

## **Weighing Before or After Galvanizing**

The average of coating may be determined by weighing articles before and after galvanizing, subtracting the first weigh from the second and dividing the result by the surface area. The first weigh shall be determined after pickling and drying, and the second after cooling to ambient temperature. The weight of coating per unit area thus determined is converted to equivalent coating thickness values according to Table 2 (rounding up or down as appropriate). The thickness of coating thus obtained is the test article coating thickness.

## **Microscopy**

The thickness of coating may be determined by cross-sectional and optical measurement in accordance with ASTM Test Method B 487. The thickness thus determined is a point value. No less than five such measurements shall be made at locations on the test article which are as widely dispersed as practical, so as to be representative of the whole surface of the test article. The average of no less than five such measurement is the specimen coating thickness.

## **Adhesion**

Determine adhesion of the zinc coating to the surface of the base metal by cutting or prying with the point of a stout knife, applied with considerable pressure in a manner tending to remove a portion of the coating. The adhesion shall be considered inadequate if the coating flakes off in the form of a layer of the coating so as to expose the base metal in advance of the knife point. Do not use testing carried out at edges or corners (points of lowest coating adhesion) to determine adhesion of the coating. Likewise, do not use removal of small particles of the coating by paring or whittling to determine failure.

## **Embrittlement**

Test for embrittlement may be made in accordance with ASTM Practice A 143

The galvanized article should withstand a degree of bending substantially the same as the ungalvanized article. Flaking or spalling of the galvanized coating is not be constructed as an embrittlement failure.

## **Inspection, Rejection and Retest**

The material shall be inspected at the galvanizer's plant prior to shipment. However, by agreement the purchaser may make the tests which govern the acceptance or rejection of the materials in his own laboratory or elsewhere.

When inspection of materials to determine conformity with the visual requirements of Subsection "Finish" warrants rejection of a lot, the galvanizer may sort the lot and submit it once again for acceptance after he has removed any nonconforming articles and replace them with conforming articles.

Materials have been rejected for reasons other than embrittlement may be stripped and re-galvanized, and again submitted for inspection and test at which time they shall conform to the requirements of this inspection.

## **Transport and Storage**

**Galvanized components shall, wherever possible, be transported and stored under dry, well-ventilated conditions to prevent the formation of wet storage staining.**

**Either zinc phosphate or chromate passivation treatment after galvanizing may be used to minimize the wet storage staining which may occur on articles unable to be stored in dry, well-ventilated conditions.**

**Provided the coating thickness complies with the requirements of Subsection "Coating Thickness", no further remedial action is required to the stained areas.**

## **ITEM 09 : MOORING AND FENDERING SYSTEM**

### **SCOPE OF WORK**

1. The work includes furnishing of all labor, materials and equipment to complete the installation of mooring bollards and fenders in piers/wharves.
2. The work shall include the supply, transport, handling, storage and installation of fenders systems in the newly constructed piers.
3. The Contractor shall furnish and install the necessary fittings as shown on the drawings and/or specified.

Supplementary parts necessary to complete and install each item of works shall be included whether or not shown or specified. The Contractor shall furnish to relevant trades all anchors, fastenings, inserts, fittings, fixtures or the like to be installed on or required for securing the works.

The Contractor shall submit shop drawings of all fitting works prior to placing orders and commencement of any fabrication.

### **MATERIAL REQUIREMENTS**

#### **MOORING SYSTEM**

Designated load capacity of mooring bollards shall be as shown in the drawings, and shall be referred to as the maximum load capacity. The mooring bollards shall be at rupture stage upon reaching the maximum load capacity.

Mooring bollards shall be of the dimensions, weights, capacities and designs as shown in the drawings and shall be fabricated by approved manufacturer with cast steel conforming to the requirements indicated in the plan/drawings, or approved equivalent.

The size of the bolts, nuts and washers shall be in accordance with the specifications provided in the plans/drawings. The anchor plate shall be connected to the holding down bolt as shown in the plans/drawings. All bolts, nuts, washers etc., that are exposed shall be hot-dip galvanized.

Samples of the bolts, nuts, washers and anchor plates shall be submitted to the Engineer for approval before being used in the Works.

The upper part of bollards and base plates which are not embedded in concrete shall be painted. The surface of bollards shall be cleaned thoroughly by wire brush or other means prior to painting to remove rust or any other contamination which may interfere with bond of paint to metal.

The exposed surface shall be coated with rust proof paint and finishing paint, which shall be coal-tar epoxy of 120m micron thickness in accordance with JIS K5623 or the approved standard.

#### **Base Steel:**

Chemical composition and mechanical properties of base metal to be used for fabrication of mooring bollard and its accessories shall comply with ASTM A36 and other required standard stated therein.

**Concrete Foundation :**

Concrete foundation for mooring bollards shall conform to the requirements of the Section concerning "Reinforced Concrete".

**Visual Inspection :**

All mooring bollards delivered to Site shall be inspected by the Engineer for any signs of flaws or defect inimical to usage.

**Mill Test Certificates:**

Two (2) copies of mill test reports shall be submitted certifying that materials meet the specified standards.

**Test Inspection:**

Inspection of all materials and methods of fabrication shall be carried out by the Contractor. However, the Engineer reserves the right to inspect all facilities at any time during the manufacture to ensure that the materials and workmanship are in accordance with Specifications and the best of workmanship.

## FENDER SYSTEM

The rubber fenders should comply with the performance requirements specified in the table provided on the plan/drawings of Rubber Dock Fenders (RDF).

### PHYSICAL PROPERTIES OF MATERIALS

The rubber for the fenders shall be of high quality natural rubber, synthetic rubber or mixed rubber blended with carbon black used in the rubber industry and shall have sufficient resilience and anti-ageing, weathering, abrasion, wear and oil resistant properties. The rubber dock fenders shall be free from bubbles, cracks and other harmful defects.

The physical properties of the rubber compound used for the fenders shall comply with the following requirements:

**Physical Properties and Test Method**

Test Item		Properties	Test Method	
Physical Test	Before Aging	Tensile Strength	Test piece: Dumbell No. 3	ASTM D412
		Elongation		ASTM D1456
		Hardness	Spring Type hardness test (Type A)	ASTM D2240
	After Aging	Tensile Strength	Aging by air heating: 70±1°C x 96 hours.	ASTM D412
		Elongation		ASTM D1456
		Hardness		ASTM D2240
	Compression Test		Heat treatment: 70±1°C x 22 hours.	ASTM D395

Note: Equivalent Standards are acceptable.

### FITTINGS AND ANCHORAGE

Anchor bolts and connecting hardware shall be fabricated using type of steel specified and to the required shapes and sizes shown on the approved plan/drawings.

### TESTING, SAMPLING, INSPECTION, ACCEPTANCE, MARKING AND PACKAGING

#### Testing

All rubber dock fenders shall be tested for performance. It shall pass the required energy absorption and reaction force at a certain deflection as indicated in the plan.

The Contractor shall be required to submit test certificates showing compliance to the above requirements. The test certificates shall be certified by an independent testing institute / organization recognized by the Authority.

The standard performance testing methodology shall be Method B, to wit:

1. Fender temperature shall be stabilized at 23 degrees plus or minus 5 degrees centigrade for at least 24 hours before compression testing.
2. Break-in of fender by deflecting 3 times to rated deflection.
3. Removed load from the RDF and allow recovering for a minimum of 1 hour.
4. Deflect RDF at speed of 2-8 cm/min once to rated deflection.

The testing apparatus shall be calibrated and certified within plus or minus 1% in accordance with ISO or equivalent JIS or ASTM requirements. Calibration shall be traceable to a national/international standard and shall be performed annually by an accredited third party organization. The RDF performance testing center shall be subjected to accreditation by PPA and notation and /or certification by DPWH-BRS prior to acceptance.

#### **Inspection**

All fenders of each type shall be inspected for compliance to specified dimensions and all fenders shall be inspected by the Engineer for any sign of flaw or defect inimical to its use.

All anchor bolts and fittings shall be inspected. The material used for the fabrication of bolts and fittings shall be covered by the manufacturer's certified mill certificate and shall be verified by the Authority.

All RDF items/units shall be clearly numbered and marked indicated the following:

#### **Acceptance Tolerance**

The acceptance tolerance shall be based on the following:

1. **Fender Dimension**

Length	:	-2% to +4%
Width	:	-2% to +4%
Height	:	-2% to +4%
Thickness	:	-2% to +8%
2. **Anchor Bolt Holes in Fender**

Diameter of the Hole	:	+2.0mm
Pitch of the Hole	:	+4.0mm
3. **Acceptance tolerance for all fenders supplied shall be as follows:**

E = Energy absorption,	$E \geq$ Specified E but not less than 10% of the specified E
R = Reaction force,	$R \leq$ Specified R but not more than 10% of the specified R

## Marking

All fender units shall be clearly numbered and marked. Each fender shall have the following markings.

1. Fender type and manufacturer's name or trade mark
2. Production serial number
3. Date of manufacture or its abbreviation
4. Main dimensions
5. Project identification as follows:

Name of Port/Project: \_\_\_\_\_

Year supplied \_\_\_\_\_

## Packaging

The fenders shall be packaged on wooden crate or wrapped individually with Polypropylene sheets except when shipped containerized. The bolts and fittings should be placed in crates and suitably treated for protection when transported by sea and stored in port areas.

## EXECUTION

### MOORING / FENDERING SYSTEM

All units shall be installed at the locations shown on the drawings and as directed by the Engineer.

## **ITEM 10 : SECURITY FENCE**

### **DESCRIPTION**

This item shall consist of furnishing, construction and installation of security fence components in any combinations in accordance with this specification, lines, grades and cross-sections shown on the Plans, or as directed by the Engineer.

### **MATERIALS REQUIREMENT**

Materials shall conform to the respective specifications and other requirements specified below

#### **CONCRETE HOLLOW BLOCKS (CHB)**

CHB shall be of standard manufacture, machine vibrated with fine and even texture and well-defined edges and conforming to the requirements of ASTM C 129. Unless otherwise specified on the Drawings, it shall have a minimum compressive strength of 4.14 MPa (600 psi). CHB shall be non-load bearing uniform and essentially smooth as normally achieves by standard molding methods and shall be free from any cracks, flaws or other defects.

#### **BEDDING MORTAR**

Mortar shall be composed of 1 part of Portland cement, 3 parts of sand and ½ part of lime. It shall have a compressive strength of [14 MPa (2,000 psi)] at 28 days and shall comply with property specifications for type N mortar set forth in ASTM Specification C 270 and as modified herein, proportioned and tested in an approved laboratory at the expense of the Contractor. When tested for water retention, the mortar shall have a flow after suction, of 75 percent or more when mixed to an initial flow of 125 to 140 percent. When tested for compressive strength, mortar shall be mixed to a flow of 100 to 115 percent. Aggregate for mortar shall conform to ASTM C 144.

#### **PLASTER**

Plaster shall comply with the same specification as those for bedding mortar and will include the use of synthetic fibrous reinforcement of type and dosage recommended by the manufacturer.

#### **REINFORCING STEEL BARS AND RODS**

Minimum yield strength of reinforcement shall conform to the specifications in Section of Reinforced Concrete.

#### **CONCRETE**

Minimum compressive strength of concrete shall conform to the specifications in Section of Reinforced Concrete.

#### **BARBED WIRE AND STEEL/GI PIPE POST**

The materials to be used shall conform to the specifications indicated on the drawings and shall be approved by the Engineer prior to installation.

#### **CYCLONE WIRE MESH**

Cyclone Wire Mesh shall conform to the requirements of ASTM A 121, Class I.



## **CONSTRUCTION REQUIREMENT**

The Contractor shall perform such clearing and grubbing as may be necessary to construct the fence to required grade and alignment. Fence shall generally follow the contour of the ground. Grading shall be performed where necessary to provide a neat appearance.

The post shall be erected vertically in position inside the formwork of the foundation block prior to the placing of concrete shall be adequately supported by bracing to prevent movement of the post during the placing and setting of the concrete. The post shall be erected to the height and location shown on the Plans, or as ordered by the Engineer.

Masonry shall be laid plumb, true to line, with level courses accurately spaced. Bond pattern shall be kept plumb throughout. Corners and reveals shall be plumb and true. Vertical joints shall be shoved tight. Each unit shall be adjusted to final position while mortar is still soft and plastic. Any unit that is disturbed after mortar has stiffened shall be removed and relaid with fresh mortar. Courses shall be so spaced that backing masonry will level off, flush with the face work at all joints where ties occur. Chases and rake-out joints shall be kept free from mortar or other debris.

Anchorage to concrete. Anchorage to abutting columns shall be provided only where indicated. Details shall be as indicated including anchorage to underside of beams and slabs

Cutting and fitting, including that required to accommodate the work of others shall be done by masonry mechanics. Wherever possible, full units of the proper size shall be used in lieu of cut units. Cut edges shall be clean, true and sharp. Openings shall be carefully cut, formed or otherwise neatly made for recessed items and for electrical, plumbing, or other mechanical installations so that wall plates, cover plates, or escutcheons required by the installation will completely conceal the openings and will have bottoms in alignment with lower edge of masonry joints. Webs of hollow masonry units shall be cut to the minimum required for the installation. Reinforced masonry lintels shall be provided as indicated above openings over 300mm wide, for pipes, ducts and cable trays, unless steel sleeves are used.

Spaces around built-in items shall be filled with mortar. Openings around flush-mounted electrical outlet boxes in wet locations shall be pointed flush with mortar including flush joints above the boxes. Anchors, ties, accessories, flashing, pipe sleeves and other items required to be built-in shall be built-in as the masonry work progresses. Anchors, ties, and joint reinforcement shall be fully embedded in mortar.

Unfinished work shall be stepped back for jointing with new work. Toothing may be resorted to only when specifically approved. Before laying new work, loose mortar shall be removed and the exposed joint shall be thoroughly cleaned.

Mortar shall be accurately measured in laboratory-established proportions and mixed with as much water as may be necessary to produce the wettest workable consistency possible. Mortar shall be placed in final position within one hour after mixing. Mortar not used or that has started to set within this time interval shall be discarded.

Joints in exposed-to-view except control joints, joints to be pointed or caulked or sealed, and openings around flush-mounted electrical outlet boxes in wet locations shall be tooled slightly concave with the mortar thoroughly compacted and pressed against the edges of the units. Tooling shall be done when the mortar has been thumbprint hard. The tooled joint shall be finished to uniformly straight and true lines and surfaces, smooth and free of tool marks.

Details of reinforcement shall be as indicated in the drawings. Reinforcing shall not be bent or straightened in a manner injurious to the steel. Bars with kinks or bends not shown on the drawings shall not be used. Placement of reinforcement shall be inspected and approved prior to placing grout. One piece vertical bars extending from floor to floor or roof above shall be provided. Vertical bars shall be spliced only where indicated.

a.      Positioning Bars

Vertical bars shall be positioned accurately at the centerline of the wall. A minimum clearance between the bars and masonry units of 12mm and between parallel bars of one diameter of the reinforcement shall be maintained. Vertical reinforcing shall be held in place using metal supports, centering clips, spacers, ties or caging devices located near the ends of each bar and at intermediate intervals of not more than 192 diameters of the reinforcement.

b.      Splices

Splices shall be located only as indicated. Splices shall be staggered in adjacent bars at least 600mm. Bars shall be lapped a minimum of 40 diameters of the reinforcement.

Welding shall be done in accordance with Standard Code and under supervision of Engineer.

## **PAINTING AND CLEANING**

If required in the contract, paint shall be in accordance to the specification indicated in the plans and coordinated with the end user.

Mortar daubs or splashing, before setting or hardening, shall be completely removed from masonry unit surfaces that will be exposed or painted. Before completion of the work, all defects in joints or masonry to be exposed or painted shall be raked out as necessary, filled with mortar, and tooled to match existing joints. Masonry surfaces shall not be cleaned, other than removing excess surface mortar until mortar in joints has hardened. Masonry hardened surfaces shall be left clean, free of mortar daubs, dirt, stain and discoloration, including scum from cleaning operations and with tight mortar joints throughout. Metal tools and metal brushes shall not be used for cleaning.

## ITEM 11 : ELECTRICAL WORKS

### SCOPE OF WORK

The work to be done shall consist of furnishing, delivering and installing electrical materials / fixtures completed in accordance with all the details of the electrical works as shown on the drawings including materials, labor, tools and equipment and all incidental works as found necessary.

Refer to electrical plans/drawings for location and extent of work involved.

### GENERAL REQUIREMENTS

- a) All works shall be done in accordance with the requirements of the publications and agencies having jurisdiction, as well as the requirements of the approved standards.
  1. National Fire Protection Association - (NFPA)
  2. National Electrical Manufacturer Association - (NEMA)
  3. Underwriter Laboratories, Inc. - (UL)
  4. Philippine Electrical Code - (PEC)  
Philippine National Standard - (PNS)
  5. Federation Specification:  
Circuit Breaker, Molded Case, Branch  
Circuit and Service
  6. American National Standard Institute - (ANSI)
  7. American Society for Testing and Materials - (ASTM)
  8. Illuminating Engineering Society - (IES)
  9. Light Emitting Diode - (LED)
- b) The electrical power of the Port lighting system will be connected to the existing concrete pedestal post where the Main Disconnected Panel (MDP) is located. While the supply voltage must be 230 volts, single phase (1Ø), and 60 hertz.
- c) The Contractor shall employ a licensed Registered Electrical Engineer or Master electrician to perform or to supervise and to conduct the continuous inspection of all electrical work.
- d) The Contractor shall first obtain approval from the Authority before procurement, fabrication or delivery of electrical materials to the site. Partial submittals will not be acceptable and will be returned without review. Submittals shall include the Manufacturer's Name, Trade Name, Place of Manufacture, Catalog Model or Number, Nameplate Data, Size, Layout Dimensions, Capacity, Project Specification and Paragraph Reference, Technical Society Publication References and other information necessary to establish contract compliance of each item to be furnished.
- e) All excavations fill and backfill and concrete works involved herein, shall be carried to the required elevations and shall conform to the provisions of specification under Earthwork and Concrete Construction of this tender document.

- f) The materials and equipment to be furnished shall be standard products of reputable manufacturer engaged in the reproduction of such materials and equipment.
- g) All permits and electrical fees required for this work shall be obtained at the expense of the Contractor. The Contractor shall furnish the Engineer-in-Charge, the final Certificates of Inspections and approval from the proper government authorities after the completion of work. The Contractor shall prepare all as-built plans and all other paper works as required by the enforcing authorities.
- h) The Contractor shall furnish and install electrical materials as shown in the drawings. A licensed Electrical Engineer or Master Electrician is required to implement the installation of the electrical system.
- i) Electrical installation shall conform to the requirements of Philippine Electrical Code (PEC) and the other approved standards.
- j) The contractor shall install all electrical works with the supervision of the qualified Registered Electrical Engineer (REE) or Master Electrician. All electrical installation applications regardless of capacity and voltage whether new, addition or revision shall be accompanied by electrical plans signed and sealed by a duly licensed Professional Electrical Engineer (PEE).

## **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.

## **PRODUCTS**

### **WIRES AND CABLES**

The conductor material to be furnished and installed shall be copper wire Heat-Resistant Thermoplastic (THHN/THWN-2). All conductors shall be rated 600 volts insulation and shall be standard for all sizes.

### **CONDUIT AND FITTINGS**

Underground PVC conduit shall be polyvinyl chloride with concrete covered. It shall be manufactured to schedule 40 outside diameter. All fittings and bends shall be solvent bonded using manufacturers recommended product.

### **LED FLOODLIGHT FIXTURE 200 WATT**

#### **Specifications:**

Rated	: 200 watt LED Floodlight Fixture or equivalent
Input Voltage	: AC 85-265 / 50-60 HZ
Luminous Flux	: 20000 LM
Color Temperature	: 5500-6500k / Daylight
Light Source	: 4 layer of High Brightness LED Module
Material	: Die Cast Aluminum Alloy Housing
Beam Angle	: 120 degrees
Lifetime	: > 50,000 hours
IP Rating	: IP 66 outdoor (water resistant, excellent for outdoor use)

**Switches:**

Weatherproof die cast aluminum 2-gang switch (NEMA-3R) attached to Single Angle Bar Floodlight Steel Tapered Lamp Post.

**CONCRETE DUCT BANK**

The contractor shall construct concrete duct bank as shown in the approved plan.

**SINGLE ANGLE BAR FLOODLIGHT STEEL TAPERED LAMP POST**

Lamp Post shall be 10.0 m ht. Single Angle Bar Floodlight steel tapered lamp post, furnished installed and tested as shown on the approved plans. The post/s shall be dimensioned for a wind velocity of 185 km/hr. It shall be locally fabricated or manufactured. The post shall be Hot – Dipped Galvanized, prime-coated with red lead and shall be painted at site with the final coating preferably aluminum paint to be approved by the Engineer.

**PANEL BOARD**

Panel board shall conform as shown on the approved plans with respect to supply characteristics, rating of main lugs or main circuit breaker, number and ratings and capacities of branch circuit breakers.

Panel board shall consist of a factory completed dead front assembly mounted in an enclosing NEMA-3R cabinet consisting of code gauge galvanized sheet steel box with trim and door.

Main and branch circuit breakers for panel board shall have the rating, capacity and number of poles as shown on the approved plans. Breakers shall be thermal magnetic type solid state-type with interrupting capacity of 10,000 amperes symmetrical minimum. Breaker terminal shall be UL listed as suitable for type of conductor provided. Breaker shall be the bolt-in type (that is, bolted to the current carrying bus). Plug-in circuit breakers are not acceptable

**INTERIOR WIRING SYSTEMS (FIELD OFFICE)**

**SUBMITTALS**

**a. Shop Drawings: Submit for the following:**

1. Location of panel boards and circuit breaker
2. Conduit support / hanger's installation drawing

**b. Manufacturer's data: Submit for the following:**

1. Circuit Breakers
2. Switches
3. Conduit and fittings (each type)
5. Device Plates
6. Insulated conductors
7. 3-Prong Duplex convenience outlet and utility / junction boxes
8. Window type air-condition outlet

## **INTERIOR LIGHTING SYSTEM & ACCESSORIES**

### **SUBMITTALS**

Data, shop drawings showing mounting heights, and reports shall employ the terminology, classifications, and methods prescribed by the IES Lighting Handbook, as applicable, for the lighting system specified.

### **PRODUCT**

- a. Vertical downlight recess mounted type without glass cover lamp holder, 220V, E27, 11 watt LED bulb, daylight
- b. Bathroom ceiling exhaust fan 220V, 26 watt, 60hertz
- c. Telephone and internet connection

### **RECESS AND FLUSH MOUNTED FIXTURES**

The Contractor shall provide the type of materials as shown in the plan.

### **LED BULB**

Recessed mounted LED bulb, use for general lighting to replace the compact fluorescent lamp. It is used in commercial areas and homes for general purposes. Life span of LED is 35,000 to 50,000 hours. Provide 50% more efficient than CFL, reliable electronic power line, strong stability, direct replacement to CFL, energy efficient and environmental friendly and electricity savings

## **EXECUTION**

### **INSTALLATION**

For the field office, the interior lighting and wiring installation system shall be installed as shown on the approved plans.

Single Angle Bar Floodlight Steel Tapered Lamp Post shall be installed as shown on the approved plans.

Pole Setting:      Depth as shown on the approved plans.

Construction of lamp post foundation shall be in accordance with the shape and dimensions as shown on the approved plans.

Excavations / backfilling required before /after installation of lamp post foundation with the trench shall conform to the provisions of Earthwork and Concrete construction.

Metering: the local utility company of Romblon Electric Cooperative is responsible for the supply and installation of measuring equipment, and its accessories, but it is part of the contractor responsibility and expense to contact them about this.

## **WORKMANSHIP**

The work throughout shall be executed in the best and most thorough manner under the direction of and at the satisfaction of the Registered Electrical Engineer or Master Electrician, who will interpret the intent meaning of the drawings and specification and shall have the power to reject any work and materials which in his judgment, are not in full accordance therewith.

## **TESTING OPERATIONS**

When the electrical installation is completed, the Contractor shall test the installed electrical materials and equipment in the presence of Registered Electrical Engineer or Master Electrician. The system shall be free from any defects, shorts or grounds. The Contractor at no extra cost shall furnish all necessary instruments and personnel required for the testing.

## **GUARANTEE**

Upon completion and before final acceptance of the work, the Contractor shall furnish the Engineer a written guarantee stating that all works executed are free from defects on materials and workmanship. The guarantee shall be for a period of one year from the date of the final acceptance. Any work that becomes defective during the said period shall be corrected / replaced by the Contractor at his own expense in a manner satisfactory to the Authority.

**ITEM 12 : PROJECT BILLBOARD****SPECIFICATION**

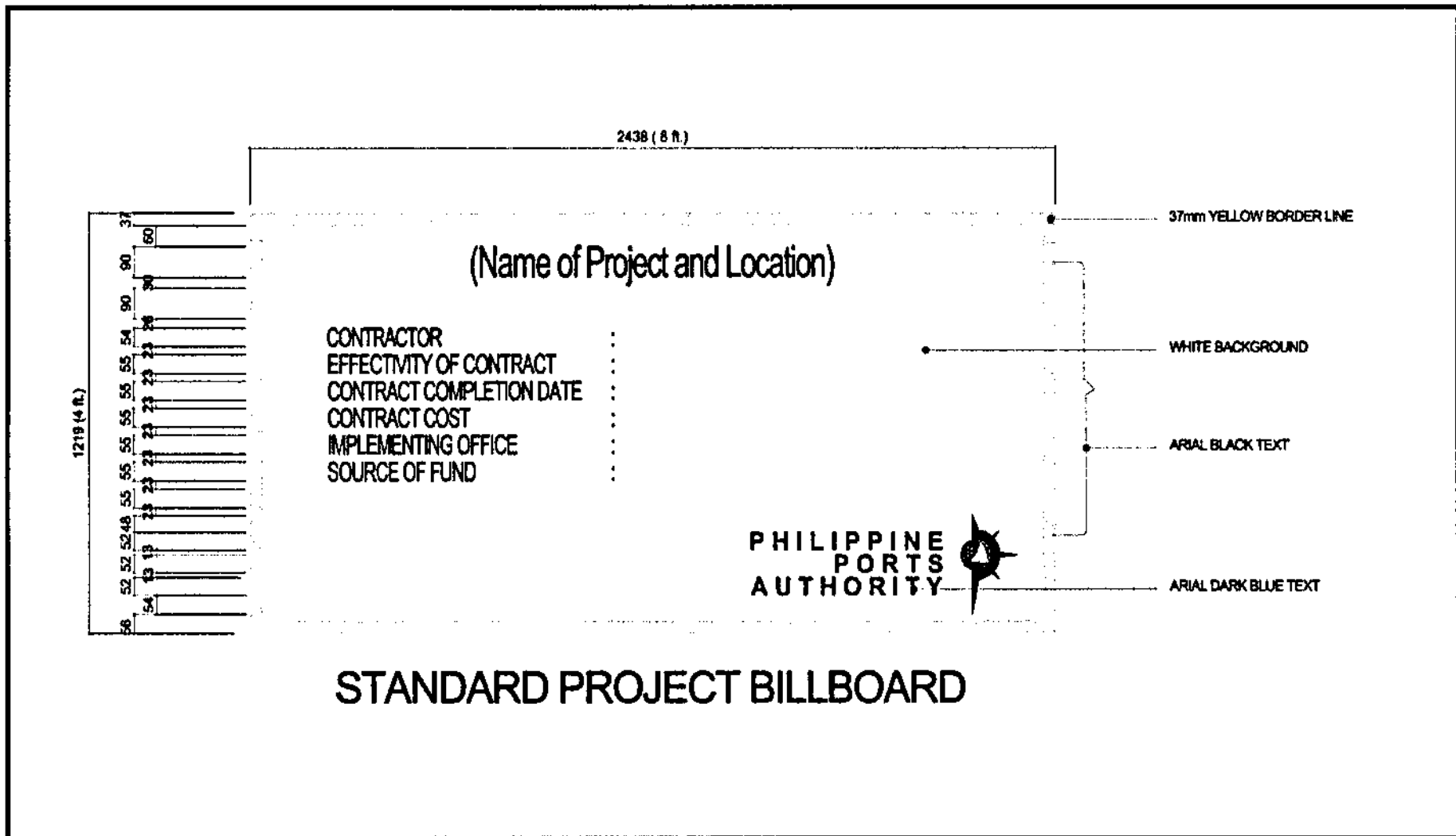
The Project Billboard shall be installed at location(s) designated by the Engineer.

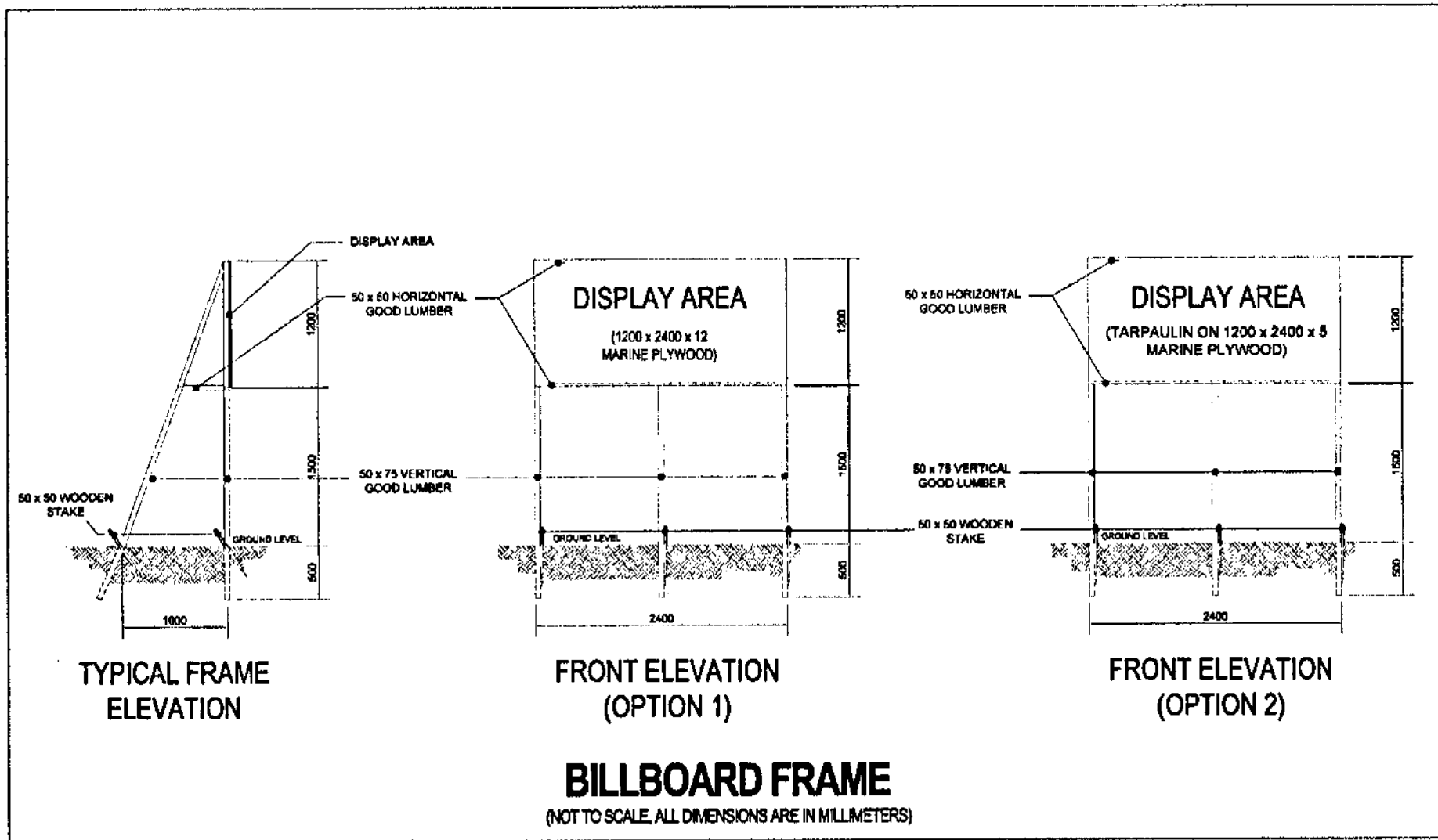
The size and specifications of materials for the standard billboard shall be 4ft. x 8ft. (1,200mm x 2,400mm) using ½ inch (12mm) marine plywood or tarpaulin poster on 3/16 inch (5mm) marine plywood.

Project billboards shall not contain Name(s) and/or picture(s) of any personages.

See attached drawings for further details of the standard billboard.







**ITEM 13 : SAFETY SIGNAGES AND BARRICADES**

## DESCRIPTION

This work includes the furnishing and installing of safety signages and barricades in accordance with the specifications and to the details shown below in the drawings, or as directed by the Engineer.

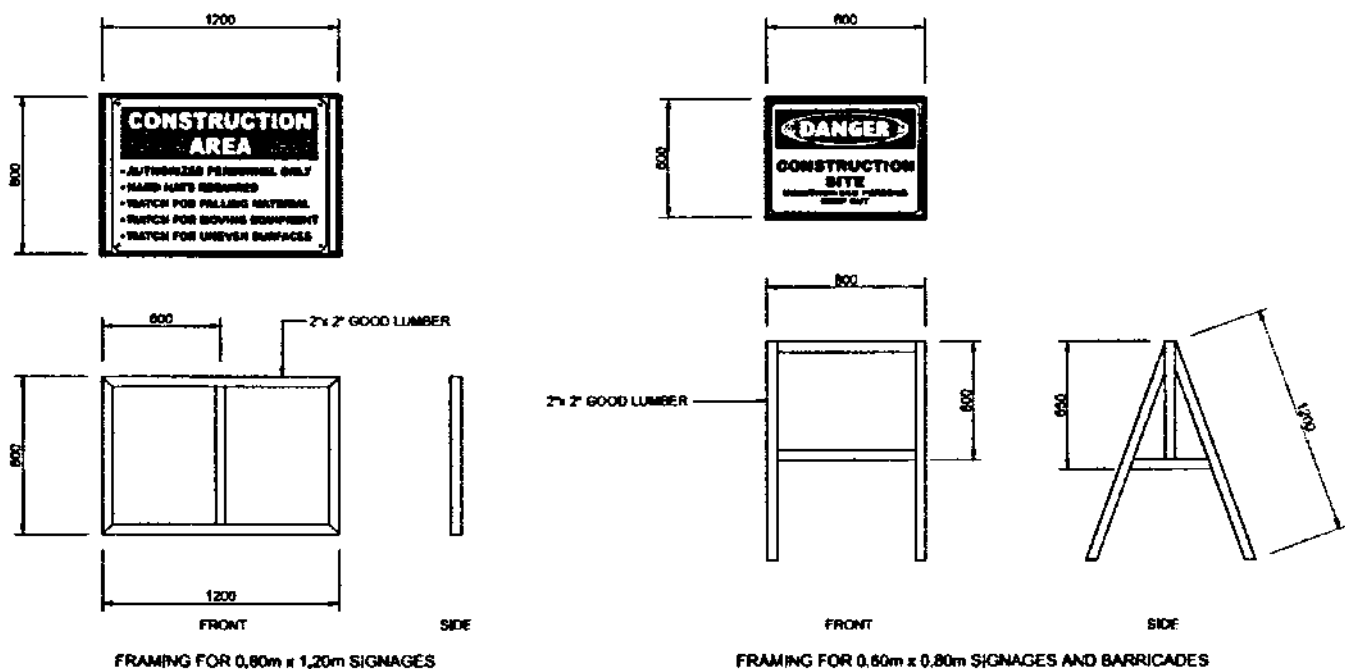
## SPECIFICATION

**The Signage's and Barricades shall be installed at location(s) designated by the Engineer.**

The sizes of the standard signages shall be 2-2/3ft x 4ft (800mm X 1,200mm) for fixed type and 2ft x 2-2/3ft (600mm x 800mm) for mobile type. For barricade standard 2ft x 2-2/3ft (600mm x 800mm) shall be provided.

The materials to be used for signages and barricades are ½ inch (12mm) marine plywood or tarpaulin poster on 2" x 2" (50mm x 50mm) good lumber frame (see drawing below).

**The printing or painting shall be the discretion of the Engineer.**



## STANDARD PLAN FOR SIGNAGES AND BARRICADES

***SECTION VII***

***DRAWINGS  
(APPROVED PLANS)***

# **SECTION VII**

## **DRAWINGS AND APPROVED PLANS**

**(SEE ISSUED APPROVED PLANS)**

### **LIST OF DRAWINGS:**

1 of 17	Development Plan, General Notes, Design Parameters, List of Drawings and Location Map
2 of 17	Demolition and Clearing Layout
3 of 17	General Plan
4 of 17	Wharf Plan, Schedule of Mooring Bollards (Tee-Head) and Schedule of Fendering System (V-Type)
5 of 17	Wharf offshore Elevation
6 of 17	Section Thru A-A, Section Thru B-B, Section Thru C-C and Section Thru A-A
7 of 17	Wharf Piling and Framing Plan and R.C. Wharf Pile Schedule (450mm X 450mm PSC Piles)
8 of 17	Details of 450mm X 450mm Pre-Stressed Concrete Pile
9 of 17	Detail of Slab, Pile Cap for Vertical Piles, Pile Cap for Couple-Batter Piles, Detail of Construction Joint and Detail of Curtain Wall
10 of 17	Reinforcement Detail of Mooring/Fendering Block and Typical attachment of 600h X 1500l V-Type RDF and 50t Mooring Tee-Head
11 of 17	Beam Detail
12 of 17	Beam Detail
13 of 17	Detail of V-Type Rubber Dock Fender (V-600H X 1500L) and Detail of 50 Ton Mooring Tee – Head
14 of 17	Security Fence Detail
15 of 17	Port Lighting Layout, Legends and Symbols and General Notes and Specifications
16 of 17	Load Schedule, Detail of Duct Bank, Riser Diagram, Single Angle Bar Floodlight Steel Tapered Lamp Post, Floodlight Post Connection Details and Specification
17 of 17	Detail of Lamp Foundation at RC Deck and Detail of Lamp Foundation at Grade

*SECTION VIII*

*BILL OF QUANTITIES*  
*and*  
*ATTACHMENTS*

**BID SUMMARY**  
**ROMBLON PORT EXPANSION PROJECT**  
 Port of Romblon, Romblon



NO.	DESCRIPTION OF WORK	AMOUNT (Pesos)
BILL NO. 1	GENERAL EXPENSES	
BILL NO. 2	EXCAVATION AND REMOVAL WORKS	
BILL NO. 3	CONSTRUCTION OF R.C. WHARF	
	<b>BID PRICE</b>	

\_\_\_\_\_  
 Name of Firm

\_\_\_\_\_  
 Name of Bidder/Authorized Representative  
 (Signatory's Legal Capacity)

\_\_\_\_\_  
 Date

**BILL OF QUANTITIES**  
**ROMBLON PORT EXPANSION PROJECT**  
Port of Romblon, Romblon



NO. (1)	DESCRIPTION OF WORK (2)	UNIT (3)	QTY. (4)	UNIT PRICE (Pesos) (5)	AMOUNT (Pesos) (4) x (5)
<b>BILL NO. 1</b>	<b>GENERAL EXPENSES</b>				
1.01	Mobilization, demobilization and cleaning	lot	1		
1.02	Provide field office and residence for the Engineer and staff	lot	1		
1.03	Maintain field office and residence for the Engineer and staff	mo.	12		
1.04	Provide Construction Safety and Health Program in the execution of the project	mo.	12		
<b>TOTAL FOR BILL NO. 1:</b>					

\_\_\_\_\_  
Name of Bidder/Authorized Representative  
(Signatory's Legal Capacity)



**BILL OF QUANTITIES**  
**ROMBLON PORT EXPANSION PROJECT**  
Port of Romblon, Romblon



NO. (1)	DESCRIPTION OF WORK (2)	UNIT (3)	QTY. (4)	UNIT PRICE (Pesos) (5)	AMOUNT (Pesos) (4) x (5)
<b>BILL NO. 2</b>	<b>EXCAVATION AND REMOVAL WORKS</b>				
2.01	Chipp-off and dispose existing R.C. Curb flush to deck level and smoothen with mortar	l.m.	127		
2.02	Chipp-off and dispose existing base of mooring bollard flush to deck level and smoothen with mortar	no.	8		
2.03	Remove existing mooring bollard and turned over to the Authority as directed by the Engineer	set	6		
2.04	Remove existing mooring bits and turned over to the Authority as directed by the Engineer	set	2		
2.05	Remove existing rubber dock fender and turned over to the Authority as directed by the Engineer	set	17		
2.06	Remove existing solar lamp post	set	1		
2.07	Remove and restore existing pavement prior for installation of electrical works	sq.m.	33		
2.08	Excavate and backfill existing fill materials prior for installation of electrical works	cu.m.	16		
<b>TOTAL FOR BILL NO. 2</b>					

\_\_\_\_\_  
Name of Bidder/Authorized Representative  
(Signatory's Legal Capacity)

**BILL OF QUANTITIES**  
**ROMBLON PORT EXPANSION PROJECT**  
Port of Romblon, Romblon



NO. (1)	DESCRIPTION OF WORK (2)	UNIT (3)	QTY. (4)	UNIT PRICE (Pesos) (5)	AMOUNT (Pesos) (4) x (5)
<b>BILL NO.</b>	<b>3 CONSTRUCTION OF R.C. WHARF</b>				
3.01	Supply, deliver & drive 450m x 450mm x 28m PSC Test piles	no.	2		
3.02	Supply and deliver to site 450mm x 450mm PSC Piles	l.m.	8,194		
3.03	Handle, pitch and drive 450mm x 450mm Vertical PSC Piles	l.m.	4,806		
3.04	Handle, pitch and drive 450mm x 450mm Batter PSC Piles	l.m.	3,388		
3.05	Chip/cut & dispose portion of newly driven PSC Piles up to required elevation	no.	301		
3.06	Supply and install steel reinforcements for the superstructure and electrical works	kg.	162,064		
3.07	Supply and place 3,500 psi concrete for the superstructure and electrical works	cu.m.	929		
3.08	Supply, spread and compact gravel bedding for electrical works	cu.m.	1		
3.09	Supply and install construction joints (100mm x 100mm x 10mm) angle bar, hot-dipped galvanized including dowel bars	l.m.	157		
3.10	Supply and deliver to site rubber dock fender (V-type, 600H x 1500L) including accessories	set	16		
3.11	Install rubber dock fender and accessories	set	16		

\_\_\_\_\_  
Name of Bidder/Authorized Representative  
(Signatory's Legal Capacity)

**BILL OF QUANTITIES**  
**ROMBLON PORT EXPANSION PROJECT**  
Port of Romblon, Romblon



NO. (1)	DESCRIPTION OF WORK (2)	UNIT (3)	QTY. (4)	UNIT PRICE (Pesos) (5)	AMOUNT (Pesos) (4) x (5)
3.12	Supply and deliver to site mooring bollard (50 Tons, T-head) including accessories	set	8		
3.13	Install mooring bollards (T-head type) and accessories	set	8		
3.14	Construct Cyclone wire fence including painting and accessories	l.m.	27		
3.15	Re-install newly removed solar lamp post	set	1		
3.16	Supply, deliver and install Port Lighting System and accessories	lot	1		
<b>TOTAL FOR BILL NO. 3</b>					

\_\_\_\_\_  
Name of Bidder/Authorized Representative  
(Signatory's Legal Capacity)

## **BASIS OF PAYMENT FOR WORK ITEMS INCLUDED IN THE PROPOSAL**

The work items included in the proposal and the basis of payments are as follows:

### **BILL NO. 1**

#### **GENERAL EXPENSES**

**Item 1.01      Mobilization, demobilization, and cleaning**

The quantity to be paid for shall be the minimum equipment requirement enumerated in the bid documents mobilized, demobilized and cleaning of the site and accepted by the Engineer. The contract lump sum price shall be full compensation for furnishing all materials, labor, equipment, tools, and incidentals necessary to mobilize and demobilize all the minimum equipment requirement enumerated in the bid documents including cleaning of the site. Fifty percent (50%) of the total amount shall be payable after the mobilization activity while the remaining (50%) payable after demobilization and cleaning.

**Item 1.02      Rental of temporary site office and residence for the Engineer and staff**

The quantity to be paid for shall be the actual rental of site office and residence for the engineer and staff and accepted by the Engineer. The contract unit price shall be full compensation for furnishing all materials, labor, equipment, tools, and incidentals necessary for the provision of temporary site office and residence for the engineer and staff.

**Item 1.03      Maintain temporary site office and residence for the Engineer and staff**

The quantity to be paid for shall be the actual services rendered in maintaining the site office and accepted by the Engineer. The contract unit price shall be full compensation for furnishing all materials, labor, equipment, tools, and incidentals necessary to complete the maintenance of the temporary site office and residence as well as other expenses such as provision for electric power, telephone bill, potable water supply, janitorial and security services.

**Item 1.04      Provide construction safety and Health Program in the execution of the project**

The quantity to be paid for shall be the actual implementation of construction safety and health program and accepted by the Engineer. The contract unit price shall be full compensation for furnishing all materials, labor, equipment, tools, and incidentals necessary to complete the implementation of the Construction Safety and Health Program, as required and approved by the Department of Labor and Employment (DOLE).

## **BILL NO. 2**

### **EXCAVATION AND REMOVAL WORKS**

- Item 2.01      Chip-off and dispose existing R.C. Curb flush to deck level and smoothen with mortar**
- The quantity to be paid for shall be the actual length in linear meter of existing RC curb to be chipped off and properly disposed, flushed to deck level, and smoothened with mortar in accordance with the plans and specifications and accepted by the Engineer. The contract unit price shall be full compensation for furnishing all materials, labor, equipment, tools, and incidentals necessary to complete the work.
- Item 2.02      Chip-off and dispose existing base of mooring bollard flush to deck level and smoothen with mortar**
- The quantity to be paid for shall be the actual number of existing base of mooring bollard to be chipped off and properly disposed, flushed to deck level, and smoothened with mortar in accordance with the plans and specifications and accepted by the Engineer. The contract unit price shall be full compensation for furnishing all materials, labor, equipment, tools, and incidentals necessary to complete the work.
- Item 2.03      Remove existing mooring bollard and turn-over to authority as directed by the Engineer**
- The quantity to be paid for shall be the actual set of existing mooring bollard to be removed and turned-over to authority as directed by the Engineer in accordance with the plans and specifications and accepted by the Engineer. The contract unit price shall be full compensation for furnishing all materials, labor, equipment, tools, and incidentals necessary to complete the work.
- Item 2.04      Remove existing mooring bitts and turn-over to authority as directed by the Engineer**
- The quantity to be paid for shall be the actual set of existing mooring bitts to be removed and turned-over to authority as directed by the Engineer in accordance with the plans and specifications and accepted by the Engineer. The contract unit price shall be full compensation for furnishing all materials, labor, equipment, tools, and incidentals necessary to complete the work.
- Item 2.05      Remove existing rubber dock fender and turn-over to authority as directed by the Engineer**
- The quantity to be paid for shall be the actual set of existing rubber dock fender to be removed and turned-over to authority as directed by the Engineer in accordance with the plans and specifications and accepted by the Engineer. The contract unit price shall be full compensation for furnishing all materials, labor, equipment, tools, and incidentals necessary to complete the work.
- Item 2.06      Remove existing solar lamp post**
- The quantity to be paid for shall be the actual set of existing solar lamp post to be removed in accordance with the plans and specifications and accepted by the Engineer. The contract unit price shall be full compensation for furnishing all materials, labor, equipment, tools, and incidentals necessary to complete the work.

**Item 2.07      Remove and restore existing pavement prior for installation of electrical works**

The quantity to be paid for shall be the actual area in square meter of existing pavement to be removed and restored prior for installation of electrical works in accordance with the plans and specifications and accepted by the Engineer. The contract unit price shall be full compensation for furnishing all materials, labor, equipment, tools, and incidentals necessary to complete the work.

**Item 2.08      Excavate and backfill existing fill materials prior for installation of electrical works**

The quantity to be paid for shall be the actual volume in cubic meter of existing fill materials to be excavated prior to installation of electrical works and backfilled thereafter in accordance with the plans and specifications and accepted by the Engineer. The contract unit price shall be full compensation for furnishing all materials, labor, equipment, tools, and incidentals necessary to complete the work.

### **BILL NO. 3**

#### **CONSTRUCTION OF R.C. WHARF**

**Item 3.01      Supply, deliver & drive 450mm x 450mm x 28.00m PSC Test Piles**

The quantity to be paid for shall be the actual number of 450mm x 450mm x 28.00m PSC Test Piles to be supplied, delivered and driven in accordance with the plans and specifications and accepted by the Engineer. The contract unit price shall be full compensation for furnishing all materials, labor, equipment, tools, and incidentals necessary to complete the work.

**Item 3.02      Supply and deliver to site 450mm x 450mm PSC Piles**

The quantity to be paid for shall be the actual length in linear meter of 450mm x 450mm PSC Piles to be supplied and delivered to site in accordance with the plans and specifications and accepted by the Engineer. The contract unit price shall be full compensation for furnishing all materials, labor, equipment, tools, and incidentals necessary to complete the work.

**Item 3.03      Handle, pitch, and drive 450mm x 450mm Vertical PSC Piles**

The quantity to be paid for shall be the actual length in linear meter of 450mm x 450mm Vertical PSC Piles to be handled, pitched, and driven in accordance with the plans and specifications, measured from the tip of piles to cut-off elevation and accepted by the Engineers. The contract unit price shall be full compensation for furnishing all materials, labor, equipment, tools, and incidentals necessary to complete the work.

**Item 3.04      Handle, pitch, and drive 450mm x 450mm Batter PSC Piles**

The quantity to be paid for shall be the actual length in linear meter of 450mm x 450mm Batter PSC Piles to be handled, pitched, and driven in accordance with the plans and specifications, measured from the tip of piles to cut-off elevation and accepted by the Engineers. The contract unit price shall be full compensation for furnishing all materials, labor, equipment, tools, and incidentals necessary to complete the work.

**Item 3.05      Chip/cut and dispose portion of newly driven PSC Piles up to required elevation**

The quantity to be paid for shall be the actual number of newly driven PSC Piles to be chipped/cut off up to required elevation including proper disposal of debris in accordance with the plans and specifications and accepted by the Engineer. The contract unit price shall be full compensation for furnishing all materials, labor, equipment, tools, and incidentals necessary to complete the work.

**Item 3.06      Supply and install steel reinforcements for the superstructure and electrical works**

The quantity to be paid for shall be the actual weight in kilogram of steel reinforcements to be supplied and installed for the superstructure and electrical works in accordance with the plans and specifications and accepted by the Engineer. The contract unit price shall be full compensation for furnishing all materials, labor, equipment, tools, and incidentals necessary to complete the work.

- Item 3.07      Supply and place 3,500 psi concrete for the superstructure and electrical works**
- The quantity to be paid for shall be the actual volume in cubic meter of 3,500 psi concrete to be supplied and set-in-place for the superstructure and electrical works in accordance with the plans and specifications and accepted by the Engineer. The contract unit price shall be full compensation for furnishing all materials, labor, equipment, tools, and incidentals necessary to complete the work.
- Item 3.08      Supply, spread and compact gravel bedding for electrical works**
- The quantity to be paid for shall be the actual volume in cubic meter of gravel bedding to be supplied, spread, and compacted for electrical works in accordance with the plans and specifications and accepted by the Engineer. The contract unit price shall be full compensation for furnishing all materials, labor, equipment, tools, and incidentals necessary to complete the work.
- Item 3.09      Supply and install construction joints (100mm x 100mm x 10mm) angle bar, hot-dipped galvanized including dowel bars**
- The quantity to be paid for shall be the actual length in linear meter of construction joints (100mm x 100mm x 10mm) angle bar, hot-dipped galvanized including dowel bars to be supplied and installed in accordance with the plans and specifications and accepted by the Engineer. The contract unit price shall be full compensation for furnishing all materials, labor, equipment, tools, and incidentals necessary to complete the work.
- Item 3.10      Supply and deliver to site rubber dock fender (V-ty6e, 500H x 1500L) including accessories**
- The quantity to be paid for shall be the actual set of rubber dock fender (V-type, 600H x 1500L) including accessories to be supplied and delivered to site in accordance with the plans and specifications and accepted by the Engineer. The contract unit price shall be full compensation for furnishing all materials, labor, equipment, tools, and incidentals necessary to complete the work.
- Item 3.11      Install rubber dock fender and accessories**
- The quantity to be paid for shall be the actual set of rubber dock fender and accessories to be installed in accordance with the plans and specifications and accepted by the Engineer. The contract unit price shall be full compensation for furnishing all materials, labor, equipment, tools, and incidentals necessary to complete the work.
- Item 3.12      Supply and deliver to site mooring bollard (50T, T-head) including accessories**
- The quantity to be paid for shall be the actual set of mooring bollards (50T, T-head) including accessories to be supplied and delivered to site in accordance with the plans and specifications and accepted by the Engineer. The contract unit price shall be full compensation for furnishing all materials, labor, equipment, tools, and incidentals necessary to complete the work.
- Item 3.13      Install mooring bollard and accessories**
- The quantity to be paid for shall be the actual set of mooring bollard (T-head type) and accessories to be installed in accordance with the plans and specifications and accepted by the Engineer. The contract unit price shall be full compensation for



furnishing all materials, labor, equipment, tools, and incidentals necessary to complete the work.

**Item 3.14 Construct Cyclone wire fence including painting and accessories**

The quantity to be paid for shall be the actual length in linear meter of Cyclone wire fence including painting and accessories to be constructed in accordance with the plans and specifications and accepted by the Engineer. The contract unit price shall be full compensation for furnishing all materials, labor, equipment, tools, and incidentals necessary to complete the work.

**Item 3.15 Reinstall newly removed solar lamp post**

The quantity to be paid for shall be the actual set of newly removed solar lamp post to be reinstalled in accordance with the plans and specifications and accepted by the Engineer. The contract unit price shall be full compensation for furnishing all materials, labor, equipment, tools, and incidentals necessary to complete the work.

**Item 3.16 Supply, deliver and install Port Lighting System and accessories**

The quantity to be paid for shall be the actual lot of Port Lighting System and accessories to be supplied, delivered and installed in accordance with the plans and specifications and accepted by the Engineer. The contract unit price shall be full compensation for furnishing all materials, labor, equipment, tools, and incidentals necessary to complete the work.

## **FACILITIES TO BE PROVIDED FOR THE ENGINEER & HIS STAFF**

### **CONSTRUCTION OF SITE OFFICE AND RESIDENCE FOR THE ENGINEER & STAFF**

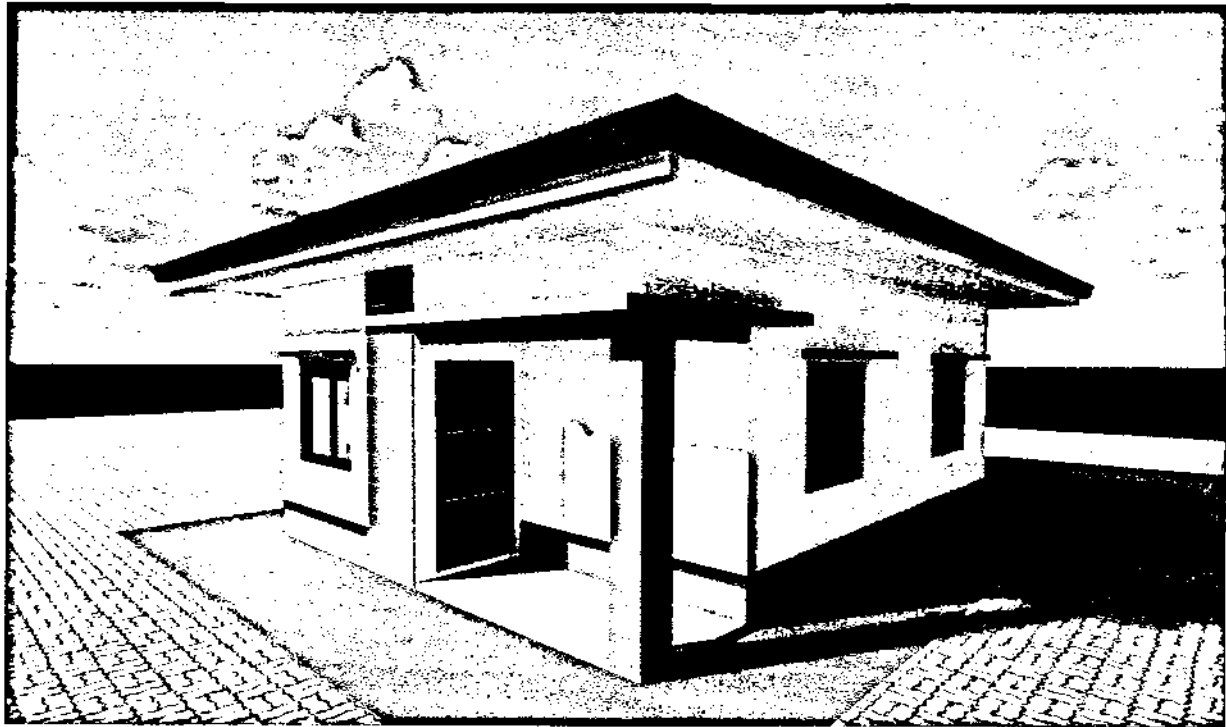
The Contractor shall construct a site office and residence for the Engineer and his staff in accordance with the plans and specifications as indicated hereafter.

Upon completion of the project, the said office will be turned-over to the PMO.

PHILIPPINE  
PORTS  
AUTHORITY



# PROPOSED FIELD OFFICE



## PERSPECTIVE

SCALE

N.T.S.

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PHILIPPINE  
PORTS  
AUTHORITY



PROJECT TITLE

PROPOSED FIELD OFFICE

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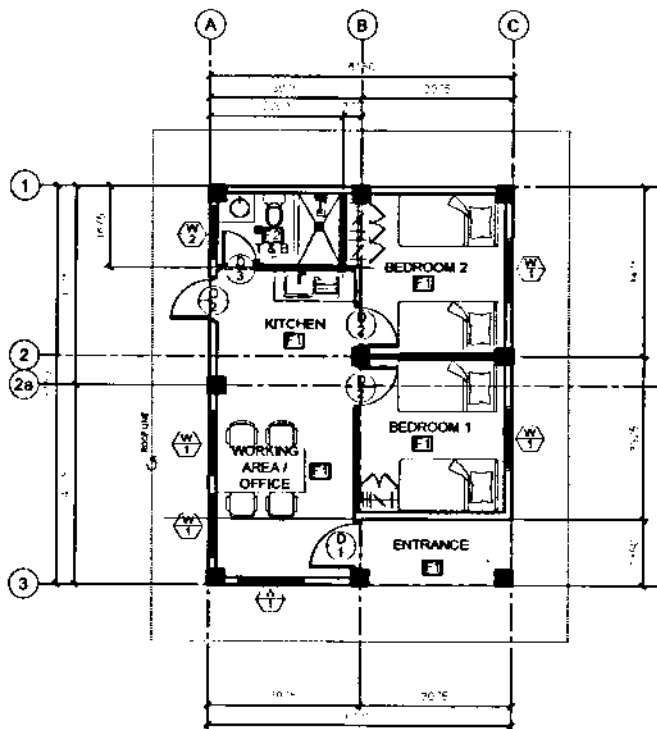
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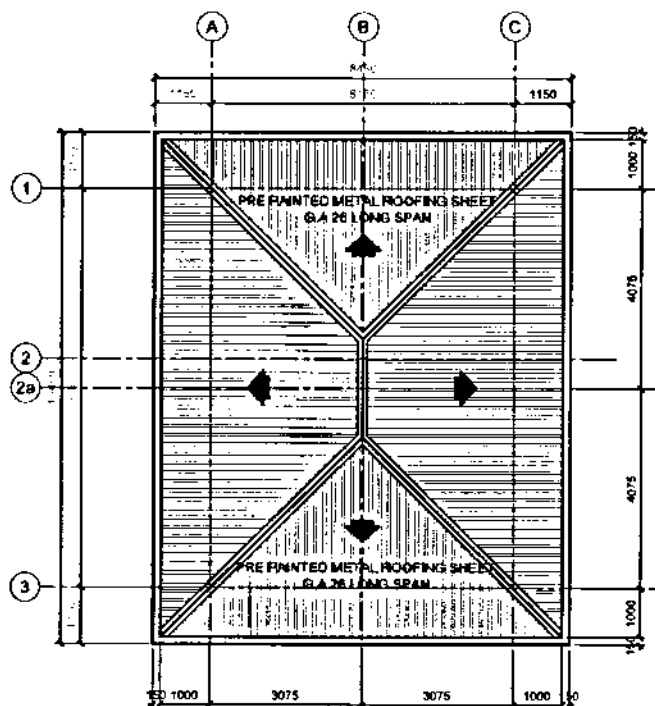
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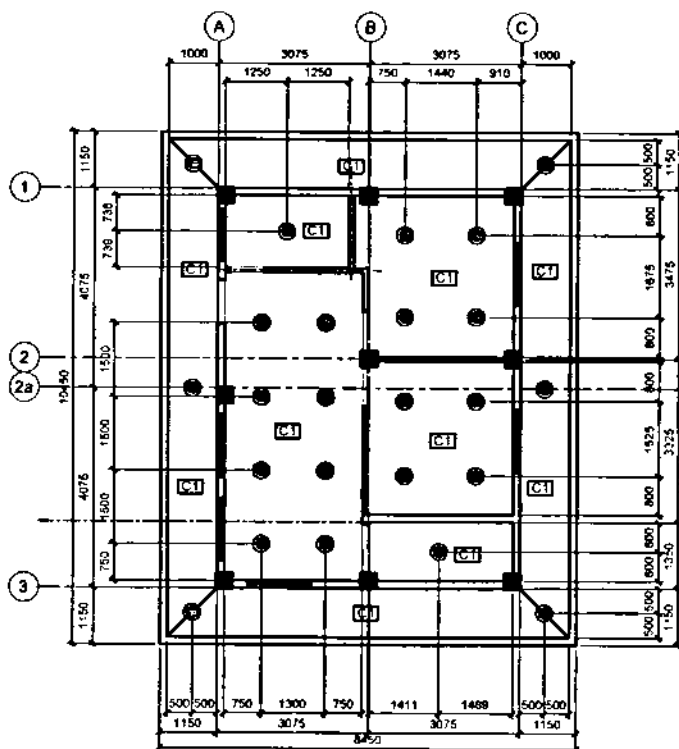
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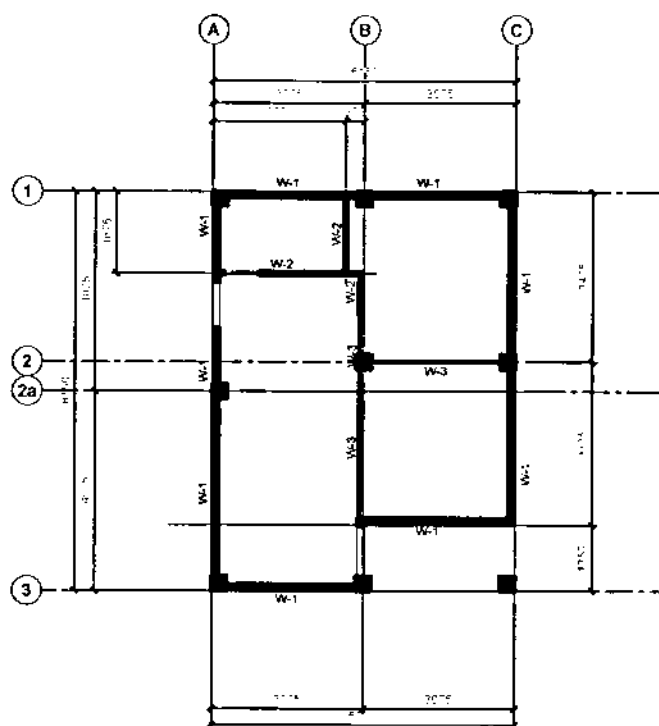
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**2 ROOF PLAN**  
SCALE 1:150 M



**3 REFLECTED CEILING PLAN**  
SCALE 1:150 M



**4 WALL PARTITION LAYOUT**  
SCALE 1:150 M

LEGEND:		
FLOOR FINISHES	CEILING FINISHES	WALL PARTITION
FLOOR FINISH SYMBOL 1	CEILING FINISH SYMBOL 1	WALL PARTITION SYMBOL 1
FLOOR FINISH SYMBOL 2	CEILING FINISH SYMBOL 2	WALL PARTITION SYMBOL 2
FLOOR FINISH SYMBOL 3	CEILING FINISH SYMBOL 3	WALL PARTITION SYMBOL 3

PHILIPPINE  
PORTS  
AUTHORITY



PROJECT TITLE

PROPOSED FIELD OFFICE

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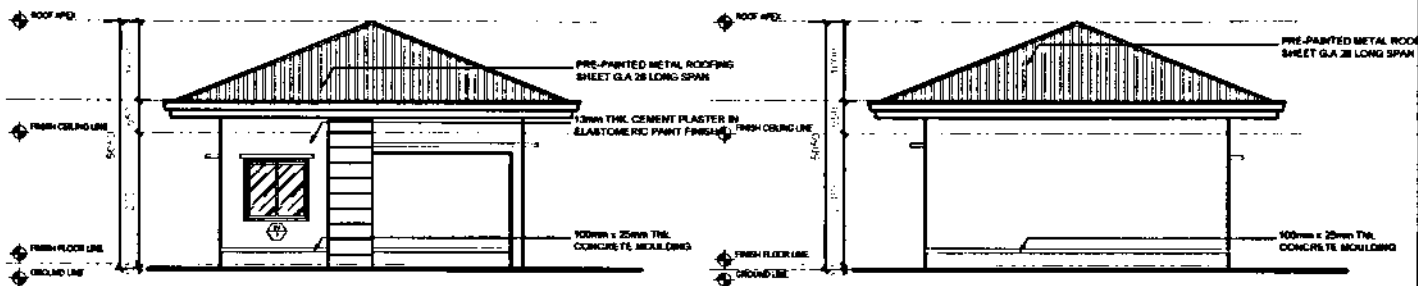
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- ROOF PLAN
- REFLECTED CEILING PLAN
- WALL PARTITION LAYOUT
- LEGEND

SCALE

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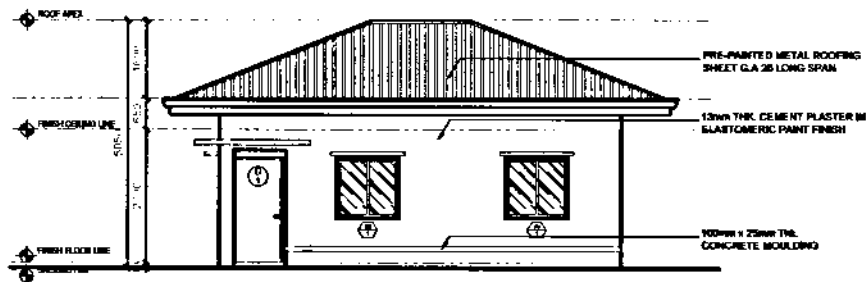
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DATE  
JUNE 2022

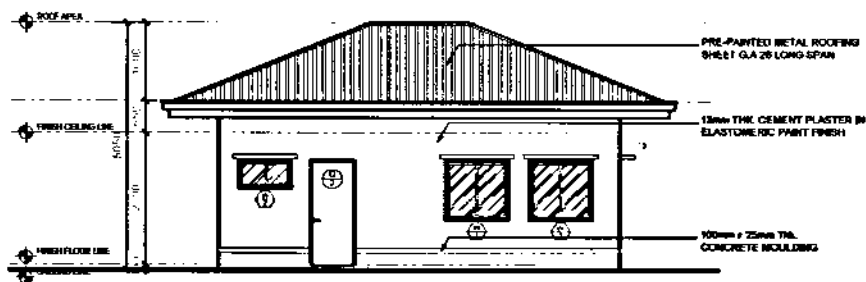


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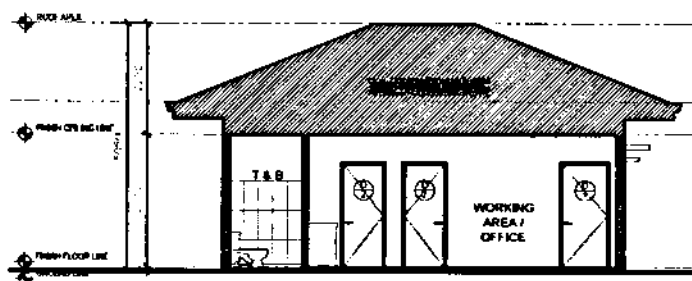
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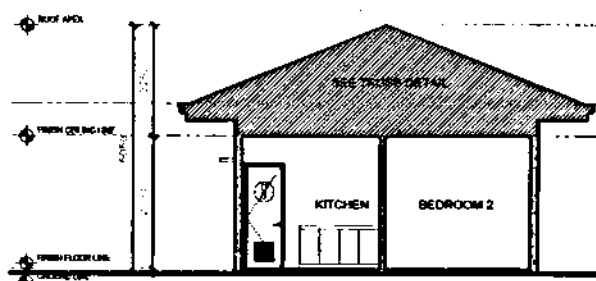
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4 LEFT SIDE ELEVATION  
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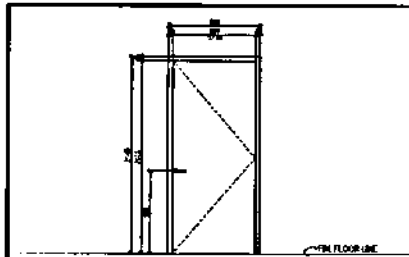


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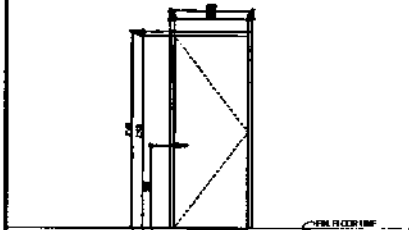


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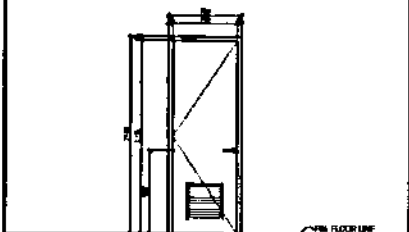




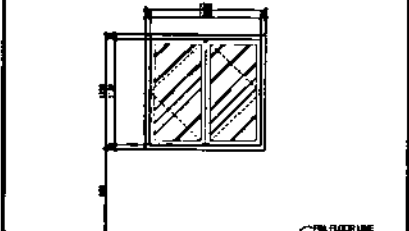
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LOCATION: BATH ENTRY  
DATE: 06/11/20



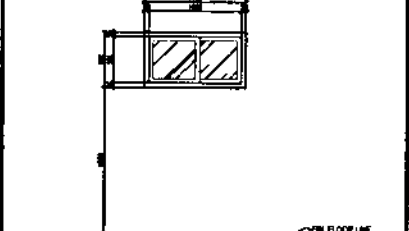
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DATE: 06/11/20



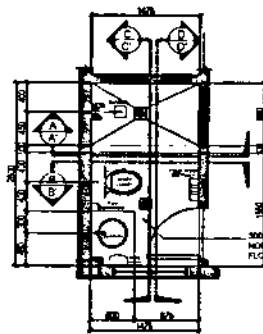
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DATE: 06/11/20



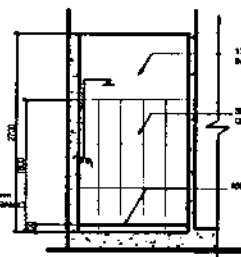
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LOCATION: BATH ENTRY  
DATE: 06/11/20



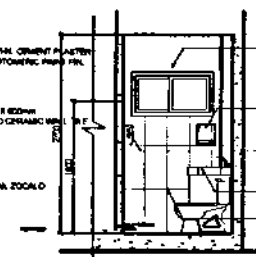
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LOCATION: BATH ENTRY  
DATE: 06/11/20



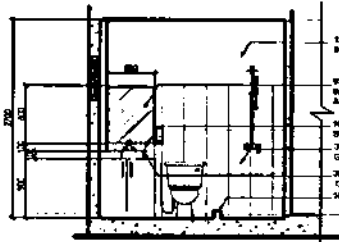
BLOW-UP PLAN



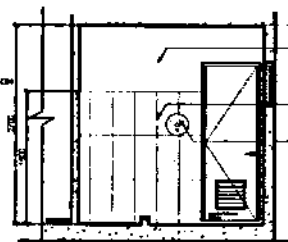
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SECTION THRU B-B'



SECTION THRU C-C'



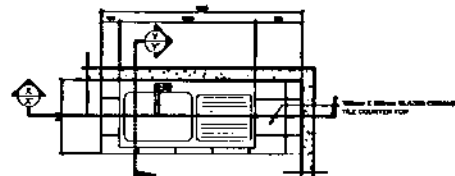
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2  
A/4

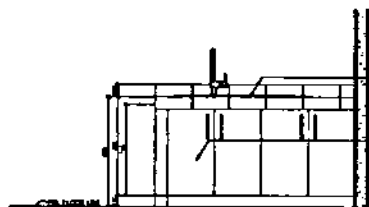
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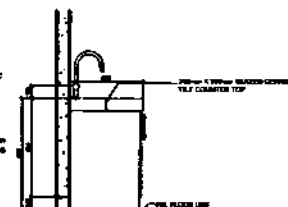
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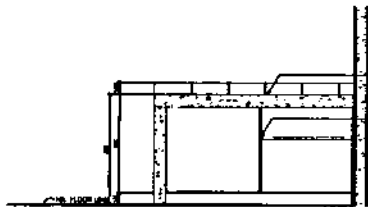
BLOW-UP PLAN



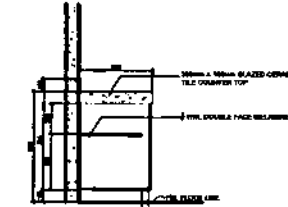
FRONT ELEVATION



SIDE ELEVATION



SECTION THRU X-X'



SECTION THRU Y-Y'

3  
A/4

## KITCHEN CABINET DETAILS

SCALE

1:100 M

1  
A/4

## SCHEDULE OF DOORS AND WINDOWS

SCALE

1:100 M

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PORTS  
AUTHORITY



PROJECT TITLE:

PROPOSED FIELD OFFICE

SHEET CONTENTS:

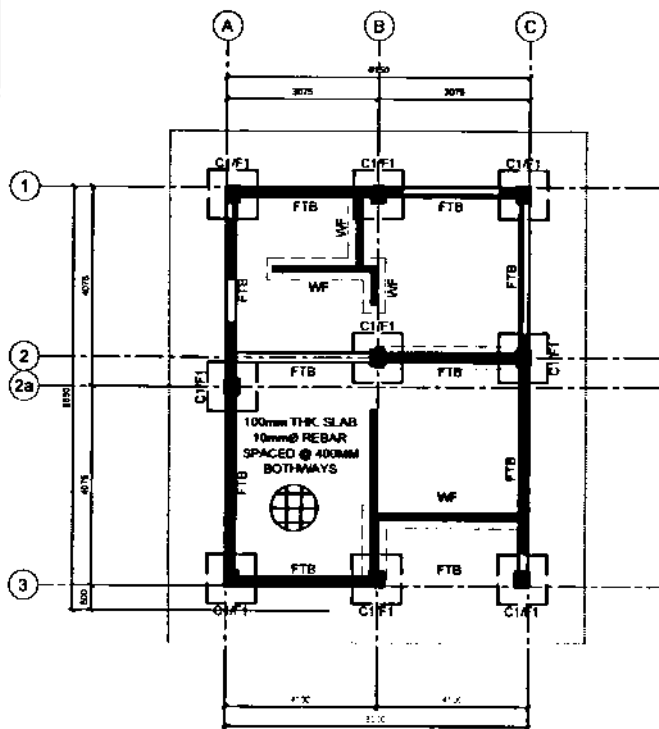
- SCHEDULE OF DOORS AND WINDOWS
- TOILET DETAILS
- KITCHEN CABINET DETAILS

SCALE:

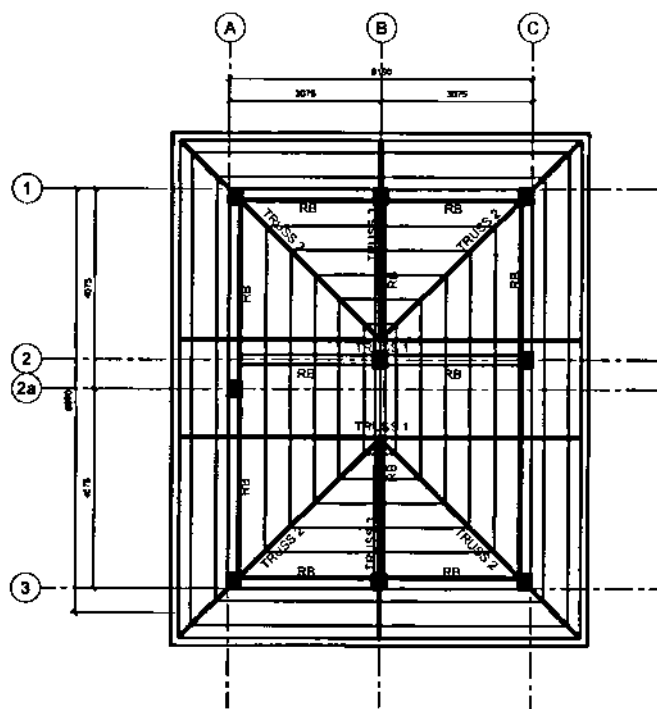
AS SHOWN

SHEET NO.  
A-04 of 04

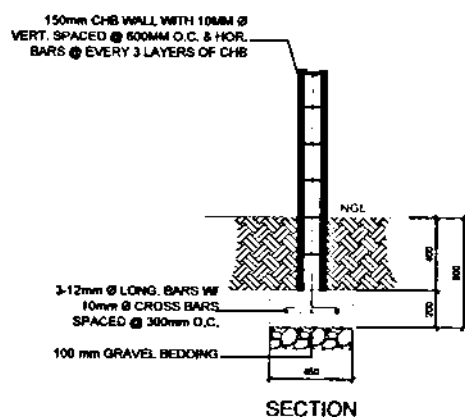
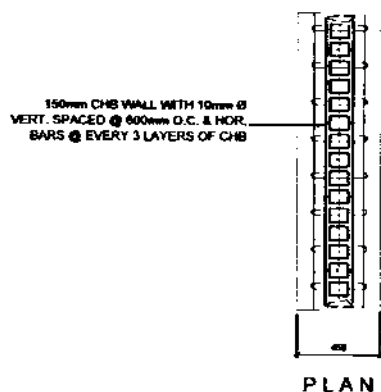
DATE  
JUNE 2020



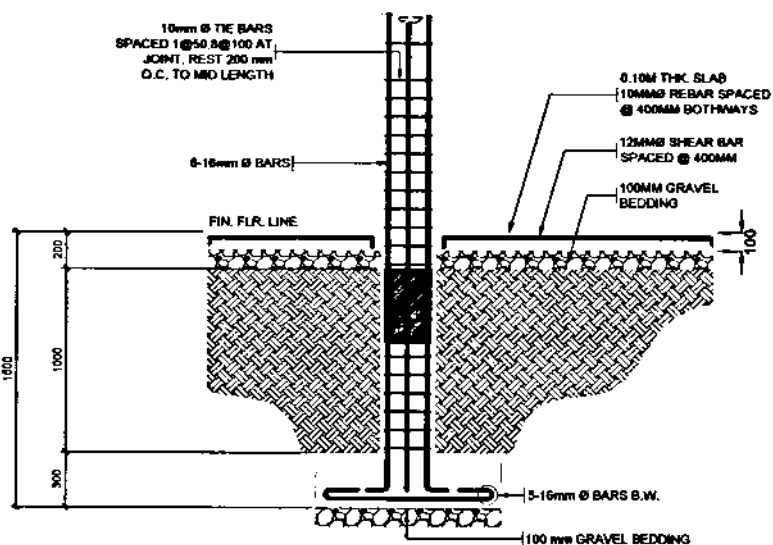
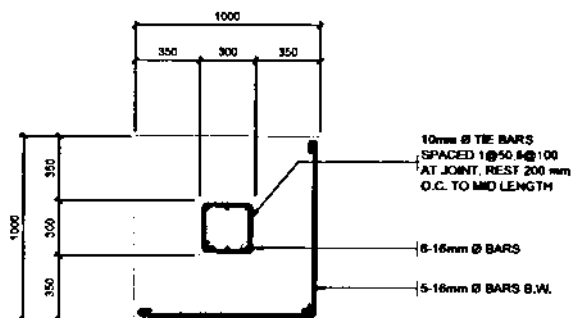
**1 FOUNDATION PLAN**  
SCALE 1:150 M



**2 ROOF FRAMING PLAN**  
SCALE 1:150 M



**3 WALL FOOTING DETAIL**  
SCALE 1:50 M



**4 DETAIL OF COLUMN/CORNER FOOTING**  
SCALE 1:50 M



PROJECT TITLE:

PROPOSED FIELD OFFICE

SHEET CONTENTS:

- FOUNDATION PLAN
- ROOF FRAMING PLAN
- WALL FOOTING DETAIL
- DETAIL OF COLUMN/CORNER FOOTING

SCALE:

AS SHOWN

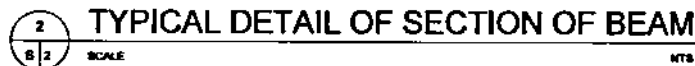
SHEET NO. S-01 of 02

DATE:

JUNE 2023

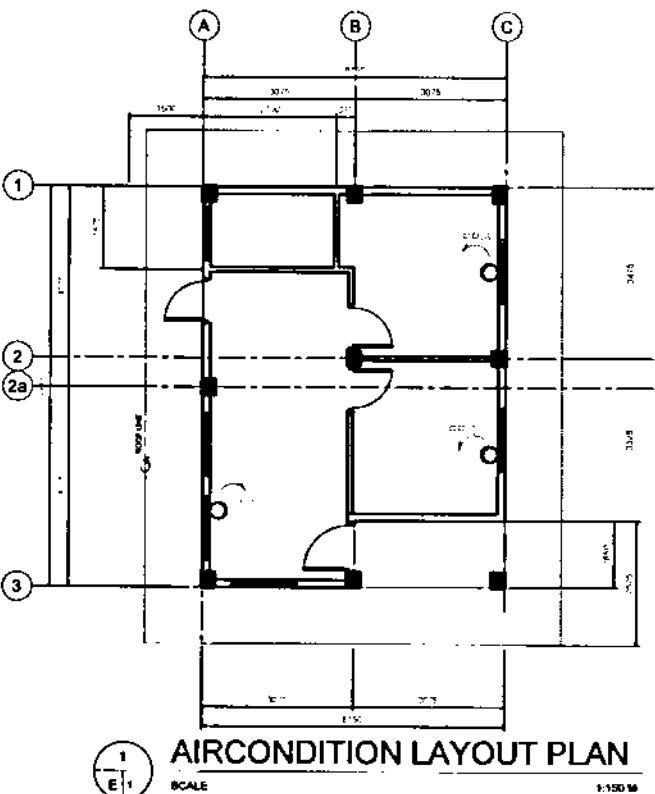
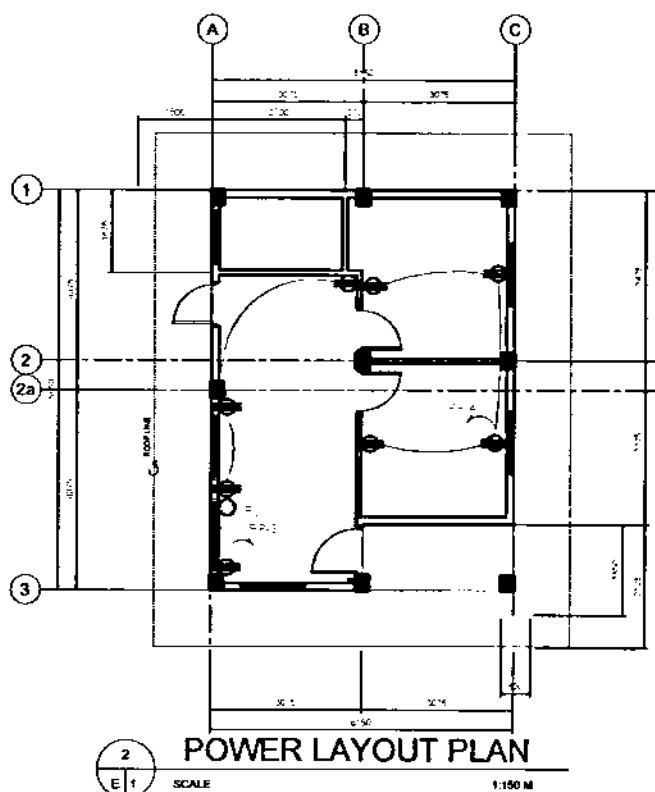
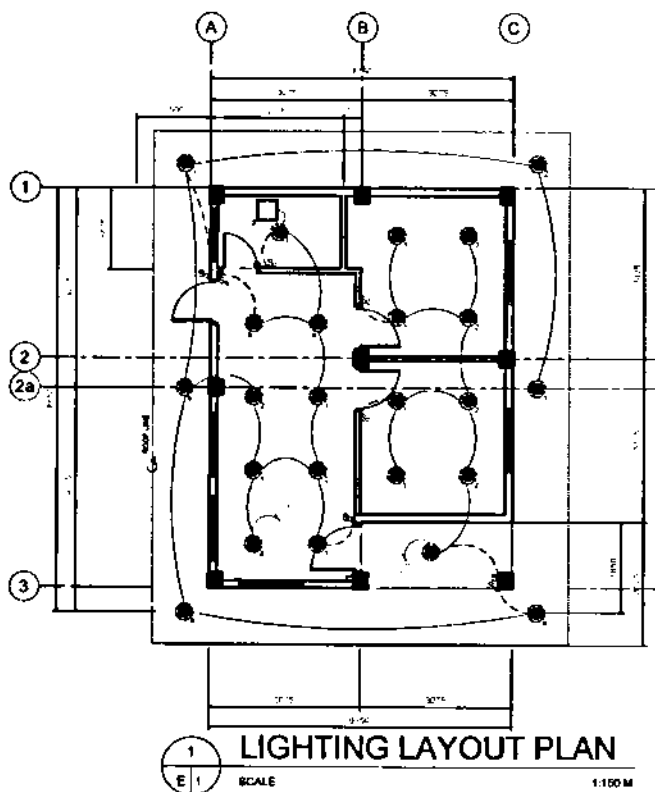


FTB/GIRDER/B EAM SCHEDULE



**TRUSS DIAGRAM**





#### LEGEND:

- VERTICAL DOWNLIGHT RECESSED INTO TYPE WITHOUT QUAD COVER LAMP HOLDER, 220V, E27, 11 WATT LED BULB, DAYLIGHT
- BATHROOM RECESSED CEILING EXHAUST FAN 26 WATT, 220 VOLT, 60 HZ
- ◆ 3-PRONG DUPLEX CONVENIENCE OUTLET WITH GROUNDING
- S ONE GANG SWITCH, 10A
- S<sub>2</sub> TWO GANG SWITCH, 10A, SUBSCRIPT DENOTES LIGHT CONTROL
- S<sub>3</sub> THREE GANG SWITCH, 10A, SUBSCRIPT DENOTES LIGHT CONTROL
- ⊖ WINDOW TYPE, AIR CONDITION OUTLET (INVERTER AC)
- PANEL BOARD (LIGHT / POWER)
- ⊕ CIRCUIT HOMERUN
- ⊗ TELEPHONE / INTERNET CONNECTION PROVIDED BY TELEPHONE COMPANY

#### LP/PP SCHEDULE OF LOAD

LP/PP NO.	LT / PP	LOAD DESCRIPTION	VOLT	CURRENT	WATT, VA	COMPLUT	OKT BRK PROTECTION
1	15	LIGHTING	220	5.97	1313.4	20/10/15	20A/10A
2	2	LED LIGHTING	220	2.45	539.0	20/10/15	20A/10A
3	4	CEILING EXHAUST FAN (BULB)	220	1.77	389.4	20/10/15	20A/10A
4	4	3-PRONG DUPLEX CONVENIENCE OUTLET	220	3.17	697.4	20/10/15	20A/10A
5	1	WIRELESS TYPE A/C UNIT	220	6.16	1355.2	20/10/15	20A/10A
6	1	WIRELESS TYPE A/C UNIT	220	6.16	1355.2	20/10/15	20A/10A
7	1	WIRELESS TYPE A/C UNIT	220	6.16	1355.2	20/10/15	20A/10A
8	1	WIRELESS TYPE A/C UNIT	220	6.16	1355.2	20/10/15	20A/10A
9	1	WIRELESS TYPE A/C UNIT	220	6.16	1355.2	20/10/15	20A/10A
10	1	WIRELESS TYPE A/C UNIT	220	6.16	1355.2	20/10/15	20A/10A
11	1	WIRELESS TYPE A/C UNIT	220	6.16	1355.2	20/10/15	20A/10A
MAIN DISCONNECTIVE PANEL (MDP)			220	40.00	8800.0	20/10/15	20A/10A

#### GENERAL NOTES AND SPECIFICATIONS:

- ALL WORKS SHALL BE IN ACCORDANCE WITH THE PLANS & SPECIFICATION AND SHALL COMPLY WITH THE PROVISION OF THE LATEST EDITION OF THE PHILIPPINE ELECTRICAL CODE, LAWS, ORDINANCES, RULES AND REGULATIONS OF LOCALITY HAVING JURISDICTION OVER THE PROJECT REQUIREMENTS OF POWER COMPANY CONCERNED.
- VOLTAGES SHALL BE 220 VOLTS, 60 HERTZ, SINGLE PHASE, 2 WIRES.
- THE JOB SHALL BE EXECUTED IN THE MOST THOROUGH MANNER, EMPLOYING STANDARD TOOLS, EQUIPMENT AND ENGINEERING GOOD PRACTICES.
- ALL MATERIALS TO BE USED SHALL BE NEW AND APPROVED TYPE FOR BOTH PURPOSED AND LOCATION INTENDED.
- ALL ELECTRICAL WORKS HEREIN SHALL BE DONE UNDER THE DIRECT SUPERVISION OF DULY LICENSED ELECTRICAL ENGINEER.
- COORDINATE WITH THE LOCAL COOPERATIVE AND VERIFY WHETHER AN UPGRADE ON THE ELECTRIC METER IS NECESSARY.

PHILIPPINE  
PORTS  
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PROJECT TITLE

PROPOSED FIELD OFFICE

#### SHEET CONTENTS

- LIGHTING LAYOUT PLAN
- POWER LAYOUT PLAN
- AIR CONDITION LAYOUT PLAN
- GENERAL
- SCHEDULE OF LOAD
- GENERAL NOTES

#### SCALE

AS SHOWN

SHEET NO.  
E-01 of 01

DATE  
JUNE 2021

## GENERAL NOTES AND SPECIFICATIONS:

- IT IS NOT INTENDED THAT THE DRAWINGS SHALL SHOW EVERY PIPE FITTING, VALVE AND APPURTENANCE. ALL SUCH ITEMS WHETHER SPECIFICALLY MENTIONED OR NOT, OR INDICATED ON THE DRAWINGS SHALL BE FURNISHED AND INSTALLED IF NECESSARY TO COMPLETE THE SYSTEM TO THE SATISFACTION OF THE OWNER.
- ALL PLUMBING WORKS SHALL BE INSTALLED IN ACCORDANCE WITH THE PROVISION OF THE NATIONAL PLUMBING CODE OF THE PHILIPPINES, THE REQUIREMENTS OF THE LOCAL PLUMBING INSPECTION OFFICE, PERTINENT PROVISIONS OF THE UNIFORM BUILDING CODE AND THE NATIONAL BUILDING CODE OF THE PHILIPPINES.
- COORDINATE THE DRAWING WITH OTHER RELATED DRAWINGS AND SPECIFICATION. THE ARCHITECT SHALL BE NOTIFIED IMMEDIATELY OF ANY DISCREPANCY FOUND THEREIN.
- ALL PIPES SHALL BE INSTALLED AS INDICATED ON PLANS. ANY RELOCATIONS REQUIRED FOR PROPER EXECUTION OF OTHER TRADE SHALL BE WITH PRIOR APPROVAL OF THE ARCHITECT OR ENGINEER.
- PROPOSED SANITARY UTILITIES SHALL CONFORM TO THE ACTUAL LOCATION, DEPTH AND INVERT ELEVATION OF ALL EXISTING PIPES AND STRUCTURES AS VERIFIED BY THE CONTRACTOR.
- ALL SLOPES FOR HORIZONTAL DRAINAGE SHALL MAINTAIN 1% UNLESS OTHERWISE SPECIFIED.
- SIZE OF WATER SUPPLY PIPES TO FIXTURES SHALL BE IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.
- THE CONTRACTOR SHALL VERIFY ALL EXISTING UTILITIES AT THE SITE, COORDINATE THE WORKS WITH THE SEWER LINE EFFLUENT DISPOSAL POINT AND WATER LINE SERVICE CONNECTING POINT, UNLESS OTHERWISE POINT AND WATER LINE SERVICE CONNECTING POINT, UNLESS OTHERWISE SPECIFIED.
- ALL FIXTURES SHALL BE INDIVIDUALLY VENTED.
- THE INVERT OF THE INLET PIPE OF A SEPTIC TANK SHALL BE AT A LEVEL NOT LESS THAN 50.8mm (2") ABOVE THE INVERT OF THE OUTLET PIPE.
- TO PREVENT CONTAMINATION OF UNDERGROUND WATER SOURCE NO SEPTIC TANK SHALL BE CONSTRUCTED LESS THAN 1.20m ABOVE THE WATER TABLE LEVEL.
- ALL PIPE SIZE ARE IN MILLIMETERS AND ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SPECIFIED.
- ALL PLUMBING INSTALLATION INCLUDED HEREIN SHALL BE UNDER THE DIRECT SUPERVISION OF A DULY REGISTERED AND LICENSED MASTER PLUMBER.
- ALL PIPE SIZES AND OTHER DIMENSIONS ARE IN MILLIMETER (MM) UNLESS OTHERWISE SPECIFIED.
- ALL PIPE SIZES INDICATED ARE NOMINAL SIZES.

### SCHEDULE OF PIPE (WATER LINE)

ABV.	SIZE OF PIPE (mm)	TYPE OF PIPE
WATER CLOSET	WC	PPR
LAVATORY	LAV	PPR
URINAL	UR	PPR
KITCHEN SINK	KS	PPR

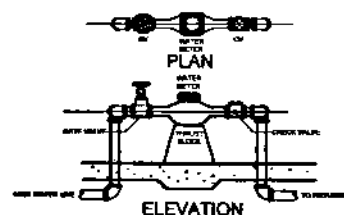
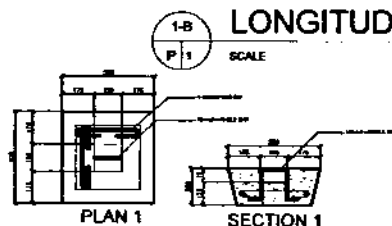
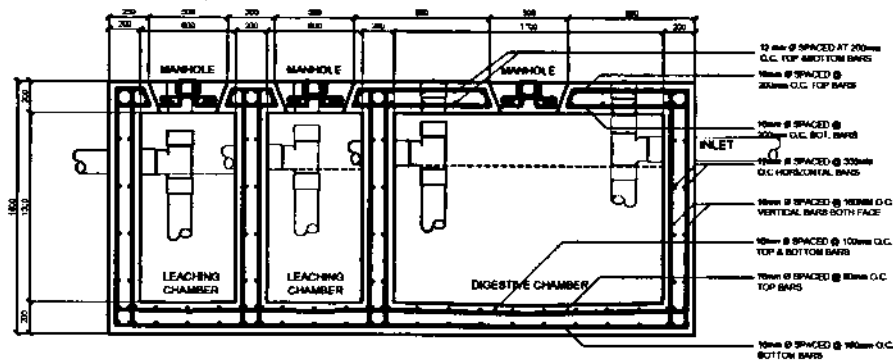
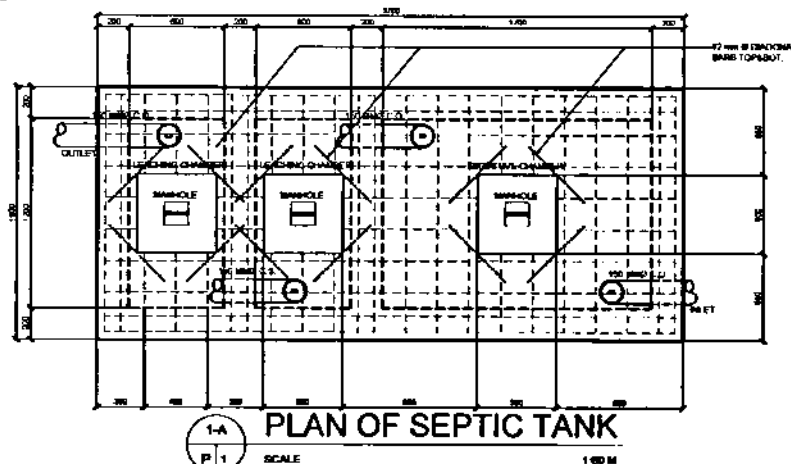
## MATERIAL SPECIFICATIONS:

COLD WATER LINE-	SHALL BE POLYPROPYLENE RANDOM (PPR) TYPE 3 PIPE, "WAVIN EKOFLLASTIK" BRAND OR APPROVED EQUAL.
VENT PIPES-	SHALL BE POLYVINYL CHLORIDE (PVC) PIPE SERIES 1000, "NELTEX", "ATLANTA" BRAND OR APPROVED EQUAL.
FITTING-	SHALL BE SOLVENT CEMENT JOINT TO ASTM D2554.
SEWER LINES-	SHALL BE POLYVINYL CHLORIDE (PVC) PIPE SERIES 1000, "NELTEX", "ATLANTA" BRAND OR APPROVED EQUAL. D2554.
BOTTOM DRAINAGE LINES- DOWNSPOUT	SHALL BE POLYVINYL CHLORIDE (PVC) SERIES 1000, "ATLANTA" BRAND OR APPROVED EQUAL. FITTING SHALL BE SOLVENT CEMENT JOINT TO ASTM D 2554. 250MM & ABOVE MATERIAL SHALL BE CONCRETE DRAIN PIPE (CDP) TONGUE FOR 300MM & LARGER.
AIR/PCU LINES-	SHALL BE POLYVINYL CHLORIDE (PVC) PIPE SERIES 600 II, "NELTEX", "ATLANTA" BRAND OR APPROVED EQUAL.
CHECK VALVES-	"GREAT VOLUME", "CRANE", "KITS", OR APPROVED EQUAL.
GATE VALVES-	"GREAT VOLUME", "CRANE", "KITS", OR APPROVED EQUAL.
WATER METER-	"ARAD", "ASAHI" BRAND OR APPROVED EQUAL.

### SCHEDULE OF PIPE (SEWER LINE)

ABV.	SIZE OF PIPE (mm)	TYPE OF PIPE
WATER CLOSET	WC	PVC (SERIES 1000)
LAVATORY	LAV	PVC (SERIES 1000)
URINAL	UR	PVC (SERIES 1000)
KITCHEN SINK	KS	PVC (SERIES 1000)
FLOOR DRAIN	FD	PVC (SERIES 1000)
FLOOR CLEAN-OUT	FCO	SEE PLAN
DRAIN-OUT	DO	SEE PLAN
CLEAN-OUT	CO	SEE PLAN
VENT STACK THRU ROOF	VSTR	PVC (SERIES 1000)
SEWER LINE (COL. PIPE)	SP	SEE PLAN

## SEPTIC TANK DETAILS



### MANHOLE COVER DETAILS

### WATER METER DETAILS

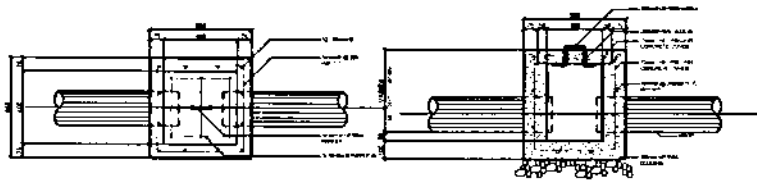


PROJECT TITLE:

PROPOSED FIELD OFFICE

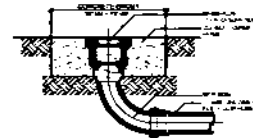
SHEET CONTENTS:  
 • DETAILS OF SEPTIC TANK  
 • SEPTIC TANK MANHOLE DETAILS  
 • DETAILS OF WATER METER  
 • GENERAL NOTES AND SPECIFICATIONS  
 • MATERIAL SPECIFICATIONS  
 • SCHEDULE OF PIPE (WATER LINE)  
 • SCHEDULE OF PIPE (SEWER LINE)

SCALE:  
 AS SHOWN  
 SHEET NO.  
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1 CATCH BASIN DETAILS

SCALE 1:40 M



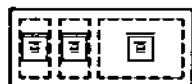
2 CLEAN-OUT DETAIL

SCALE NTS



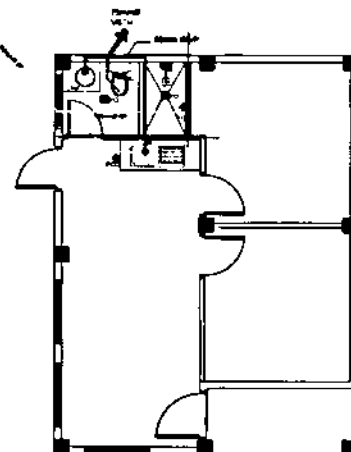
3 PIPE TRENCH BEDDING

SCALE NTS



SCHEDULE OF PIPE (SEWER LINE)

NO.	SIZE OF PIPE (mm)	TYPE OF PIPE
WATER CLOSET	100	PVC (SERIES 1000)
LAVATORY	50	PVC (SERIES 1000)
URINAL	50	PVC (SERIES 1000)
KITCHEN SINK	50	PVC (SERIES 1000)
FLOOR DRAIN	50	PVC (SERIES 1000)
FLOOR CLEAN-OUT	50	PVC (SERIES 1000)
DOWN SPOUT	50	PVC (SERIES 1000)
CLEAN-OUT	50	PVC (SERIES 1000)
VENT STACK THRU ROOF	100	PVC (SERIES 1000)
SEWER LINE (SOL. PIPE)	100	PVC (SERIES 1000)

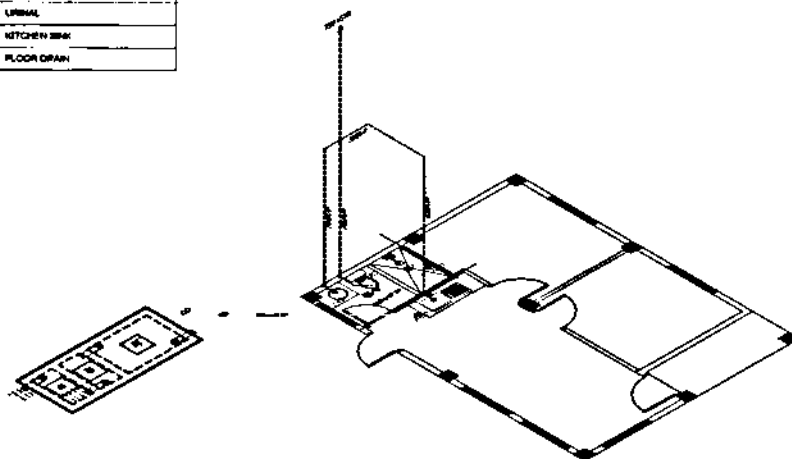


LEGENDS

100mm Ø	100mm Ø PVC Sanitary pipe
150mm Ø	150mm Ø PVC Sanitary pipe
50mm Ø	50mm Ø PVC VENT pipe
POD 50	FLOOR CLEAN-OUT
CO 50	CLEAN-OUT
WC	WATER CLOSET
L	LAVATORY
U	URINAL
K	KITCHEN SINK
F	FLOOR DRAIN

4 SANITARY SEWAGE LAYOUT

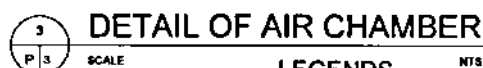
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5 ISOMETRIC SANITARY SEWAGE LAYOUT

SCALE 1:150 M















	REV.	SIZE OF PIPE (mm)	TYPE OF PIPE
WATER CLOSET	WC	25	PVC
LAVATORY	LAV	25	PVC
SHOWER WITH FAUCET	SHO-FC	25	PVC
KITCHEN SINK	KS	20	PVC

## LEGENDS

NTS

	25MM Ø PVC FIXTURE SUPPLY
	32MM Ø PVC FIXTURE SUPPLY
	GATE VALVE
	CHECK VALVE
	WATER METER
	AIR CHAMBER
	WATER CLOSET
	URINAL
	SHOWER
	HOT WATER TANK

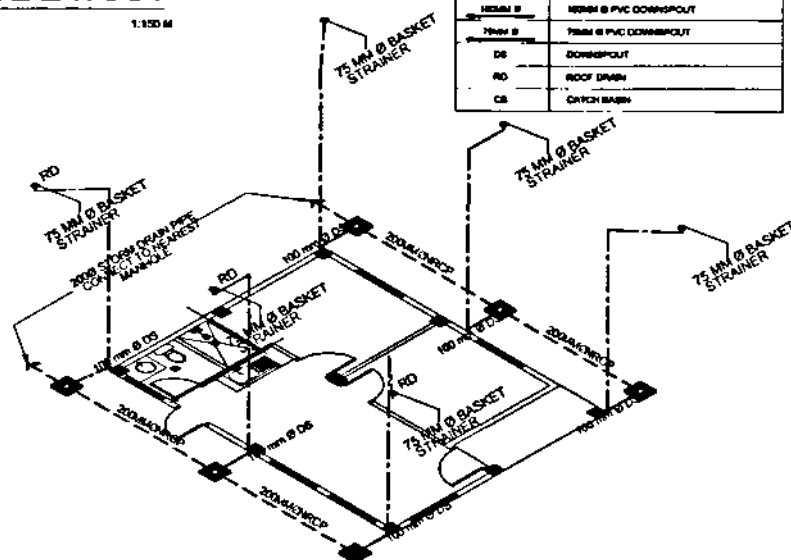
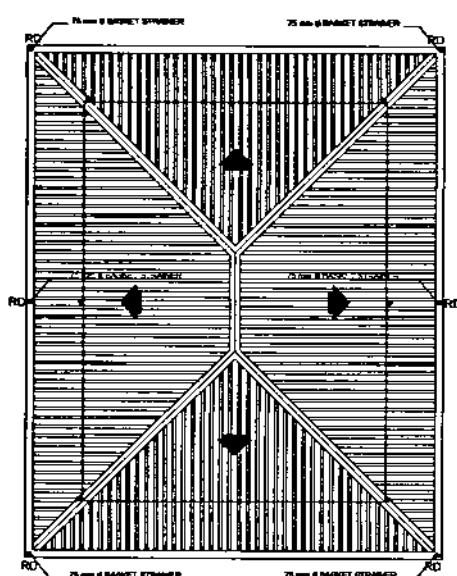


TABLE 2	200MM Ø NON REINFORCED CONCRETE PIPE
TABLE 3	150MM Ø PVC DOWNSPOUT
TABLE 4	75MM Ø PVC DOWNSPOUT
DE	DOWNSPOUT
RO	ROOF DRAIN
CS	CATCH BASIN



**MINIMUM MAJOR EQUIPMENT REQUIREMENTS**

1	unit/s	Air Compressor (250 cfm, minimum), owned ✓
1	unit/s	Backhoe (0.40 cu.m., 94.30hp, minimum), owned ✓
1	unit/s	Concrete cutter, owned ✓
2	unit/s	Concrete Mixer (1 bagger, minimum), owned ✓
1	unit/s	Concrete bucket, owned ✓
2	unit/s	Concrete Vibrator (3.5 hp, minimum), owned ✓
1	unit/s	Crane Barge (319 GW, minimum) with 60T crane, owned ✓
1	unit/s	Crawler Crane (60T, minimum), owned ✓
1	unit/s	Crawler Crane (30T, minimum), owned/leased ✓
1	unit/s	Pile Hammer (Diesel, 10,500 kg.m.) or its equivalent, owned ✓
1	unit/s	Drop Hammer (2T, minimum), owned ✓
1	unit/s	Dump Truck (8 cu.m., minimum), owned ✓
2	unit/s	Bar Bender (electric, 25mm dia min.), owned ✓
2	unit/s	Bar Cutter (electric, 25mm dia min.), owned ✓
1	unit/s	Jackhammer, owned ✓
1	unit/s	Oxy/Acetylene cutting outfit, owned ✓
1	unit/s	Payloader (80 hp, minimum), owned ✓
1	unit/s	Plate Compactor (5 hp, minimum), owned ✓
2	unit/s	Transit Mixer (5-6 cu.m. cap., minimum), owned/leased ✓
1	unit/s	Tugboat (500hp, minimum), owned/leased ✓
1	unit/s	Water Truck with pump (1,000 gal., minimum), owned ✓
1	unit/s	Welding Machine (400 amp., minimum), owned ✓
1	unit/s	Cargo Truck (5T, minimum), owned ✓

## CONSTRUCTION SAFETY AND HEALTH REQUIREMENT

The Contractor shall implement the construction safety and health program in accordance with the applicable provisions of the Occupational Safety and Health Standards (OSHS) of the Department of Labor and Employment (DOLE).

The Contractor, subject to the approval of the Engineer shall provide and maintain throughout the duration of the contract a medical room with at least 15 square meters together with all necessary supplies to be sited in the Contractor's main area.

The Contractor shall provide the following minimum requirements:

### LABOR

1	no.	Safety Engineer / Officer
1	no.	Nurse / Health Officer

### EQUIPMENT / MATERIALS

#### Personnel Protective Equipment

31	pcs.	Hard Hats
31	pairs	Gloves (rubberized)
31	pcs.	Safety Glasses/Goggles (clear)
62	pcs.	Long sleeve T-shirt
4	pc.	Aprons
4	pc.	Safety Belts
31	pairs	Safety Shoes
4	sets	Life Lines

#### Safety Devices

1	lot	Barricades
1	lot	Warning signs
2	unit/s	Fire extinguisher (10kg)

Medical and First Aid System	-	Twelve (12) mos.
Temporary shelter for workers	-	1 lot

### NOTE:

The Contractor shall provide the above-cited minimum construction safety and health requirements or as required by the Engineer.

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### REVISED SCHEDULE OF MINIMUM TEST REQUIREMENTS OF CONSTRUCTION MATERIALS FOR PPA INFRASTRUCTURE PROJECTS

<i>Materials/Items of Work</i>	<i>Required Tests</i>	<i>Minimum Incremental Frequency of Tests</i>
<b>I. Construction of Pier/Wharf, Platform and Ramp</b>		
<b>Structural Concrete (SC)</b>		
A Portland Cement	Quality Test	For every 2,000 bags (40kg) or fraction thereof
B Fine Aggregate	Quality Test for Grading, Elutriation (wash), Bulk Specific Gravity, Absorption, Mortar Strength, Soundness, Organic Impurities, Unit Weight, % Clay Lumps and Shale	For every 1,500 cubic meter or fraction thereof
C Coarse Aggregate	Quality Test for Grading, Bulk Specific Gravity, Absorption and Abrasion	For every 1,500 cubic meter or fraction thereof
D Water	Certificate from the Engineer or Quality Test for Density and Chloride Content	One per source
E Steel Bars	Mil Certificate and Quality Test for Chemical Composition and Mechanical Properties	For every 10,000 kg or fraction thereof
F Concrete	Compressive Strength on cylinder samples	1 set consisting of 3 concrete cylinder samples shall be taken from each day's pouring and to represent not more than 75 cu m of concrete or fraction thereof
	Slump Test	For every mix
G Admixture and Concrete Curing Materials	Quality Test	One per shipment
<b>Piling (P)</b>		
A Concrete Piles	Fabrication Report	One per fabrication
1 Concrete	Same test as for SC (F)	Same frequency as SC (F)
2 Steel Bars	Same test as for SC (E)	Same frequency as SC (E)
3 High Tension Strand	Test for Chemical Composition and Mechanical Properties	For every 20000kg or fraction thereof



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Materials/Items of Work	Required Tests	Minimum Incremental Frequency of Tests
4 Coarse Aggregates	Same Test as for SC (C)	Same frequency as SC (C)
5 Fine Aggregates	Same Test as for SC (B)	Same frequency as SC (B)
B Steel Pipe Piles	Fabrication Report, Mill Certificate and Quality Test for Chemical and Mechanical properties	One per fabrication
1 Steel	Chemical Composition (refer below) <ul style="list-style-type: none"> <li>- Under 14" (355 60mm) Outside Diameter</li> <li>- 14" to 36" (355 6 to 914mm) Outside Dia</li> <li>- Over 36" (914mm) Outside Diameter</li> </ul> Mechanical/Tensile	2 from 200 pipe or fraction thereof 2 from 100 pipe or fraction thereof 2 from 3000ft (914m) or fraction thereof One (1) tension test shall be made on one length or fraction thereof of each size, or one piece of skelp representing each lot of 200 lengths or fraction thereof of each size
2 Polyurethane Coating	Mill Certificate and Quality Test	One per fabrication
3 Concrete	Same test as for SC (F)	Same frequency as SC (F)
4 Fine Aggregate	Same test as for SC (B)	Same frequency as SC (B)
5 Coarse Aggregate	Same test as for SC (C)	Same frequency as SC (C)
6 Steel Bars	Same Test as SC (E)	Same frequency as SC (E)
7 Water	Same Test as SC (D)	Same frequency as SC (D)
Rubber Dock Fenders (RDF)	Physical Test Performance Test for Energy Absorption and Reaction Force	All units All units
Accessories		
Washer and Fixing Bolt, Anchor Bolt	Physical Test Quality Test for Chemical Composition and Mechanical Properties	All units One per fabrication

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<b>Materials/Items of Work</b>	<b>Required Tests</b>	<b>Minimum Incremental Frequency of Tests</b>
Mooring Bollard (MB) and Accessories (Hexagon Nuts, Plain Washer, Anchor Ring and Anchor Bolt)	Physical Test  Quality Test for Chemical Composition and Mechanical Properties	All Units  One per fabrication
<b>II. Construction of Back-Up Area, Causeway and Pavement</b>		
Sheet Piling (SP)		
A Concrete Sheet Piles		
1 Concrete	Same test as for SC (F)	Same frequency as SC (F)
2 Steel Bars	Same test as for SC (E)	Same frequency as SC (E)
3 High Tension Strands	Same test as for P (A 3)	Same frequency as P (A 3)
4 Fine Aggregates	Same test as for SC (B)	Same frequency as SC (B)
5 Coarse Aggregates	Same Test as for SC (C)	Same frequency as SC (C)
B Steel Pipe Piles		
1 Steel	Same test as for P (B1)	Same frequency as P (B1)
2 Concrete	Same test as for SC (F)	Same frequency as SC (F)
3 Fine Aggregate	Same test as for SC (B)	Same frequency as SC (B)
4 Steel Bars	Same test as for SC (E)	Same frequency as SC (E)

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<b>Materials/Items of Work</b>	<b>Required Tests</b>	<b>Minimum Incremental Frequency of Tests</b>
Rocks	Test for Apparent Specific Gravity and Abrasion	For every 1,500 cubic meter or fraction thereof
Geotextile Filter	Physical and Mechanical Test Mill Certificate	One per batch One per batch
Sand and Gravel Fill	Quality Test for Organic Impurities and Grading	For every 1,500 cubic meter or fraction thereof
Selected Fill	Quality Test for Grading, Plasticity and Laboratory Compaction Test  Laboratory California Bearing Ratio (CBR)  Field Density Test	For every 1,500 cubic meter or fraction thereof  For every 2,500 cubic meter or fraction thereof  For every layer of 150mm of compacted depth at least one group of three in-situ density test for every 500 sq m or fraction thereof
Aggregate Base Course	Quality Test for Grading and Plasticity  Quality Test for Grading, Plasticity, Abrasion and Laboratory Compaction Test  Laboratory California Bearing Ratio (CBR)  Field Density Test	For every 300 cubic meter or fraction thereof  For every 1,500 cubic meter or fraction thereof  Same frequency as Selected Fill Same frequency as Selected Fill
Portland Cement Concrete Pavement (PCCP)		
A Portland Cement	Same test as for SC (A)	Same frequency as SC (A)
B Fine Aggregate	Same test as for SC (B)	Same frequency as SC (B)
C Coarse Aggregate	Same test as for SC (C)	Same frequency as SC (C)
D Water	Same test as for SC (D)	Same frequency as SC (D)
E Steel Bars (Dowels)	Same test as for SC (E)	Same frequency as SC (E)
F Joint Filler	Quality Test	One (1) per shipment

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<b>Materials/Items of Work</b>	<b>Required Tests</b>	<b>Minimum Incremental Frequency of Tests</b>
G Admixture and Concrete Curing Material	Same test as for SC (G)	Same frequency as SC (G)
H Concrete	Same test as for SC (F) Flexural Test	Same frequency as SC (F) 3 beam samples for every 330 sq m or fraction thereof
I Completed Pavement	Core Test	1 set (3 specimen) for every 2,500 sq m and fraction thereof
Interlocking Concrete Blocks		
A Cement	Same test as for SC (A)	Same frequency as SC (A)
B Fine Aggregate	Same test as for SC (B)	Same frequency as SC (B)
C Coarse Aggregate	Same test as for SC (C)	Same frequency as SC (C)
D Water	Same test as for SC (D)	Same frequency as SC (D)
E Admixture & Concrete Curing Materials	Same test as for SC (G)	Same frequency as SC (G)
F Completed Blocks	Physical Test and Compressive Strength	6 blocks per day of fabrication
Cement Treated Base Course (CTB)		
A Portland Cement	Same test as for SC (A)	Same frequency as SC (A)
B Fine & Coarse Aggregates	Quality Test for Grading, Abrasion and Soundness	For every 1,500 cubic meter or fraction thereof
C Water	Same test as for SC (D)	Same frequency as SC (D)
D Completed CTB	Field Density Test	For every layer of 150mm of compacted depth at least one group of three in-situ density test every 500 sq m or fraction thereof
Retaining Wall/Coping Wall/RC Curb/RC Ditch/Shear Key/Concrete Blocks/Lean Concrete		
A Portland Cement	Same test as for SC (A)	Same frequency as SC (A)
B Fine Aggregate	Same test as for SC (B)	Same frequency as SC (B)

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<b>Materials/Items of Work</b>	<b>Required Tests</b>	<b>Minimum Incremental Frequency of Tests</b>
C Coarse Aggregates	Same test as for SC (C)	Same frequency as SC (C)
D Water	Same test as for SC (D)	Same frequency as SC (D)
E Steel Bars	Same test as for SC (E)	Same frequency as SC (E)
F Admixture and Concrete Curing	Same test as for SC (G)	Same frequency as SC (G)
G Concrete	Same test as for SC (F)	Same frequency as SC (F)
Tie Rod		
A Steel	Same test as for SC (E)	One per batch
B Assembly	Performance Test (Tension)	One per batch
Tie Bars and Dowels	Same test as for SC (E)	For every 10,000 kg or fraction thereof per Tie bars and Dowels
Pipe Culverts and Storm Drains		
A Pipes	Test for Strength, Absorption and Physical	For every 50 pieces
B Mortar or Joint	Same Test as for SC (A,B and D) Alternative Test Same test as for SC (F) and Inspection Report	For every 25 pieces
Concrete Hollow Blocks		
A Portland Cement	Same test as for SC (A)	Same frequency as SC (A)
B Fine Aggregates	Same test as for SC (B)	Same frequency as SC (B)
C Water	Same test as for SC (D)	Same frequency as SC (C)
D Concrete	Same test as for SC (F)	Same frequency as SC (F)
E Completed CHB	Quality Test	One for every 500 pieces or fraction thereof
Construction Joints (CJ)		
A Angle Bars	Test for Physical and Mechanical Properties	One per batch
B Steel Bars	Same test as for SC (E)	One per batch
C Zinc (Hot Dip Galvanizing) Coatings	Physical Test for Appearance, Stripping, Weighing, Adherence and Adhesion  Coating Thickness Magnetic Thickness Measurement	All units  1 set (3 specimen) for every 100,000 sq mm or fraction thereof

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<b>Materials/Items of Work</b>	<b>Required Tests</b>	<b>Minimum Incremental Frequency of Tests</b>
<b>Sacked Concrete</b>		
A Cement	Same test as for SC (A)	Same frequency as SC (A)
B Fine Aggregates	Same test as for SC (B)	Same frequency as SC (B)
C Coarse Aggregates	Same test as for SC (C)	Same frequency as SC (C)
D Water	Same test as for SC (D)	Same frequency as SC (D)
E Concrete	Same test as for SC (F)	Same frequency as SC (F)
F Sack (jute)	Physical Test	One for every 50 pieces
<b>Rubble Concrete</b>		
A Cement	Same test as for SC (A)	Same frequency as SC (A)
B Fine Aggregates	Same test as for SC (B)	Same frequency as SC (B)
C Coarse Aggregates	Same test as for SC (C)	Same frequency as SC (C)
D Water	Same test as for SC (D)	Same frequency as SC (D)
E Concrete	Same test as for SC (F)	Same frequency as SC (F)
F Rocks	Same test as for ROCKS	Same frequency as ROCKS
<b>Earthworks</b>		
A Sub-grade preparation	Grading Test Plasticity Test (LL, PL, PI) Laboratory Compaction Test  Density Test	For every 1,500 cubic meter or fraction thereof  For every layer of 150mm of compacted depth at least one group of three in-situ density test every 500 sq m or fraction thereof
B Structure Excavation	If excavated materials shall be used as Backfill Grading Test Plasticity Test (LL, PL, PI) Laboratory Compaction Test  Density Test	For every 1,500 cubic meter or fraction thereof  For every layer of 150mm of compacted depth at least one group of three in-situ density test every 500 sq m or fraction thereof

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<b>Materials/Items of Work</b>	<b>Required Tests</b>	<b>Minimum Incremental Frequency of Tests</b>
<b>III Port Operations Building/Passenger Terminal Building/Transit Shed/Warehouse</b>		
<b>STRUCTURAL WORKS</b>		
Refer to Structural Concrete (SC) and Piling Works (P)		
<b>ARCHITECTURAL WORKS</b>		
Ceramic – Filled Liquid Membrane / Water Proofing, Hydrophobic Poreblocking Ingredients with Superplasticizer	Physical Property, Mechanical and Chemical Property, Leak Test / Flood Test	One per shipment
Paint	Quality Test	One 4-L can for every 100 cans or fraction thereof
Ceramic Tile	Inspection and Evaluation Report from the Engineer	One per shipment
Stainless Steel	Inspection and Evaluation Report from the Engineer	One per shipment
Roofing Materials	Inspection and Evaluation Report from the Engineer	One per shipment
Ceiling Materials	Inspection and Evaluation Report from the Engineer	One per shipment
<b>ELECTRICAL AND MECHANICAL WORKS</b>		
Wires / Cables	Inspection and Evaluation Report from the Engineer Testing and Commissioning	One per shipment
Electrical Devices	Inspection and Evaluation Report from the Engineer Testing and Commissioning	One per shipment
Fire Alarm System	Inspection and Evaluation Report from the Engineer Testing and Commissioning	One per item
Wiring Devices	Inspection and Evaluation Report from the Engineer Testing and Commissioning	One per shipment

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Materials/Items of Work	Required Tests	Minimum Incremental Frequency of Tests
Protective Devices	Inspection and Evaluation Report from the Engineer Testing and Commissioning	One per shipment
Telephone System	Inspection and Evaluation Report from the Engineer Testing and Commissioning	One per item
CCTV System	Inspection and Evaluation Report from the Engineer Testing and Commissioning	One per item
CATV System	Inspection and Evaluation Report from the Engineer Testing and Commissioning	One per item
Background Music and Paging System	Inspection and Evaluation Report from the Engineer, Testing and Commissioning	One per item
Air Conditioning Units & Ventilation	Inspection and Evaluation Report from the Engineer Testing and Commissioning	One per item
Conduit Pipes	Inspection and Evaluation Report from the Engineer Testing and Commissioning	One per item
Lighting Fixtures	Inspection and Evaluation Report from the Engineer Testing and Commissioning	One per item
<b>PLUMBING WORKS</b>		
Pipes	Inspection and Evaluation Report from the Engineer Testing and Commissioning	One per item



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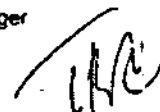
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Materials/Items of Work	Required Tests	Minimum Incremental Frequency of Tests
Fixtures	Inspection and Evaluation Report from the Engineer  Testing and Commissioning	One per item
Pipe Culverts	Compression Strength  Inspection and Evaluation Report from the Engineer	For every size not more than 25 pipes cast in the field
<b>IV Miscellaneous Materials</b> Fencing A Barbed Wire, Cyclone Wire Mesh, Chain Link B Concrete Post	Physical Test (Dimensions and Coatings)  Refer to Superstructure (SC)	One per Batch  Refer to Superstructure (SC)
Lamp Post A Structural Steel B Zinc (Hot Dip Galvanizing) Coatings	Physical Test (Dimensions) Same test as for SC (E)  Same test as for CJ (C)	All units  One per batch
Drainage Steel Grating	Same test as for SC (E)  Inspection Report	One (1) batch
Metal Pipe (Cast Iron Galvanized, etc.)	Physical Test (Dimensions and Coatings)	1 per delivery
Welding Works	Destructive and Non Destructive Test	One (1) per lot

- NOTES**
1. Testing of RDF shall be performed only by an independent Testing Laboratory duly accredited by BRS, DOST and PPA
  2. Testing of other materials shall be performed only by an independent Testing Laboratory duly accredited by BRS and PPA.
  3. All other issuances which are otherwise inconsistent herewith are hereby revoked or otherwise amended.

Approved

  
**RAUL T. SANTOS**  
Officer-In-Charge,  
Office of the General Manager



## ***SECTION IX***

# ***CHECKLIST OF TECHNICAL AND FINANCIAL DOCUMENTS***

# Checklist of Technical and Financial Documents

## I. TECHNICAL COMPONENT ENVELOPE

### *Class "A" Documents*

#### Legal Documents

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

#### Technical Documents

- ☐ (b) Statement of the prospective bidder of all its ongoing government and private contracts, including contracts awarded but not yet started, if any, whether similar or not similar in nature and complexity to the contract to be bid; and
- ☐ (c) Statement of the bidder's Single Largest Completed Contract (SLCC) similar to the contract to be bid, except under conditions provided under the rules; and
- ☐ (d) Special PCAB License in case of Joint Ventures; and registration for the type and cost of the contract to be bid; and
- ☐ (e) Original copy of Bid Security. If in the form of a Surety Bond, submit also a certification issued by the Insurance Commission;  
or  
Original copy of Notarized Bid Securing Declaration; and
- ☐ (f) Project Requirements, which shall include the following:
  - ☐ a. Organizational chart for the contract to be bid;
  - ☐ b. List of contractor's key personnel (e.g., Project Manager, Project Engineers, Materials Engineers, and Foremen), to be assigned to the contract to be bid, with their complete qualification and experience data;
  - ☐ c. List of contractor's major equipment units, which are owned, leased, and/or under purchase agreements, supported by proof of ownership or certification of availability of equipment from the equipment lessor/vendor for the duration of the project, as the case may be; and
- ☐ (g) Original duly signed Omnibus Sworn Statement (OSS); and if applicable, Original Notarized Secretary's Certificate in case of a corporation, partnership, or cooperative; or Original Special Power of Attorney of all members of the joint venture giving full power and authority to its officer to sign the OSS and do acts to represent the Bidder.

**Financial Documents**

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

***Class "B" Documents***

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

**II. FINANCIAL COMPONENT ENVELOPE**

- ☐ (j) Original of duly signed and accomplished Financial Bid Form; and

***Other documentary requirements under RA No. 9184***

- ☐ (k) Original of duly signed Bid Prices in the Bill of Quantities; and
- ☐ (l) Duly accomplished Detailed Estimates Form, including a summary sheet indicating the unit prices of construction materials, labor rates, and equipment rentals used in coming up with the Bid; and
- ☐ (m) Cash Flow by Quarter.

***SECTION X***  
***BIDDING FORM***

## Bid Form for the Procurement of Infrastructure Projects

*[shall be submitted with the Bid]*

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### BID FORM

Date : \_\_\_\_\_  
Project Identification No. : \_\_\_\_\_

To: **Philippine Ports Authority**  
PPA Building, Bonifacio Drive,  
South Harbor, Port Area, Manila

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

- a. We have no reservation to the PBDs, including the Supplemental or Bid Bulletins, for the Procurement Project: **Romblon Port Expansion Project, Port of Romblon, Romblon;**
- b. We offer to execute the Works for this Contract in accordance with the PBDs;
- c. The total price of our Bid in words and figures, excluding any discounts offered below is: \_\_\_\_\_;
- d. The discounts offered and the methodology for their application are: \_\_\_\_\_;
- e. The total bid price includes the cost of all taxes, such as, but not limited to: *[specify the applicable taxes, e.g. (i) value added tax (VAT), (ii) income tax, (iii) local taxes, and (iv) other fiscal levies and duties]*, which are itemized herein and reflected in the detailed estimates,
- f. Our Bid shall be valid within the period stated in the PBDs, and it shall remain binding upon us at any time before the expiration of that period;
- g. If our Bid is accepted, we commit to obtain a Performance Security in the amount of \_\_\_\_\_ percent of the Contract Price for the due performance of the Contract, or a Performance Securing Declaration in lieu of the the allowable forms of Performance Security, subject to the terms and conditions of issued GPPB guidelines<sup>1</sup> for this purpose;
- h. We are not participating, as Bidders, in more than one Bid in this bidding process, other than alternative offers in accordance with the Bidding Documents;
- i. We understand that this Bid, together with your written acceptance thereof

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<sup>1</sup> currently based on GPPB Resolution No. 09-2020

included in your notification of award, shall constitute a binding contract between us, until a formal Contract is prepared and executed; and

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

Name: \_\_\_\_\_

Legal Capacity: \_\_\_\_\_

Signature: \_\_\_\_\_

Duly authorized to sign the Bid for and behalf of: \_\_\_\_\_

Date: \_\_\_\_\_

**STATEMENT OF THE BIDDER'S ALL ONGOING GOVERNMENT AND PRIVATE CONTRACTS, INCLUDING CONTRACTS AWARDED BUT NOT YET STARTED**

I hereby declare that all ongoing contracts, including awarded contracts yet to be started coinciding with the contract to be bid are listed below:

Name of outstanding Contracts 1]	Owner's Name and Address	Scope of Work 2]	Contractor's Role and Percentage of Participation 3]	Total Contract Amount or Value 4]	Date of Contract and NOA 5]	Value of Outstanding Works 6]	Accomplishment (in percentage, %) 7]		Contract Duration 8]	
							Planned	Actual	Start of Project	Estimated Completion Date
A) Government Contracts i. On-going ii. Awarded but not yet started  B) Private Contracts i. On-going ii. Awarded but not yet started										

**NOTE:**

- 1] As appearing in the contract executed by the parties.
- 2] With special reference to the Scope of Works of the Project as described/enumerated in the Contract.
- 3] Indicate the percentage of participation and whether as Sole Contractor, Sub-Contractor or Member in a Joint Venture / Consortium.
- 4] Indicate the FOREX used if Contract Value is expressed in a currency other than the Philippine Peso.
- 5] As appearing in the Contract and Notice of Award (NOA).
- 6] Amount or value of all outstanding or uncompleted portions of the projects under ongoing contracts, including awarded contracts yet to be started coinciding with the contract to be bid.
- 7] Percentage of Accomplishment as of the preceding month which should not be earlier than two (2) months from the date of bid submission.
- 8] As appearing in the Notice to Proceed and Contract.

This Statement shall be supported by:

- a) Notice of Award
- b) Notice to Proceed and Contract

\_\_\_\_\_  
Name of Firm

\_\_\_\_\_  
Name of Bidder/Authorized Representative  
(Signatory's Legal Capacity)

\_\_\_\_\_  
Date

Revised: September 2021



**STATEMENT OF THE BIDDER'S SINGLE LARGEST COMPLETED CONTRACT (SLCC) SIMILAR TO THE CONTRACT TO BE BID**

Name of the completed Contract  1]	Owner's Name and Address	Scope of Work  2]	Contractor's Role and Percentage of Participation  3]	Total Contract Value At 4]			Date of Award  5]	Contract Duration 6]	
				Award	Completion	Escalated Value to Present Prices		Start	Completed

**NOTE :**

- 1) As appearing in the contract executed by the parties.  
 2) With special reference to the Scope of Works of the Project as described/enumerated in the Contract.  
 3) Indicate the percentage of participation and whether as Sole Contractor, Sub-Contractor or Member in a Joint Venture / Consortium.  
 4) Indicate the FOREX used if Contract Value is expressed in a currency other than the Philippine Peso. Attached the computation for the escalated contract value.  
 5) As appearing in the Notice of Award.  
 6) As appearing in the Notice to proceed and Certificate of Completion.

- A. The bidder must have an experience of having completed a SLCC that is similar to the contract to be bid equivalent to at least fifty percent (50%) of the ABC, adjusted if necessary, by the Bidder to current prices using the PSA consumer price indices. A contract is considered to be "similar" to the contract to be bid if it has the same Major Categories of Work as stated in the Bid Data Sheet (BDS).
- B. This Statement shall be supported by:
- Notice of Award, Notice to Proceed and Contract.
  - Project Owner's Certificate of Final Acceptance Issued by the owner and/ or Constructors Performance Evaluation System (CPES) Final Rating, which must be at least Satisfactory. The said Certificate of Acceptance shall contain the following: 1) Name of project owner that issued the certificate, 2) Name of Contractor/ Constructor, 3) Name of Contract, and 4) Contract Duration.
  - Recapitulation or Final Bill of Quantities.

\_\_\_\_\_  
Name of Firm\_\_\_\_\_  
Name of Bidder/Authorized Representative  
(Signatory's Legal Capacity)\_\_\_\_\_  
Date

Revised: September 2021

**STATEMENT OF THE BIDDER'S EXPERIENCE ON MAJOR CATEGORIES OF WORK OF THE SLCC INCLUDING OTHER COMPLETED CONTRACTS  
SIMILAR TO THE CONTRACT TO BE BID**

Major Categories of Work 1]	Unit of Measure 1]	Quantity 1]	SLCC similar to the contract to be bid 2]	Other completed contracts similar to the contract to be bid 2]				Unit of Measure 2]	Quantity 2]
			Name of the contract	Name of the contract	Name of the contract	Name of the contract			
1. Pile Driving works (off-shore)	I.m.	4,097							
2. Reinforced Concrete Works	cu.m.	465							

**NOTE:**

1] As stated in the Bid Data Sheet.

2] As appearing in the Recapitulation and/ or Final Bill of Quantities.

This statement shall be supported by:

a. Notice of Award, Notice to Proceed and Contract.

b. Project Owner's Certificate of Final Acceptance issued by the owner and/ or Constructors Performance Evaluation System (CPES) Final Rating, of at least satisfactory. The said Certificate of Acceptance shall contain the following: 1) Name of project owner that issued the certificate, 2) Name of Contractor/Constructor, 3) Name of Contract, and 4) Contract Duration.

c. Recapitulation and/ or Final Bill of Quantities.

\_\_\_\_\_  
Name of Firm

\_\_\_\_\_  
Name of Bidder/Authorized Representative  
Signatory's Legal Capacity

\_\_\_\_\_  
Date

Revised: September 2021

## FINANCIAL DATA

- A. The prospective bidder's audited Financial Statements, showing, among others, the prospective bidder's total and current assets and liabilities, stamped "RECEIVED" by the Bureau of Internal Revenue (BIR), or its duly accredited and authorized institutions, for the preceding calendar year which should not be earlier than two (2) years from the date of bid submission.

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

- B. The computation of the bidders Net Financial Contracting Capacity (NFCC) must be at least equal to the ABC to be bid, as follows:

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

NFCC = \_\_\_\_\_

Attached herewith are certified true copies of the audited financial statements stamped received by the BIR or BIR authorized collecting agent for the latest/immediately preceding calendar year.

\_\_\_\_\_  
Name of Firm/Applicant

\_\_\_\_\_  
Authorized Signing Official

Date: \_\_\_\_\_

**NOTES:**

If Partnership or Joint Venture, each Partner or Member Firm of Joint venture shall submit separate financial statements.

### STATEMENT OF THE BIDDER'S KEY PERSONNEL PLEDGED FOR THE CONTRACT TO BE BID

I hereby declare that the following key personnel are qualified and available for the duration of the contract to be bid:

Position of Key Personnel 1]	Name	No. of Key Personnel	Similar Experience in the Position (Years) 2]	Total Experience in the Position (Years)	Attachment(s)	Annex(es)
Project Manager					PRC License (CE Preferred) Complete Qualification and Experience Data Certificate of Commitment	Annex " _ "
Project Engineer					PRC License (CE Preferred) Complete Qualification and Experience Data Certificate of Commitment	Annex " _ "
Materials Engineer II					PRC License (CE Preferred) Submit Valid and Renewed DPWH Certificate of Accreditation Submit Accreditation Identification Card as Materials Engineer Complete Qualification and Experience Data Certificate of Commitment	Annex " _ "
Construction Safety and Health Officer					Certificate of Safety and Health Construction Related Course issued by DOLE Accredited Trainings Complete Qualification and Experience Data Certificate of Commitment	Annex " _ "
Foreman					Complete Qualification and Experience Data Certificate of Commitment	Annex " _ "
Other Position(s)					Complete Qualification and Experience Data Certificate of Commitment	Annex " _ "

**NOTE:** 1] As stated in the Bid Data Sheet

2] The number of years of experience of the key personnel shall be as indicated in the qualification and experience data or curriculum vitae.

Minimum qualification requirements: The key personnel must have a work experience that is similar in nature and complexity to the contract to be bid.

Project Manager - Five (5) years

Materials Engineer – One (1) year

Project Engineer - Three (3) years

Materials Engineer I – for projects costing up to 100M

Foreman - Five (5) years

Materials Engineer II – for projects costing more than 100M

Construction Safety and Health Officer – One (1) year

\_\_\_\_\_  
Name of Firm

\_\_\_\_\_  
Name of Bidder/Authorized Representative  
(Signatory's Legal Capacity)

\_\_\_\_\_  
Date

Revised: September 2021

### STATEMENT OF THE BIDDER'S EQUIPMENT PLEDGED FOR THE CONTRACT TO BE BID

I hereby declare that the following equipment are in good operating condition and available for the duration of the contract to be bid:

DESCRIPTION (Type, Model, Make)	No. of Unit(s)	Capacity/ Output  1]	Owned, Leased, and/or under purchased agreement 2]	Proof of Ownership/ Leased/ Under Purchase Agreement (Mark as Annex "A.....Z") 3]	OTHER INFORMATION (As Applicable)				
					Manufacturer	Engine Serial No.	Chassis No./ Name of Vessel	Location	Status

**NOTE:**

- 1] The unit of capacity of the pledged equipment shall be as indicated in the Proof of Ownership, i.e. GW (for crane barge), DWT (for deck barge and hopper barge), Ton (for crane, road roller and drop hammer), kg.-m/blow (for diesel hammer), cu.m. (for dump truck), hp (for tugboat, road grader, bulldozer and concrete vibrator), cfm (for compressor), gal (for water truck with pump), amp (for welding machine), bagger (for concrete mixer). If the capacity of the pledged equipment is not indicated in the Proof of Ownership/Leased Contract/Purchased Agreement, submit other proof of capacity such as specifications, brochures or other verifiable printouts indicating the model name, model number and other details of the equipment.
- 2] Indicate if the pledged equipment are owned, leased or under purchase agreement.
- 3] If the pledged equipment is owned, it should be in the name of the bidder. Submit proof of ownership, i.e. deed of sale, sales invoice, official receipt; For owned Water Truck, Dump Truck and Transit Mixer submit LTO Certificate of Registration and valid Official Receipt; For owned barge/tugboat, submit Marina Certificate of Ownership and valid Cargo Ship Safety Certificate.

If the pledged equipment is leased/under purchased agreement, submit certification of availability of equipment from the equipment lessor/vendor for the duration of the project, and duly Notarized copy of leased contract/purchased agreement.

If the pledged barge/tugboat is leased/under purchase agreement, submit certification of availability of barge/tugboat from the equipment lessor/vendor for the duration of the project, and duly Notarized copy of leased contract/purchased agreement together with a copy of the Marina Certificate of Ownership and valid Cargo Ship Safety Certificate.

The Minimum Major Equipment Requirements are listed in Section 8, Annex 3.

\_\_\_\_\_  
Name of Firm

\_\_\_\_\_  
Name of Bidder/Authorized Representative  
(Signatory's Legal Capacity)

\_\_\_\_\_  
Date

Revised: September 2021

**Omnibus Sworn Statement for Sole Proprietorship**  
*[shall be submitted with the Bid]*

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

**AFFIDAVIT**

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

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

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

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

---

Name of Bidder/ Authorized Representative  
(Signatory's Legal Capacity)  
AFFIANT

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

**Omnibus Sworn Statement for Partnership or Cooperative**  
*[shall be submitted with the Bid]*

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

**AFFIDAVIT**

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

1. I am the duly authorized and designated representative of \_\_\_\_\_ with office address at \_\_\_\_\_;
2. I am granted full power and authority to do, execute and perform any and all acts necessary to participate, submit the bid, and to sign and execute the ensuing contract for **Romblon Port Expansion Project, Port of Romblon, Romblon of the Philippine Ports Authority**, as shown in the attached [state title of attached document showing proof of authorization (e.g., duly notarized Secretary's Certificate, Board/Partnership Resolution, or Special Power of Attorney, whichever is applicable)];
3. [Name of Bidder] is not "blacklisted" or barred from bidding by the Government of the Philippines or any of its agencies, offices, corporations, or Local Government Units, foreign government/foreign or international financing institution whose blacklisting rules have been recognized by the Government Procurement Policy Board, by itself or by relation, membership, association, affiliation, or controlling interest with another blacklisted person or entity as defined and provided for in the Uniform Guidelines on Blacklisting;
4. Each of the documents submitted in satisfaction of the bidding requirements is an authentic copy of the original, complete, and all statements and information provided therein are true and correct;
5. [Name of Bidder] is authorizing the Head of the Procuring Entity or its duly authorized representative(s) to verify all the documents submitted;
6. 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;
7. [Name of Bidder] complies with existing labor laws and standards; and
8. [Name of Bidder] is aware of and has undertaken the responsibilities as a Bidder in compliance with the Philippine Bidding Documents, which includes:
  - a. Carefully examining all of the Bidding Documents;
  - b. Acknowledging all conditions, local or otherwise, affecting the implementation of the Contract;
  - c. Making an estimate of the facilities available and needed for the contract to be bid, if any; and
  - d. Inquiring or securing Supplemental/Bid Bulletin(s) issued for the [Name of the Project].



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

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

---

Name of Bidder/ Authorized Representative  
(Signatory's Legal Capacity)  
AFFIANT

**[Jurat]**

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

**Omnibus Sworn Statement for Corporation or Joint Venture**  
*[shall be submitted with the Bid]*

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

**AFFIDAVIT**

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

1. I am the duly authorized and designated representative of \_\_\_\_\_ with office address at \_\_\_\_\_;
2. I am granted full power and authority to do, execute and perform any and all acts necessary to participate, submit the bid, and to sign and execute the ensuing contract for **Romblon Port Expansion Project, Port of Romblon, Romblon**, as shown in the attached [state title of attached document showing proof of authorization (e.g., duly notarized Secretary's Certificate, Board/Partnership Resolution, or Special Power of Attorney, whichever is applicable)];
3. [Name of Bidder] is not "blacklisted" or barred from bidding by the Government of the Philippines or any of its agencies, offices, corporations, or Local Government Units, foreign government/foreign or international financing institution whose blacklisting rules have been recognized by the Government Procurement Policy Board, by itself or by relation, membership, association, affiliation, or controlling interest with another blacklisted person or entity as defined and provided for in the Uniform Guidelines on Blacklisting;
4. Each of the documents submitted in satisfaction of the bidding requirements is an authentic copy of the original, complete, and all statements and information provided therein are true and correct;
5. [Name of Bidder] is authorizing the Head of the Procuring Entity or its duly authorized representative(s) to verify all the documents submitted;
6. 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 responsibilities as a Bidder in compliance with the Philippine Bidding Documents, which includes:
  - a. Carefully examining all of the Bidding Documents;
  - b. Acknowledging all conditions, local or otherwise, affecting the implementation of the Contract;
  - c. Making an estimate of the facilities available and needed for the contract to be bid, if any; and
  - d. Inquiring or securing Supplemental/Bid Bulletin(s) issued for the [Name of the Project].
9. [Name of Bidder] did not give or pay directly or indirectly, any commission, amount, fee, or any form of consideration, pecuniary or otherwise, to any person or official, personnel or

representative of the government in relation to any procurement project or activity.

10. In case advance payment was made or given, failure to perform or deliver any of the obligations and undertakings in the contract shall be sufficient grounds to constitute criminal liability for Swindling (Estafa) or the commission of fraud with unfaithfulness or abuse of confidence through misappropriating or converting any payment received by a person or entity under an obligation involving the duty to deliver certain goods or services, to the prejudice of the public and the government of the Philippines pursuant to Article 315 of Act No. 3815 s. 1930, as amended, or the Revised Penal Code.

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

\_\_\_\_\_  
Name of Bidder/ Authorized Representative  
(Signatory's Legal Capacity)  
AFFIANT

**[Jurat]**

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

**Bid Securing Declaration Form**  
*[shall be submitted with the Bid if bidder opts to provide this form of bid security]*

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

**BID SECURING DECLARATION**  
**Project Identification No.:** \_\_\_\_\_

**To: Philippine Ports Authority**  
PPA Building, Bonifacio Drive,  
South Harbor, Port Area, Manila

I/We, the undersigned, declare that:

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

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

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Name of Bidder/ Authorized Representative  
(Signatory's Legal Capacity)  
**AFFIANT**

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

## CONSTRUCTION METHODOLOGY

Name of Project : \_\_\_\_\_  
Project Description : \_\_\_\_\_  
Location : \_\_\_\_\_

### MINIMUM SCOPE OF CONSTRUCTION METHODOLOGY

#### A. GENERAL EXPENSES

1. Provision (Construction) of Field Office (48 sq.m.)

#### B. EXCAVATION AND REMOVAL WORKS

1. Removal & disposal of existing r.c. curb (127 l.m.)
2. Chipping of existing mooring bollard base (8 no.)
3. Removal & turn over existing mooring bollard (6 set)
4. Removal & turn over existing mooring bitt (2 set)
5. Removal & turn over existing rubber dock fender (17 set)
6. Removal & turn over existing lamp post (1 set)
7. Removal & restoration of existing concrete pavement (33 sq.m.)
8. Excavation and backfilling works (16 cu.m.)

#### C. CONSTRUCTION OF R.C. WHARF

1. Supply & driving of PSC Test pile (2 units)
2. Supply & driving of PSC square pile (8,194 l.m.)
3. Supply & placing of 3,500 psi. concrete (929 cu.m.)
4. Supply & installation of reinforcing steel bar (162,064 kg.)
5. Supply & installation of construction joints (157 l.m.)
6. Supply & installation of Rubber dock fenders (16 sets)
7. Supply & installation of mooring bollards (8 sets)
8. Construction of cyclone wire fence (27 l.m.)
9. Reinstallation of the newly removed solar lamp post (1 set)
10. Port lighting system (1 lot)

#### NOTES:

The narrative construction method will guide and familiarize the contractor and the PPA on how the project shall be carried out in accordance with the highest standard of workmanship.

The construction method shall be consistent with the Bar Chart / S-Curve Schedule, Equipment Schedule and Manpower Schedule.

\_\_\_\_\_  
Name of Bidder/Authorized Representative  
(Signatory's Legal Capacity)

**MANPOWER SCHEDULE**

Name of Project : \_\_\_\_\_

Project Description : \_\_\_\_\_

Location : \_\_\_\_\_

MANPOWER (Minimum)	CONTRACT DURATION (_____ Calendar Days)											
	M O N T H L Y											
	1	2	3	4	5	6	7	8	9	10	11	12
Project Manager												
Project Engineer												
Materials Engineer II												
Construction Safety and Health Officer												
Foreman												
Specify other applicable positions, ie.:												
- Carpenter												
- Steelman												
- Mason												
- Electrician												
- Rigger												
- Others												

\_\_\_\_\_  
Name of Bidder/Authorized Representative  
(Signatory's Legal Capacity)

Revised: September 2021



## CASHFLOW BY QUARTER AND PAYMENT SCHEDULE

Name of Project: : \_\_\_\_\_

Project Description : \_\_\_\_\_

Location : \_\_\_\_\_

Project Duration (days or months)	Payment Schedule (Monthly, in Pesos)	Cash flow (Quarterly, in Pesos)
<b>TOTAL</b>		

### NOTES

- The cash flow by quarter and payment schedule should be consistent with the Bar Chart and S-curb.
- Payment schedule shall not be more than once a month.

\_\_\_\_\_  
Name of Bidder/Authorized Representative  
(Signatory's Legal Capacity)

Revised: September 2021



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

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

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**CONTRACT AGREEMENT**

THIS AGREEMENT, made this \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_ between Philippine Ports Authority with principal office at PPA Building, Bonifacio Drive, South Harbor, Port Area, Manila (hereinafter called the "Entity") and [name and address of Contractor] (hereinafter called the "Contractor").

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

**NOW THIS AGREEMENT WITNESSETH AS FOLLOWS:**

1. In this Agreement, words and expressions shall have the same meanings as are respectively assigned to them in the Conditions of Contract hereinafter referred to.
2. The following documents as required by the 2016 revised Implementing Rules and Regulations of Republic Act No. 9184 shall be deemed to form and be read and construed as part of this Agreement, viz.:
  - a. Philippine Bidding Documents (PBDs);
    - i. Drawings/Plans;
    - ii. Specifications;
    - iii. Bill of Quantities;
    - iv. General and Special Conditions of Contract;
    - v. Supplemental or Bid Bulletins, if any;
  - b. Winning bidder's bid, including the Eligibility requirements, Technical and Financial Proposals, and all other documents or statements submitted;  
  
Bid form, including all the documents/statements contained in the Bidder's bidding envelopes, as annexes, and all other documents submitted (e.g., Bidder's response to request for clarifications on the bid), including corrections to the bid, if any, resulting from the Procuring Entity's bid evaluation;
  - c. Performance Security;
  - d. Notice of Award of Contract and the Bidder's conforme thereto; and

- e. Other contract documents that may be required by existing laws and/or the Procuring Entity concerned in the PBDs. Winning bidder agrees that additional contract documents or information prescribed by the GPPB that are subsequently required for submission after the contract execution, such as the Notice to Proceed, Variation Orders, and Warranty Security, shall likewise form part of the Contract.
3. In consideration for the sum of [total contract price in words and figures] or such other sums as may be ascertained, [Named of the bidder] agrees to [state the object of the contract] in accordance with his/her/its Bid.
4. The Philippine Ports Authority agrees to pay the above-mentioned sum in accordance with the terms of the Bidding.

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

**JAY DANIEL R. SANTIAGO**  
General Manager

for:

**Philippine Ports Authority**

**Name of Bidder/ Authorized  
Representative  
(Signatory's Legal Capacity)**

for:

**Contractor**

**Acknowledgment**

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