TERMS OF REFERENCE

PROCUREMENT, DELIVERY, DISMANTLING, HAULING, AND INSTALLATION OF FOURTEEN (14) AIR CONDITIONING UNITS FOR THE OFFICE OF THE SOLICITOR GENERAL, MAKATI CITY

APPROVED BUDGET FOR THE CONTRACT (ABC) ON OFFICE EQUIPMENT (AIR CONDITIONING UNITS)

One million Two Hundred Ninety-Nine Thousand Nine Hundred Thirty-One Pesos and Fifty Centavos (Php 1,299,931.50), inclusive of all applicable government taxes and charges.

I. TECHNICAL SPECIFICATIONS FOR OFFICE EQUIPMENT (AIR CONDITIONING UNITS)

A. TWO (2) 10 TR AIR CONDITIONER DUCTED SPLIT TYPE

ominal Cooling Capacity	Btu/hr	120000
······································	k J/h	126,600
Refrigerant		HCFC-22
Power Supply	V/ph/Hz	230 / 3 / 60
	INDOOR UNI	rs
Air Flow	CFM	4000
V-1	CMH	6800
Motor	HP	
Dimension, H x W x D	mm	1669 x 1068 x 738
Weight	Kg	227
Refrigerant Metering Device		TXV
Location		Indoor Unit
Air Filter (Standard)		Washable, Anti-Mold Filter
External Finish		Painted Steel
	OUTDOOR UNITS AIR	Painted Steel
External Finish	OUTDOOR UNITS AIR	Painted Steel R COOLED
External Finish Voltage, Frequency, Phase		Painted Steel R COOLED 230 / 60 / 3
External Finish Voltage, Frequency, Phase System Power Input	Kw	Painted Steel R COOLED 230 / 60 / 3 11.57
Voltage, Frequency, Phase System Power Input Motor	Kw	Painted Steel 230 / 60 / 3 11.57 ½ x 2
External Finish Voltage, Frequency, Phase System Power Input Motor Compressor Type	Kw HP	Painted Steel 230 / 60 / 3 11.57 ½ x 2 Scroll
Voltage, Frequency, Phase System Power Input Motor Compressor Type Dimension, H x W x D	Kw HP	Painted Steel 230 / 60 / 3 11.57 ½ x 2 Scroll 1090 x 2010 x 918
Voltage, Frequency, Phase System Power Input Motor Compressor Type Dimension, H x W x D	Kw HP mm Kg	Painted Steel 230 / 60 / 3 11.57 ½ x 2 Scroll 1090 x 2010 x 918
Voltage, Frequency, Phase System Power Input Motor Compressor Type Dimension, H x W x D Operating Weight Refrigerant Piping Connection Pipe Size Liquid/Gas	Kw HP mm Kg	Painted Steel 230 / 60 / 3 11.57 ½ x 2 Scroll 1090 x 2010 x 918 294
Voltage, Frequency, Phase System Power Input Motor Compressor Type Dimension, H x W x D Operating Weight Refrigerant Piping Connection	Kw HP mm Kg PIPING	Painted Steel 230 / 60 / 3 11.57 ½ x 2 Scroll 1090 x 2010 x 918 294 Welded

B. ONE (1) 5.0 TR AIR CONDITIONER CEILING MOUNTED INVERTER SPLIT TYPE

Nominal Cooling Capacity	Btu/h-W	60000
Troumer Cooling Capacity	kJ/h	63300
Refrigerant		R410A
Power Supply	V / Phase / Hz	230 - 3 - 60
	INDOOR UNIT	
Air Flow Volume	m3/h	2423
Noise Level (Lo)	dBA	49.3
Dimension, W x D x H	mm	1725 x 755 x 313
Weight	Kg	39.2 / 45.7
Refrigerant Metering Device		Actuator
Location		Indoor Unit
Air Filter (Standard)		Washable, Anti-Mold Filter
External Finish		Painted Steel, Plastic
	OUTDOOR UNIT AIR	COOLED
Voltage Frequency Phase		230 / 60 / 3
Voltage, Frequency, Phase System Power Input	Watts	230 / 60 / 3
Voltage, Frequency, Phase System Power Input Rated Current	Watts	230 / 60 / 3 5370 12
System Power Input Rated Current	Watts Amps	5370
System Power Input Rated Current Compressor Type		5370 12 Scroll
System Power Input Rated Current	Amps	5370 12
System Power Input Rated Current Compressor Type Dimension, W x D x H	Amps	5370 12 Scroll 1095 x 495 x 1,480
System Power Input Rated Current Compressor Type Dimension, W x D x H	Amps mm Kg	5370 12 Scroll 1095 x 495 x 1,480
System Power Input Rated Current Compressor Type Dimension, W x D x H Weight Refrigerant Piping Connection Pipe Size Liquid/Gas	Amps mm Kg	5370 12 Scroll 1095 x 495 x 1,480 104 / 116
System Power Input Rated Current Compressor Type Dimension, W x D x H Weight Refrigerant Piping Connection	Amps mm Kg PIPING	5370 12 Scroll 1095 x 495 x 1,480 104 / 116 Flare

C. ONE (1) 3.0 TR AIR CONDITIONER CEILING MOUNTED INVERTER SPLIT TYPE

SPECIFICATIONS	A 1800 P	
Nominal Cooling Capacity	Btu/hr	38000
	kJ/h	40090
Refrigerant		R410A
Power Supply	V/ph/Hz	230 / 1 / 60
Air Flow Volume (Hi)	m3/h	1900
	INDOOR U	
Dimension W x D x H	mm	1650 x 675 x 235
Weight	Kg	30 / 35
Location		Indoor Unit
Air Filter (Standard)		Washable, Anti-Mold Filter
External Finish		Painted Steel, Plastic

	OUTDOOR UNITS	AIR COOLLD
Voltage, Frequency, Phase		230 / 60 / 3
System Power Input	Watts	3100
System Current	Amps	16
Compressor Type		Rotary
Dimension, W x D x H	mm	1090 x 500 x 875
Weight	Kg	69 / 75
Refrigerant Piping Connection	PIPIN	G Flare
Refrigerant Piping Connection Piping Size Gas/Liquid	PIPIN	
		Flare

D. ONE (1) 5 TR FREE BLOW / FLOOR MOUNTED SPLIT TYPE AIR CONDITIONING UNIT NON-INVERTER

SPECIFICATIONS		
Nominal Cooling Capacity	Btu/hr	60000
	Kj/hr	63300
Refrigerant		HCFC-22
Power Supply	V/ph/Hz	208-230 / 3 / 60
	INDOOR UN	NITS
Air Flow	CMH/CFM	2700 / 1589
Dimension W x D x H	mm	610 x 385 x 1877
Weight	Kg	65
Location		Indoor Unit
A' T'1/ (O/ 1 1)		Weekship Anti Maid Eilten
Air Filter (Standard)		Washable, Anti-Mold Filter
External Finish		Painted Steel
External Finish Power Consumption	OUTDOOR UNITS A Watts	Painted Steel IR COOLED 5500
External Finish Power Consumption Running Current		Painted Steel IR COOLED 5500 17.5
External Finish Power Consumption Running Current Dimension W x D x H	Watts A	Painted Steel IR COOLED 5500 17.5 1016 x 355 x 1268
External Finish Power Consumption Running Current	Watts	Painted Steel IR COOLED 5500 17.5
External Finish Power Consumption Running Current Dimension W x D x H	Watts A	Painted Steel IR COOLED 5500 17.5 1016 x 355 x 1268 115
External Finish Power Consumption Running Current Dimension W x D x H	Watts A Kg PIPING	Painted Steel IR COOLED 5500 17.5 1016 x 355 x 1268 115
Power Consumption Running Current Dimension W x D x H Weight Refrigerant Piping Connection Operating Temperature	Watts A Kg	Painted Steel IR COOLED 5500 17.5 1016 x 355 x 1268 115
Power Consumption Running Current Dimension W x D x H Weight Refrigerant Piping Connection	Watts A Kg PIPING	Painted Steel

E. EIGHT (8) 1.0 HP AIR CONDITIONER WINDOW TYPE NON-INVERTER

SPECIFICATIONS		
Cooling Capacity	Btu/h Kj/hr	9573 10100
Rated Current	A	4.1
Max. Input Consumption	W	1200
Energy Efficiency Ratio (EER)	Kj / h-W	10.5
Power Supply		220-230V / 60Hz / 1Ph
Unit Dimension W x H x D	mm	456 x 557 x 345
Product Weight	Kg	32
Refrigerant		R410A

F. ONE (1) 1.5 HP AIR CONDITIONER WALL MOUNTED INVERTER SPLIT TYPE

SPECIFICATIONS		
Nominal Cooling Capacity	Btu/hr	13000
•	Kj/hr	13715
Refrigerant		R32
Power Supply	V/ph/Hz	230 / 1 / 60
	INDOOR UN	NITS
Air Flow, L/M/H	m3/h	550 / 480 / 400
Dimension W x D x H	mm	837 x 205 x 296
Weight	Kg	10 / 12
Location		Indoor Unit
		*** 1 11 4 (*) 6 11 W(*)
Air Filter (Standard)		Washable, Anti-Mold Filter
	OUTDOOR UNITS A	IR COOLED
Power Consumption	Watts	IR COOLED
Power Consumption Running Current		IR COOLED 1170 5.2
Power Consumption Running Current Dimension W x D x H Weight	Watts	IR COOLED
Power Consumption Running Current Dimension W x D x H	Watts A	1170 5.2 730 x 285 x 545 23/27
Power Consumption Running Current Dimension W x D x H	Watts A Kg	1170 5.2 730 x 285 x 545 23/27
Power Consumption Running Current Dimension W x D x H Weight Liquid Pipe Size	Watts A Kg	1170 5.2 730 x 285 x 545 23/27
Power Consumption Running Current Dimension W x D x H Weight	Watts A Kg	1170 5.2 730 x 285 x 545 23/27

II. QUALIFICATION OF THE SUPPLIER

- 1. Must be legally registered with SEC, DTI or Cooperative Development Authority (CDA) whichever is a applicable.
 - 2. Must have been in the business of supplying, delivering, installing air conditioning units and providing its repair and preventive maintenance for at least five (5) years.
 - 3. Must present a Client Satisfaction Rating from at least three (3) government agencies or private corporations, with whom the Supplier has a past or ongoing contract similar to this budget.

II. SUPPLY, DELIVERY, DISMANTLING, HAULING AND INSTALLATION SCHEDULE

Agrees to supply, deliver, dismantle and install fourteen (14) air conditioning units at the OSG Building and extension offices within a period of Sixty (60) calendar days from receipt of Notice to Proceed (NTP), which period shall already include the time required to dismantle and haul the existing air conditioning units to be replaced, and the delivery and installation of the new air conditioning units.

III. SCOPE OF SERVICES

A. DOCUMENTATION

- 1. Agrees to process and submit to the concerned government agencies the required documents needed, if any, in the dismantling, hauling, delivery, installation and operation of the air conditioning units and pay the necessary fees on its own account.
- 2. Agrees to issue a one (1) year Certificate of Comprehensive Warranty on technical support, provision of services parts replacement/repair and preventive maintenance check-up.
- 3. Agrees to provide Operation and Maintenance Manual, Control Diagrams, Manufacturer's Printed Data including associated diagrams in clear concise English, drawings, technical data for the efficient operation and maintenance of the air conditioning units.
- 4. Other documents as may be required by pertinent COA rules and regulations (e.g. tax receipts from the BIR indicating the exact specifications and/or serial number of the air conditioning units supplied to the OSG).

B. DISMANTLING, HAULING AND INSTALLATION WORK

- 1. Agrees to dismantle the existing air conditioning units, evaporator assembly, condenser assembly, feeder line, accessories and all other components, according to a pre-approved work plan.
- 2. Agrees to haul all dismantled parts/components, which includes but is not limited to the old air conditioning units, to the area designated by the Section Head of the Security Ground and Building Maintenance Section.
- 3. Agrees to deliver and install fourteen (14) brand new air conditioning units, according to a pre-approved work plan.
- 4. Agrees to provide wiring and conduit works for main-feeder lines and sub-feeders from main circuit breaker to the equipment.
- 5. Agrees to render necessary masonry, repair/polishing work, grouting and cementing of concrete walls.
- 6. Agrees to supply and fix all support necessary for the installation of the air conditioning units, whether indoor or outdoor.
- 7. Agrees to provide safety barricades, enclosures, shielding, coverings, warning device, etc. upon the start of the project to ensure protection of the general public and damage to properties due to falling debris.
- 8. Agrees to clean up the whole area daily of accumulated refuse of debris caused by the work and upon completion of the project, the entire installation to the satisfaction of the OSG.

IV. POST - INSTALLATION WORK

A. ORIENTATION / FAMILIARIZATION

Agrees to conduct a one-time in-house familiarization/orientation for the personnel of the Security Ground and Building Maintenance Section of the OSG and end users on the operation of the air conditioning units immediately after their installation.

B. POST-INSTALLATION SERVICE WARRANTY

- 1. Agrees to respond within four (4) working hours from the time a problem is reported during the warranty period.
- 2. Agrees to issue to client a diagnostic report of the problem within eight (8) working hours from the time it was reported during the warranty period.
- 3. Agrees to make available on-call technicians to provide technical support services during the warranty period.

C. WARRANTIES OF THE SUPPLIER

- 1. Warrants to replace defective goods or parts if beyond repair, within three (3) calendar days from receipt of written notice from Procuring Entity.
- 2. Warrants that it shall conform strictly to the terms and conditions of this Terms of Reference.
- 3. Warrants that its manpower shall have at least one (1) personnel who must be a holder of a license or possess a certification from TESDA or other accredited institutions warranting technical skills to do the services required to the satisfaction of the OSG.
- 4. Warrants that it shall employ well-behaved and honest employees with ID displayed conspicuously while working within the compound.
- 5. Warrants to pay all fees or charges payable to any instrumentality of government or to any other duly constituted authority relating to the use or operation of the installation.
- 6. Warrants that its personnel shall take all necessary precautions for the safety of all persons and properties at or near their area of work and shall comply with all the standard and established safety regulations, rules and practices.
- 7. Warrants that it shall coordinate with authorized and/or designated OSG personnel in the performance of their job.
- 8. Warrants a period of one (1) year warranty from date of acceptance that installed air conditioning units shall have no defects, arising from design, materials, or workmanship.
- 9. Warrants that it shall be liable for loss, damage, or injury as may be due directly through the fault or negligence of its personnel; that it shall assume responsibility thereof and the OSG shall be specifically released from any responsibility arising there from.

V. TERMS OF PAYMENT

A. Schedule of Payment

1. Agrees to be paid based on a progressive billing scheme as follows:

	Particulars	Remarks/ Conditions
First release	15% of the Total Contract Price per lot, less 5% warranty deposit, computed based on the progress billing.	The amount represents the mobilization fee. The SUPPLIER shall submit a written request after the Contract is duly signed and notarized.
Second release	40% of the Total Contract Price after the installation of seven (7) air conditioning units, less 5% warranty deposit, computed based on the progress billing.	The SUPPLIER shall submit (a) Delivery Receipt, (b) Sales Invoice on the delivered and installed air conditioning units showing the quantity, description, and total value, duly signed by the SUPPLIER or his representative, and indicating receipt by OSG's designated representative; and (c) Other documents showing completion of incidental works as specified in III.B and IV.A, as may be required by the OSG.

Third release	40% of the Total Contract Price after the installation of five (7) air conditioning units, less 5% warranty deposit, computed based on the progress billing.	The SUPPLIER shall submit (a) Delivery Receipt, (b) Sales Invoice on the delivered and installed air conditioning units showing the quantity, description, and total value, duly signed by the SUPPLIER or his representative, and indicating receipt by OSG's designated representative; and (c) Other documents showing completion of incidental works as specified in III.B and IV.A, as may be required by the OSG.
Fourth release	5% warranty deposit of the Total Contract Price	To ensure that manufacturing defects shall be corrected by the supplier, a warranty security shall be required from the SUPPLIER for a period of one (1) year reckoned from the date the OSG personnel verified and certified that all fourteen (14) air conditioning units are delivered and installed.

and subject to the required Expanded Withholding Tax (EWT) of one percent (1%) and Final Withholding Tax on VAT of five percent (5%).

- 2. Agrees that each payment shall be made within thirty (30) days from completion of Inspection and Acceptance Report and all other required documents.
- 3. Finally, following Section 62.1 of the Revised Implementing Rules and Regulations of R.A. No. 9184, the warranty security in the form of retention money amounting to 5% of the total contract price shall be required from the contract awardee for a period of one (1) year after acceptance by the OSG of the delivered units.

VI. HEALTH AND SAFETY PROTOCOLS

- 1. The Supplier shall ensure that its manpower and personnel observe the minimum health and safety protocols enforced and observed by the national government and the Procuring Entity in view of the ongoing pandemic during the actual delivery, dismantling, hauling, installation, as well as the checking and fixing of the equipment within the warranty period.
- 2. The costs of ensuring compliance to the health protocols, including but not limited to testing, personal protective equipment, etc. of the Supplier's employees/personnel shall be for the account of the Supplier.

TECHNICAL WORKING GROUP FOR THE PROCUREMENT OF PROPERTY, PLANT & EQUIPMENT AND OFFICE EQUIPMENT

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