. All changes in direction shall be made with the appropriate use of 45 wyes, half wyes, long sweep quarter bends, or elbows may use in soil and waste lines where the change in direction of flow is from horizontal to vertical, and on the discharge from water closets. Where it become necessary to use short radius fittings in any other location, the

approval of the Procuring Entity shall be obtained before they are installed.

- iii. Traps - Each fixture and place of equipment connection to the drainage system except fixture with continuous waste shall be equipped with a trap. Traps shall be placed as near to fixtures as possible.
- e. **FIXTURES AND EQUIPMENT SUPPORTS AND FASTENINGS.** All fixtures and equipment shall be supported and fastened in a satisfactory manner.
- i. Where secured to concrete on hollow block, walls, they shall be fastened with 6mm (1/4") brass bolts with twenty threads to the inch and of sufficient length to extend at least 75mm (3") into solid concrete on hollow block work; fitted with loose tubing or sleeve inserts, shall be securely anchored and installed flush with the finished wall and shall be completely concealed when the fixtures are installed.
 - ii. Where though bolts are used, they shall be provided with name plates and washers at backsets so that head, nuts and washer will be concealed by plaster. Bolts and nuts shall be hexagonal and screw shall be provided chromium brass washers.
 - iii. Upon completion of work, all fixtures, trimmings, and equipment shall be thoroughly cleaned, polished and left in first class condition for final acceptance.
- f. **CLEANING AND PAINTING**
- i. Prior to acceptance of the work, thoroughly clean all exposed metal surface and rid of grease, dirt or other foreign material. Chrome or nickel - plated piping's, fitting and trimming shall be polished.
 - ii. Pipe hangers, supports and all other iron work in concealed spaces shall be thoroughly cleaned and painted with one coat of red lead and a finish coat of oil enamel paint.
 - iii. All exposed soil, waste and vent piping or cast iron that are asphalt or tar-coated shall be given two (2) coats of shellac and two (2) coats of oil paint.
- g. **WATER SYSTEM TEST**
- i. Upon completion of the roughing-in and before fixtures, the entire water piping system shall be tested at a hydrostatic pressure of one and half (1-1/2) times the expected working pressure in the system when in operation, and proven tight at this pressure or not less than 150 psi gauge.
 - ii. Where a portion of the water piping system is to be concealed before completion, this portion shall be tested separately in a manner to that described for the entire system, and in the presence of the Procuring Entity or its representative.
- h. **DRAINAGE SYSTEM TEST**
- i. The entire drainage and venting system shall have necessary opening which can be plugged to permit the entire system to be filled with water to the level of the highest vent stack and/or vent above the roof.
 - ii. The system shall hold this water for a full thirty (30) minutes during which time there shall be no drop more than four inches 100mm (4").
 - iii. If and when the Procuring Entity decides that an additional test is needed, such as an air or smoke test on the drainage system, the Contractor shall perform such test without additional cost to the Procuring Entity.

X. MECHANICAL WORKS

ACUs to be installed are shown in the mechanical plans.

- a. The contractor shall supply and install of two (2) air-conditioning unit, 3HP wall mounted, 230volts single phase, 60hz. Brand: Trane or Carrier.
- b. The contractor shall install of refrigerant lines, drain pipes and electrical supply on all ACUs.
- c. The contractor shall provide the protection or bracket needed for ACUs

Y. STRUCTURED CABLING SYSTEM FOR DATA AND VOICE CONNECTIVITY

The scope of work for this project is to install Structure Cabling that will cater the internet needs of HMTS. These items include but are not limited to the following:

- a. Includes the laying out of UTP Cable as specified in the drawing. The UTP cable must be CAT 6 type. Each connection shall be terminated from the corresponding nodes to the network switch which will be provided by HMD. Connection from the network switch to the ICT room will be coordinated with ICT personnel.
- b. Each nodes will be installed within the modular and specified wall portions for Xerox machine. The contractor will provide the data outlet including the faceplate with shutter. Cables connected to the network switch will be terminated with RJ 45 and RJ 45 Jacket.
- c. Provide and install molding as protection of cables that will be laid out outside the modular.
- d. Provide and install stainless ramp as protection of cable laid out from the wall to the conference table as specified in the drawing.
- e. The contractor shall be responsible for the proper coordination of all items to ensure that all items requiring Structure cabling are installed as required.
- f. Obtain approvals from the ICT Group inspection authority of any changes requested by the inspection authority.
- g. Clean all equipment during construction and on completion of the contract
- h. Remove all surplus materials, cutting and packaging and debris from the site during the progress and at final completion of the work.
- i. Execute work in a FIRST-CLASS and workmanlike manner.
- j. Installation of Structure Cabling with high adhesive standard.
- k. All material shall be used brand new of the type of specified and approved by certification and free from defect.
- l. All cable should be covered by plastic moulding on wall and stainless ramp on floor. No cables should be expose.

ARTICLE 2 – CONTRACTOR'S OBLIGATIONS

The **CONTRACTOR** shall carry out the Works diligently and in accordance with this Contract. The **CONTRACTOR** shall supply all materials, labor, equipment and technical supervision necessary for its implementation in accordance with the contract documents and project schedule and manpower/equipment schedule. **Job site shall be provided with safety early warning signs and enclosures/barricades** as necessary during the implementation.

The electricity and water consumption incurred during the execution of the project shall be borne by the **CONTRACTOR**.

The **CONTRACTOR** shall commence execution of the Works on the Start Date and shall carry out the Works in accordance with the Program of Work submitted by the **CONTRACTOR**, as updated with the approval of the **PAGASA's** representative, and complete them by the Intended Completion Date.

The **CONTRACTOR** shall be responsible for the safety of all activities on the Site and shall carry out all instructions of the **PAGASA's** representative that comply with the applicable laws where the Site is located.

The **CONTRACTOR** shall employ the key personnel named in the Schedule of Key Personnel, as referred to in the **SCC**, to carry out the implementation and supervision of the entire Work. **PAGASA** shall at all times be consulted of any proposed replacement of key personnel shall approve the same only if their relevant qualifications and abilities are equal to or better than those of the personnel listed in the Schedule.

If the **PAGASA** asks the **CONTRACTOR** to remove a member of the its staff or work force, for justifiable cause, the **CONTRACTOR** shall ensure that the person leaves the Site within seven (7) days and has no further connection with the Work in this Contract.

During Contract implementation, the **CONTRACTOR** shall abide at all times by all labor laws, including child labor related enactments, and other relevant rules.

The **CONTRACTOR** shall submit to the **PAGASA** for consent the name and particulars of the person authorized to receive instructions on behalf of the **CONTRACTOR**.

The **CONTRACTOR** shall cooperate and share the Site with other contractors, public authorities, utilities, and the **PAGASA** between the dates given in the schedule of other contractors particularly when they shall require access to the Site. The **CONTRACTOR** shall also provide facilities and services for them during this period. The **PAGASA** may modify the schedule of other contractors, and shall notify the **CONTRACTOR** of any such modification thereto.

Should anything of historical or other interest or of significant value be unexpectedly discovered on the Site, it shall be the property of the Procuring Entity. The **CONTRACTOR** shall notify the **PAGASA's** representative of such discoveries and carry out the **PAGASA's** representative's instructions in dealing with them.

ARTICLE 3 – TIME OF COMPLETION

The Work stipulated in this Contract shall be completed "**Broom**" clean and ready for use not later than **Ninety Five (95) calendar days** from receipt of the **Notice to Proceed (NTP)** by the **CONTRACTOR**.

ARTICLE 4 - CONTRACT AMOUNT/ PAYMENT SCHEDULE

The **PAGASA** agrees that for and in consideration of the faithful performance by the **CONTRACTOR** of this Contract, it shall pay to **CONTRACTOR**, in a manner provided hereinafter the amount of **ONE MILLION EIGHT HUNDRED THOUSAND FIVE HUNDRED SIXTY EIGHT AND 90/100 PESOS (Php1,800,568.90) ONLY**.

PROVISION OF ADVANCE PAYMENT

The **PAGASA** shall, upon a written request of the **CONTRACTOR**, which shall be submitted within **thirty (30) calendar days** upon receipt of the **NTP**, allow an advance payment to the **CONTRACTOR** in an amount not to exceed **fifteen percent (15%)** of the total contract price, to be made in lump sum.

Provided, however that, the said advance payment shall be made only upon the submission to and acceptance by the **PAGASA** of an irrevocable standby letter of credit (LC) of equivalent value from a commercial bank, a bank guarantee (BG) or a surety bond callable upon demand, issued by a surety or insurance company duly licensed by the Philippine Insurance Commission and confirmed by **PAGASA**.

The advance payment shall be repaid by the **CONTRACTOR** by deducting fifteen percent (15%) from his periodic progress payments.

The **CONTRACTOR** may reduce his standby Letter of Credit or Guarantee Instrument by the amounts refunded by the Monthly Certificates in the advance payment.

PROGRESS PAYMENT

Unless otherwise provided in this Agreement, payment of progress billing is not applicable.

METHOD OF PAYMENT

Pursuant to and in compliance with the **DBM Circular No. 3-2013-16A**, dated February 6, 2014, the **CONTRACTOR** shall be required to apply and/or submit to **PAGASA**, through the **Cashier Unit**, its **bank account and branch thereof**, and, preferably from an authorized government servicing bank such as, Land Bank of the Philippines (LBP), Development Bank of the Philippines (DBP) or Philippine Veterans Bank (PVB), to which any payment due to the **CONTRACTOR** shall be made or credited.

In the event; however, that the **CONTRACTOR'S** bank account is not among the listed authorized government servicing banks, any corresponding bank charges shall be borne/paid by the **CONTRACTOR**.

ARTICLE 5 – RETENTION MONEY

The total billing submitted by the **CONTRACTOR** will be subject to retention of ten percent (10%) referred to as the “**retention money**”.

The “retention money” shall be due for release upon final acceptance of the works. The **CONTRACTOR** may, however request for the substitution of the retention money for each progress billing with irrevocable standby letter of credit from a commercial bank, bank guarantees or surety bonds callable on demand, of amounts equivalent to the retention money substituted for and acceptable to the **PAGASA**; provided that, the project is on schedule and is satisfactorily undertaken. Otherwise, the ten percent (10%) retention shall be made. Said irrevocable standby letter of credit, bank guarantee and/or surety bond, to be posted in favor of the **PAGASA**, shall be valid for a duration to be determined by the **PAGASA** and will answer for the purpose for which the ten percent (10%) retention is intended i.e. to cover uncorrected discovered defects and third party liabilities.

ARTICLE 6 – CONTRACT COMPLETION

Once the project reaches an accomplishment of ninety five (95%) of the total contract amount, the **PAGASA** may create an inspectorate team to make preliminary inspection 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, work deficiencies for necessary corrections, and the specific duration/time to fully complete the project considering the approved remaining contract time. This, however, shall not preclude the **PAGASA's** claim for liquidated damages.

ARTICLE 7 – LIQUIDATED DAMAGES

In the event that the **CONTRACTOR** refuses or fails to satisfactorily complete the work within the specified contract time, plus any time extension duly granted and is hereby in default under the contract, the **CONTRACTOR** shall pay **PAGASA** for liquidated damages, and not by way of penalty, an amount to be determined in accordance with the following formula provided in the conditions of contract, for each calendar day of delay, until the work is completed and accepted or taken over by the **PAGASA**.

The amount of the liquidated damages shall be at least equal to **one-tenth (1/10) of one percent (1%)** of the cost of the unperformed portion for every day of delay.

Such amount shall be deducted from any money due or which may become due the contractor under the contract and/or collect such liquidated damages from the retention money or other securities posted by the contractor whichever is convenient to the procuring entity.

In the event that the delay in the completion of the work exceeds a time duration equivalent to ten percent (10%) of the specified contract time plus any time extension duly granted to the contractor, the procuring entity concerned may rescind the contract, forfeit the contractor's performance security and takeover the prosecution of the project or award the same to a qualified contractor through negotiated contract.

Such other provisions on liquidated damages under Annex "E" of R.A. 9184 and its IRR shall likewise be implemented.

ARTICLE 8 – SUSPENSION OF WORK

PAGASA shall have the authority to suspend the work, wholly or partly by written order for such period as may be deemed necessary, due to *force majeure* or any fortuitous event or for failure on the part of the **CONTRACTOR** to correct bad conditions which are unsafe for workers or for the general public, to carry out valid orders given by the **PAGASA** or to perform any provisions of the contract, or due to adjustment of plans to suit field conditions as found necessary during construction. The **CONTRACTOR** shall immediately comply with such order to suspend the work wholly or partly. Such other provisions on Suspension of Work under Annex "E" of R.A. 9184 and its IRR shall be implemented.

ARTICLE 9 – EXTENSION OF CONTRACT PERIOD

Should the amount of additional work of any kind or other special circumstances of any kind whatsoever occur such as to fairly entitle the **CONTRACTOR** to an extension of contract time the **PAGASA** shall determine the amount of such extension; *provided that*, the **PAGASA** is not bound to take into account any claim for an extension of time unless the **CONTRACTOR** has prior to the expiration of the contract time and within **fifteen (15) calendar days** after such work has been commenced or after the circumstances leading to such claim have arisen, delivered to the **PAGASA** notices in order that it could have investigated them at the time. Failure to provide such notice shall constitute a waiver by the **CONTRACTOR** or any claim. Upon receipt of full detailed particulars, the **PAGASA** shall examine the facts and extent of the delay and shall extend the contract time for completing the contract work when, in the **PAGASA's** opinion, the findings of facts justify an extension. Such other provisions on Extension of Contract Time under Annex "E" of R.A. 9184 and its IRR shall be implemented.

ARTICLE 10 – VARIATION ORDERS

The provisions on Variation Orders under Annex "E" of R.A. 9184 and its IRR shall be implemented.

ARTICLE 11 – WARRANTY

1. The **CONTRACTOR** shall assume full responsibility for the contract work from the time project construction commenced up to final acceptance by the **PAGASA** and shall be held responsible for any damage or destruction of the works except those occasioned by *force majeure* and the safety, protection, security, and convenience of its personnel, third parties, and the public at large, as well as the works, equipment, installation and the like.

2. Within **one (1) year period** from project completion up to final acceptance by the **PAGASA**, the **CONTRACTOR** shall undertake the repair works, at its own expense, of any damage to the infrastructure on account of the use of materials of inferior quality, within ninety (90) days from the time the **PAGASA** has issued an order to undertake repair. In case of failure or refusal to comply with this mandate, the **PAGASA** shall undertake such repair works and shall be entitled to full reimbursement of expenses incurred therein upon demand.

The defects liability period shall be covered by the **Performance Security** of the **CONTRACTOR** required in **Section 39.1 of the IRR**, which shall guarantee that the **CONTRACTOR** performs his responsibilities stated in the immediately preceding paragraph. If the **CONTRACTOR** fails to comply with its obligations under the foregoing paragraph, the **PAGASA** 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 **PAGASA** in its favor shall be offset to cover the costs.

3. To guarantee that the **CONTRACTOR** shall perform his responsibilities as prescribed in foregoing number, the **CONTRACTOR** shall post a warranty security in accordance with the following schedule:

Form of Warranty Security	Amount of Warranty Security (Equal to Percentage of % of the Total Contract Price)
1. Cash or letter of credit issued by a Universal or Commercial Bank	Five percent (10%)
2. Bank guarantee confirmed by a Universal or Commercial Bank	Ten percent (10%)
3. Surety bond callable upon demand issued by the GSIS or a surety or insurance company duly certified by the Insurance Commission as authorized to issue such security.	Thirty percent (30%)

4. The warranty security shall be denominated in Philippine Pesos and shall remain effective during the applicable warranty period provided under Section 62.2.3.2, **RULE XIX of the Revised IRR of RA No. 9184**, and shall be returned only after the lapse of the said warranty period.

ARTICLE 12- PRE-TERMINATION OF CONTRACT

The **PAGASA** reserves the right to pre-terminate the contract for cause, without liability and without prejudice to any other right of **PAGASA**, upon the **CONTRACTOR's** material default such as violation of the terms and conditions of the Contract, significant delay in the work schedule that is not attributable to force majeure or fortuitous events or any valid reason beneficial to **PAGASA**. In case of pre-termination, the **CONTRACTOR** shall be informed by the **PAGASA** thirty (30) days prior to such pre-termination.

In case of pre-termination, the **CONTRACTOR** shall be liable for liquidated damages equivalent to one percent (1%) of the Contract price as provided by the Government Accounting and Auditing Manual (GAAM) and to forfeit the Performance Security.

The **PAGASA** shall have the right to blacklist the **CONTRACTOR** in case of pre-termination.

ARTICLE 13 - MUTUAL CONSULTATION AND ARBITRATION AND VENUE OF ACTION

The **Parties** shall as often as practicable, mutually consult with each other with respect to the faithful performance of their respective obligations under this Contract.

The **Parties** shall use their best efforts to promptly resolve any differences or disagreements in connection with the implementation of the terms and conditions of this Contract. However, in the event that any dispute could not be resolved after mutual consultation by the Parties, then such dispute(s) shall be submitted to arbitration in accordance with the provisions of Republic Act No. 876 otherwise known as the "Arbitration Law". At the option of **PAGASA**, the arbitration shall be held in Quezon City, Metro Manila. A decision in any such arbitration shall be final and binding upon the **Parties**, unless the aggrieved party shall make an appeal by way of Petition for Review to the proper Court with competent jurisdiction.

The **CONTRACTOR** shall continue to deliver the Works described in this Contract notwithstanding any dispute which may have arisen between the **Parties** is being arbitrated.

ARTICLE 14 - GOVERNING LAWS

The governing laws of Republic Act No. 9184 otherwise known as "The Government Procurement Reform Act" and its Revised Implementing Rules and Regulations, the laws on Obligations and Contracts and other pertinent laws shall govern this Contract.

ARTICLE 15-OTHER PROVISIONS

Any other commitment made by the **CONTRACTOR** and accepted by the **PAGASA** such as but not limited to the provision of additional materials necessary for the completion and/or to improve the specifications set under the scope of works for the project but without additional cost to the **PAGASA** shall be adopted and made part of this Contract.

The **CONTRACTOR** hereby agrees to comply with laws bearing on employment of its workers performing the work including minimum wages, COLA, SSS, Philhealth, PAGIBIG, ECC, income tax payments, VAT payments, and permit fees necessary in the execution of work.

The **PAGASA** shall not be liable for any injury, damage, or death suffered by its workers in the performance of their duties.

Any amendment, change or alteration of any of the terms of this **Contract**, which are mutually agreed upon by the Parties shall be made in writing and attached as an Addendum to the Contract.

ARTICLE 16 - VALIDITY CLAUSE

If any term or condition of this Contract is held invalid or contrary to law, the validity of the other terms and conditions hereof shall not be affected thereby.

IN WITNESS WHEREOF, the **Parties** hereto have caused this Contract to be executed in accordance with the laws of the Republic of the Philippines on the day and year first above written.

**PHILIPPINE ATMOSPHERIC,
GEOPHYSICAL AND ASTRONOMICAL
SERVICES ADMINISTRATION
(PAGASA)**

**ROCK 101 CONSTRUCTIONS
AND SUPPLY**

By:



VICENTE B. MALANO, Ph.D.
Administrator

By:

for: 

JOEL F. ALADO
General Manager/Proprietor

Signed in the Presence of:



EDWIN F. MANRESA

Chief, ETSD

Witness for the **Contractor**

Funds Available:


BERNARD LOUISE C. DATUIN
Chief, Accounting Section

ORS# 2019-10-5984

5021304001

₱ 1,800,568.90

Oct. 3, 2019

ACKNOWLEDGEMENT

REPUBLIC OF THE PHILIPPINES)
QUEZON CITY) S.S.
X-----X

BEFORE ME, personally appeared:

Name	Valid Identification Document	Issued by	Place Issued
VICENTE B. MALANO	Office ID #571	PAGASA	Quezon City
JOEL F. ALADO			

Both known to me to be the same persons who executed the foregoing **INFRASTRUCTURE CONTRACT** and they acknowledged to me that the same is their own, free and voluntary act and deed as well as that of the entity represented.

This instrument consists of **Twenty Four (24)** pages including this page on which this Acknowledgment is written and has been duly signed by the parties and their witnesses.

SIGNED AND SEALED on OCT 21 2019 2019 at Quezon City, Metro Manila.

Doc. No. 163;
Page No. 24;
Book No. 1;
Series of 2019.

m-cj
ATTY. MICHAEL JOSEPH C. GAPIPIN
Notary Public for Quezon City
Until December 31, 2019
PTR No. 5610545 / 1-10-19/Q.C.
IBP Lifetime NO. 08330
ROLL NO. 56499
MCLE Comp. No. - V-0025351
Adm Matter No. NP-131 (2018-2019)

[Handwritten signatures]