

# Terms of Reference for the Procurement of Supply of Labor, Materials, Supervision and other Consumables for the Waterproofing Works of Roof Deck, Powerhouse, Main Electrical Room, Penthouse and Machine Room of NEA Building

## 1. RATIONALE

- 1.1. Roof deck gives a vantage point from which to look out a nice or stunning cityscape. However, this part of the building deemed extremely vulnerable to damage caused by constant movement and exposure to weather. With heavy rainfall, leaks occur. Water can seep into the roof deck ceiling and damage the structure and other components of the building. Thus, this area must undergo waterproofing to avoid potential damage and save costly and time-consuming repairs.
- 1.2. To address this situation, it is highly recommended that in order to prevent future leaks of roof deck, including penthouse and machine room, the **National Electrification Administration (NEA for brevity)**, a Government-Owned and Controlled Corporation duly organized and existing under and by virtue of P.D. 269, as amended by R.A. 10531, with principal office address at NEA Building, Barangay Pinyahan, Diliman, Quezon City, needs the services of a qualified/professional waterproofing service firm ("**CONTRACTOR**", for brevity) which can provide manpower, equipment, supplies, materials and technical expertise for the waterproofing of **NEA's** Roof Deck, Powerhouse, Main Electrical Room, Penthouse and Machine Room.

## 2. APPROVED BUDGET FOR THE CONTRACT

- 2.1. For and in consideration of the performance and accomplishment of the **WATERPROOFING SERVICES**, NEA shall pay the **CONTRACTOR** the total amount of **THREE MILLION TWO HUNDRED FIFTY-THREE THOUSAND NINETY-TWO PESOS and 6/100 (Php3,253,092.06)** for the contract price. Subject to pertinent laws on government contracts and auditing procedures.
- 2.2. The contract price is inclusive of all duties and taxes.
- 2.3. No changes shall be made on the Contract Price by reason of escalation in currency. Any adjustment in Contract Price shall be done in accordance with guidelines provided by law.
- 2.4. The payment of escalation costs shall be subject to the unilateral and written approval of **NEA** and to availability of funds.

### 3. PROJECT DURATION

- 3.1. The project duration covering the waterproofing works of roof deck, including penthouse and machine room, in **NEA** shall be for a period of **sixty (60) days** from the issuance of Notice to Proceed (NTP).
- 3.2. The **CONTRACTOR's** proposed Work Plan shown in Gantt Chart, which is a mandatory part of the Technical Proposal, should provide a more detailed schedule of activities. Unless approved in writing by **NEA** on the written request of the **CONTRACTOR**, the coverage – *from mobilization to demobilization*, should not extend beyond the derivable dates as indicated here below.

Work Clusters	Nth Cal-days from Contractor's Date of Receipt of Notice-to-Proceed	
	Start	Finish
1. Notice to Proceed	1 <sup>st</sup>	1 <sup>st</sup>
2. Mobilization of construction materials and consumables; deployment of manpower and equipment; secure necessary permits; provision of safety signage's and paraphernalia; and, submission of shop drawings and project Bar Chart/S-Curve and PERT/CPM Network Diagram for NEA's approval prior to project implementation.	2 <sup>nd</sup>	14 <sup>th</sup>
3. Surface Preparation, Concrete Repair, Waterproofing Works, Flood Testing on Roof Deck including Penthouse and Machine Room	15 <sup>th</sup>	44 <sup>th</sup>
4. Punch-listing, Rectification of Punch-list Items, Final Flood Testing; Cleaning, Restoration of all affected facilities/areas/landscape, and other related-fixtures due to waterproofing works; and, Project Turn-Over including submission of as-built plans duly signed and sealed by appropriate professional engineer/s and other contract documents.	45 <sup>th</sup>	60 <sup>th</sup>

- 3.3. Exact dates of delivery and/or completion should be reckoned from the date of **CONTRACTOR's** receipt of NTP.
- 3.4. The liquidated damages shall be imposed for the inability of the **CONTRACTOR** to comply with the **Approved Construction Schedule**, unless a written request for time extension been approved in writing by **NEA**.

### 4. QUALIFICATION OF THE CONTRACTOR

- 4.1. The **CONTRACTOR** must be competent and experienced in the field of waterproofing works with a minimum of five (5) years prior experience on

similar projects and should have a valid and current Philippine Contractors Accreditation Board (PCAB) License, Category “C” or “D”, with a classification General Engineering (GE-1) or Specialty – Waterproofing Work (SP-WP).

- 4.2. The **CONTRACTOR** is required to submit a company profile, list of present and previous clientele for the past five (5) years, and certifications issued by past/present clients indicating the Contractor’s satisfactory performance.
- 4.3. The Project-in-Charge who will administer the Waterproofing Works must be well trained and experienced waterproof applicator with at least three (3) years’ experience.

## 5. GENERAL REQUIREMENTS

- 5.1. The **CONTRACTOR** will provide technical supervision, skilled manpower, tools, equipment and suitable highest quality materials within the specified period to complete the project.
- 5.2. As-built Drawings is to be done and submitted by **CONTRACTOR**.
- 5.3. Provide coordination and collaborative works with **NEA** to complete respective works in accordance with approved drawings, specifications and method of installation.
- 5.4. Provide all materials necessary to complete the works although not specifically mentioned in the Specifications, working drawings or in on other contract documents without extra cost to the **NEA**.
- 5.5. Comply with all applicable Environmental, Health and Safety regulations required by law.
- 5.6. Secure and submit all necessary bonds, permits and insurances required in the contract.
- 5.7. Submit on time, the required work schedule, delivery schedule, table of organization, manpower schedule, samples product data, safety plan, methodology and other requirements deemed necessary.
- 5.8. Ensure the quality of materials and workmanship needed to complete and render ready for acceptance by the owner.
- 5.9. Responsible for the safety requirements (safety shoes, vest, hard hat, safety harness, lifeline) and provision of fire extinguishers and all other fire protection provisions in working areas.
- 5.10. Compliance to provisions of safety provisions for warehousing/storage of their materials and equipment.
- 5.11. Medical Requirements of **CONTRACTOR** workers will be part of preliminaries of **CONTRACTORS**.

- 5.12. Hauling and disposal of garbage inside the building perimeter.
- 5.13. Protect and maintain in the required acceptable conditions of all waterproofing works and accessories during construction until hand over.
- 5.14. Ensure that the performance, appearance and proper functioning of the works are not affected by any movements, settlement or deflection in the building structure. Also take into account the construction accuracy of works by others to which the waterproofing works are attached.
- 5.15. Coverage of the waterproofing works is approximately **2,020.78 square meters** covering areas such as but not limited to the following:

Location	Area (sqm)
Roof Deck	1,607.50
Penthouse	231.00
Machine Room	117.00
Powerhouse	45.00
Main Electrical Room	20.28
<b>Total</b>	<b>2,020.78</b>

## 6. SCOPE OF WORK

- 6.1. The **CONTRACTOR** shall undertake the works implementation of the **“Supply of Labor, Materials, Supervision and other Consumables for the Waterproofing Works of Roof Deck, Powerhouse, Main Electrical Room, Penthouse and Machine Room of NEA Building”**, all in accordance with the specifications and subject to the terms and conditions of the contract.

### 6.1.1. Mobilization and Provision of Temporary Facilities

- 6.1.1.1. The **CONTRACTOR** shall provide safety signage/early warning signs visible at the jobsite.
- 6.1.1.2. The **CONTRACTOR** shall make available Protective Gears for the workers.
- 6.1.1.3. Temporary Facilities shall be of a design and materials acceptable to **NEA**.
- 6.1.1.4. The **CONTRACTOR** shall provide suitable portable toilet facilities at approved location with proper enclosures for the use of workmen, and shall maintain same in sanitary operable conditions, all in conformity with the local regulations.
- 6.1.1.5. The **CONTRACTOR** shall provide such other temporary building as maybe required for use of his/her workers and safe storage of tools and materials. Such structures shall be located only where previously approved.

- 6.1.1.6. **NEA** shall provide for temporary power facility required for the entire waterproofing works phase. The **CONTRACTOR** shall provide conduits, wires, connections and accessories and labor.
- 6.1.1.7. **NEA** shall provide temporary water facility that will be used during the entire waterproofing works stage.
- 6.1.1.8. The **CONTRACTOR** shall install, operate and maintain adequate number of temporary hoists, scaffolds, runways, ladders, and the like as required for the proper execution of the work. Safety precautions shall at all times be observed.
- 6.1.1.9. All temporary services and facilities installed by the **CONTRACTOR** shall be removed by the **CONTRACTOR** on completion of this Contract or as directed by **NEA**. The **CONTRACTOR** shall restore any damage, alteration, caused by such removal and during the project implementation.

#### 6.1.2. Surface Preparation

- 6.1.2.1. Remove and dispose existing concrete topping as well as old waterproofing materials.
- 6.1.2.2. Prepare concrete base at the roof deck to include the correction of slope to drain and restoration of damage surface. Provide a minimum pitch of 1:100 to satisfactory drain rainwater freely into the drainage lines, gutters and downspouts.
- 6.1.2.3. Clean/prepare/steel trowel horizontal and vertical concrete surfaces until said surfaces are smoothly finished, fully cured, dry clean and free of rubbish, loose or foreign materials.
- 6.1.2.4. De-clogging and repair of all defective storm drain pipes, including leak test. Remove existing brass strainers.
- 6.1.2.5. Prepared reglets of about 40 mm deep by 40 mm wide and 250 mm above floor finish along walls or parapets for the termination of the membrane.
- 6.1.2.6. Prepared surfaces shall be cured and kept wet by sprinkling with water at regular intervals for a period of at least 3 days and allow surface to actually set within 7 days.
- 6.1.2.7. When there is reasonable doubt as to the presence of moisture in the surface to be applied with membrane, expose the same direct to sunlight for another 2 days or heat all suspected area using blow torch.

6.1.2.8. For planter boxes, temporary removal of garden soil, plants and other items and to be placed to designated areas provided by **NEA**.

6.1.2.9. Haul and dispose debris properly and to be placed to designated areas provided by **NEA**.

### 6.1.3. Concrete Repair

6.1.3.1. Repair/seal cracks on concrete, cold joint, construction and expansion joint.

6.1.3.1.1. *For thin hairline cracks:* cracks (0.25 mm or under) shall not be opened or cut but the cracks shall be cleaned, filled, and sealed with epoxy grout by using stiff brush, trowel or putty knife.

6.1.3.1.2. *For large cracks and voids:* cracks shall be routed out along its entire length (to a depth not less than 6.35 mm and a width of 9.5 mm) and cleaned groove by vacuuming or blowing off all dust and loose particles and primed with pure epoxy-resin binder adhesive to ensure a weld bond after which the epoxy mortar shall be applied with a trowel or putty knife flush with the adjoining surface.

6.1.3.1.3. *In case of deep cracks and cleavage:* where the size of the opening permit, the cracks shall be filled with epoxy grout by pumping epoxy resin mix under pressure into cracks, allowed to hardened, then the surface coated with epoxy mortar.

6.1.3.2. Inspect all areas to be waterproofed.

6.1.3.3. Certify if areas are free from any structural defect and therefore ready for waterproofing installation.

### 6.1.4. Waterproofing Installation

6.1.4.1. Bidders may propose and adopt other types and methodology as long as they fulfill the obligations in the contract which is to fully waterproof the entire areas subject to be waterproofed so that leaks and seepages are prevented.

6.1.4.2. Prepare surface/substrate slab. The application of the waterproofing material will require **NEA** or its authorized representative's formal approval before application.

*Note: Construction and expansion joints should be double covered with the strip of same graded waterproofing material of about 1 foot wide centered on the axis on the corner or joint.*

- 6.1.4.3. Install waterproofing material as indicated and in accordance with the respective manufacturer's application/installation instructions and recommendations or in accordance with Department of Public Works and Highways Department Order No. 110, Series of 2017, DPWH Standard Specification for Item 1016 - Waterproofing.

*Note: If crystalline waterproofing will be applied, the concrete surface to be treated must be clean and free of laitance, dirt, film, paint, coatings or other foreign matter and rout out cracks, faulty construction joints and other structural defects to a depth of 1.5 inches (37 mm) and a width of one inch (25 mm).*

*Note: If preformed or built-up bituminous membrane method will be applied, it should be smooth and free from irregularities which may destroy the integrity of the membrane with 2-inch minimum overlaps on all sheet joints. Bond all overlaps using appropriate bonding material. Membrane should conform to the number of ply size and shape of the surface area covered. Seal membrane edges with appropriate sealing materials.*

*Note: If liquid membrane waterproofing will be applied, it should be sound and cured without the use of curing compound. It should not be applied unless the ambient temperature is 4.44 Centigrade or higher and should not proceed during inclement weather condition.*

- 6.1.4.3.1. *For Drains:* extend waterproofing material down the drains at about 2 inches in length.
- 6.1.4.3.2. *For Pipe Embedded thru Slab:* treat area or extend waterproofing material around the embedded pipe.
- 6.1.4.3.3. *For Plant Boxes:* extend waterproofing material to fully cover top of parapet walls.
- 6.1.4.3.4. *For Horizontal Surface:* extend waterproofing material to about 12 inches high from slab if terminated to adjoining walls.

- 6.1.4.4. Remove the layer of waterproofing materials exposed to moisture and repeat the procedure until completion of the process.

#### 6.1.5. Flood Testing

- 6.1.5.1. Flood testing the waterproof areas with 2-inch depth of water for at least 48 hours to determine any leakage or defect on the materials used and/or workmanship.
- 6.1.5.2. Repeat the waterproofing installation procedures if leaks manifest.

6.1.6. Concrete Topping, if necessary

6.1.6.1. Provide concrete cement topping of at least 50 mm thick with GA #10 welded wire mesh (size: 6" x 6" square mesh opening) where protective covering has been applied.

6.1.6.2. Apply finishing topping. Ensure proper sloping on surfaces (about 2.0%) enough to drain water freely into drain lines, gutter and downspouts to prevent water ponding.

6.2. Inspection and Test

6.2.1. The **CONTRACTOR** shall permit and facilitate inspection of the work by the **NEA** or its authorized representative, and the public authorities having jurisdiction at all times during the progress of the work.

6.2.2. The **CONTRACTOR** will be responsible for all the test and engineering services required by the Specifications. The cost for inspection or tests not required by the specification but which the **NEA** requires, will be borne by the **NEA**.

6.2.3. All tests shall be performed by the testing agency approved by the **NEA** and shall be in accordance with the current standards of the American Society for Testing and Materials unless otherwise specified by **NEA**. The **CONTRACTOR** shall furnish the **NEA** with 2 copies of the test procedures used.

6.3. Punch List, Final Flood Testing, Cleaning, Clearing and Turn-Over

6.3.1. Correct all noted punch lists, defects and/or needed replacements identified and observed.

6.3.2. Conduct final flood testing of all areas for the duration of 2 days.

6.3.3. Restore to its original condition any facilities and fixtures that has been damaged due to waterproofing works and accidents arising during implementation, if any.

6.3.4. Restoration of garden soils, plants and other items removed from the planter box into its original condition, including cleaning of weep hole drains.

6.3.5. Replacement of existing brass strainers and restoration of missing brass strainers with a new dome type strainer.

6.3.6. Clean, clearing of the area, and hauling and disposal of debris properly before turn-over.

6.3.7. Demobilize and turn-over the entire project for acceptance of **NEA** or its authorized representative.



## 7. MATERIALS REQUIREMENTS & SPECIFICATIONS

- 7.1. Use **NEA-approved** one brand only all throughout. All exposed finish hardware, lighting fixtures and accessories, plumbing fixtures and accessories, glasses and the like shall be adequately protected that these are not stained with waterproofing materials prior to waterproofing works. All other surfaces which would be endangered by stains and waterproofing materials marks should be taped and covered with craft paper or equal.
- 7.2. Delivery of the materials must be supported by an official receipt or delivery receipt duly signed by the authorized representative of the manufacturer attesting that the paint was sourced from the manufacturer which will be subject to inspection and documents validation by the **NEA** or its authorized representative.
- 7.3. Liquid Membrane Waterproofing
- 7.3.1. Liquid waterproofing alternate material shall be of elastomeric or other substances applied in liquid form and cured to an impervious membrane.
- 7.3.2. For long-term UV and weather resistance, a high-performance synthetic rubber-based membrane type of liquid waterproofing is highly suggested to be used. For tiled finishes that is capable of accommodating expected structural movements, a waterborne flexible Styrene Butadiene Rubber (SBR) waterproof membrane can be used. For waterproofing shower recesses, bathrooms, laundries, decks, balconies and rooftops, an elastomeric, one part, fiber reinforced, water based polyurethane membrane can be used.
- 7.3.3. Specifications and Performance Data

Density, kg/m <sup>2</sup>	<b>1.2 – 1.3</b>
Solid Content, %	<b>&gt;95</b>
Tensile Strength (ASTM D412), N/mm <sup>2</sup>	<b>4.0</b>
Elongation at break (ASTM D412), %	<b>&gt;700</b>
Tear Strength, N/mm <sup>2</sup>	<b>&gt;12</b>
Adhesion to concrete (ASTM D5469), N/mm <sup>2</sup>	<b>&gt;1.5</b>
Hardness (Shore A) (ASTM D2240)	<b>&gt;60</b>
Touch Dry (@ 25C at 65% R.H.), hours	<b>2 – 3</b>
Cure Time, hours	<b>12 – 24</b>
VOC Content, g/L	<b>&lt;50</b>
Use	<b>Exposure (Pure PU)</b>
Crack Bridging Test (ASTM C836)	<b>Pass (-250C, 2.0 mm, 25 cycles)</b>
Water Permeability (ASTM D5052)	<b>Below 5.0 g/m<sup>2</sup> (42 hours)</b>

## 8. WARRANTY

- 8.1. The **CONTRACTOR** shall guarantee the work done to be free from defects for a period of **five (5) years** reckoned from acceptance of the project. Form of warranty shall be in accordance with the provisions in Section 62 of the Revised Implementing Rules and Regulations (IRR) of R.A. 9184.

## 9. RESPONSIBILITIES OF THE CONTRACTOR

- 9.1. The principal features of the work do not in any way limit the responsibilities of the **CONTRACTOR** to the general description of his/her scope of work. He/she shall perform all the work fully and make operational to the intent of the project.
- 9.2. The **CONTRACTOR** shall be responsible for the proper execution and coordination of his/her work. He/she shall schedule and program all necessary work activities according to the specified completion period.
- 9.3. The **CONTRACTOR** shall observe the required standards of safety and procedures and that its contract and workers shall be properly insured against all risks. He/she shall provide/equip its workers with Personal Protective Equipment (PPE) during the course of construction/installation. He/she shall observe the **NEA's** house regulations to be issued together with the Work Permit.
- 9.4. The **CONTRACTOR** shall be responsible for securing **NEA** issued work permits and compliance with other **NEA** rules and regulations related to the construction works. All workers/engineers working at site are required to wear company uniforms indicating their company name.
- 9.5. The **CONTRACTOR** is not allowed to erect quarters for workers within **NEA** premises; sleeping is also not allowed. **CONTRACTOR's** workers are limited to the designated working area only. Loitering around and inside the **NEA** premises is not allowed.
- 9.6. The **CONTRACTOR** shall be responsible for clearing and cleaning of the designated project site of unused materials, left over and other debris at the site and disposal of the same outside of the **NEA** premises. A daily inspection of the work area shall be conducted by the **CONTRACTOR** and **NEA** or its authorized representative to ensure that the working area and storage area assigned to the **CONTRACTOR** is clean and in order at all times.
- 9.7. The **CONTRACTOR** shall protect adjacent areas against any damage by his/her employees, or by his/her materials, equipment and tools during the execution of the work. Any damage done by him/her or his/her employees shall be repaired at his own expense, without additional compensation beyond the contract.
- 9.8. Permits, Laws, Ordinances and Standards – the installation provided for and specified herein shall comply with laws and regulations of the local

government unit and any government agency having jurisdiction. All necessary permits and other requirements shall be secured and for the account of the **CONTRACTOR**. Said requirements shall be turned-over to **NEA** upon project completion.

- 9.9. The **CONTRACTOR** shall assign a fulltime Engineer/Architect as Project-In-Charge (PIC) for the project to supervise the works mentioned herein. The PIC shall be a certified registered Civil Engineer or Architect designated for the project by the **CONTRACTOR**. Said PIC must be the one to report on a weekly/monthly basis of the status/progress of the project as agreed during the kick-off meeting and who shall be the one responsible for all coordination works with the **NEA** or its authorized representative.
- 9.10. All other items of work not specifically mentioned but are necessary to complete the works in accordance with the plans and specifications and other related documents shall be provided by the **CONTRACTOR** at no additional cost to the **NEA**.

## **10. SUBMITTALS**

- 10.1. Before commencing any work or providing any materials at the jobsite for this project, the **CONTRACTOR** shall submit samples, project Bar Chart/S-Curve and PERT/CPM Network Diagram for the **NEA's** approval **within five (5) calendar days** upon receipt of Notice to Proceed.
- 10.2. The Contractor's All-Risk Insurance (CARI) shall be submitted to **NEA within ten (10) calendar days** upon receipt of Notice of Award (NOA) to be issued by the BAC Secretariat.
- 10.3. The **CONTRACTOR** shall submit to **NEA**, the proposed delivery of materials, tools and equipment, and manpower schedules for proper monitoring **five (5) calendar days** after the Pre-construction/kick-off meeting.
- 10.4. The **CONTRACTOR** shall submit samples and/or technical brochures of all materials to be used in the project **within ten (10) calendar days** upon receipt of Notice to Proceed which include but may not be limited to the following for **NEA's** approval:
  - 10.4.1. Waterproofing Materials/Brochures with technical specifications.
  - 10.4.2. Manufacturer's printed Product Installation Instructions.
  - 10.4.3. Manufacturer's Warranty Certificate covering the five (5) years product warranty after application.
- 10.5. Prior to issuance of the Certificate of Completion (COC) the following shall be submitted to **NEA**. **NEA** reserves the right not to issue a Certificate of Satisfactory Performance on the basis of the non-submission of any of the items below:

- 10.5.1. Test results/Report for leak test/s.
  - 10.5.2. Original Copy of "Record Drawing/Plan" complete with legend, technical specifications and measurements.
  - 10.5.3. Final Project Report including photo documentations before, during and after implementation works. Each photo-documentation should have the date and time stamps in jpg-format.
  - 10.5.4. As-built Plans – Plans should be approved by **NEA**. The **CONTRACTOR** shall submit shop drawings as required by **NEA**. A complete set of As-Built Drawings in printed form (20" x 30") and/or A3 whichever is required by **NEA** and an electronic copy in AutoCAD.
  - 10.5.5. Warranty Certificate of at least five (5) years against poor workmanship and defects traceable to materials.
- 10.6. The **CONTRACTOR** is required to have a suitable Construction Safety and Health Program, which must be in accordance with Occupation Safety and Health (OSH) Standard, rules and issuances by the DOLE. The program shall state the following:
- 10.6.1. Composition of Construction Safety and Health Committee.
  - 10.6.2. Specific safety policies which the **CONTRACTOR** shall observe at the area of construction which include but not limited to Fall Protection, Chemical Hazards, and Materials Handling and Storage.
  - 10.6.3. Penalties and sanctions for violations of the program.
  - 10.6.4. The manner of disposing waste arising from the construction.
  - 10.6.5. The safety program shall also include the appointment of a full-time safety officer-in-charge of the implementation of the said program.

## 11. PAYMENTS

- 11.1. Payments to the **CONTRACTOR** will be made only for the actual accomplishment and/or material utilized, certified by the **NEA** as performed by the **CONTRACTOR** in accordance with the plans, specifications and program of works/construction schedule.
- 11.2. Payments in accordance with the above paragraph shall be considered full compensation for furnishing materials, labor, tools and equipment, and for performing all work contemplated and embraced under the Contract.
- 11.3. Payment shall be made upon complete submission of all documents required by **NEA** as indicated in this Terms of Reference and other contract documents.

- 11.4. It is responsibility of the **CONTRACTOR** to ensure that their performance bond is updated and valid until the **NEA** issue the final Certificate of Acceptance. The **CONTRACTOR** shall submit the endorsement or amendments to **NEA** on extension or revisions to its validity, as maybe necessary, not later than **seven (7) days** before the expiration of the originally submitted Performance Bond. No payment shall be made unless the Performance is updated.
- 11.5. In order to assure that manufacturing defects shall be corrected by the Supplier, a warranty shall be required at the Supplier's option, either retention money in an amount equivalent to at least ten percent (10%) of every progress payment, or a special bank guarantee equivalent to at least ten percent (10%) of the Contract Price.

## **12. LIQUIDATED DAMAGES**

- 12.1. Failure to comply with the terms and conditions of the contract will result in the payment of corresponding penalties/liquidated damages in the amount to 1/10 of 1% of the cost of the unperformed portion for every day of delay. Once the cumulative amount of liquidated damages reaches 10% of the amount of the contract, **NEA** shall rescind the contract, without prejudice to other courses of action and remedies open to it.

For your consideration and proper action.

### **TECHNICAL WORKING GROUP**

**FEDERICO P. VILLAR, JR.**  
Member

**SHIRLEY J. SALVADOR**  
Member

**CYNTHIA E. LISONDRA**  
Member

**CESAR F. JACINTO JR.**  
Member

**MARCELINO D. CACDAC**  
Member

**HERNANDO N. GABOTERO**  
Member

**RAFAEL B. BARRIENTOS**  
Member

**ESTRELLITA S. VOLANTE**  
End-user

**MA. CHONA O. DELA CRUZ**  
Vice-Chairman

**GWEN P. ENCISO-KYAMKO**  
Chairman

Bill of Quantities/Bid Form

Procurement of Supply of Labor, Materials, Supervision and other Consumables for the Waterproofing Works of Roof Deck, Powerhouse, Main Electrical Room, Penthouse and Machine Room of NEA Building

PROJECT: Supply of Labor, Materials, Supervision and other Consumables for the Waterproofing Works of Roof Deck, Powerhouse, Main Electrical Room, Penthouse and Machine Room of NEA Building

LOCATION: NEA Building, #57 NIA Road, Government Center, Diliman, Quezon City

SUBJECT: Bill of Quantities / Bid Form

ITEM NO.	DESCRIPTION	MATERIALS				LABOR	ESTIMATED DIRECT COST	MARK-UPS IN PERCENT		TOTAL MARK-UPS		VAT	TOTAL INDIRECT COST	TOTAL COST	UNIT COST
		QTY	UNIT MEASURE	UNIT COST	AMOUNT			OCM	PROFIT	%	VALUE				
		(1)		(2)	(3)	(4)	(5) (3 + 4)	(6)	(7)	(8) (6 + 7)	(9) (5 X 8)	(10) 5%(5 + 9)	(11) (9 + 10)	(12) (5 + 11)	(13) (12 / 1)
<b>1.0.</b>	<b>GENERAL REQUIREMENTS</b>														
	1.1. Mobilization and demobilization.	1.00	lot												
	1.2. Bonds, Permits and Insurances.	1.00	lot												
	1.3. Environmental, Safety and Health.	1.00	lot												
	1.4. Temporary Facilities.	1.00	lot												
<b>2.0.</b>	<b>SURFACE PREPARATION AND INSTALLATION OF WATERPROOFING MATERIALS AT ROOF DECK AREA</b>														
	2.1. Removal of all existing waterproofing and concrete topping, and hauling the same for proper disposal by the contractor to a designated location.	1,607.50	sq.m.												
	2.2. Temporary removal of garden plants, soil and other items from planters' boxes. All soil and plants shall be put in sacks, plastic plant bags and placed in designated area.	1	lot												
	2.3. Preparation of surface area. Clean, dry, sound surfaces free of loose particles before application of waterproofing materials. Including correction of slope to drain and restoration of damage surface. Repair/seal cracks on concrete, cold joint, construction and expansion joint.	1,607.50	sq.m.												
	2.4. De-clogging, repair and leak test of all storm drain pipes.	17	unit												
	2.5. Application or installation of waterproofing materials as per scope of work and specifications.	1,607.50	sq.m.												
	2.6. Replacement of existing brass strainers and restoration of missing brass strainers with a new dome type strainer.	17	pcs												
	2.7. Flood testing for at least 48 hours.	1,607.50	sq.m.												
	2.8. Restoration of garden soils, plants and other items removed from the	1	lot												

	planter box into its original conditions, including cleaning of weep hole drains.																		
<b>3.0.</b>	<b>SURFACE PREPARATION AND INSTALLATION OF WATERPROOFING MATERIALS AT POWERHOUSE AREA</b>																		
	3.1. Removal of all existing waterproofing and concrete topping, and hauling the same for proper disposal by the contractor to a designated location.	45.00	sq.m.																
	3.2. Preparation of surface area. Clean, dry, sound surfaces free of loose particles before application of waterproofing materials. Including correction of slope to drain and restoration of damage surface. Repair/seal cracks on concrete, cold joint, construction and expansion joint.	45.00	sq.m.																
	3.3. De-clogging, repair and leak test of all storm drain pipes.	2	unit																
	3.4. Application or installation of waterproofing materials as per scope of work and specifications.	45.00	sq.m.																
	3.5. Replacement of existing brass strainers and restoration of missing brass strainers with a new dome type strainer.	2	pcs																
	3.6. Flood testing for at least 48 hours.	45.00	sq.m.																
<b>4.0.</b>	<b>SURFACE PREPARATION AND INSTALLATION OF WATERPROOFING MATERIALS AT MAIN ELECTRICAL ROOM AREA</b>																		
	4.1. Removal of all existing waterproofing and concrete topping, and hauling the same for proper disposal by the contractor to a designated location.	20.28	sq.m.																
	4.2. Preparation of surface area. Clean, dry, sound surfaces free of loose particles before application of waterproofing materials. Including correction of slope to drain and restoration of damage surface. Repair/seal cracks on concrete, cold joint, construction and expansion joint.	20.28	sq.m.																
	4.3. Application or installation of waterproofing materials as per scope of work and specifications.	20.28	sq.m.																
	4.4. Flood testing for at least 48 hours.	20.28	sq.m.																
<b>5.0.</b>	<b>SURFACE PREPARATION AND INSTALLATION OF WATERPROOFING MATERIALS AT MACHINE ROOM AREA</b>																		
	5.1. Removal of all existing waterproofing and concrete topping, and hauling the same for	117.00	sq.m.																



	proper disposal by the contractor to a designated location.													
	5.2. Preparation of surface area. Clean, dry, sound surfaces free of loose particles before application of waterproofing materials. Including correction of slope to drain and restoration of damage surface. Repair/seal cracks on concrete, cold joint, construction and expansion joint.	117.00	sq.m.											
	5.3. De-clogging, repair and leak test of all storm drain pipes.	10	unit											
	5.4. Application or installation of waterproofing materials as per scope of work and specifications.	117.00	sq.m.											
	5.5. Replacement of existing brass strainers and restoration of missing brass strainers with a new dome type strainer.	10	pcs											
	5.6. Flood testing for at least 48 hours.	117.00	sq.m.											
<b>6.0.</b>	<b>SURFACE PREPARATION AND INSTALLATION OF WATERPROOFING MATERIALS AT PENTHOUSE AREA</b>													
	6.1. Removal of all existing waterproofing, and hauling the same for proper disposal by the contractor to a designated location.	231.00	sq.m.											
	6.2. Preparation of surface area. Clean, dry, sound surfaces free of loose particles before application of waterproofing materials. Including correction of slope to drain and restoration of damage surface. Repair/seal cracks on concrete, cold joint, construction and expansion joint.	231.00	sq.m.											
	6.3. De-clogging, repair and leak test of all storm drain pipes.	9	unit											
	6.4. Application or installation of waterproofing materials as per scope of work and specifications.	231.00	sq.m.											
	6.5. Replacement of existing brass strainers and restoration of missing brass strainers with a new dome type strainer.	9	pcs											
	6.6. Flood testing for at least 48 hours.	231.00	sq.m.											
	<b>TOTAL PROJECT COST</b>													

CONTRACTOR: \_\_\_\_\_  
Complete Address: \_\_\_\_\_  
Name of Authorized Representative and Signature: \_\_\_\_\_  
Telephone No.: \_\_\_\_\_  
Email Account: \_\_\_\_\_

**ANNEX B**

**Detail Unit Price Analysis (DUPA)**

Procurement of Supply of Labor, Materials, Supervision and other Consumables for the Waterproofing Works of Roof Deck, Powerhouse, Main Electrical Room, Penthouse and Machine Room of NEA Building

PROJECT: Supply of Labor, Materials, Supervision and other Consumables for the Waterproofing Works of Roof Deck, Powerhouse, Main Electrical Room, Penthouse and Machine Room of NEA Building

SUBJECT: Detail Unit Price Analysis (DUPA)

<b>PAY ITEM:</b>	<b>1.0. GENERAL REQUIREMENTS</b>	<b>QTY</b>	<b>UNIT</b>	<b>UNIT COST</b>	<b>TOTAL COST (Php)</b>
<b>DESCRIPTION:</b>	<b>1.1. Mobilization and Demobilization.</b>	<b>1.00</b>	<b>lot</b>		
<b>A.</b>	<b>EQUIPMENT</b>				
<b>Ref. No.</b>	<b>Name and Specification of Equipment</b>	<b>No. of Units</b>	<b>No. of Days</b>	<b>Unit Cost</b>	<b>Total Cost (Php)</b>
	1.				
	2.				
	3.				
	4.				
	5.				
	<b>TOTAL EQUIPMENT COST</b>				
<b>B.</b>	<b>LABOR</b>				
<b>Ref. No.</b>	<b>Designation of Personnel</b>	<b>No. of Personnel</b>	<b>No. of Days</b>	<b>Unit Cost</b>	<b>Total Cost (Php)</b>
	1.				
	2.				
	3.				
	4.				
	5.				
	<b>TOTAL LABOR COST</b>				
<b>OUTPUT=</b>	<b>Quantity / Total Working Hours</b>				
<b>C.</b>	<b>MATERIALS</b>				
<b>Ref. No.</b>	<b>Designation of Materials</b>	<b>Unit</b>	<b>Quantity</b>	<b>Unit Cost</b>	<b>Total Cost (Php)</b>
	1.				
	2.				
	3.				
	4.				
	5.				
	<b>TOTAL MATERIALS COST</b>				
<b>D.</b>	<b>TOTAL DIRECT COST</b>	(	<b>A+B+C</b>	)	
<b>E.</b>	<b>OVERHEAD, CONTINGENCES &amp; MISC.</b>	(		)	<b>TDC</b>
<b>F.</b>	<b>PROFIT</b>	(		)	<b>TDC</b>
<b>G.</b>	<b>VALUE ADDED TAX</b>	(		)	<b>of D+E+F+G</b>
<b>H.</b>	<b>TOTAL COST</b>	(	<b>D+E+F+G+H</b>	)	
<b>I.</b>	<b>UNIT COST</b>				

PROJECT: Supply of Labor, Materials, Supervision and other Consumables for the Waterproofing Works of Roof Deck, Powerhouse, Main Electrical Room, Penthouse and Machine Room of NEA Building

SUBJECT: Detail Unit Price Analysis (DUPA)

PAY ITEM:	1.0. GENERAL REQUIREMENTS	QTY	UNIT	UNIT COST	TOTAL COST (Php)
DESCRIPTION:	1.2. Bonds, Permits and Insurances.	1.00	lot		
A.	EQUIPMENT				
Ref. No.	Name and Specification of Equipment	No. of Units	No. of Days	Unit Cost	Total Cost (Php)
	1.				
	2.				
	3.				
	4.				
	5.				
	<b>TOTAL EQUIPMENT COST</b>				
B.	LABOR				
Ref. No.	Designation of Personnel	No. of Personnel	No. of Days	Unit Cost	Total Cost (Php)
	1.				
	2.				
	3.				
	4.				
	5.				
	<b>TOTAL LABOR COST</b>				
OUTPUT=	Quantity / Total Working Hours				
C.	MATERIALS				
Ref. No.	Designation of Materials	Unit	Quantity	Unit Cost	Total Cost (Php)
	1.				
	2.				
	3.				
	4.				
	5.				
	<b>TOTAL MATERIALS COST</b>				
D.	<b>TOTAL DIRECT COST</b>	(	<b>A+B+C</b>	)	
E.	<b>OVERHEAD, CONTINGENCES &amp; MISC.</b>	(		TDC)	
F.	<b>PROFIT</b>	(		TDC)	
G.	<b>VALUE ADDED TAX</b>	(		of D+E+F+G)	
H.	<b>TOTAL COST</b>	(	<b>D+E+F+G+H</b>	)	
I.	<b>UNIT COST</b>				

PROJECT: Supply of Labor, Materials, Supervision and other Consumables for the Waterproofing Works of Roof Deck, Powerhouse, Main Electrical Room, Penthouse and Machine Room of NEA Building

SUBJECT: Detail Unit Price Analysis (DUPA)

<b>PAY ITEM:</b>	<b>1.0. GENERAL REQUIREMENTS</b>	<b>QTY</b>	<b>UNIT</b>	<b>UNIT COST</b>	<b>TOTAL COST (Php)</b>
<b>DESCRIPTION:</b>	<b>1.3. Environmental, Safety and Health.</b>	<b>1.00</b>	<b>lot</b>		
<b>A.</b>	<b>EQUIPMENT</b>				
<b>Ref. No.</b>	<b>Name and Specification of Equipment</b>	<b>No. of Units</b>	<b>No. of Days</b>	<b>Unit Cost</b>	<b>Total Cost (Php)</b>
	1.				
	2.				
	3.				
	4.				
	5.				
	<b>TOTAL EQUIPMENT COST</b>				
<b>B.</b>	<b>LABOR</b>				
<b>Ref. No.</b>	<b>Designation of Personnel</b>	<b>No. of Personnel</b>	<b>No. of Days</b>	<b>Unit Cost</b>	<b>Total Cost (Php)</b>
	1.				
	2.				
	3.				
	4.				
	5.				
	<b>TOTAL LABOR COST</b>				
<b>OUTPUT=</b>	<b>Quantity / Total Working Hours</b>				
<b>C.</b>	<b>MATERIALS</b>				
<b>Ref. No.</b>	<b>Designation of Materials</b>	<b>Unit</b>	<b>Quantity</b>	<b>Unit Cost</b>	<b>Total Cost (Php)</b>
	1.				
	2.				
	3.				
	4.				
	5.				
	<b>TOTAL MATERIALS COST</b>				
<b>D.</b>	<b>TOTAL DIRECT COST</b>	(	<b>A+B+C</b>	)	
<b>E.</b>	<b>OVERHEAD, CONTINGENCES &amp; MISC.</b>	(		TDC)	
<b>F.</b>	<b>PROFIT</b>	(		TDC)	
<b>G.</b>	<b>VALUE ADDED TAX</b>	(		of D+E+F+G)	
<b>H.</b>	<b>TOTAL COST</b>	(	<b>D+E+F+G+H</b>	)	
<b>I.</b>	<b>UNIT COST</b>				

PROJECT: Supply of Labor, Materials, Supervision and other Consumables for the Waterproofing Works of Roof Deck, Powerhouse, Main Electrical Room, Penthouse and Machine Room of NEA Building

SUBJECT: Detail Unit Price Analysis (DUPA)

<b>PAY ITEM:</b>	<b>1.0. GENERAL REQUIREMENTS</b>	<b>QTY</b>	<b>UNIT</b>	<b>UNIT COST</b>	<b>TOTAL COST (Php)</b>
<b>DESCRIPTION:</b>	<b>1.4. Temporary Facilities.</b>	<b>1.00</b>	<b>lot</b>		
<b>A.</b>	<b>EQUIPMENT</b>				
<b>Ref. No.</b>	<b>Name and Specification of Equipment</b>	<b>No. of Units</b>	<b>No. of Days</b>	<b>Unit Cost</b>	<b>Total Cost (Php)</b>
	1.				
	2.				
	3.				
	4.				
	5.				
	<b>TOTAL EQUIPMENT COST</b>				
<b>B.</b>	<b>LABOR</b>				
<b>Ref. No.</b>	<b>Designation of Personnel</b>	<b>No. of Personnel</b>	<b>No. of Days</b>	<b>Unit Cost</b>	<b>Total Cost (Php)</b>
	1.				
	2.				
	3.				
	4.				
	5.				
	<b>TOTAL LABOR COST</b>				
<b>OUTPUT=</b>	<b>Quantity / Total Working Hours</b>				
<b>C.</b>	<b>MATERIALS</b>				
<b>Ref. No.</b>	<b>Designation of Materials</b>	<b>Unit</b>	<b>Quantity</b>	<b>Unit Cost</b>	<b>Total Cost (Php)</b>
	1.				
	2.				
	3.				
	4.				
	5.				
	<b>TOTAL MATERIALS COST</b>				
<b>D.</b>	<b>TOTAL DIRECT COST</b>	(	<b>A+B+C</b>	)	
<b>E.</b>	<b>OVERHEAD, CONTINGENCES &amp; MISC.</b>	(		TDC)	
<b>F.</b>	<b>PROFIT</b>	(		TDC)	
<b>G.</b>	<b>VALUE ADDED TAX</b>	(		of D+E+F+G)	
<b>H.</b>	<b>TOTAL COST</b>	(	<b>D+E+F+G+H</b>	)	
<b>I.</b>	<b>UNIT COST</b>				

PROJECT: Supply of Labor, Materials, Supervision and other Consumables for the Waterproofing Works of Roof Deck, Powerhouse, Main Electrical Room, Penthouse and Machine Room of NEA Building

SUBJECT: Detail Unit Price Analysis (DUPA)

<b>PAY ITEM:</b>	<b>2.0. SURFACE PREPARATION AND INSTALLATION OF WATERPROOFING MATERIALS AT ROOF DECK AREA</b>	<b>QTY</b>	<b>UNIT</b>	<b>UNIT COST</b>	<b>TOTAL COST (Php)</b>
<b>DESCRIPTION:</b>	2.1. Removal of all existing waterproofing and concrete topping, and hauling the same for proper disposal by the contractor to a designated location.	1,607.50	sq.m.		
<b>A.</b>	<b>EQUIPMENT</b>				
<b>Ref. No.</b>	<b>Name and Specification of Equipment</b>	<b>No. of Units</b>	<b>No. of Days</b>	<b>Unit Cost</b>	<b>Total Cost (Php)</b>
	1.				
	2.				
	3.				
	4.				
	5.				
	<b>TOTAL EQUIPMENT COST</b>				
<b>B.</b>	<b>LABOR</b>				
<b>Ref. No.</b>	<b>Designation of Personnel</b>	<b>No. of Personnel</b>	<b>No. of Days</b>	<b>Unit Cost</b>	<b>Total Cost (Php)</b>
	1.				
	2.				
	3.				
	4.				
	5.				
	<b>TOTAL LABOR COST</b>				
<b>OUTPUT=</b>	<b>Quantity / Total Working Hours</b>				
<b>C.</b>	<b>MATERIALS</b>				
<b>Ref. No.</b>	<b>Designation of Materials</b>	<b>Unit</b>	<b>Quantity</b>	<b>Unit Cost</b>	<b>Total Cost (Php)</b>
	1.				
	2.				
	3.				
	4.				
	5.				
	<b>TOTAL MATERIALS COST</b>				
<b>D.</b>	<b>TOTAL DIRECT COST</b>	(	<b>A+B+C</b>	)	
<b>E.</b>	<b>OVERHEAD, CONTINGENCES &amp; MISC.</b>	(		)	<b>TDC</b>
<b>F.</b>	<b>PROFIT</b>	(		)	<b>TDC</b>
<b>G.</b>	<b>VALUE ADDED TAX</b>	(		)	<b>of D+E+F+G</b>
<b>H.</b>	<b>TOTAL COST</b>	(	<b>D+E+F+G+H</b>	)	
<b>I.</b>	<b>UNIT COST</b>				

PROJECT: Supply of Labor, Materials, Supervision and other Consumables for the Waterproofing Works of Roof Deck, Powerhouse, Main Electrical Room, Penthouse and Machine Room of NEA Building

SUBJECT: Detail Unit Price Analysis (DUPA)

<b>PAY ITEM:</b>	<b>2.0. SURFACE PREPARATION AND INSTALLATION OF WATERPROOFING MATERIALS AT ROOF DECK AREA</b>	<b>QTY</b>	<b>UNIT</b>	<b>UNIT COST</b>	<b>TOTAL COST (Php)</b>
<b>DESCRIPTION:</b>	2.2. Temporary removal of garden plants, soil and other items from planters' boxes. All soil and plants shall be put in sacks, plastic plant bags and placed in designated area.	1.00	lot		
<b>A.</b>	<b>EQUIPMENT</b>				
<b>Ref. No.</b>	<b>Name and Specification of Equipment</b>	<b>No. of Units</b>	<b>No. of Days</b>	<b>Unit Cost</b>	<b>Total Cost (Php)</b>
	1.				
	2.				
	3.				
	4.				
	5.				
	<b>TOTAL EQUIPMENT COST</b>				
<b>B.</b>	<b>LABOR</b>				
<b>Ref. No.</b>	<b>Designation of Personnel</b>	<b>No. of Personnel</b>	<b>No. of Days</b>	<b>Unit Cost</b>	<b>Total Cost (Php)</b>
	1.				
	2.				
	3.				
	4.				
	5.				
	<b>TOTAL LABOR COST</b>				
<b>OUTPUT=</b>	<b>Quantity / Total Working Hours</b>				
<b>C.</b>	<b>MATERIALS</b>				
<b>Ref. No.</b>	<b>Designation of Materials</b>	<b>Unit</b>	<b>Quantity</b>	<b>Unit Cost</b>	<b>Total Cost (Php)</b>
	1.				
	2.				
	3.				
	4.				
	5.				
	<b>TOTAL MATERIALS COST</b>				
<b>D.</b>	<b>TOTAL DIRECT COST</b>	(	<b>A+B+C</b>	)	
<b>E.</b>	<b>OVERHEAD, CONTINGENCES &amp; MISC.</b>	(		)	<b>TDC</b>
<b>F.</b>	<b>PROFIT</b>	(		)	<b>TDC</b>
<b>G.</b>	<b>VALUE ADDED TAX</b>	(		)	<b>of D+E+F+G</b>
<b>H.</b>	<b>TOTAL COST</b>	(	<b>D+E+F+G+H</b>	)	
<b>I.</b>	<b>UNIT COST</b>				

PROJECT: Supply of Labor, Materials, Supervision and other Consumables for the Waterproofing Works of Roof Deck, Powerhouse, Main Electrical Room, Penthouse and Machine Room of NEA Building

SUBJECT: Detail Unit Price Analysis (DUPA)

<b>PAY ITEM:</b>	<b>2.0. SURFACE PREPARATION AND INSTALLATION OF WATERPROOFING MATERIALS AT ROOF DECK AREA</b>	<b>QTY</b>	<b>UNIT</b>	<b>UNIT COST</b>	<b>TOTAL COST (Php)</b>
<b>DESCRIPTION:</b>	2.3. Preparation of surface area. Clean, dry, sound surfaces free of loose particles before application of waterproofing materials. Including correction of slope to drain and restoration of damage surface. Repair/seal cracks on concrete, cold joint, construction and expansion joint.	1,607.50	sq.m.		
<b>A.</b>	<b>EQUIPMENT</b>				
<b>Ref. No.</b>	<b>Name and Specification of Equipment</b>	<b>No. of Units</b>	<b>No. of Days</b>	<b>Unit Cost</b>	<b>Total Cost (Php)</b>
	1.				
	2.				
	3.				
	4.				
	5.				
	<b>TOTAL EQUIPMENT COST</b>				
<b>B.</b>	<b>LABOR</b>				
<b>Ref. No.</b>	<b>Designation of Personnel</b>	<b>No. of Personnel</b>	<b>No. of Days</b>	<b>Unit Cost</b>	<b>Total Cost (Php)</b>
	1.				
	2.				
	3.				
	4.				
	5.				
	<b>TOTAL LABOR COST</b>				
<b>OUTPUT=</b>	<b>Quantity / Total Working Hours</b>				
<b>C.</b>	<b>MATERIALS</b>				
<b>Ref. No.</b>	<b>Designation of Materials</b>	<b>Unit</b>	<b>Quantity</b>	<b>Unit Cost</b>	<b>Total Cost (Php)</b>
	1.				
	2.				
	3.				
	4.				
	5.				
	<b>TOTAL MATERIALS COST</b>				
<b>D.</b>	<b>TOTAL DIRECT COST</b>	(	<b>A+B+C</b>	)	
<b>E.</b>	<b>OVERHEAD, CONTINGENCES &amp; MISC.</b>	(		<b>TDC)</b>	
<b>F.</b>	<b>PROFIT</b>	(		<b>TDC)</b>	
<b>G.</b>	<b>VALUE ADDED TAX</b>	(		<b>of D+E+F+G)</b>	
<b>H.</b>	<b>TOTAL COST</b>	(	<b>D+E+F+G+H</b>	)	
<b>I.</b>	<b>UNIT COST</b>				

PROJECT: Supply of Labor, Materials, Supervision and other Consumables for the Waterproofing Works of Roof Deck, Powerhouse, Main Electrical Room, Penthouse and Machine Room of NEA Building



SUBJECT: Detail Unit Price Analysis (DUPA)

<b>PAY ITEM:</b>	<b>2.0. SURFACE PREPARATION AND INSTALLATION OF WATERPROOFING MATERIALS AT ROOF DECK AREA</b>	<b>QTY</b>	<b>UNIT</b>	<b>UNIT COST</b>	<b>TOTAL COST (Php)</b>
<b>DESCRIPTION:</b>	2.4. De-clogging, repair and leak test of all storm drain.	17.00	unit		
<b>A.</b>	<b>EQUIPMENT</b>				
<b>Ref. No.</b>	<b>Name and Specification of Equipment</b>	<b>No. of Units</b>	<b>No. of Days</b>	<b>Unit Cost</b>	<b>Total Cost (Php)</b>
	1.				
	2.				
	3.				
	4.				
	5.				
	<b>TOTAL EQUIPMENT COST</b>				
<b>B.</b>	<b>LABOR</b>				
<b>Ref. No.</b>	<b>Designation of Personnel</b>	<b>No. of Personnel</b>	<b>No. of Days</b>	<b>Unit Cost</b>	<b>Total Cost (Php)</b>
	1.				
	2.				
	3.				
	4.				
	5.				
	<b>TOTAL LABOR COST</b>				
<b>OUTPUT=</b>	<b>Quantity / Total Working Hours</b>				
<b>C.</b>	<b>MATERIALS</b>				
<b>Ref. No.</b>	<b>Designation of Materials</b>	<b>Unit</b>	<b>Quantity</b>	<b>Unit Cost</b>	<b>Total Cost (Php)</b>
	1.				
	2.				
	3.				
	4.				
	5.				
	<b>TOTAL MATERIALS COST</b>				
<b>D.</b>	<b>TOTAL DIRECT COST</b>	(	<b>A+B+C</b>	)	
<b>E.</b>	<b>OVERHEAD, CONTINGENCES &amp; MISC.</b>	(		<b>TDC</b> )	
<b>F.</b>	<b>PROFIT</b>	(		<b>TDC</b> )	
<b>G.</b>	<b>VALUE ADDED TAX</b>	(		<b>of D+E+F+G</b> )	
<b>H.</b>	<b>TOTAL COST</b>	(	<b>D+E+F+G+H</b>	)	
<b>I.</b>	<b>UNIT COST</b>				

PROJECT: Supply of Labor, Materials, Supervision and other Consumables for the Waterproofing Works of Roof Deck, Powerhouse, Main Electrical Room, Penthouse and Machine Room of NEA Building

SUBJECT: Detail Unit Price Analysis (DUPA)

<b>PAY ITEM:</b>	<b>2.0. SURFACE PREPARATION AND INSTALLATION OF WATERPROOFING MATERIALS AT ROOF DECK AREA</b>	<b>QTY</b>	<b>UNIT</b>	<b>UNIT COST</b>	<b>TOTAL COST (Php)</b>
<b>DESCRIPTION:</b>	2.5. Application or installation of waterproofing materials as per scope of work and specifications.	1,607.50	sq.m.		
<b>A.</b>	<b>EQUIPMENT</b>				
<b>Ref. No.</b>	<b>Name and Specification of Equipment</b>	<b>No. of Units</b>	<b>No. of Days</b>	<b>Unit Cost</b>	<b>Total Cost (Php)</b>
	1.				
	2.				
	3.				
	4.				
	5.				
	<b>TOTAL EQUIPMENT COST</b>				
<b>B.</b>	<b>LABOR</b>				
<b>Ref. No.</b>	<b>Designation of Personnel</b>	<b>No. of Personnel</b>	<b>No. of Days</b>	<b>Unit Cost</b>	<b>Total Cost (Php)</b>
	1.				
	2.				
	3.				
	4.				
	5.				
	<b>TOTAL LABOR COST</b>				
<b>OUTPUT=</b>	<b>Quantity / Total Working Hours</b>				
<b>C.</b>	<b>MATERIALS</b>				
<b>Ref. No.</b>	<b>Designation of Materials</b>	<b>Unit</b>	<b>Quantity</b>	<b>Unit Cost</b>	<b>Total Cost (Php)</b>
	1.				
	2.				
	3.				
	4.				
	5.				
	<b>TOTAL MATERIALS COST</b>				
<b>D.</b>	<b>TOTAL DIRECT COST</b>	(	<b>A+B+C</b>	)	
<b>E.</b>	<b>OVERHEAD, CONTINGENCES &amp; MISC.</b>	(		TDC)	
<b>F.</b>	<b>PROFIT</b>	(		TDC)	
<b>G.</b>	<b>VALUE ADDED TAX</b>	(		of D+E+F+G)	
<b>H.</b>	<b>TOTAL COST</b>	(	<b>D+E+F+G+H</b>	)	
<b>I.</b>	<b>UNIT COST</b>				

PROJECT: Supply of Labor, Materials, Supervision and other Consumables for the Waterproofing Works of Roof Deck, Powerhouse, Main Electrical Room, Penthouse and Machine Room of NEA Building

SUBJECT: Detail Unit Price Analysis (DUPA)

<b>PAY ITEM:</b>	<b>2.0. SURFACE PREPARATION AND INSTALLATION OF WATERPROOFING MATERIALS AT ROOF DECK AREA</b>	<b>QTY</b>	<b>UNIT</b>	<b>UNIT COST</b>	<b>TOTAL COST (Php)</b>
<b>DESCRIPTION:</b>	2.6. Replacement of existing brass strainers and restoration of missing brass strainers with a new dome type strainer.	17.00	pcs		
<b>A.</b>	<b>EQUIPMENT</b>				
<b>Ref. No.</b>	<b>Name and Specification of Equipment</b>	<b>No. of Units</b>	<b>No. of Days</b>	<b>Unit Cost</b>	<b>Total Cost (Php)</b>
	1.				
	2.				
	3.				
	4.				
	5.				
	<b>TOTAL EQUIPMENT COST</b>				
<b>B.</b>	<b>LABOR</b>				
<b>Ref. No.</b>	<b>Designation of Personnel</b>	<b>No. of Personnel</b>	<b>No. of Days</b>	<b>Unit Cost</b>	<b>Total Cost (Php)</b>
	1.				
	2.				
	3.				
	4.				
	5.				
	<b>TOTAL LABOR COST</b>				
<b>OUTPUT=</b>	<b>Quantity / Total Working Hours</b>				
<b>C.</b>	<b>MATERIALS</b>				
<b>Ref. No.</b>	<b>Designation of Materials</b>	<b>Unit</b>	<b>Quantity</b>	<b>Unit Cost</b>	<b>Total Cost (Php)</b>
	1.				
	2.				
	3.				
	4.				
	5.				
	<b>TOTAL MATERIALS COST</b>				
<b>D.</b>	<b>TOTAL DIRECT COST</b>	(	<b>A+B+C</b>	)	
<b>E.</b>	<b>OVERHEAD, CONTINGENCES &amp; MISC.</b>	(		TDC)	
<b>F.</b>	<b>PROFIT</b>	(		TDC)	
<b>G.</b>	<b>VALUE ADDED TAX</b>	(		of D+E+F+G)	
<b>H.</b>	<b>TOTAL COST</b>	(	<b>D+E+F+G+H</b>	)	
<b>I.</b>	<b>UNIT COST</b>				

PROJECT: Supply of Labor, Materials, Supervision and other Consumables for the Waterproofing Works of Roof Deck, Powerhouse, Main Electrical Room, Penthouse and Machine Room of NEA Building

SUBJECT: Detail Unit Price Analysis (DUPA)

<b>PAY ITEM:</b>	<b>2.0. SURFACE PREPARATION AND INSTALLATION OF WATERPROOFING MATERIALS AT ROOF DECK AREA</b>	<b>QTY</b>	<b>UNIT</b>	<b>UNIT COST</b>	<b>TOTAL COST (Php)</b>
<b>DESCRIPTION:</b>	<b>2.7. Flood testing for at least 48 hours.</b>	<b>1,607.50</b>	<b>sq.m.</b>		
<b>A.</b>	<b>EQUIPMENT</b>				
<b>Ref. No.</b>	<b>Name and Specification of Equipment</b>	<b>No. of Units</b>	<b>No. of Days</b>	<b>Unit Cost</b>	<b>Total Cost (Php)</b>
	1.				
	2.				
	3.				
	4.				
	5.				
	<b>TOTAL EQUIPMENT COST</b>				
<b>B.</b>	<b>LABOR</b>				
<b>Ref. No.</b>	<b>Designation of Personnel</b>	<b>No. of Personnel</b>	<b>No. of Days</b>	<b>Unit Cost</b>	<b>Total Cost (Php)</b>
	1.				
	2.				
	3.				
	4.				
	5.				
	<b>TOTAL LABOR COST</b>				
<b>OUTPUT=</b>	<b>Quantity / Total Working Hours</b>				
<b>C.</b>	<b>MATERIALS</b>				
<b>Ref. No.</b>	<b>Designation of Materials</b>	<b>Unit</b>	<b>Quantity</b>	<b>Unit Cost</b>	<b>Total Cost (Php)</b>
	1.				
	2.				
	3.				
	4.				
	5.				
	<b>TOTAL MATERIALS COST</b>				
<b>D.</b>	<b>TOTAL DIRECT COST</b>	(	<b>A+B+C</b>	)	
<b>E.</b>	<b>OVERHEAD, CONTINGENCES &amp; MISC.</b>	(		TDC)	
<b>F.</b>	<b>PROFIT</b>	(		TDC)	
<b>G.</b>	<b>VALUE ADDED TAX</b>	(		of D+E+F+G)	
<b>H.</b>	<b>TOTAL COST</b>	(	<b>D+E+F+G+H</b>	)	
<b>I.</b>	<b>UNIT COST</b>				

PROJECT: Supply of Labor, Materials, Supervision and other Consumables for the Waterproofing Works of Roof Deck, Powerhouse, Main Electrical Room, Penthouse and Machine Room of NEA Building

SUBJECT: Detail Unit Price Analysis (DUPA)

<b>PAY ITEM:</b>	<b>2.0. SURFACE PREPARATION AND INSTALLATION OF WATERPROOFING MATERIALS AT ROOF DECK AREA</b>	<b>QTY</b>	<b>UNIT</b>	<b>UNIT COST</b>	<b>TOTAL COST (Php)</b>
<b>DESCRIPTION:</b>	2.8. Restoration of garden soils, plants and other items removed from the planter box into its original conditions, including cleaning of weep hole drains.	1.00	lot		
<b>A.</b>	<b>EQUIPMENT</b>				
<b>Ref. No.</b>	<b>Name and Specification of Equipment</b>	<b>No. of Units</b>	<b>No. of Days</b>	<b>Unit Cost</b>	<b>Total Cost (Php)</b>
	1.				
	2.				
	3.				
	4.				
	5.				
	<b>TOTAL EQUIPMENT COST</b>				
<b>B.</b>	<b>LABOR</b>				
<b>Ref. No.</b>	<b>Designation of Personnel</b>	<b>No. of Personnel</b>	<b>No. of Days</b>	<b>Unit Cost</b>	<b>Total Cost (Php)</b>
	1.				
	2.				
	3.				
	4.				
	5.				
	<b>TOTAL LABOR COST</b>				
<b>OUTPUT=</b>	<b>Quantity / Total Working Hours</b>				
<b>C.</b>	<b>MATERIALS</b>				
<b>Ref. No.</b>	<b>Designation of Materials</b>	<b>Unit</b>	<b>Quantity</b>	<b>Unit Cost</b>	<b>Total Cost (Php)</b>
	1.				
	2.				
	3.				
	4.				
	5.				
	<b>TOTAL MATERIALS COST</b>				
<b>D.</b>	<b>TOTAL DIRECT COST</b>	(	<b>A+B+C</b>	)	
<b>E.</b>	<b>OVERHEAD, CONTINGENCES &amp; MISC.</b>	(		TDC)	
<b>F.</b>	<b>PROFIT</b>	(		TDC)	
<b>G.</b>	<b>VALUE ADDED TAX</b>	(		of D+E+F+G)	
<b>H.</b>	<b>TOTAL COST</b>	(	<b>D+E+F+G+H</b>	)	
<b>I.</b>	<b>UNIT COST</b>				

PROJECT: Supply of Labor, Materials, Supervision and other Consumables for the Waterproofing Works of Roof Deck, Powerhouse, Main Electrical Room, Penthouse and Machine Room of NEA Building

SUBJECT: Detail Unit Price Analysis (DUPA)

<b>PAY ITEM:</b>	<b>3.0. SURFACE PREPARATION AND INSTALLATION OF WATERPROOFING MATERIALS AT POWERHOUSE AREA</b>	<b>QTY</b>	<b>UNIT</b>	<b>UNIT COST</b>	<b>TOTAL COST (Php)</b>
<b>DESCRIPTION:</b>	3.1. Removal of all existing waterproofing and concrete topping, and hauling the same for proper disposal by the contractor to a designated location.	45.00	sq.m.		
<b>A.</b>	<b>EQUIPMENT</b>				
<b>Ref. No.</b>	<b>Name and Specification of Equipment</b>	<b>No. of Units</b>	<b>No. of Days</b>	<b>Unit Cost</b>	<b>Total Cost (Php)</b>
	1.				
	2.				
	3.				
	4.				
	5.				
	<b>TOTAL EQUIPMENT COST</b>				
<b>B.</b>	<b>LABOR</b>				
<b>Ref. No.</b>	<b>Designation of Personnel</b>	<b>No. of Personnel</b>	<b>No. of Days</b>	<b>Unit Cost</b>	<b>Total Cost (Php)</b>
	1.				
	2.				
	3.				
	4.				
	5.				
	<b>TOTAL LABOR COST</b>				
<b>OUTPUT=</b>	<b>Quantity / Total Working Hours</b>				
<b>C.</b>	<b>MATERIALS</b>				
<b>Ref. No.</b>	<b>Designation of Materials</b>	<b>Unit</b>	<b>Quantity</b>	<b>Unit Cost</b>	<b>Total Cost (Php)</b>
	1.				
	2.				
	3.				
	4.				
	5.				
	<b>TOTAL MATERIALS COST</b>				
<b>D.</b>	<b>TOTAL DIRECT COST</b>	(	<b>A+B+C</b>	)	
<b>E.</b>	<b>OVERHEAD, CONTINGENCES &amp; MISC.</b>	(		TDC)	
<b>F.</b>	<b>PROFIT</b>	(		TDC)	
<b>G.</b>	<b>VALUE ADDED TAX</b>	(		of D+E+F+G)	
<b>H.</b>	<b>TOTAL COST</b>	(	<b>D+E+F+G+H</b>	)	
<b>I.</b>	<b>UNIT COST</b>				

PROJECT: Supply of Labor, Materials, Supervision and other Consumables for the Waterproofing Works of Roof Deck, Powerhouse, Main Electrical Room, Penthouse and Machine Room of NEA Building

SUBJECT: Detail Unit Price Analysis (DUPA)

<b>PAY ITEM:</b>	<b>3.0. SURFACE PREPARATION AND INSTALLATION OF WATERPROOFING MATERIALS AT POWERHOUSE AREA</b>	<b>QTY</b>	<b>UNIT</b>	<b>UNIT COST</b>	<b>TOTAL COST (Php)</b>
<b>DESCRIPTION:</b>	3.2. Preparation of surface area. Clean, dry, sound surfaces free of loose particles before application of waterproofing materials. Including correction of slope to drain and restoration of damage surface. Repair/seal cracks on concrete, cold joint, construction and expansion joint.	45.00	sq.m.		
<b>A.</b>	<b>EQUIPMENT</b>				
<b>Ref. No.</b>	<b>Name and Specification of Equipment</b>	<b>No. of Units</b>	<b>No. of Days</b>	<b>Unit Cost</b>	<b>Total Cost (Php)</b>
	1.				
	2.				
	3.				
	4.				
	5.				
	<b>TOTAL EQUIPMENT COST</b>				
<b>B.</b>	<b>LABOR</b>				
<b>Ref. No.</b>	<b>Designation of Personnel</b>	<b>No. of Personnel</b>	<b>No. of Days</b>	<b>Unit Cost</b>	<b>Total Cost (Php)</b>
	1.				
	2.				
	3.				
	4.				
	5.				
	<b>TOTAL LABOR COST</b>				
<b>OUTPUT=</b>	<b>Quantity / Total Working Hours</b>				
<b>C.</b>	<b>MATERIALS</b>				
<b>Ref. No.</b>	<b>Designation of Materials</b>	<b>Unit</b>	<b>Quantity</b>	<b>Unit Cost</b>	<b>Total Cost (Php)</b>
	1.				
	2.				
	3.				
	4.				
	5.				
	<b>TOTAL MATERIALS COST</b>				
<b>D.</b>	<b>TOTAL DIRECT COST</b>	(	<b>A+B+C</b>	)	
<b>E.</b>	<b>OVERHEAD, CONTINGENCES &amp; MISC.</b>	(		TDC)	
<b>F.</b>	<b>PROFIT</b>	(		TDC)	
<b>G.</b>	<b>VALUE ADDED TAX</b>	(		of D+E+F+G)	
<b>H.</b>	<b>TOTAL COST</b>	(	<b>D+E+F+G+H</b>	)	
<b>I.</b>	<b>UNIT COST</b>				

PROJECT: Supply of Labor, Materials, Supervision and other Consumables for the Waterproofing Works of Roof Deck, Powerhouse, Main Electrical Room, Penthouse and Machine Room of NEA Building

SUBJECT: Detail Unit Price Analysis (DUPA)

<b>PAY ITEM:</b>	<b>3.0. SURFACE PREPARATION AND INSTALLATION OF WATERPROOFING MATERIALS AT POWERHOUSE AREA</b>	<b>QTY</b>	<b>UNIT</b>	<b>UNIT COST</b>	<b>TOTAL COST (Php)</b>
<b>DESCRIPTION:</b>	<b>3.3. De-clogging, repair and leak test of all storm drain.</b>	<b>2.00</b>	<b>unit</b>		
<b>A.</b>	<b>EQUIPMENT</b>				
<b>Ref. No.</b>	<b>Name and Specification of Equipment</b>	<b>No. of Units</b>	<b>No. of Days</b>	<b>Unit Cost</b>	<b>Total Cost (Php)</b>
	1.				
	2.				
	3.				
	4.				
	5.				
	<b>TOTAL EQUIPMENT COST</b>				
<b>B.</b>	<b>LABOR</b>				
<b>Ref. No.</b>	<b>Designation of Personnel</b>	<b>No. of Personnel</b>	<b>No. of Days</b>	<b>Unit Cost</b>	<b>Total Cost (Php)</b>
	1.				
	2.				
	3.				
	4.				
	5.				
	<b>TOTAL LABOR COST</b>				
<b>OUTPUT=</b>	<b>Quantity / Total Working Hours</b>				
<b>C.</b>	<b>MATERIALS</b>				
<b>Ref. No.</b>	<b>Designation of Materials</b>	<b>Unit</b>	<b>Quantity</b>	<b>Unit Cost</b>	<b>Total Cost (Php)</b>
	1.				
	2.				
	3.				
	4.				
	5.				
	<b>TOTAL MATERIALS COST</b>				
<b>D.</b>	<b>TOTAL DIRECT COST</b>	(	<b>A+B+C</b>	)	
<b>E.</b>	<b>OVERHEAD, CONTINGENCES &amp; MISC.</b>	(		<b>TDC)</b>	
<b>F.</b>	<b>PROFIT</b>	(		<b>TDC)</b>	
<b>G.</b>	<b>VALUE ADDED TAX</b>	(		<b>of D+E+F+G)</b>	
<b>H.</b>	<b>TOTAL COST</b>	(	<b>D+E+F+G+H</b>	)	
<b>I.</b>	<b>UNIT COST</b>				

PROJECT: Supply of Labor, Materials, Supervision and other Consumables for the Waterproofing Works of Roof Deck, Powerhouse, Main Electrical Room, Penthouse and Machine Room of NEA Building



SUBJECT: Detail Unit Price Analysis (DUPA)

<b>PAY ITEM:</b>	<b>3.0. SURFACE PREPARATION AND INSTALLATION OF WATERPROOFING MATERIALS AT POWERHOUSE AREA</b>	<b>QTY</b>	<b>UNIT</b>	<b>UNIT COST</b>	<b>TOTAL COST (Php)</b>
<b>DESCRIPTION:</b>	3.4. Application or installation of waterproofing materials as per scope of work and specifications.	45.00	sq.m.		
<b>A.</b>	<b>EQUIPMENT</b>				
<b>Ref. No.</b>	<b>Name and Specification of Equipment</b>	<b>No. of Units</b>	<b>No. of Days</b>	<b>Unit Cost</b>	<b>Total Cost (Php)</b>
	1.				
	2.				
	3.				
	4.				
	5.				
	<b>TOTAL EQUIPMENT COST</b>				
<b>B.</b>	<b>LABOR</b>				
<b>Ref. No.</b>	<b>Designation of Personnel</b>	<b>No. of Personnel</b>	<b>No. of Days</b>	<b>Unit Cost</b>	<b>Total Cost (Php)</b>
	1.				
	2.				
	3.				
	4.				
	5.				
	<b>TOTAL LABOR COST</b>				
<b>OUTPUT=</b>	<b>Quantity / Total Working Hours</b>				
<b>C.</b>	<b>MATERIALS</b>				
<b>Ref. No.</b>	<b>Designation of Materials</b>	<b>Unit</b>	<b>Quantity</b>	<b>Unit Cost</b>	<b>Total Cost (Php)</b>
	1.				
	2.				
	3.				
	4.				
	5.				
	<b>TOTAL MATERIALS COST</b>				
<b>D.</b>	<b>TOTAL DIRECT COST</b>	(	<b>A+B+C</b>	)	
<b>E.</b>	<b>OVERHEAD, CONTINGENCES &amp; MISC.</b>	(		)	<b>TDC</b>
<b>F.</b>	<b>PROFIT</b>	(		)	<b>TDC</b>
<b>G.</b>	<b>VALUE ADDED TAX</b>	(		)	<b>of D+E+F+G</b>
<b>H.</b>	<b>TOTAL COST</b>	(	<b>D+E+F+G+H</b>	)	
<b>I.</b>	<b>UNIT COST</b>				

PROJECT: Supply of Labor, Materials, Supervision and other Consumables for the Waterproofing Works of Roof Deck, Powerhouse, Main Electrical Room, Penthouse and Machine Room of NEA Building

SUBJECT: Detail Unit Price Analysis (DUPA)

<b>PAY ITEM:</b>	<b>3.0. SURFACE PREPARATION AND INSTALLATION OF WATERPROOFING MATERIALS AT POWERHOUSE AREA</b>	<b>QTY</b>	<b>UNIT</b>	<b>UNIT COST</b>	<b>TOTAL COST (Php)</b>
<b>DESCRIPTION:</b>	3.5. Replacement of existing brass strainers and restoration of missing brass strainers with a new dome type strainer.	2.00	pcs		
<b>A.</b>	<b>EQUIPMENT</b>				
<b>Ref. No.</b>	<b>Name and Specification of Equipment</b>	<b>No. of Units</b>	<b>No. of Days</b>	<b>Unit Cost</b>	<b>Total Cost (Php)</b>
	1.				
	2.				
	3.				
	4.				
	5.				
	<b>TOTAL EQUIPMENT COST</b>				
<b>B.</b>	<b>LABOR</b>				
<b>Ref. No.</b>	<b>Designation of Personnel</b>	<b>No. of Personnel</b>	<b>No. of Days</b>	<b>Unit Cost</b>	<b>Total Cost (Php)</b>
	1.				
	2.				
	3.				
	4.				
	5.				
	<b>TOTAL LABOR COST</b>				
<b>OUTPUT=</b>	<b>Quantity / Total Working Hours</b>				
<b>C.</b>	<b>MATERIALS</b>				
<b>Ref. No.</b>	<b>Designation of Materials</b>	<b>Unit</b>	<b>Quantity</b>	<b>Unit Cost</b>	<b>Total Cost (Php)</b>
	1.				
	2.				
	3.				
	4.				
	5.				
	<b>TOTAL MATERIALS COST</b>				
<b>D.</b>	<b>TOTAL DIRECT COST</b>	(	<b>A+B+C</b>	)	
<b>E.</b>	<b>OVERHEAD, CONTINGENCES &amp; MISC.</b>	(		)	<b>TDC</b>
<b>F.</b>	<b>PROFIT</b>	(		)	<b>TDC</b>
<b>G.</b>	<b>VALUE ADDED TAX</b>	(		)	<b>of D+E+F+G</b>
<b>H.</b>	<b>TOTAL COST</b>	(	<b>D+E+F+G+H</b>	)	
<b>I.</b>	<b>UNIT COST</b>				

PROJECT: Supply of Labor, Materials, Supervision and other Consumables for the Waterproofing Works of Roof Deck, Powerhouse, Main Electrical Room, Penthouse and Machine Room of NEA Building

SUBJECT: Detail Unit Price Analysis (DUPA)

<b>PAY ITEM:</b>	<b>3.0. SURFACE PREPARATION AND INSTALLATION OF WATERPROOFING MATERIALS AT POWERHOUSE AREA</b>	<b>QTY</b>	<b>UNIT</b>	<b>UNIT COST</b>	<b>TOTAL COST (Php)</b>
<b>DESCRIPTION:</b>	3.6. Flood testing for at least 48 hours.	45.00	sq.m.		
<b>A.</b>	<b>EQUIPMENT</b>				
<b>Ref. No.</b>	<b>Name and Specification of Equipment</b>	<b>No. of Units</b>	<b>No. of Days</b>	<b>Unit Cost</b>	<b>Total Cost (Php)</b>
	1.				
	2.				
	3.				
	4.				
	5.				
	<b>TOTAL EQUIPMENT COST</b>				
<b>B.</b>	<b>LABOR</b>				
<b>Ref. No.</b>	<b>Designation of Personnel</b>	<b>No. of Personnel</b>	<b>No. of Days</b>	<b>Unit Cost</b>	<b>Total Cost (Php)</b>
	1.				
	2.				
	3.				
	4.				
	5.				
	<b>TOTAL LABOR COST</b>				
<b>OUTPUT=</b>	<b>Quantity / Total Working Hours</b>				
<b>C.</b>	<b>MATERIALS</b>				
<b>Ref. No.</b>	<b>Designation of Materials</b>	<b>Unit</b>	<b>Quantity</b>	<b>Unit Cost</b>	<b>Total Cost (Php)</b>
	1.				
	2.				
	3.				
	4.				
	5.				
	<b>TOTAL MATERIALS COST</b>				
<b>D.</b>	<b>TOTAL DIRECT COST</b>	(	<b>A+B+C</b>	)	
<b>E.</b>	<b>OVERHEAD, CONTINGENCES &amp; MISC.</b>	(		TDC)	
<b>F.</b>	<b>PROFIT</b>	(		TDC)	
<b>G.</b>	<b>VALUE ADDED TAX</b>	(		of D+E+F+G)	
<b>H.</b>	<b>TOTAL COST</b>	(	<b>D+E+F+G+H</b>	)	
<b>I.</b>	<b>UNIT COST</b>				

PROJECT: Supply of Labor, Materials, Supervision and other Consumables for the Waterproofing Works of Roof Deck, Powerhouse, Main Electrical Room, Penthouse and Machine Room of NEA Building

SUBJECT: Detail Unit Price Analysis (DUPA)

<b>PAY ITEM:</b>	<b>4.0. SURFACE PREPARATION AND INSTALLATION OF WATERPROOFING MATERIALS AT MAIN ELECTRICAL ROOM AREA</b>	<b>QTY</b>	<b>UNIT</b>	<b>UNIT COST</b>	<b>TOTAL COST (Php)</b>
<b>DESCRIPTION:</b>	4.1. Removal of all existing waterproofing and concrete topping, and hauling the same for proper disposal by the contractor to a designated location.	20.28	sq.m.		
<b>A.</b>	<b>EQUIPMENT</b>				
<b>Ref. No.</b>	<b>Name and Specification of Equipment</b>	<b>No. of Units</b>	<b>No. of Days</b>	<b>Unit Cost</b>	<b>Total Cost (Php)</b>
	1.				
	2.				
	3.				
	4.				
	5.				
	<b>TOTAL EQUIPMENT COST</b>				
<b>B.</b>	<b>LABOR</b>				
<b>Ref. No.</b>	<b>Designation of Personnel</b>	<b>No. of Personnel</b>	<b>No. of Days</b>	<b>Unit Cost</b>	<b>Total Cost (Php)</b>
	1.				
	2.				
	3.				
	4.				
	5.				
	<b>TOTAL LABOR COST</b>				
<b>OUTPUT=</b>	<b>Quantity / Total Working Hours</b>				
<b>C.</b>	<b>MATERIALS</b>				
<b>Ref. No.</b>	<b>Designation of Materials</b>	<b>Unit</b>	<b>Quantity</b>	<b>Unit Cost</b>	<b>Total Cost (Php)</b>
	1.				
	2.				
	3.				
	4.				
	5.				
	<b>TOTAL MATERIALS COST</b>				
<b>D.</b>	<b>TOTAL DIRECT COST</b>	(	<b>A+B+C</b>	)	
<b>E.</b>	<b>OVERHEAD, CONTINGENCES &amp; MISC.</b>	(		TDC)	
<b>F.</b>	<b>PROFIT</b>	(		TDC)	
<b>G.</b>	<b>VALUE ADDED TAX</b>	(		of D+E+F+G)	
<b>H.</b>	<b>TOTAL COST</b>	(	<b>D+E+F+G+H</b>	)	
<b>I.</b>	<b>UNIT COST</b>				

PROJECT: Supply of Labor, Materials, Supervision and other Consumables for the Waterproofing Works of Roof Deck, Powerhouse, Main Electrical Room, Penthouse and Machine Room of NEA Building

SUBJECT: Detail Unit Price Analysis (DUPA)

<b>PAY ITEM:</b>	<b>4.0. SURFACE PREPARATION AND INSTALLATION OF WATERPROOFING MATERIALS AT MAIN ELECTRICAL ROOM AREA</b>	<b>QTY</b>	<b>UNIT</b>	<b>UNIT COST</b>	<b>TOTAL COST (Php)</b>
<b>DESCRIPTION:</b>	4.2. Preparation of surface area. Clean, dry, sound surfaces free of loose particles before application of waterproofing materials. Including correction of slope to drain and restoration of damage surface. Repair/seal cracks on concrete, cold joint, construction and expansion joint.	20.28	sq.m.		
<b>A.</b>	<b>EQUIPMENT</b>				
<b>Ref. No.</b>	<b>Name and Specification of Equipment</b>	<b>No. of Units</b>	<b>No. of Days</b>	<b>Unit Cost</b>	<b>Total Cost (Php)</b>
	1.				
	2.				
	3.				
	4.				
	5.				
	<b>TOTAL EQUIPMENT COST</b>				
<b>B.</b>	<b>LABOR</b>				
<b>Ref. No.</b>	<b>Designation of Personnel</b>	<b>No. of Personnel</b>	<b>No. of Days</b>	<b>Unit Cost</b>	<b>Total Cost (Php)</b>
	1.				
	2.				
	3.				
	4.				
	5.				
	<b>TOTAL LABOR COST</b>				
<b>OUTPUT=</b>	<b>Quantity / Total Working Hours</b>				
<b>C.</b>	<b>MATERIALS</b>				
<b>Ref. No.</b>	<b>Designation of Materials</b>	<b>Unit</b>	<b>Quantity</b>	<b>Unit Cost</b>	<b>Total Cost (Php)</b>
	1.				
	2.				
	3.				
	4.				
	5.				
	<b>TOTAL MATERIALS COST</b>				
<b>D.</b>	<b>TOTAL DIRECT COST</b>	(	<b>A+B+C</b>	)	
<b>E.</b>	<b>OVERHEAD, CONTINGENCES &amp; MISC.</b>	(		TDC)	
<b>F.</b>	<b>PROFIT</b>	(		TDC)	
<b>G.</b>	<b>VALUE ADDED TAX</b>	(		of D+E+F+G)	
<b>H.</b>	<b>TOTAL COST</b>	(	<b>D+E+F+G+H</b>	)	
<b>I.</b>	<b>UNIT COST</b>				

PROJECT: Supply of Labor, Materials, Supervision and other Consumables for the Waterproofing Works of Roof Deck, Powerhouse, Main Electrical Room, Penthouse and Machine Room of NEA Building

SUBJECT: Detail Unit Price Analysis (DUPA)

<b>PAY ITEM:</b>	<b>4.0. SURFACE PREPARATION AND INSTALLATION OF WATERPROOFING MATERIALS AT MAIN ELECTRICAL ROOM AREA</b>	<b>QTY</b>	<b>UNIT</b>	<b>UNIT COST</b>	<b>TOTAL COST (Php)</b>
<b>DESCRIPTION:</b>	4.3. Application or installation of waterproofing materials as per scope of work and specifications.	20.28	sq.m.		
<b>A.</b>	<b>EQUIPMENT</b>				
<b>Ref. No.</b>	<b>Name and Specification of Equipment</b>	<b>No. of Units</b>	<b>No. of Days</b>	<b>Unit Cost</b>	<b>Total Cost (Php)</b>
	1.				
	2.				
	3.				
	4.				
	5.				
	<b>TOTAL EQUIPMENT COST</b>				
<b>B.</b>	<b>LABOR</b>				
<b>Ref. No.</b>	<b>Designation of Personnel</b>	<b>No. of Personnel</b>	<b>No. of Days</b>	<b>Unit Cost</b>	<b>Total Cost (Php)</b>
	1.				
	2.				
	3.				
	4.				
	5.				
	<b>TOTAL LABOR COST</b>				
<b>OUTPUT=</b>	<b>Quantity / Total Working Hours</b>				
<b>C.</b>	<b>MATERIALS</b>				
<b>Ref. No.</b>	<b>Designation of Materials</b>	<b>Unit</b>	<b>Quantity</b>	<b>Unit Cost</b>	<b>Total Cost (Php)</b>
	1.				
	2.				
	3.				
	4.				
	5.				
	<b>TOTAL MATERIALS COST</b>				
<b>D.</b>	<b>TOTAL DIRECT COST</b>	(	<b>A+B+C</b>	)	
<b>E.</b>	<b>OVERHEAD, CONTINGENCES &amp; MISC.</b>	(		)	<b>TDC</b>
<b>F.</b>	<b>PROFIT</b>	(		)	<b>TDC</b>
<b>G.</b>	<b>VALUE ADDED TAX</b>	(		)	<b>of D+E+F+G</b>
<b>H.</b>	<b>TOTAL COST</b>	(	<b>D+E+F+G+H</b>	)	
<b>I.</b>	<b>UNIT COST</b>				

PROJECT: Supply of Labor, Materials, Supervision and other Consumables for the Waterproofing Works of Roof Deck, Powerhouse, Main Electrical Room, Penthouse and Machine Room of NEA Building

SUBJECT: Detail Unit Price Analysis (DUPA)

<b>PAY ITEM:</b>	<b>4.0. SURFACE PREPARATION AND INSTALLATION OF WATERPROOFING MATERIALS AT MAIN ELECTRICAL ROOM AREA</b>	<b>QTY</b>	<b>UNIT</b>	<b>UNIT COST</b>	<b>TOTAL COST (Php)</b>
<b>DESCRIPTION:</b>	4.4. Flood testing for at least 48 hours.	20.28	sq.m.		
<b>A.</b>	<b>EQUIPMENT</b>				
<b>Ref. No.</b>	<b>Name and Specification of Equipment</b>	<b>No. of Units</b>	<b>No. of Days</b>	<b>Unit Cost</b>	<b>Total Cost (Php)</b>
	1.				
	2.				
	3.				
	4.				
	5.				
	<b>TOTAL EQUIPMENT COST</b>				
<b>B.</b>	<b>LABOR</b>				
<b>Ref. No.</b>	<b>Designation of Personnel</b>	<b>No. of Personnel</b>	<b>No. of Days</b>	<b>Unit Cost</b>	<b>Total Cost (Php)</b>
	1.				
	2.				
	3.				
	4.				
	5.				
	<b>TOTAL LABOR COST</b>				
<b>OUTPUT=</b>	<b>Quantity / Total Working Hours</b>				
<b>C.</b>	<b>MATERIALS</b>				
<b>Ref. No.</b>	<b>Designation of Materials</b>	<b>Unit</b>	<b>Quantity</b>	<b>Unit Cost</b>	<b>Total Cost (Php)</b>
	1.				
	2.				
	3.				
	4.				
	5.				
	<b>TOTAL MATERIALS COST</b>				
<b>D.</b>	<b>TOTAL DIRECT COST</b>	(	<b>A+B+C</b>	)	
<b>E.</b>	<b>OVERHEAD, CONTINGENCES &amp; MISC.</b>	(		TDC)	
<b>F.</b>	<b>PROFIT</b>	(		TDC)	
<b>G.</b>	<b>VALUE ADDED TAX</b>	(		of D+E+F+G)	
<b>H.</b>	<b>TOTAL COST</b>	(	<b>D+E+F+G+H</b>	)	
<b>I.</b>	<b>UNIT COST</b>				

PROJECT: Supply of Labor, Materials, Supervision and other Consumables for the Waterproofing Works of Roof Deck, Powerhouse, Main Electrical Room, Penthouse and Machine Room of NEA Building

SUBJECT: Detail Unit Price Analysis (DUPA)

<b>PAY ITEM:</b>	<b>5.0. SURFACE PREPARATION AND INSTALLATION OF WATERPROOFING MATERIALS AT MACHINE ROOM AREA</b>	<b>QTY</b>	<b>UNIT</b>	<b>UNIT COST</b>	<b>TOTAL COST (Php)</b>
<b>DESCRIPTION:</b>	5.1. Removal of all existing waterproofing and concrete topping, and hauling the same for proper disposal by the contractor to a designated location.	117.00	sq.m.		
<b>A.</b>	<b>EQUIPMENT</b>				
<b>Ref. No.</b>	<b>Name and Specification of Equipment</b>	<b>No. of Units</b>	<b>No. of Days</b>	<b>Unit Cost</b>	<b>Total Cost (Php)</b>
	1.				
	2.				
	3.				
	4.				
	5.				
	<b>TOTAL EQUIPMENT COST</b>				
<b>B.</b>	<b>LABOR</b>				
<b>Ref. No.</b>	<b>Designation of Personnel</b>	<b>No. of Personnel</b>	<b>No. of Days</b>	<b>Unit Cost</b>	<b>Total Cost (Php)</b>
	1.				
	2.				
	3.				
	4.				
	5.				
	<b>TOTAL LABOR COST</b>				
<b>OUTPUT=</b>	<b>Quantity / Total Working Hours</b>				
<b>C.</b>	<b>MATERIALS</b>				
<b>Ref. No.</b>	<b>Designation of Materials</b>	<b>Unit</b>	<b>Quantity</b>	<b>Unit Cost</b>	<b>Total Cost (Php)</b>
	1.				
	2.				
	3.				
	4.				
	5.				
	<b>TOTAL MATERIALS COST</b>				
<b>D.</b>	<b>TOTAL DIRECT COST</b>	(	<b>A+B+C</b>	)	
<b>E.</b>	<b>OVERHEAD, CONTINGENCES &amp; MISC.</b>	(		TDC)	
<b>F.</b>	<b>PROFIT</b>	(		TDC)	
<b>G.</b>	<b>VALUE ADDED TAX</b>	(		of D+E+F+G)	
<b>H.</b>	<b>TOTAL COST</b>	(	<b>D+E+F+G+H</b>	)	
<b>I.</b>	<b>UNIT COST</b>				

PROJECT: Supply of Labor, Materials, Supervision and other Consumables for the Waterproofing Works of Roof Deck, Powerhouse, Main Electrical Room, Penthouse and Machine Room of NEA Building



SUBJECT: Detail Unit Price Analysis (DUPA)

<b>PAY ITEM:</b>	<b>5.0. SURFACE PREPARATION AND INSTALLATION OF WATERPROOFING MATERIALS AT MACHINE ROOM AREA</b>	<b>QTY</b>	<b>UNIT</b>	<b>UNIT COST</b>	<b>TOTAL COST (Php)</b>
<b>DESCRIPTION:</b>	5.2. Preparation of surface area. Clean, dry, sound surfaces free of loose particles before application of waterproofing materials. Including correction of slope to drain and restoration of damage surface. Repair/seal cracks on concrete, cold joint, construction and expansion joint.	117.00	sq.m.		
<b>A.</b>	<b>EQUIPMENT</b>				
<b>Ref. No.</b>	<b>Name and Specification of Equipment</b>	<b>No. of Units</b>	<b>No. of Days</b>	<b>Unit Cost</b>	<b>Total Cost (Php)</b>
	1.				
	2.				
	3.				
	4.				
	5.				
	<b>TOTAL EQUIPMENT COST</b>				
<b>B.</b>	<b>LABOR</b>				
<b>Ref. No.</b>	<b>Designation of Personnel</b>	<b>No. of Personnel</b>	<b>No. of Days</b>	<b>Unit Cost</b>	<b>Total Cost (Php)</b>
	1.				
	2.				
	3.				
	4.				
	5.				
	<b>TOTAL LABOR COST</b>				
<b>OUTPUT=</b>	<b>Quantity / Total Working Hours</b>				
<b>C.</b>	<b>MATERIALS</b>				
<b>Ref. No.</b>	<b>Designation of Materials</b>	<b>Unit</b>	<b>Quantity</b>	<b>Unit Cost</b>	<b>Total Cost (Php)</b>
	1.				
	2.				
	3.				
	4.				
	5.				
	<b>TOTAL MATERIALS COST</b>				
<b>D.</b>	<b>TOTAL DIRECT COST</b>	(	<b>A+B+C</b>	)	
<b>E.</b>	<b>OVERHEAD, CONTINGENCES &amp; MISC.</b>	(		TDC)	
<b>F.</b>	<b>PROFIT</b>	(		TDC)	
<b>G.</b>	<b>VALUE ADDED TAX</b>	(		of D+E+F+G)	
<b>H.</b>	<b>TOTAL COST</b>	(	<b>D+E+F+G+H</b>	)	
<b>I.</b>	<b>UNIT COST</b>				

PROJECT: Supply of Labor, Materials, Supervision and other Consumables for the Waterproofing Works of Roof Deck, Powerhouse, Main Electrical Room, Penthouse and Machine Room of NEA Building

SUBJECT: Detail Unit Price Analysis (DUPA)

<b>PAY ITEM:</b>	<b>5.0. SURFACE PREPARATION AND INSTALLATION OF WATERPROOFING MATERIALS AT MACHINE ROOM AREA</b>	<b>QTY</b>	<b>UNIT</b>	<b>UNIT COST</b>	<b>TOTAL COST (Php)</b>
<b>DESCRIPTION:</b>	<b>5.3. De-clogging, repair and leak test of all storm drain.</b>	<b>10.00</b>	<b>unit</b>		
<b>A.</b>	<b>EQUIPMENT</b>				
<b>Ref. No.</b>	<b>Name and Specification of Equipment</b>	<b>No. of Units</b>	<b>No. of Days</b>	<b>Unit Cost</b>	<b>Total Cost (Php)</b>
	1.				
	2.				
	3.				
	4.				
	5.				
	<b>TOTAL EQUIPMENT COST</b>				
<b>B.</b>	<b>LABOR</b>				
<b>Ref. No.</b>	<b>Designation of Personnel</b>	<b>No. of Personnel</b>	<b>No. of Days</b>	<b>Unit Cost</b>	<b>Total Cost (Php)</b>
	1.				
	2.				
	3.				
	4.				
	5.				
	<b>TOTAL LABOR COST</b>				
<b>OUTPUT=</b>	<b>Quantity / Total Working Hours</b>				
<b>C.</b>	<b>MATERIALS</b>				
<b>Ref. No.</b>	<b>Designation of Materials</b>	<b>Unit</b>	<b>Quantity</b>	<b>Unit Cost</b>	<b>Total Cost (Php)</b>
	1.				
	2.				
	3.				
	4.				
	5.				
	<b>TOTAL MATERIALS COST</b>				
<b>D.</b>	<b>TOTAL DIRECT COST</b>	(	<b>A+B+C</b>	)	
<b>E.</b>	<b>OVERHEAD, CONTINGENCES &amp; MISC.</b>	(		<b>TDC)</b>	
<b>F.</b>	<b>PROFIT</b>	(		<b>TDC)</b>	
<b>G.</b>	<b>VALUE ADDED TAX</b>	(		<b>of D+E+F+G)</b>	
<b>H.</b>	<b>TOTAL COST</b>	(	<b>D+E+F+G+H</b>	)	
<b>I.</b>	<b>UNIT COST</b>				

PROJECT: Supply of Labor, Materials, Supervision and other Consumables for the Waterproofing Works of Roof Deck, Powerhouse, Main Electrical Room, Penthouse and Machine Room of NEA Building

SUBJECT: Detail Unit Price Analysis (DUPA)

<b>PAY ITEM:</b>	<b>5.0. SURFACE PREPARATION AND INSTALLATION OF WATERPROOFING MATERIALS AT MACHINE ROOM AREA</b>	<b>QTY</b>	<b>UNIT</b>	<b>UNIT COST</b>	<b>TOTAL COST (Php)</b>
<b>DESCRIPTION:</b>	5.4. Application or installation of waterproofing materials as per scope of work and specifications.	117.00	sq.m.		
<b>A.</b>	<b>EQUIPMENT</b>				
<b>Ref. No.</b>	<b>Name and Specification of Equipment</b>	<b>No. of Units</b>	<b>No. of Days</b>	<b>Unit Cost</b>	<b>Total Cost (Php)</b>
	1.				
	2.				
	3.				
	4.				
	5.				
	<b>TOTAL EQUIPMENT COST</b>				
<b>B.</b>	<b>LABOR</b>				
<b>Ref. No.</b>	<b>Designation of Personnel</b>	<b>No. of Personnel</b>	<b>No. of Days</b>	<b>Unit Cost</b>	<b>Total Cost (Php)</b>
	1.				
	2.				
	3.				
	4.				
	5.				
	<b>TOTAL LABOR COST</b>				
<b>OUTPUT=</b>	<b>Quantity / Total Working Hours</b>				
<b>C.</b>	<b>MATERIALS</b>				
<b>Ref. No.</b>	<b>Designation of Materials</b>	<b>Unit</b>	<b>Quantity</b>	<b>Unit Cost</b>	<b>Total Cost (Php)</b>
	1.				
	2.				
	3.				
	4.				
	5.				
	<b>TOTAL MATERIALS COST</b>				
<b>D.</b>	<b>TOTAL DIRECT COST</b>	(	<b>A+B+C</b>	)	
<b>E.</b>	<b>OVERHEAD, CONTINGENCES &amp; MISC.</b>	(		<b>TDC</b> )	
<b>F.</b>	<b>PROFIT</b>	(		<b>TDC</b> )	
<b>G.</b>	<b>VALUE ADDED TAX</b>	(		<b>of D+E+F+G</b> )	
<b>H.</b>	<b>TOTAL COST</b>	(	<b>D+E+F+G+H</b>	)	
<b>I.</b>	<b>UNIT COST</b>				

PROJECT: Supply of Labor, Materials, Supervision and other Consumables for the Waterproofing Works of Roof Deck, Powerhouse, Main Electrical Room, Penthouse and Machine Room of NEA Building

SUBJECT: Detail Unit Price Analysis (DUPA)

<b>PAY ITEM:</b>	<b>5.0. SURFACE PREPARATION AND INSTALLATION OF WATERPROOFING MATERIALS AT MACHINE ROOM AREA</b>	<b>QTY</b>	<b>UNIT</b>	<b>UNIT COST</b>	<b>TOTAL COST (Php)</b>
<b>DESCRIPTION:</b>	5.5. Replacement of existing brass strainers and restoration of missing brass strainers with a new dome type strainer.	10.00	pcs		
<b>A.</b>	<b>EQUIPMENT</b>				
<b>Ref. No.</b>	<b>Name and Specification of Equipment</b>	<b>No. of Units</b>	<b>No. of Days</b>	<b>Unit Cost</b>	<b>Total Cost (Php)</b>
	1.				
	2.				
	3.				
	4.				
	5.				
	<b>TOTAL EQUIPMENT COST</b>				
<b>B.</b>	<b>LABOR</b>				
<b>Ref. No.</b>	<b>Designation of Personnel</b>	<b>No. of Personnel</b>	<b>No. of Days</b>	<b>Unit Cost</b>	<b>Total Cost (Php)</b>
	1.				
	2.				
	3.				
	4.				
	5.				
	<b>TOTAL LABOR COST</b>				
<b>OUTPUT=</b>	<b>Quantity / Total Working Hours</b>				
<b>C.</b>	<b>MATERIALS</b>				
<b>Ref. No.</b>	<b>Designation of Materials</b>	<b>Unit</b>	<b>Quantity</b>	<b>Unit Cost</b>	<b>Total Cost (Php)</b>
	1.				
	2.				
	3.				
	4.				
	5.				
	<b>TOTAL MATERIALS COST</b>				
<b>D.</b>	<b>TOTAL DIRECT COST</b>		( A+B+C )		
<b>E.</b>	<b>OVERHEAD, CONTINGENCES &amp; MISC.</b>		( TDC)		
<b>F.</b>	<b>PROFIT</b>		( TDC)		
<b>G.</b>	<b>VALUE ADDED TAX</b>		( of D+E+F+G)		
<b>H.</b>	<b>TOTAL COST</b>		( D+E+F+G+H )		
<b>I.</b>	<b>UNIT COST</b>				

PROJECT: Supply of Labor, Materials, Supervision and other Consumables for the Waterproofing Works of Roof Deck, Powerhouse, Main Electrical Room, Penthouse and Machine Room of NEA Building

SUBJECT: Detail Unit Price Analysis (DUPA)

<b>PAY ITEM:</b>	<b>5.0. SURFACE PREPARATION AND INSTALLATION OF WATERPROOFING MATERIALS AT MACHINE ROOM AREA</b>	<b>QTY</b>	<b>UNIT</b>	<b>UNIT COST</b>	<b>TOTAL COST (Php)</b>
<b>DESCRIPTION:</b>	5.6. Flood testing for at least 48 hours.	117.00	sq.m.		
<b>A.</b>	<b>EQUIPMENT</b>				
<b>Ref. No.</b>	<b>Name and Specification of Equipment</b>	<b>No. of Units</b>	<b>No. of Days</b>	<b>Unit Cost</b>	<b>Total Cost (Php)</b>
	1.				
	2.				
	3.				
	4.				
	5.				
	<b>TOTAL EQUIPMENT COST</b>				
<b>B.</b>	<b>LABOR</b>				
<b>Ref. No.</b>	<b>Designation of Personnel</b>	<b>No. of Personnel</b>	<b>No. of Days</b>	<b>Unit Cost</b>	<b>Total Cost (Php)</b>
	1.				
	2.				
	3.				
	4.				
	5.				
	<b>TOTAL LABOR COST</b>				
<b>OUTPUT=</b>	<b>Quantity / Total Working Hours</b>				
<b>C.</b>	<b>MATERIALS</b>				
<b>Ref. No.</b>	<b>Designation of Materials</b>	<b>Unit</b>	<b>Quantity</b>	<b>Unit Cost</b>	<b>Total Cost (Php)</b>
	1.				
	2.				
	3.				
	4.				
	5.				
	<b>TOTAL MATERIALS COST</b>				
<b>D.</b>	<b>TOTAL DIRECT COST</b>	(	<b>A+B+C</b>	)	
<b>E.</b>	<b>OVERHEAD, CONTINGENCES &amp; MISC.</b>	(		TDC)	
<b>F.</b>	<b>PROFIT</b>	(		TDC)	
<b>G.</b>	<b>VALUE ADDED TAX</b>	(		of D+E+F+G)	
<b>H.</b>	<b>TOTAL COST</b>	(	<b>D+E+F+G+H</b>	)	
<b>I.</b>	<b>UNIT COST</b>				

PROJECT: Supply of Labor, Materials, Supervision and other Consumables for the Waterproofing Works of Roof Deck, Powerhouse, Main Electrical Room, Penthouse and Machine Room of NEA Building

SUBJECT: Detail Unit Price Analysis (DUPA)

<b>PAY ITEM:</b>	<b>6.0. SURFACE PREPARATION AND INSTALLATION OF WATERPROOFING MATERIALS AT PENTHOUSE AREA</b>	<b>QTY</b>	<b>UNIT</b>	<b>UNIT COST</b>	<b>TOTAL COST (Php)</b>
<b>DESCRIPTION:</b>	6.1. Removal of all existing waterproofing and concrete topping, and hauling the same for proper disposal by the contractor to a designated location.	231.00	sq.m.		
<b>A.</b>	<b>EQUIPMENT</b>				
<b>Ref. No.</b>	<b>Name and Specification of Equipment</b>	<b>No. of Units</b>	<b>No. of Days</b>	<b>Unit Cost</b>	<b>Total Cost (Php)</b>
	1.				
	2.				
	3.				
	4.				
	5.				
	<b>TOTAL EQUIPMENT COST</b>				
<b>B.</b>	<b>LABOR</b>				
<b>Ref. No.</b>	<b>Designation of Personnel</b>	<b>No. of Personnel</b>	<b>No. of Days</b>	<b>Unit Cost</b>	<b>Total Cost (Php)</b>
	1.				
	2.				
	3.				
	4.				
	5.				
	<b>TOTAL LABOR COST</b>				
<b>OUTPUT=</b>	<b>Quantity / Total Working Hours</b>				
<b>C.</b>	<b>MATERIALS</b>				
<b>Ref. No.</b>	<b>Designation of Materials</b>	<b>Unit</b>	<b>Quantity</b>	<b>Unit Cost</b>	<b>Total Cost (Php)</b>
	1.				
	2.				
	3.				
	4.				
	5.				
	<b>TOTAL MATERIALS COST</b>				
<b>D.</b>	<b>TOTAL DIRECT COST</b>	(	<b>A+B+C</b>	)	
<b>E.</b>	<b>OVERHEAD, CONTINGENCES &amp; MISC.</b>	(		TDC)	
<b>F.</b>	<b>PROFIT</b>	(		TDC)	
<b>G.</b>	<b>VALUE ADDED TAX</b>	(		of D+E+F+G)	
<b>H.</b>	<b>TOTAL COST</b>	(	<b>D+E+F+G+H</b>	)	
<b>I.</b>	<b>UNIT COST</b>				

PROJECT: Supply of Labor, Materials, Supervision and other Consumables for the Waterproofing Works of Roof Deck, Powerhouse, Main Electrical Room, Penthouse and Machine Room of NEA Building

SUBJECT: Detail Unit Price Analysis (DUPA)

<b>PAY ITEM:</b>	<b>6.0. SURFACE PREPARATION AND INSTALLATION OF WATERPROOFING MATERIALS AT PENTHOUSE AREA</b>	<b>QTY</b>	<b>UNIT</b>	<b>UNIT COST</b>	<b>TOTAL COST (Php)</b>
<b>DESCRIPTION:</b>	6.2. Preparation of surface area. Clean, dry, sound surfaces free of loose particles before application of waterproofing materials. Including correction of slope to drain and restoration of damage surface. Repair/seal cracks on concrete, cold joint, construction and expansion joint.	231.00	sq.m.		
<b>A.</b>	<b>EQUIPMENT</b>				
<b>Ref. No.</b>	<b>Name and Specification of Equipment</b>	<b>No. of Units</b>	<b>No. of Days</b>	<b>Unit Cost</b>	<b>Total Cost (Php)</b>
	1.				
	2.				
	3.				
	4.				
	5.				
	<b>TOTAL EQUIPMENT COST</b>				
<b>B.</b>	<b>LABOR</b>				
<b>Ref. No.</b>	<b>Designation of Personnel</b>	<b>No. of Personnel</b>	<b>No. of Days</b>	<b>Unit Cost</b>	<b>Total Cost (Php)</b>
	1.				
	2.				
	3.				
	4.				
	5.				
	<b>TOTAL LABOR COST</b>				
<b>OUTPUT=</b>	<b>Quantity / Total Working Hours</b>				
<b>C.</b>	<b>MATERIALS</b>				
<b>Ref. No.</b>	<b>Designation of Materials</b>	<b>Unit</b>	<b>Quantity</b>	<b>Unit Cost</b>	<b>Total Cost (Php)</b>
	1.				
	2.				
	3.				
	4.				
	5.				
	<b>TOTAL MATERIALS COST</b>				
<b>D.</b>	<b>TOTAL DIRECT COST</b>	(	<b>A+B+C</b>	)	
<b>E.</b>	<b>OVERHEAD, CONTINGENCES &amp; MISC.</b>	(		TDC)	
<b>F.</b>	<b>PROFIT</b>	(		TDC)	
<b>G.</b>	<b>VALUE ADDED TAX</b>	(		of D+E+F+G)	
<b>H.</b>	<b>TOTAL COST</b>	(	<b>D+E+F+G+H</b>	)	
<b>I.</b>	<b>UNIT COST</b>				

PROJECT: Supply of Labor, Materials, Supervision and other Consumables for the Waterproofing Works of Roof Deck, Powerhouse, Main Electrical Room, Penthouse and Machine Room of NEA Building

SUBJECT: Detail Unit Price Analysis (DUPA)

<b>PAY ITEM:</b>	<b>6.0. SURFACE PREPARATION AND INSTALLATION OF WATERPROOFING MATERIALS AT PENTHOUSE AREA</b>	<b>QTY</b>	<b>UNIT</b>	<b>UNIT COST</b>	<b>TOTAL COST (Php)</b>
<b>DESCRIPTION:</b>	<b>6.3. De-clogging, repair and leak test of all storm drain.</b>	<b>9.00</b>	<b>unit</b>		
<b>A.</b>	<b>EQUIPMENT</b>				
<b>Ref. No.</b>	<b>Name and Specification of Equipment</b>	<b>No. of Units</b>	<b>No. of Days</b>	<b>Unit Cost</b>	<b>Total Cost (Php)</b>
	1.				
	2.				
	3.				
	4.				
	5.				
	<b>TOTAL EQUIPMENT COST</b>				
<b>B.</b>	<b>LABOR</b>				
<b>Ref. No.</b>	<b>Designation of Personnel</b>	<b>No. of Personnel</b>	<b>No. of Days</b>	<b>Unit Cost</b>	<b>Total Cost (Php)</b>
	1.				
	2.				
	3.				
	4.				
	5.				
	<b>TOTAL LABOR COST</b>				
<b>OUTPUT=</b>	<b>Quantity / Total Working Hours</b>				
<b>C.</b>	<b>MATERIALS</b>				
<b>Ref. No.</b>	<b>Designation of Materials</b>	<b>Unit</b>	<b>Quantity</b>	<b>Unit Cost</b>	<b>Total Cost (Php)</b>
	1.				
	2.				
	3.				
	4.				
	5.				
	<b>TOTAL MATERIALS COST</b>				
<b>D.</b>	<b>TOTAL DIRECT COST</b>	(	<b>A+B+C</b>	)	
<b>E.</b>	<b>OVERHEAD, CONTINGENCES &amp; MISC.</b>	(		<b>TDC)</b>	
<b>F.</b>	<b>PROFIT</b>	(		<b>TDC)</b>	
<b>G.</b>	<b>VALUE ADDED TAX</b>	(		<b>of D+E+F+G)</b>	
<b>H.</b>	<b>TOTAL COST</b>	(	<b>D+E+F+G+H</b>	)	
<b>I.</b>	<b>UNIT COST</b>				

PROJECT: Supply of Labor, Materials, Supervision and other Consumables for the Waterproofing Works of Roof Deck, Powerhouse, Main Electrical Room, Penthouse and Machine Room of NEA Building



SUBJECT: Detail Unit Price Analysis (DUPA)

<b>PAY ITEM:</b>	<b>6.0. SURFACE PREPARATION AND INSTALLATION OF WATERPROOFING MATERIALS AT PENTHOUSE AREA</b>	<b>QTY</b>	<b>UNIT</b>	<b>UNIT COST</b>	<b>TOTAL COST (Php)</b>
<b>DESCRIPTION:</b>	6.4. Application or installation of waterproofing materials as per scope of work and specifications.	231.00	sq.m.		
<b>A.</b>	<b>EQUIPMENT</b>				
<b>Ref. No.</b>	<b>Name and Specification of Equipment</b>	<b>No. of Units</b>	<b>No. of Days</b>	<b>Unit Cost</b>	<b>Total Cost (Php)</b>
	1.				
	2.				
	3.				
	4.				
	5.				
	<b>TOTAL EQUIPMENT COST</b>				
<b>B.</b>	<b>LABOR</b>				
<b>Ref. No.</b>	<b>Designation of Personnel</b>	<b>No. of Personnel</b>	<b>No. of Days</b>	<b>Unit Cost</b>	<b>Total Cost (Php)</b>
	1.				
	2.				
	3.				
	4.				
	5.				
	<b>TOTAL LABOR COST</b>				
<b>OUTPUT=</b>	<b>Quantity / Total Working Hours</b>				
<b>C.</b>	<b>MATERIALS</b>				
<b>Ref. No.</b>	<b>Designation of Materials</b>	<b>Unit</b>	<b>Quantity</b>	<b>Unit Cost</b>	<b>Total Cost (Php)</b>
	1.				
	2.				
	3.				
	4.				
	5.				
	<b>TOTAL MATERIALS COST</b>				
<b>D.</b>	<b>TOTAL DIRECT COST</b>	(	<b>A+B+C</b>	)	
<b>E.</b>	<b>OVERHEAD, CONTINGENCES &amp; MISC.</b>	(		<b>TDC</b> )	
<b>F.</b>	<b>PROFIT</b>	(		<b>TDC</b> )	
<b>G.</b>	<b>VALUE ADDED TAX</b>	(		<b>of D+E+F+G</b> )	
<b>H.</b>	<b>TOTAL COST</b>	(	<b>D+E+F+G+H</b>	)	
<b>I.</b>	<b>UNIT COST</b>				

PROJECT: Supply of Labor, Materials, Supervision and other Consumables for the Waterproofing Works of Roof Deck, Powerhouse, Main Electrical Room, Penthouse and Machine Room of NEA Building

SUBJECT: Detail Unit Price Analysis (DUPA)

<b>PAY ITEM:</b>	<b>6.0. SURFACE PREPARATION AND INSTALLATION OF WATERPROOFING MATERIALS AT PENTHOUSE AREA</b>	<b>QTY</b>	<b>UNIT</b>	<b>UNIT COST</b>	<b>TOTAL COST (Php)</b>
<b>DESCRIPTION:</b>	6.5. Replacement of existing brass strainers and restoration of missing brass strainers with a new dome type strainer.	9.00	pcs		
<b>A.</b>	<b>EQUIPMENT</b>				
<b>Ref. No.</b>	<b>Name and Specification of Equipment</b>	<b>No. of Units</b>	<b>No. of Days</b>	<b>Unit Cost</b>	<b>Total Cost (Php)</b>
	1.				
	2.				
	3.				
	4.				
	5.				
	<b>TOTAL EQUIPMENT COST</b>				
<b>B.</b>	<b>LABOR</b>				
<b>Ref. No.</b>	<b>Designation of Personnel</b>	<b>No. of Personnel</b>	<b>No. of Days</b>	<b>Unit Cost</b>	<b>Total Cost (Php)</b>
	1.				
	2.				
	3.				
	4.				
	5.				
	<b>TOTAL LABOR COST</b>				
<b>OUTPUT=</b>	<b>Quantity / Total Working Hours</b>				
<b>C.</b>	<b>MATERIALS</b>				
<b>Ref. No.</b>	<b>Designation of Materials</b>	<b>Unit</b>	<b>Quantity</b>	<b>Unit Cost</b>	<b>Total Cost (Php)</b>
	1.				
	2.				
	3.				
	4.				
	5.				
	<b>TOTAL MATERIALS COST</b>				
<b>D.</b>	<b>TOTAL DIRECT COST</b>	(	<b>A+B+C</b>	)	
<b>E.</b>	<b>OVERHEAD, CONTINGENCES &amp; MISC.</b>	(		)	<b>TDC</b>
<b>F.</b>	<b>PROFIT</b>	(		)	<b>TDC</b>
<b>G.</b>	<b>VALUE ADDED TAX</b>	(		)	<b>of D+E+F+G</b>
<b>H.</b>	<b>TOTAL COST</b>	(	<b>D+E+F+G+H</b>	)	
<b>I.</b>	<b>UNIT COST</b>				

PROJECT: Supply of Labor, Materials, Supervision and other Consumables for the Waterproofing Works of Roof Deck, Powerhouse, Main Electrical Room, Penthouse and Machine Room of NEA Building

SUBJECT: Detail Unit Price Analysis (DUPA)

<b>PAY ITEM:</b>	<b>6.0. SURFACE PREPARATION AND INSTALLATION OF WATERPROOFING MATERIALS AT PENTHOUSE AREA</b>	<b>QTY</b>	<b>UNIT</b>	<b>UNIT COST</b>	<b>TOTAL COST (Php)</b>
<b>DESCRIPTION:</b>	6.6. Flood testing for at least 48 hours.	231.00	sq.m.		
<b>A.</b>	<b>EQUIPMENT</b>				
<b>Ref. No.</b>	<b>Name and Specification of Equipment</b>	<b>No. of Units</b>	<b>No. of Days</b>	<b>Unit Cost</b>	<b>Total Cost (Php)</b>
	1.				
	2.				
	3.				
	4.				
	5.				
	<b>TOTAL EQUIPMENT COST</b>				
<b>B.</b>	<b>LABOR</b>				
<b>Ref. No.</b>	<b>Designation of Personnel</b>	<b>No. of Personnel</b>	<b>No. of Days</b>	<b>Unit Cost</b>	<b>Total Cost (Php)</b>
	1.				
	2.				
	3.				
	4.				
	5.				
	<b>TOTAL LABOR COST</b>				
<b>OUTPUT=</b>	<b>Quantity / Total Working Hours</b>				
<b>C.</b>	<b>MATERIALS</b>				
<b>Ref. No.</b>	<b>Designation of Materials</b>	<b>Unit</b>	<b>Quantity</b>	<b>Unit Cost</b>	<b>Total Cost (Php)</b>
	1.				
	2.				
	3.				
	4.				
	5.				
	<b>TOTAL MATERIALS COST</b>				
<b>D.</b>	<b>TOTAL DIRECT COST</b>	(	<b>A+B+C</b>	)	
<b>E.</b>	<b>OVERHEAD, CONTINGENCES &amp; MISC.</b>	(		TDC)	
<b>F.</b>	<b>PROFIT</b>	(		TDC)	
<b>G.</b>	<b>VALUE ADDED TAX</b>	(		of D+E+F+G)	
<b>H.</b>	<b>TOTAL COST</b>	(	<b>D+E+F+G+H</b>	)	
<b>I.</b>	<b>UNIT COST</b>				