

**Request for Quotation**

October 14, 2019

6<sup>th</sup> Posting

The **TOURISM PROMOTIONS BOARD** invites you to submit quotations for the item/s listed below:

**Quotation No. TPB-RFQ.2019.10.906**

PR NO. 2.076

**Requirements : Repair/Rehabilitation of Unit 4 PEZA**

**Project Title : Repair/Rehabilitation of Unit 4 PEZA**

Quantity	Particulars	Estimated Unit Price	Estimated Total Amount
1 lot	<p><i>Please see Technical Specification (Annex "B")</i></p> <p><b>Bill of Quantity (Annex "C" and "D")</b></p> <p><b>CASH BOND: The contractor is responsible to shoulder the cash bond at Legaspi Towers 300 Management amounting to Php 50,000.00</b></p>	Php1,000,000.00	Php1,000,000.00
Terms	30 days upon receipt of invoice		
Delivery	30 days after received P.O.		
ABC	<b>Php1,000,000.00</b> inclusive of all applicable taxes		

The last day for submission of quotation and eligibility documents is on or before 5:00 p.m. of **October 24, 2019**. Your quotation should comply with the Terms and Conditions attached herewith, stating the shortest time of delivery, duly signed by your representative to the General Services Division, Administrative Department, 4<sup>th</sup> Floor, Legaspi Towers 300, Roxas Blvd., Manila.

Please address your quotation to the undersigned.

Thank you very much.

  
**ROSELLE D. ROMERO**

Acting Head

Procurement and General Services Division

Contact Person

**JOSE T. DUCUSIN, JR**

Note: **All entries must be typewritten in your company letterhead.**

Price Validity shall be for a period of thirty (30) calendar days.

New Suppliers must submit the following legal documents to be eligible to participate in the bidding:

1. SEC/DTI Registration Certificate
2. Mayor's Permit/License
3. BIR Registration / TIN
4. Company Profile/Reference
5. PhilGEPS Certificate
6. Omnibus sworn Statement (annex A)
7. Annual Income Tax Return

### Omnibus Sworn Statement

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REPUBLIC OF THE PHILIPPINES     )  
CITY/MUNICIPALITY OF \_\_\_\_\_ ) S.S.

#### AFFIDAVIT

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

1. **Select one, delete the other:**

*If a sole proprietorship:* I am the sole proprietor or authorized representative of *[Name of Bidder]* with office address at *[address of Bidder]*;

*If a partnership, corporation, cooperative, or joint venture:* I am the duly authorized and designated representative of *[Name of Bidder]* with office address at *[address of Bidder]*;

2. **Select one, delete the other:**

*If a sole proprietorship:* As the owner and sole proprietor, or authorized representative of *[Name of Bidder]*, I have full power and authority to do, execute and perform any and all acts necessary to participate, submit the bid, and to sign and execute the ensuing contract for *[Name of the Project]* of the *[Name of the Procuring Entity]*, as shown in the attached duly notarized Special Power of Attorney;

*If a partnership, corporation, cooperative, or joint venture:* I am granted full power and authority to do, execute and perform any and all acts necessary to participate, submit the bid, and to sign and execute the ensuing contract for *[Name of the Project]* of the *[Name of the Procuring Entity]*, as shown in the attached *[state title of attached document showing proof of authorization (e.g., duly notarized Secretary's Certificate, Board/Partnership Resolution, or Special Power of Attorney, whichever is applicable;)]*;

3. *[Name of Bidder]* is not "blacklisted" or barred from bidding by the Government of the Philippines or any of its agencies, offices, corporations, or Local Government Units, foreign government/foreign or international financing institution whose blacklisting rules have been recognized by the Government Procurement Policy Board;

4. Each of the documents submitted in satisfaction of the bidding requirements is an authentic copy of the original, complete, and all statements and information provided therein are true and correct;

5. *[Name of Bidder]* is authorizing the Head of the Procuring Entity or its duly authorized representative(s) to verify all the documents submitted;

6. **Select one, delete the rest:**

*If a sole proprietorship:* The owner or sole proprietor is not related to the Head of the Procuring Entity, members of the Bids and Awards Committee (BAC), the Technical Working Group, and the BAC Secretariat, the head of the Project Management Office or the end-user unit, and the project consultants by consanguinity or affinity up to the third civil degree;



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

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

7. [Name of Bidder] complies with existing labor laws and standards; and
8. [Name of Bidder] is aware of and has undertaken the following responsibilities as a Bidder:
  - a) Carefully examine all of the Bidding Documents;
  - b) Acknowledge all conditions, local or otherwise, affecting the implementation of the Contract;
  - c) Made an estimate of the facilities available and needed for the contract to be bid, if any; and
  - d) Inquire or secure Supplemental/Bid Bulletin(s) issued for the [Name of the Project].
9. [Name of Bidder] did not give or pay directly or indirectly, any commission, amount, fee, or any form of consideration, pecuniary or otherwise, to any person or official, personnel or representative of the government in relation to any procurement project or activity.

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

\_\_\_\_\_  
Bidder's Representative/Authorized Signatory

**SUBSCRIBED AND SWORN** to before me this \_\_\_\_ day of [month] [year] at [place of execution], Philippines. Affiant/s is/are personally known to me and was/were identified by me through competent evidence of identity as defined in the 2004 Rules on Notarial Practice (A.M. No. 02-8-13-SC). Affiant/s exhibited to me his/her [insert type of government identification card used], with his/her photograph and signature appearing thereon, with no. \_\_\_\_\_ and his/her Community Tax Certificate No. \_\_\_\_\_ issued on \_\_\_\_ at \_\_\_\_\_.

Witness my hand and seal this \_\_\_\_ day of [month] [year].

**NAME OF NOTARY PUBLIC**

Serial No. of Commission \_\_\_\_\_  
Notary Public for \_\_\_\_\_ until \_\_\_\_\_  
Roll of Attorneys No. \_\_\_\_\_  
PTR No. \_\_\_\_\_ [date issued], [place issued]  
IBP No. \_\_\_\_\_ [date issued], [place issued]

Doc. No. \_\_\_\_\_  
Page No. \_\_\_\_\_  
Book No. \_\_\_\_\_  
Series of \_\_\_\_\_

## Section VI: Specification

(All relevant provisions of the DPWH Standard Specifications for Structures, 1995 Volume III shall be applicable to this contract and all provisions not consistent with these specifications are deemed repealed.)

### I. PRELIMINARY AND GENERAL REQUIREMENTS:

#### 1.01 Mobilization/Demobilization

Mobilization, as provided in these Specifications, means preparation for the execution of the works, construction operation and temporary works including but not limited to moving-in & out and transporting of Contractor's required key personnel and manpower, materials, tools and equipment to the site.

Demobilization shall include moving-out from the site and transporting of Contractor's manpower, tools and equipment and dismantling of any or all temporary works. It shall also include clean-up of the site after completion of the Contract Works as approved and accepted by the Owner or his authorized representative.

##### Measurement and Payment

The unit of measure for this item is Lump sum (L.S.) and shall be paid at lump sum contract price shown in the priced bill of quantities in the following manner;

1. Payment of 70% of the Lump Sum contract price will be made in the first progress billing submitted for approval by the Contractor.
2. The remaining 30% shall be paid in the Contractor's final progress billing upon presentation of a certificate issued by the Owner's authorized representative that the contractor has fully demobilized from the site.

#### 1.02 Dismantling Works

This item of work shall consist of the complete removal, hauling and disposal of existing acoustic ceiling, existing ceramic and vinyl tiles, existing electrical layouts & fixtures and existing plumbing & toilet fixtures.

This shall also include the salvaging of materials which the Owner or his authorized representative may determine as still good and usable. Salvable materials shall be put or stored in place designated by the Owner's authorized representative

The Contractor shall be responsible for cleaning the whole area of all debris and waste materials in a safe and orderly manner. Before the Contractor proceed for the works, he shall obtain first the necessary permits for hauling wastes materials and properly dispose at the designated disposal area. The Owner's authorized representative shall be responsible for providing the location of suitable disposal area.

##### Measurement and Payment

The unit of measure for this item is Lump sum (L.S.) and shall be paid at lump sum contract price shown in the priced bill of quantities.



## II. FINISHING

### 2.1 Plumbing

#### 2.1.1 Description

This item shall consist of furnishing all materials, tools, equipment and fixtures required as shown on the Plans for the satisfactory performance of the entire plumbing system including installation in accordance with the latest edition of the National Plumbing Code, and this Specification.

#### 2.1.2 Material Requirements

All piping material, fixtures and appliances fitting accessories whether specifically mentioned or not but necessary to complete this Item shall be furnished and installed.

##### Water supply pipes and fittings

Pipes shall be galvanized iron pipe schedule 40 conforming to specification requirements defined in ASTM A-120 with threaded connection. Under roads where necessary shall be suitably protected as shown in the Plans.

Fitting shall be malleable iron Type II, galvanized iron conforming to specification requirements defined in ASTM A338.

##### Faucets

Faucets shall be stainless steel or as shown and specified in the plans.

##### Water closet and lavatory including pipes and fittings

- a. Water closet shall be vitreous china, free standing toilet combination, round front bottom outlet siphonic washdown bowl with extended rear self and closed coupled tank with cover complete with fittings and mounting accessories. Model make and color shall be submitted for approval prior to delivery at site by the Owner's authorized representative.
- b. Lavatory shall be vitreous china, wall-hung with rear overflow and cast -in soap dishes, pocket hanger with integral china brackets complete with twin faucets, supply pipes, P-trap and mounting accessories. Where indicated on the Plans to be counter top model make and color shall be approved by the owner's authorized representative.

##### Kitchen sink

Kitchen sink shall be made of stainless steel self rimming, single compartment complete with supply fittings, strainer traps, dual control lever and other accessories.

#### 2.1.3 Installation

Plumbing installation shall be in accordance with the plans.

#### 2.1.4 Measurement

Plumbing shall be measured by set or piece as indicated in the bill of quantities.

#### 2.1.5 Basis of Payment

The quantified items installed in place shall be the basis for payment and shall be paid at the contract unit price shown in the priced bill of quantities for which price and payment shall constitute as full compensation for the satisfactory completion of this item of work.

## **2.2 Dry Wall Partition**

### 2.2.1 Description

This item of work shall consist of furnishing all required materials, tools, equipment and labor and performing all operations necessary for the satisfactory completion of the works in strict compliance of the construction details shown in the plans or shop drawings in accordance with these specifications.

### 2.2.2 Materials Requirements

#### 2.2.2.1 Plywood

Plywood shall conform to the requirements of the Philippine Trade Standard 631-02. Thickness of a single layer laminate shall not be less than 2mm. The laminate shall be superimposed in layers with grains crossing at right angles in successive layers to produce stiffness. The face veneers shall be rotary cut from select grade timber. The laminate and face veneers shall be bonded with water resistant resin glue, hot pressed and pressure treated.

Plywood to be used for this item of work shall be marine plywood 6mm thick unless otherwise specified or required in writing by the Owner or his authorized representative.

#### 2.2.2.2 Metal Studs and Tracks

Metal studs and tracks shall be 50mm x 75mm G.I. section as wall framing. The section must be true to details with clean, straight, sharply defined profiles and free from defects impairing strength or durability.

#### 2.2.2.3 Fasteners

Nails, screw, bolts, and straps shall be provided and used where suitable for fixing carpentry and joinery works. All fasteners shall be brand new and of adequate size to ensure rigidity of connections.

### 2.2.3 Construction Requirements

#### 2.2.3.1 Shop Drawing

Shop drawings complete with essential dimensions and details of construction, as may be required by the owner or his authorized representative in connection with this item of work, shall be submitted for approval before proceeding with the work

#### 2.2.3.2 Installation

Installation of dry partition wall shall be in strict compliance with the construction details shown in the plans or shop drawings and in accordance with these specifications.

### 2.2.4 Method of Measurement

Measurement for this item of work shall be by the number or quantity of materials in piece or as shown in the bill of quantities.



### 2.2.5 Basis of Payment

The quantity measured shall be paid at the contract unit price shown in the priced bill of quantities for which price and payment shall constitute full compensation for furnishing of all materials including labor, tools, equipment and incidentals necessary to satisfactory completion of this item of work.

## **2.3 Sliding Glass Window on Aluminum Frame**

### 2.3.1 Description

This item of work shall consist of furnishing all materials, tools, equipment and incidentals, and the satisfactory performance of the work in strict compliance with the plans or approved shop drawings and this specification.

### 2.3.2 Material Requirements

1. Glass shall be as specified or shown in the plans or approved shop drawings
2. Frame and panel members shall be fabricated from extruded aluminum section true to details with clean, straight, sharply defined profiles and free from defects impairing strength or durability. Extruded aluminum section shall conform to the specification requirements defined in ASTM B 211.
3. Screws, nuts, washers, bolts, rivets and other miscellaneous fastening devices shall be made of non-corrosive materials such as aluminum, stainless steel, etc.
4. Hardware for fixing and locking device shall be closely matched to the extruded aluminum section and adaptable to the type and method of opening.
5. Weather strip shall be first class quality flexible vinyl forming an effective seal and without adverse deformation when installed.
6. Glazing shall be mastics that are elastic and non-skinning bulk compounds.

### 2.3.3 Construction Requirements

For all assembly and fabrication works the cut end shall be true and accurate, free of burrs and rough edges. Cut-outs recesses, mortising and grinding operation for hardware shall be accurately made and properly reinforced.

### Installation procedure

Sliding windows shall be provided with nylon sheave. Sliding panels shall be suspended with concealed roller overhead tracks with bottom guide pitch outward and slotted for complete drainage. The sliding panels shall be provided with interior handles. The locking device shall be a spring-loaded extruded latch that automatically engages special frame hips. The procedure shall be in strict compliance with the construction details shown on the plans or shop drawings.

### Cleaning

The contractor shall not only protect all entrance units during the construction phase but shall also be responsible for removal of protective materials and cleaning the aluminum surface including glazing before work is accepted by the Owner's authorized representative.

Aluminum shall be thoroughly cleaned with kerosene or gasoline diluted with water and then wipes surface using clean cloth rags. No abrasive cleaning materials shall be permitted in cleaning surface.

### 2.3.4 Method of Measurement



This item of work shall be measured by the number of set for each size shown in the bill of quantities which were actually installed in-place and accepted to the satisfaction of the Owner or his authorized representative.

#### 2.3.5 Basis of Payment

The number of set for each size of the sliding glass window on aluminum frame actually installed shall be paid for at the contract unit price shown in the priced bill of quantities for which price and payment shall constitute as full payment for the satisfactory completion of the work.

### **2.5 Tempered Glass on Aluminum Frame**

#### 2.5.1 Description

This item of work shall consist of furnishing all materials, tools, equipment and incidentals required, and the satisfactory performance of the work in strict compliance with the plans or approved shop drawings and this specification.

#### 2.5.2 Material Requirements

Material requirements shall conform to the requirements specified in the preceding item of work except that the glass material shall be 5.6mm thick locally manufactured sheet glass with sandblast/frosted type sticker.

#### 2.5.3 Construction Requirements

Installation of tempered glass on aluminum frame shall be strictly in accordance with the Plans or approved shop drawings

#### 2.5.4 Method of Measurement

This item of work shall be measured by the area in square meters of actually installed and completed work.

#### Basis of Payment

The work completed and measured shall be paid for at the contract unit price shown in the bill of quantities for which price and payment shall be full compensation for furnishing all materials, labor, tools and equipment and incidentals necessary to satisfactory complete this item of work.

### **2.7 Frameless Tempered Glass Doors**

#### 2.7.1 Description

This item of work shall consist of the furnishing of glass, anchorage & fasteners, frosted type sticker and other necessary materials, labor, tools and equipment and the proper installation of frameless tempered glass doors.

#### 2.7.2 Material Requirements

Glass and all other materials required shall conform strictly to the specifications shown in the Plans or approved shop drawings or as described in the Bill of Quantities.

#### 2.7.3 Construction Requirements

Installation of the frameless tempered glass doors shall be in strict accordance with the construction details shown in the Plans or approved shop drawings complete and ready for service.

#### 2.7.4 Measurement

This item of work shall be measured by the number of set for each size of doors installed complete and ready for service.

#### 2.7.5 Basis of Payment

This item of work shall be paid for at the contract unit price shown in the bill of quantities for which price and payment shall be full compensation for furnishing all materials, labor, tools and equipment used to satisfactory complete this item of work.

### **2.9 Waterproofing**

#### 2.9.1 Description

This Item shall consist of furnishing cement-base waterproofing materials, labor, tools, equipment and undertaking the proper application to areas shown and indicated in the plans and in accordance with this Specification. This shall also include provision of stainless steel drain pan inside the ceiling of overhead floor slab.

#### 2.9.2 Material requirement

##### Cement-base waterproofing

Waterproofing powder mix shall be cement-base, aggregate type, heavy duty, water proof coating for reinforced concrete surface and masonry exposed to water. The aggregates are graded and sized so as to mesh perfectly and are selected for purity, hardness, strength and are non- metallic. When mix with other ingredients are free flowing, water- proofing coatings that possesses strength durability and density.

Additive binders shall be of special formulation of acrylic polymers and modifiers in liquid form use as additive with cement-base powder mix that improves adhesion and mechanical properties.

Water shall be clean, clear and potable.

#### 2.9.3 Application

##### Surface preparation

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

Application shall follow the manufacturer's printed directions for use.

#### 2.9.4 Testing

The waterproofed area shall be subjected to flood test for at least 72-hours to determine if the applied areas has still water-leak. If there is no sign of moist under the surface of the waterproofed areas, the application is considered satisfactory.

#### 2.9.5 Measurement



This item shall be measured by the lot of actually rendered and applied areas with cement-base waterproofing and accepted to the satisfaction of the owner's authorized representative. Quantity of stainless-steel drain pan shall also be measured in lot.

#### 2.9.6 Basis of Payment

The works completed and accepted shall be paid for at the contract unit price shown in the priced bill of quantities which price and payment shall constitute as full compensation for the satisfactory completion of this item of work.

### **2.11 Ceramic Tiles**

#### 2.11.1 Description

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

#### 2.11.2 Materials Requirements

Ceramic tiles and trims shall be made of clay, or a mixture of clay and other materials which is called the body of the tile. Tile bodies are classified by ASTM C 242 as to their degree of water absorption. Ceramic tiles and trims are manufactured either by dust-pressed process in which the clays are ground to dust mixed with a minimum of water shaped in steel dies and then fired or by plastic process in which the clays are made plastic by mixing with water, shaped by extrusion or in molds and then fired.

##### 2.11.2.1 Glazed Tiles and Trims

Glazed tiles and trims shall have an impervious face of ceramic materials fused onto the body of the tiles and trims. The glazed surface may be clear white or colored depending on the color scheme approved by the engineer. Standard glazes may be bright (glossy) semi matte (Less glossy) matte (dull) or crystalline (mottled and textured; good resistance to abrasion). Glazed tiles are used for floors provided however that these are used as light duty floors.

##### 2.11.2.2 Unglazed Tiles

Unglazed tiles shall be hard dense tile of homogeneous composition. Its color and characteristics are determined by the materials used in the body, the method of manufacture and the thermal treatment. It is used primarily for floors and walks.

##### 2.11.2.3 Trims

Trims are manufactured to match wall tile color, texture and to coordinate with it in dimension. These are shaped in various ceramic trim units such as caps, bases, coves, bullnoses, corners, angles, etc., that are necessary for edging or making a transition between intersecting planes.

##### 2.11.2.4 Cement

Cement shall be Portland Cement Holcim or Northern Brands which are commercially available in the local market.

##### 2.11.2.5 Sand

Sand shall be well graded fine aggregate clean river sand, free from soluble salts and organic impurities.

#### 2.11.2.6 Lime

Lime shall be hydrated lime with free Unhydrated oxide and magnesium oxide content not to exceed 8 percent by weight.

#### 2.11.3 Construction Requirements

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

##### 2.11.3.1 Surface Preparation

- a) Mortar mix for scratch coat and setting bed shall consist of one-part Portland cement  $\frac{1}{4}$  part lime and 3 parts sand by volume. Surface to receive tile must be level, true to elevation, dry, free from dirt, oil and other ointments. Allow at least seven days curing of scratch coat and setting bed. Installation work shall not be allowed to proceed until unsatisfactory conditions are corrected.

- b) Bond coat shall be Portland cement paste.

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

##### 2.11.3.2 Installation Procedure

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

#### A. Ceramic Glazed Wall Tiles

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

#### B. Vitrified Unglazed Floor Tiles



- a) Before tile is applied the floor shall be tested for levelness or uniformity of slope by flooding it with water. Area where water ponds are filled or leveled, shall be retested before the setting bed is applied.
- b) Established lines of borders and center of the walls at the field work in both direction to permit the pattern to be laid with a minimum of cut tiles.
- c) Clean concrete subfloor then moisten but do not soak. Then sprinkle dry cement over the surface and spread the mortar on the setting bed.
- d) Apply and spread mortar mix for setting bed and tamp to assure good bond over the entire area to be laid with tile.
- e) Pitch floor to drain as shown on plans or as directed by the engineer.
- f) Allow the setting bed to set sufficiently to be worked over then spread a bond coat over the surface and lay tile in accordance with the procedures for glazed wall tiles.

#### 2.11.3.3 Grouting and Pointing

Tiles shall have been laid in place for at least 24 hours before grouting of the joints is started. Grouting mortar shall be white Portland cement or blended with pigments to acquire the color appropriate for the ceramic tile.

Grouting mortar shall be applied over the tile by float or squeegee stroked diagonally across the joints. Remove excess mortar with a wet sponge stroked diagonally or in circular motion after 12-15 minutes. Follow with a barely damp or dry sponge to remove remaining haze while smoothing all grouted joints.

#### 2.11.3.4 Cleaning

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

#### 2.11.4 Method of Measurement

All works performed under this item shall be measured in square meters for areas actually laid with ceramic tiles and accepted to the satisfaction of the Owner's authorized representative.

#### 2.11.5 Basis of Payment

The actual area in square meters shall be the basis of payment and shall be paid at the contract unit price shown in the Bill of Quantities for which price and payment constitute full compensation for furnishing all materials, tools, equipment and other incidentals necessary to complete this Item.

### **2.12 Vinyl Tiles**

#### 2.12.1 Description

This Item shall consist of furnishing all vinyl tiles and fitting accessories, adhesive materials, labor, tools, equipment and the satisfactory performance in undertaking the proper installation of vinyl tile flooring as shown on the Plans and shop drawings and in accordance with this Specification.

### 2.12.2 Materials Requirements

#### a) 300 x 300 x 3mm thick vinyl tiles

Vinyl tiles shall be of first grade quality, fully homogeneous, flexible, resilient and resistant to alkali moisture, grease and oil. The color and design pattern of vinyl tile shall be uniformly distributed throughout the thickness of the tile. The color and design pattern shall be first approved by the Owner or his authorized representative before ordering the materials and delivery to jobsite.

#### b) Adhesive

Adhesive shall be best suited for tropical application and compatible with the vinyl tiles to be installed.

#### c) Seal Polish

Seal polish shall be plastic emulsion suited for the particular type of floor as recommended by the vinyl tile manufacturer.

### 2.12.3 Construction Requirements

#### a) Installation

Installation of the tile shall not commence until the work of other trades, including painting has been completed. The Contractor shall carefully examine all surfaces over which the tiles are to be set. Floor surfaces that are to receive vinyl tile shall be clean thoroughly, dry, smooth, firm and sound and free from oil, paint, wax, dirt and any other damaging material.

Start in the center of the room or area and work from the center towards the edges. Keep tile lines and joints square, symmetrical, tight and even; and keep each floor in a true, level plane, except where indicated as sloped. Vary edge width as necessary to maintain full size tiles in the field but no edge tile shall be less than one half the field tile size, except where irregular shaped rooms make it impossible.

Cutting shall fit the edges of walls, partitions and around permanent fixtures.

#### b) Tile laying Design

The Contractor shall submit for approval shop drawing for tile laying design in color and design pattern selected and approved by the Owner's authorized representative.

#### c) Adhesive

Adhesive shall be applied in accordance with the adhesive manufacturer's printed directions for use, unless specified or directed otherwise. Smoking, the use of open flames and other sources of ignition are strictly prohibited in the area where solvent containing adhesive are being used or spread.

#### d) Cleaning and Protection

After installation, the vinyl tiles shall be cleaned with wax or seal polish as recommended by the manufacturer. After waxing, it shall be carefully protected against damage, either with heavy building paper or by keeping traffic off the floors until the area is ready for use.

### 2.12.4 Method of Measurement



All works performed and completed under this section shall be measured by the area in square meters of vinyl tiles installed complete with accessories and ready for service.

#### 2.12.5 Basis of Payment

The actual area in square meters shall be the basis of payment and shall be paid at the contract unit price shown in the Bill of Quantities for which price and payment constitute full compensation for furnishing all materials, tools, equipment and other incidentals necessary to complete this Item.

### **2.13 Acoustic Ceiling**

#### 2.13.1 Description

This Item shall consist of furnishing and installing acoustical ceiling materials, tools, labor and equipment necessary as shown on the Plans and Specifications.

#### 2.13.2 Material Requirements

All acoustical materials shall be delivered in the manufacturer's original unbroken packages or containers which are labeled plain with manufacturer's name and trademark. All materials shall be carefully handled and delivered at the jobsite and provided with a storage or damage by water or dampness. All acoustical ceiling materials shall be provided with non-combustible mineral fiber and have a 9, 12, 15 mm thickness and must have the following physical properties as hereunder specified.

	PROPERTY	FIGURES	TEST METHOD
1.	Thickness	= 0.2 mm	JIS A 6307
	Tolerance		
2.	Density	320-350 kg/m <sup>2</sup>	JIS A 6307
3.	Moisture	1.0-2.0%	JIS A 6307
	Content		
4.	Flexural	20-25 kgf/cm <sup>2</sup>	JIS A 6307
	Strength		
5.	Thermal	0.047 kcal/mhc°	JIS A 6307
	Conductivity		
6.	Light Reflectance	LRI(87%)	ASTM C 523
7.	Non-combustibility	Approved by the Japanese Ministry of Construction as non-combustible Class 1 Under the approval of No. 1021	
8.	Flame Spread	Class 1 (O-25)	ASTM E 84
9.	Flame Spread	Class 35	US Federal Specs SS-s 118a

#### 2.13.3 Construction Requirements

The acoustical ceiling materials to be used shall conform to the samples approved by the Owner or his authorized representative. All acoustical works shall be done by tradesmen experienced and qualified to do this particular specialty trade.

#### Inspection of Surfaces

The acoustical contractor shall verify and examine all surfaces to be covered and the conditions under which all acoustical ceiling work is to be performed and shall list down or notify in writing all unsatisfactory conditions and no work shall be performed unless all the unsatisfactory conditions noted have been corrected and approved by the Owner's authorized representative.

#### Preparation of Surfaces

Before any installation of work begins, all surfaces must be clean, dry, level and free from irregularities and tested for adhesive bond.

#### Installation of Acoustic Ceiling Materials

The installation of acoustical materials shall be in accordance with the detailed section and with the manufacturer's manual instructions. Acoustical materials shall be cut as required to fit the perpendicular condition and should be properly secured by anchorage and other accessories to complete the installation. No mechanical work shall be exposed on the finish work. All joints around electrical outlets, pipes, and other work extending through materials shall be sealed with caulking.

#### Cleaning of Surfaces

The finished surfaces shall be cleaned and must be free from any spots, dirt marks and dust by the use of soft art gum eraser. For larger areas with larger smudges, use a chemical treated new sponge rubber pad or wallpaper cleaner. Dust shall be removed by brushing lightly with a soft brush or clean rag, or by vacuuming with soft brush attachment.

#### Guarantee

The materials and workmanship furnished under this Item shall be guaranteed by the acoustical contractor for a period of one (1) year from the completion date and final inspection and accepted in writing by the Owner's authorized representative. Any defective materials or workmanship shall be replaced and corrected by the acoustical contractor.

#### 2.13.4 Method of Measurement

The quantity of work performed under this Item shall be measured by the area covered in square meters (m<sup>2</sup>), by the number or quantity of materials in piece or by the unit of measure shown in the bill of quantities.

#### 2.13.5 Basis of Payment

The quantity determined or as measured in accordance with the above method shall be paid for at the Contract Unit Price shown in the bill of quantities for which price and payment shall constitute full compensation including labor, materials, tools and equipment and incidentals necessary to complete this Item.

### **2.14 Painting**

#### 2.14.1 Description

This Item shall consist of furnishing all paint materials, including labor, tools and equipment required in undertaking the proper and quality application of painting in accordance with this Specification.

#### 2.14.2 Materials Requirements

##### Paint



All paint materials shall conform and pass the random testing of material composition by DPWH Bureau of Research and Standards or by the National Institute of Science and Technology. Paint shall be one of the commercially available and tested brands Boysen, Davies, Dutch Boy or Fuller O'Brien and approved by the Owner's authorized representative.

#### Tinting Color

Tinting colors shall be first grade quality pigment ground in alkyd resin that disperses and mixes easily with paint to produce the color desired. Use the same brand of paint and tinting color to effect good paint body.

#### Patching Compound

Patching compound shall be fine powder type material like calciumine that can be mixed into putty consistency, with oil base primers and paints to fill minor surface dents and imperfections.

#### Wood Paste Filler

Wood paste filler shall be quality filler for filling and sealing open grain of interior wood. It shall produce a level finish for following coats of paint varnish/lacquer and other related products.

#### Concrete Neutralizer

Concrete neutralizer shall be first grade quality concentrate diluted with clean water and applied as surface conditioner of new interior and exterior walls thus improving paint adhesion and durability.

### 2.14.3 Construction Requirements

#### Surface Preparation

All surfaces shall be in proper condition to receive the paint finish. Woodworks shall be hand-sanded smooth and dusted clean. All knotholes pitch pockets or sappy portions shall be sealed with natural wood filler. Nail holes, cracks or defects shall be carefully puttied after the first coat, matching the color of paint.

Interior woodworks shall be sandpapered between coats. Cracks, holes or imperfections in plaster shall be filled with patching compound and smoothed off to match adjoining surfaces.

Concrete and masonry surfaces shall be coated with concrete neutralizer and allowed to dry before any painting primer coat is applied. When the surface is dried apply first coating. Hairline cracks and unevenness shall be patched and sealed with approved putty or patching compound. After all defects are corrected apply the finish coats as specified on the Plans (color scheme approved).

Metal shall be clean, dry and free from millscale and rust. Remove all grease and oil from surfaces. Wash, unprimed galvanized metal with etching solution and allow it to dry. Where required to prime coat surface with Red Lead Primer same shall be approved by the Owner's authorized representative

#### Workmanship

- a) All paints shall be evenly applied. Coats shall be of proper consistency and well brushed out so as to show a minimum of brush marks.
- b) All coats shall be thoroughly dry before the succeeding coat is applied.

- c) Where surfaces are not fully covered or cannot be satisfactorily finished in the number of coats specified such preparatory coats and subsequent costs as may be required shall be applied to attain the desired evenness of surface without extra cost to the owner.
- d) Where surface is not in proper condition to receive

#### 2.14.4 Method of Measurement

The work completed shall be measured by the area in square meters of the surfaces painted as specified and in accordance with this specification.

#### 2.14.5 Basis of Payment

The work completed and measured shall be paid at the contract unit price shown in the bill of quantities for which price and payment constitute as full compensation for the satisfactory completion of this item of work.

### **3.0 ELECTRICAL WORKS**

#### **3.1 Conduits, Boxes and Fittings**

##### 3.1.1 Description

This item shall consist of the furnishing and installation of the complete conduit work consisting of electrical conduits; conduit boxes such as junction boxes, pull boxes, utility boxes, octagonal and square boxes; conduit fittings such as couplings, locknuts and bushings and other electrical materials needed to complete the conduit roughing-in work of this project.

##### 3.1.2 Material Requirements

All materials shall be brand new and shall be of the approved type meeting all the requirements of the Philippine Electrical Code and bearing the Philippine Standard Agency (PSA) mark.

##### Conduits

Conduits shall be standard rigid steel, zinc coated or galvanized. Intermediate metal conduit may be used if shown or specified on the approved Plans. PVC conduits if required shall be schedule 40. Enamel coated steel conduits with rough inner surfaces are not acceptable.

##### Boxes and Fittings

All conduit boxes shall be Code gauge steel and galvanized. Outlet boxes shall be galvanized pressed steel of standard make. In general, outlet boxes shall be at least 100mm square or octagonal, 53 mm deep and 16 mm minimum gauge.

All conduit fittings such as locknuts and bushings shall be galvanized of standard make.

##### 3.1.3 Construction Requirements

All works throughout shall be executed in the best practice in a workmanlike manner by qualified and experienced electricians under the immediate and close supervision of a duly licensed Electrical Engineer.



## Conduits

Conduits should be cut square with a hacksaw and reamed. Bends shall be made with the required radius. In making bends only conduit bending apparatus will be used. The use of a pipe tee or vise for bending conduits shall not be permitted. Conduits which have been crushed, deformed or flattened shall not be installed. No running thread shall be allowed. Conduit runs crossing construction joints of the building shall be provided with standard expansion fittings of the approved type.

No conduit shall be used in any system smaller than 12 mm diameter electric trade size nor shall have more than four (4) 90-degree bends in any one run and where necessary, pull boxes shall be provided.

All ends of conduits which are left empty in cabinets and conduit boxes shall be plugged with lead or approved pipe caps so as to prevent the entrance of white ants and dirt within the conduit system. Pull wires shall be inserted in the empty ducts before they are closed with lead or pipe caps and shall be left therein for future use.

On exposed work, all pipes and outlet boxes shall be secured by means of galvanized metal clamps which shall be held in place by means of machine screws. When running over concrete surfaces, the screws shall be held in place by means of expansion sleeves for big pipes and rolled lead sheet for small for small pipes. All pipes shall be run at right angles to and parallel with the surrounding walls. No diagonal run shall be allowed and all bends and offsets shall be avoided as much as possible. Conduits shall be supported at 1,500 mm intervals maximum.

## Boxes and Fittings

Provide conduit boxes for pulling and splicing wires and outlet boxes for installation of wiring devices.

As a rule, provide junction boxes or pull boxes in all runs greater than 30 meters in length, for horizontal runs. For other lengths, provide boxes as required for splices or pulling. Pull boxes shall be installed in inconspicuous but accessible locations.

Support boxes independently of conduits entering by means of bolts, rod hangers or other suitable means.

Conduit boxes shall be installed plumb and securely fastened. They shall be set flush with the surface of the structure in which they are installed where conduits are run concealed.

All convenience and wall switch outlet boxes for concealed conduit work shall be deep, rectangular flush type boxes. Four-inch octagonal flush type boxes shall be used for all ceiling light outlets and shall be of the deep type where three or more conduits connect to a single box.

Floor mounted outlet boxes required shall be waterproof type with flush brass floor plate and brass bell nozzle.

All boxes shall be painted with antirust red lead paint after installation.

All conduits shall be fitted with approved standard galvanized bushing and locknuts where they enter cabinets and conduit boxes.

Junction and pull boxes of code gauge steel shall be provided as indicated or as required to facilitate the pulling of wires and cables.

## 3.1.4 Method of Measurement



The work executed and completed under this item shall be measured by the quantity in lot of actually put in place and installed materials as shown on the approved Plans.

### 3.1.5 Basis of Payment

All works performed and measured shall be paid for at the Unit Bid or Contract Unit Price shown in the bill of quantities which payment shall constitute full compensation including labor, materials, tools and incidentals necessary to complete this item.

## 3.2 Wires and Wiring Devices

### 3.2.1 Description

This Item shall consist of the furnishing and installation of all wires and wiring devices consisting of electric wires and cables, wall switches, convenience receptacles, heavy duty receptacles and other devices shown on the approved Plans but not mentioned in these specifications.

### 3.2.2 Material Requirements

Wire and cables shall be of the approved type meeting all the requirements of the Philippine Electrical Code and bearing the PSA mark. Unless specified or indicated otherwise, all power and lighting conductors shall be insulated for 600 volts.

All wires shall be copper, soft drawn and annealed, smooth and of cylindrical form and shall be centrally located inside the insulation.

All wiring devices shall be standard products of reputable electrical manufacturers. Wall switches shall be rated at least 10 A, 250 Volts and shall be spring operated, flush, tumbler type. Duplex convenience receptacles shall be rated at least 15A, 250 Volts, flush, parallel slots. Single heavy duty receptacles shall be rated at least 20A, 250 volts, 3- wire, flush, polarized type.

### 3.2.3 Construction Requirements

Conductors or wires shall not be drawn in conduits until after the cement plaster is dry and the conduits are thoroughly cleaned and free from dirt and moisture. In drawing wires into conduits, sufficient slack shall be allowed to permit easy connections for fixtures, switches, receptacles and other wiring devices without the use of additional splices.

All conductors of convenience outlets and lighting branch circuit homeruns shall be wired with a minimum of 3.5 mm in size. Circuit homeruns to panelboard more than 30 meters shall not be smaller than 5.5 mm. No conductor shall be less than 2 mm in size.

All wires of 14mm and larger in size shall be connected to panels and apparatus by means of approved type lugs or connectors of the solderless type, sufficiently large enough to enclose all strands of the conductors and securely fastened. They shall not loosen under vibration or normal strain.

All joints, taps and splices on wires larger than 14 mm shall be made of suitable solderless connectors of the approved type and size. They shall be taped with rubber and PVC tapes providing insulation not less than that of the conductors.

No splices or joints shall be permitted in either feeder or branch conductors or branch conductors except within outlet boxes or accessible junction boxes or pull boxes. All joints in branch circuit wiring shall be made mechanically and electrically secured by approved splicing devices and taped with rubber and PVC tapes in a manner which will make their insulation as that of the conductor.



All switched and receptacles shall be fitted with standard Bakelite face plate covers. Device plates for flush mounting shall be installed with all four edges in continuous contact with finished wall surfaces without the use of coiled wire or similar devices. Plastic fillings will not be permitted. Plates installed in wet locations shall be gasketed.

When more than one switch or device is indicated in a single location, gang plate shall be used.

#### 3.2.4 Method of Measurements

The work executed and completed under this item shall be measured by the quantity in lot of actually put in place and installed materials as shown on the approved Plans.

#### 3.2.5 Basis of Payment

All works performed and measured shall be paid for at the Unit Bid or Contract Unit Price shown in the Bill of Quantities which payment shall constitute full compensation including labor, materials, tools and incidentals necessary to complete this Item.

### **3.3 Lighting Fixtures and lamps**

#### 3.3.1 Descriptions

Lighting fixture shall be troffer light with parabolic aluminum reflector and complete accessories of standard brand approved by the Owner or his authorized representative.

#### 3.3.2 Material Requirements

Lighting fixtures shall be made up of good quality materials and shall conform to the Bureau of Products Standard (BPS) specification.

#### 3.3.3 Construction Requirements

Installation of the lighting fixtures shall be in accordance with the plans or approved shop drawings.

#### 3.3.4 Measurement

Electrical lighting fixtures shall be measured by the lot supplied and installed as listed in the schedule shown in the plans.

#### 3.3.5 Basis of Payment

The quantity measured shall be paid at the contract unit price shown in the priced bill of quantities which price and payment constitute as full payment for the satisfactory completion of this item of work.

### **3.4 Panel Board and Circuit Breaker**

This Item shall consist of furnishing and installation of the power distribution panel board at the location shown in the Plans complete with circuit breaker, cabinet and all accessories, completely wired and ready for service.

#### 3.4.1 Material requirements

Panel board, cabinet and circuit breaker shall be brand new and shall be of the approved type conforming with the requirements of the Philippine Standard Agency (PSA).

#### 3.4.2 Installation

Panel board including cabinet and circuit breaker shall be installed under a close supervision of a licensed Electrical Engineer to ensure that the installation is done correctly and in accordance with plans and specification.

#### 3.4.3 Measurement

Measurement of the work shall be by the lot supplied and installed as shown in the plans and bill of quantities.

#### 3.4.4 Basis of Payment

The quantity of the work completed and accepted as measured shall be paid at the contract unit price shown in the priced bill of quantities for which price and payment shall constitute full compensation for the satisfactory completion of this item of work.

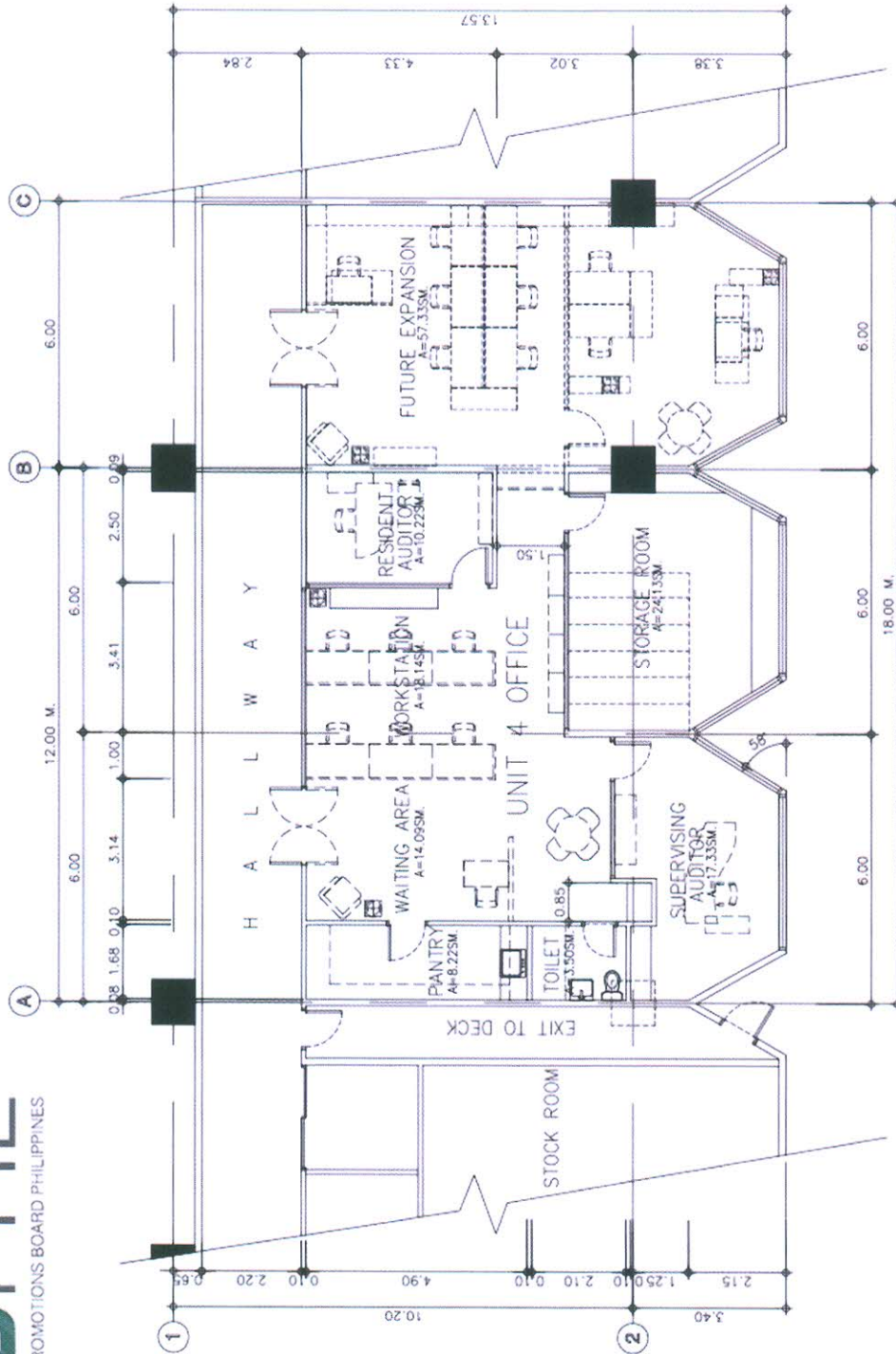


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# Annex "E"



NOTE:  
ANY DISCREPANCY MUST BE WORKED  
WITH THE ARCHITECT AND THE ENGINEER.