

## PHILIPPINE BIDDING DOCUMENTS

(As Harmonized with Development Partners)

# Supply and Delivery of Technical & Scientific Equipment (VSU-GOODS-24-01)

(early procurement)

Government of the Republic of the Philippines

October 23, 2023; 9:00 AM BAC Conference Room, VSU Market, Visca, Baybay City, Leyte and via Zoom

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# Glossary of Acronyms, Terms, and Abbreviations

**ABC** – Approved Budget for the Contract.

**BAC** – Bids and Awards Committee.

**Bid** – A signed offer or proposal to undertake a contract submitted by a bidder in response to and in consonance with the requirements of the bidding documents. Also referred to as *Proposal* and *Tender*. (2016 revised IRR, Section 5[c])

**Bidder** – Refers to a contractor, manufacturer, supplier, distributor and/or consultant who submits a bid in response to the requirements of the Bidding Documents. (2016 revised IRR, Section 5[d])

**Bidding Documents** – The documents issued by the Procuring Entity as the bases for bids, furnishing all information necessary for a prospective bidder to prepare a bid for the Goods, Infrastructure Projects, and/or Consulting Services required by the Procuring Entity. (2016 revised IRR, Section 5[e])

**BIR** – Bureau of Internal Revenue.

**BSP** – Bangko Sentral ng Pilipinas.

Consulting Services – Refer to services for Infrastructure Projects and other types of projects or activities of the GOP requiring adequate external technical and professional expertise that are beyond the capability and/or capacity of the GOP to undertake such as, but not limited to: (i) advisory and review services; (ii) pre-investment or feasibility studies; (iii) design; (iv) construction supervision; (v) management and related services; and (vi) other technical services or special studies. (2016 revised IRR, Section 5[i])

**CDA** - Cooperative Development Authority.

Contract – Refers to the agreement entered into between the Procuring Entity and the Supplier or Manufacturer or Distributor or Service Provider for procurement of Goods and Services; Contractor for Procurement of Infrastructure Projects; or Consultant or Consulting Firm for Procurement of Consulting Services; as the case may be, as recorded in the Contract Form signed by the parties, including all attachments and appendices thereto and all documents incorporated by reference therein.

**CIF** – Cost Insurance and Freight.

**CIP** – Carriage and Insurance Paid.

**CPI** – Consumer Price Index.

**DDP** – Refers to the quoted price of the Goods, which means "delivered duty paid."

**DTI** – Department of Trade and Industry.

**EXW** – Ex works.

**FCA** – "Free Carrier" shipping point.

**FOB** – "Free on Board" shipping point.

**Foreign-funded Procurement or Foreign-Assisted Project**—Refers to procurement whose funding source is from a foreign government, foreign or international financing institution as specified in the Treaty or International or Executive Agreement. (2016 revised IRR, Section 5[b]).

**Framework Agreement** – Refers to a written agreement between a procuring entity and a supplier or service provider that identifies the terms and conditions, under which specific purchases, otherwise known as "Call-Offs," are made for the duration of the agreement. It is in the nature of an option contract between the procuring entity and the bidder(s) granting the procuring entity the option to either place an order for any of the goods or services identified in the Framework Agreement List or not buy at all, within a minimum period of one (1) year to a maximum period of three (3) years. (GPPB Resolution No. 27-2019)

**GFI** – Government Financial Institution.

**GOCC** – Government-owned and/or –controlled corporation.

Goods – Refer to all items, supplies, materials and general support services, except Consulting Services and Infrastructure Projects, which may be needed in the transaction of public businesses or in the pursuit of any government undertaking, project or activity, whether in the nature of equipment, furniture, stationery, materials for construction, or personal property of any kind, including non-personal or contractual services such as the repair and maintenance of equipment and furniture, as well as trucking, hauling, janitorial, security, and related or analogous services, as well as procurement of materials and supplies provided by the Procuring Entity for such services. The term "related" or "analogous services" shall include, but is not limited to, lease or purchase of office space, media advertisements, health maintenance services, and other services essential to the operation of the Procuring Entity. (2016 revised IRR, Section 5[r])

**GOP** – Government of the Philippines.

**GPPB** – Government Procurement Policy Board.

**INCOTERMS** – International Commercial Terms.

**Infrastructure Projects** – Include the construction, improvement, rehabilitation, demolition, repair, restoration or maintenance of roads and bridges, railways, airports, seaports, communication facilities, civil works components of information technology projects, irrigation, flood control and drainage, water supply, sanitation, sewerage and solid waste management systems, shore protection, energy/power and electrification facilities, national buildings, school buildings, hospital buildings, and other related construction projects of the government. Also referred to as *civil works or works*. (2016 revised IRR, Section 5[u])

LGUs – Local Government Units.

**NFCC** – Net Financial Contracting Capacity.

**NGA** – National Government Agency.

**PhilGEPS** - Philippine Government Electronic Procurement System.

**Procurement Project** – refers to a specific or identified procurement covering goods, infrastructure project or consulting services. A Procurement Project shall be described, detailed, and scheduled in the Project Procurement Management Plan prepared by the agency which shall be consolidated in the procuring entity's Annual Procurement Plan. (GPPB Circular No. 06-2019 dated 17 July 2019)

**PSA** – Philippine Statistics Authority.

**SEC** – Securities and Exchange Commission.

**SLCC** – Single Largest Completed Contract.

**Supplier** – refers to a citizen, or any corporate body or commercial company duly organized and registered under the laws where it is established, habitually established in business and engaged in the manufacture or sale of the merchandise or performance of the general services covered by his bid. (Item 3.8 of GPPB Resolution No. 13-2019, dated 23 May 2019). Supplier as used in these Bidding Documents may likewise refer to a distributor, manufacturer, contractor, or consultant.

UN - United Nations.

## Section I. Invitation to Bid



# INVITATION TO BID FOR SUPPLY AND DELIVERY OF TECHNICAL & SCIENTIFIC EQUIPMENT AND SUPPLIES

1. The Visayas State University through the GF 2024 intends to apply the sum of Eight Million Two Hundred Sixty Thousand Pesos (PhP 8,260,000.00) being the ABC to payments under the contract for Supply and Delivery of Technical & Scientific Equipment (VSU-GOODS-24-01). Bids received in excess of the ABC shall be automatically rejected at bid opening.

The *Visayas State University*, through the *GF 2024* intends to apply the following ABC per item to payments under the contract for each item, to wit:

Item #	Description	Unit	Qty	Unit Price	Total Price
1	Industrial and Heavy-Duty Earth Ground Tester Kit	set	1	400,000.00	400,000.00
	Specification:				
	Memory: Internal memory storage up to 1500 records accessible via USB port				
	Measuring Function: Interference voltage and frequency, earthing resistance 3- and 4-pole with/without clip-on current transformer, resistance 2-pole with AC, 2-and 4-pole with DC				
	Display: 4-digit (2999 Digit) - 7 segment liquid crystal display, with improved Visibility.				
	Operation: Central rotary switch and function keys.				
	Operating Temperature: -10°C to 50°C (14°F to 122°F)				
	Storage Temperature: -30°C to 60°C (-22°F to 140°F)				
	Temperature Coefficient: ±0.1% of reading/°C < 18°C > 28°C				
	Protection: Complied with EN60529 (IP56 for case, IP40 for battery door)				
	Max Voltage: Warning-socket clamp E, ES, S or H				
	Max Urms = 250V (pertains to misuse)				
	Safety: Protection by double and/or reinforced insulation. Max. 50 V to earth per IEC61010-1. Pollution degree 2				
	Quality Standard: DIN ISO 9001 compliance in development, designed and manufacturing				
	External field influence: Complies with DIN 43780 (8/76)				
	Measure of Interference Voltage DC + AC: Full wave rectification of measuring limits of error & method, Measuring range (1V – 50V), Display range (0.0V – 50V), Frequency range (DC/AC 45hz – 400Hz), Accuracy ( $\pm 5\%$ of rdg + 5 digit), Internal resistance (Approx. 1.5 M $\Omega$ )				
	Measure of Interference Frequency: Measurement of oscillation period of the interference voltage, Measuring Range (6.0 Hz to				

	400 Hz), Display range (16.0 Hz to 299.9 Hz to 999 Hz), Accuracy (±1% of rdg + 2 digit)				
	Earthing Resistance: Current and voltage measurement with probe as IEC61557-5, Open circuit voltage (20/48 V, AC), Short				
	circuit current (250 mA AC), Noise rejection (120 dB)				
	Electrical Measurement: Position (Reference position ±90),				
	Temperature (0°C and 35°C), Resistance of the probes & auxiliary earth electrodes (0 to 100 x RA≤ 50 kΩ), System				
	frequency (99% to 101% of the nominal frequency), System				
	voltage (85% to 110% of the nominal voltage), Operating error				
	$(B[\%] = \pm B/\text{fiducial value } \times 100\%$ , A = intrinsic error, En =				
	variations, $R = routine test$ , $T = type test$ ), Accuracy ( $\pm 2\%$ of rdg				
	+ 2 digit), Measuring time (Typical 8 seconds with a fixed				
	frequency 30 sec. max. with AFC & complete cycle of all measuring frequencies) Measuring error of RH & RS (Typ. 10%				
	of RE + RS + RH), Max. probe resistance & auxiliary earth				
	electrode resistance ( $\leq 1 \text{ M}\Omega$ )				
	Automatic Switchover of Measuring Resolution in Dependence to				
	Auxiliary Earth Electrode Resistance RH				
	Selective Measurement of the Earthing Resistance (RE				
	Clamp):(Current and voltage measurement with probe as per EN61557-5 & current measurement in the individual branch with				
	additional current transformer.				
	Resistance Measurement (R AC/DC): (Current and voltage				
	measuring method as per IEC61557-4 possible)				
	Compensation of Lead Resistance (RK)				
	Stakeless Ground Loop Measurement (Two Clamp Stakeless)				
	GEO Earth Ground Tester				
	User's Manual & Quick Reference Guide				
	USB Cable				
	Professional Carrying Case				
	2 Clamps, 4 Earth Ground Stakes & 3 Cable Reels				
	General Requirement:				
	At least one-year warranty				
	Provide technical assistance and training on product usage and				
-	service center within the Cebu or Manila.				
	Product Manufacturer at least 15 years in the Electro-mechanical maintenance industry.				
2	Industrial and Heavy-Duty Earth Ground Loop and Leakage	set	1	182,000.00	182,000.00
	Clamp	301	•	102,000.00	.02,000.00
	Specification:				
	Test the grounding components of equipment in hard-to-reach				
	spaces, including areas that are indoors or fully paved and do not				
	permit driving auxiliary test stakes.  AC Leakage Current Measurement: Identify AC leakage without				
	disconnecting your earth ground stake from the grounding				
	system.				
	Heavy-duty clamp jaw stays in alignment and in calibration even				
	in every day, on-the-job industrial environments				

	User-defined high/low alarm limits, for rapid measurement	1			
	evaluation				
	Selectable band-pass filter function removes unwanted noise				
	from the AC leakage current measurement.				
	Electrical specification: Maximum voltage to earth ground (1000V), Battery type (AA alkaline IEC/EN LR6 (x4)), Frequency range (40 Hz to 1 kHz), Ingress Protection (IEC/EN 60529: IP30 with jaw closed), LCD (Digital reading, 999 counts; Refresh rate, 4 per second), Operating temperature (-10 °C to + 50 °C), Storing temperature (-20 °C to + 60 °C), Operating humidity (Non-condensing), Operating altitude (2000 m or 6561 feet), Storing altitude (12 000 m or 39,370 feet), Reference Temperature (23 °C $\pm$ 5 °C or 73 °F $\pm$ 9 °F), Measurement (IEC/EN 61010-2-032: CAT IV 600 V / CAT III 1000 V), Current clamp for leakage current measurements (IEC/EN 61557-13: Class 2, $\leq$ 30 A/m), Resistance to earth (IEC/EN 61557-5), Effectiveness of the Protective Measures (IEC/EN 61557-16), Electromagnetic compatibility (EMC) (IEC/EN 61326-1: Portable				
	Electromagnetic Environment, CISPR 11: Group 1, Class B, IEC/EN 61326-2-2, KCC Class A equipment, FCC 47 CFR 15				
	subpart B)				
	Earth Ground Clamp				
	Loop resistance standard				
	Safety information guide & Quick reference guide				
	Hard case & (4) AA batteries				
	General Requirement:				
	At least one-year warranty				
	Provide technical assistance and training on product usage and service center within the Cebu or Manila.				
	Product Manufacturer/developer at least 15 years in the Electro- mechanical maintenance industry.				
3	Industrial and Heavy-Duty Precision Acoustic Imager	unit	1	2,062,000.00	2,062,000.00
	Specification:				
	Quick and easy partial discharge detection & PD testing				
	Sensors: Frequency band (2 kHz to 100 kHz), Detection range (0.5 to > 120 meters -1.6 to > 393 feet), Field view (63 $^{\circ}$ ± 5 $^{\circ}$ ), Nominal frame rate (25FPS)				
	Built-in digital camera (visible light): (FOV63 ° ± 5 °and fixed lens)				
	Display:7" LCD with backlight, under-sunlight readable, Capacitive Touch screen, SoundMap image acoustic image, 1280 x 800 (1,024,000 pixels) resolution				
	Image storage: Storage capacity at least 999 picture files and 20 video files, blended and soundmap jpg, png and mp4 format, 5 minutes video length and USB-C for data transfer				
	Acoustic measurement: Measurement range (12.1 dB SPL to 114.6 dB SPL ±1 dB SPL 2 kHz, 4.4 dB SPL to 101.2 dB SPL ±2 dB SPL 19 kHz, 12.8 dB SPL to 119.2 dB SPL ±1 dB SPL 35 kHz, 19.8 dB SPL to 116.1 dB SPL ±3 dB SPL 52 kH, z, 41.4 dB SPL to 129.0 dB SPL ±1 dB SPL 80 kHz, 54.4 dB SPL to 135.5 dB SPL ±1 dB SPL 100 kHz)				

	Software: Intuitive user interface, Trend graphs (Frequency and dB scale), Spot markers (dB level reading at center point of the				
	image) Battery: Batteries (field-replaceable, Rechargeable, 2 x Li-ion battery), Battery life (6 hours/battery includes spare battery), Battery charging (External dual-bay, 3-hour charging time)				
	Standard palettes: 3: Grayscale, Ironbow, Blue-Red				
	Operating temperature: 0 °C to 40 °C (32 °F to 104 °F)				
	Storage temperature: -20 °C to 70 °C (-4 °F to 158 °F) Without batteries				
	Relative humidity: 10 % to 95 % non-condensing				
	Ingress Protection (IP): IP40 protection				
	Self-diagnostic notification: Array-health test to identify when microphone array needs attention				
	Supported languages: Dutch, English, Finish, French, German, Italian, Japanese, Korean, Polish, Portuguese, Russian, Simplified Chinese, Spanish, Swedish, Traditional Chinese				
	Safety Compliant: IEC 61010-1 & RoHS compliant				
	Electromagnetic Compatibility (EMC): IEC 61326-1: CISPR 11: Group 1, Class A, (KCC) Class A Equipment, (FCC) 47 CFR 15 subpart B.				
	AC power supply and battery pack charger (including universal AC adapters)				
	Two rugged lithium ion smart battery packs & USB cable				
	Rugged, hard carrying case & adjustable hand strap and neck strap				
	General Requirement:				
	Warranty: 2 year				
	Provide technical assistance and training on product usage and service center within the Cebu or Manila.				
	Product Manufacturer/developer at least 15 years in the Electro- mechanical maintenance industry.				
4	Industrial and Heavy-Duty Three-Power Quality Analyzer	unit	1	900,000.00	900,000.00
	Specification:				
	Voltage inputs: Number of inputs (4 inputs, 3 phases and neutral referenced to PE 5 connectors), Measurement category (1000 V CAT III / 600 V CAT IV), Maximum input voltage (1000 V rms / 1000 V dc (1700 Vpk)), Nominal voltage range (Wye and single phase: variable 50V – 1000V) (Delta: Variable 100V – 1000V) IEC 61000-4-30 Class A compliance, Input impedance (10 M $\Omega$				
	between P-P & P-N, 5 MΩ between P-PE & N-PE), Bandwidth (DC to 30 kHz for PQ measurements), Resolution (24-bit synchronous sampling), Sampling frequency (80 kS/s at 50/60				
	Hz), Scaling (1:1, variable for use of potential transformers)				
	Standard compliance: Power (IEEE 1459), Harmonics (IEC 61000-4-7: Class 1), IEEE 519 (short time and very short time harmonics), Flicker (IEC 61000-4-15 Class F1) Power quality				
	(IEC 61000-4-30 Class A, IEC 62586 PQI-A-PI), Power quality compliance (EN 50160 + GOST + NEQUAL + NETCODE + FOL)				

	Environmental specifications: Operating temperature range –(10 °C to 50 °C), Storage temperature range (-20 °C to 60 °C)				
	IP Rating (IEC 60529: IP50)				
	Vibration (IEC 60721-3-3 / 3M2)				
	Power supply: Voltage range (100V – 600V -15 % / +10%), Power consumption (Max. 40VA), Mains frequency 50/60 Hz				
	UPS: Li-lon battery BP1770 with extended temperature range, On-battery runtime: 1.5 hours				
	Safety: IEC 61010-1: Pollution Degree 2				
	Power supply: Overvoltage Category IV 600 V with Mains Adapter MA-C8: Overvoltage Category II 300 V				
	General Requirement:				
	Warranty Analyzer: 2 years (battery not included)				
	Accessories: 1 year (including battery)				
	Calibration cycle 2 years				
	Provide technical assistance and training on product usage and service center within the Cebu or Manila.				
	Product Manufacturer/developer at least 15 years in the Electro- mechanical maintenance industry				
5	Industrial and Heavy-Duty Thermal Camera	unit	1	310,000.00	310,000.00
	Specification:				
	Detector resolution: 640 x 480				
	Super Resolution: Captures and combines 4x the data to create a 1280 x 960 (614,400 pixels) image				
	Infrared Resolution: 307,200 pixels				
	Laser distance meter				
	Advanced manual focus				
	Ruggedized touchscreen display with 3.5 inch (landscape) 640 x 480 LCD				
	Rugged, ergonomic design for one-handed use Yes				
	Digital zoom 2x and 4x				
	Temperature measurement range: ≤-20 °C to 1000 °C (-4 °F to 1832 °F)				
	Accuracy: ±2 °C or 2% (at 25 °C nominal, whichever is greater)				
	Thermal sensitivity (NETD)* ≤0.05 °C at 30 °C target temp (50 mK)				
	Wireless connectivity and compatibility with IOS, Android and LAN				
	Lenses: Standard Iens IFOV (spatial resolution) 0.93 mRad, D:S 1065:1, Field of view 34 °H x 24 °V, Minimum focus distance 15 cm (approx. 6 in),IR-Fusion® technology Picture-In-Picture and full screen 2x telephoto smart Iens IFOV (spatial resolution) 0.46 mRad, D:S 1529:1, Field of view 17 °H x 12 °V, Minimum focus distance 45 cm (approx. 18 in), IR-Fusion® technology Picture-In-Picture and full screen				
	4x telephoto smart lens IFOV (spatial resolution) 0.23 mRad, D:S 2941:1, Field of view 6 °H x 4.5 °V, Minimum focus distance 1.5 cm (approx. 60 in),				

	Wide-angle smart lens IFOV 1.85 mRad, D:S 377:1, Field of view 48 °H x 34 °V, Minimum focus distance 15 cm (approx. 6 in), IR-				
	Fusion® technology Full screen				
	Battery: Batteries (field-replaceable, rechargeable), Two lithium				
	ion smart battery packs with five-segment LED display to show charge level, Battery life 2-3 hours per battery, 2.5 hours to full charge, Battery charging system Two-bay battery charger or inimager charging.				
	Infrared spectral band: 7.5 µm to 14 µm (long wave)				
	Operating temperature -10 °C to +50 °C (14 °F to 122 °F)				
	Storage temperature -20 °C to +50 °C (-4 °F to 122 °F)				
	Relative humidity 10% to 95% non-condensing				
	Safety IEC 61010-1: Overvoltage category II, Pollution Degree 2				
	Electromagnetic compatibility: IEC 61326-1: Basic EM environment. CISPR 11: Group 1, Class A				
	General Requirement:				
	Warranty: 2 years	İ			
	Calibration cycle: Every 2 years				
	Provide technical assistance and training on product usage and service center within the Cebu or Manila.				
	Product Manufacturer/developer at least 15 years in the Electro- mechanical maintenance industry				
6	Industrial and Heavy-Duty Cable Locator Set	set	1	90,000.00	90,000.00
	Specification:				
	Professional cable locator				
	Voltage measurement range for Transmitter: 12 V, 50 V, 120 V, 230 V, 400 V				
	Frequency range for Transmitter: 0 - 60 Hz				
	Output signal for Transmitter: 125 kHz				
	Voltage for Transmitter: Up to 400 V AC/DC				
	Tracing depth cable location for Receiver: 0 - 2.5 m wall/underground cables				
	Main voltage detection for Receiver: 0 - 0.4 m				
	Operating temperature: Transmitter & Receiver (0 to 40°C)				
	Storage temperature: Transmitter & Receiver (-20°C to +60°C)				
	Humidity (without condensation): Transmitter & Receiver (Max. 80% relative)				
	Operating altitude: Transmitter & Receiver: (Up to 2000 m)				
	Electrical safety EN 61010-1				
	Overvoltage category Cat. III 300 V				
	General Requirement:				
	Warranty 2 years				
	Provide technical assistance and training on product usage and				
	service center within the Cebu or Manila.				
	Product Manufacturer/developer at least 15 years in the Electro- mechanical maintenance industry				

7	Industrial and Heavy-Duty Infrared Camera	unit	1	916,000.00	916,000.00
	Specification:				
	Detector resolution: 640 x 480				
	Super Resolution: Captures and combines 4x the data to create a 1280 x 960 (614,400 pixels) image				
	Infrared Resolution: 307,200 pixels				
	Laser distance meter				
	Advanced manual focus				
	Ruggedized touchscreen display with 3.5 inch (landscape) 640 x 480 LCD				
	Rugged, ergonomic design for one-handed use Yes				
	Digital zoom 2x and 4x				
	Temperature measurement range: ≤-20 °C to 1000 °C (-4 °F to 1832 °F)				
	Accuracy: ±2 °C or 2% (at 25 °C nominal, whichever is greater)				
	Thermal sensitivity (NETD)* ≤0.05 °C at 30 °C target temp (50 mK)				
	Wireless connectivity and compatibility with IOS, Android and LAN				
	Lenses: Standard lens IFOV (spatial resolution) 0.93 mRad, D:S 1065:1, Field of view 34 °H x 24 °V, Minimum focus distance 15 cm (approx. 6 in),IR-Fusion® technology Picture-In-Picture and full screen 2x telephoto smart lens IFOV (spatial resolution) 0.46 mRad, D:S 1529:1, Field of view 17 °H x 12 °V, Minimum focus distance 45 cm (approx. 18 in), IR-Fusion® technology Picture-In-Picture and full screen				
	4x telephoto smart lens IFOV (spatial resolution) 0.23 mRad, D:S 2941:1, Field of view 6 °H x 4.5 °V, Minimum focus distance 1.5 cm (approx. 60 in),				
	Wide-angle smart lens IFOV 1.85 mRad, D:S 377:1, Field of view 48 °H x 34 °V, Minimum focus distance 15 cm (approx. 6 in), IR-Fusion® technology Full screen				
	Battery: Batteries (field-replaceable, rechargeable), Two lithium ion smart battery packs with five-segment LED display to show charge level, Battery life 2-3 hours per battery, 2.5 hours to full charge, Battery charging system Two-bay battery charger or inimager charging.				
	Infrared spectral band: 7.5 µm to 14 µm (long wave)				
	Operating temperature -10 °C to +50 °C (14 °F to 122 °F)				
	Storage temperature -20 °C to +50 °C (-4 °F to 122 °F)				
	Relative humidity 10% to 95% non-condensing				
	Safety IEC 61010-1: Overvoltage category II, Pollution Degree 2				
	Electromagnetic compatibility: IEC 61326-1: Basic EM environment. CISPR 11: Group 1, Class A				
	General Requirement:				
	Warranty: 2 years	L			
	Calibration cycle: Every 2 years				

	Provide technical assistance and training on product usage and service center within the Cebu or Manila.				
	Product Manufacturer/developer at least 15 years in the Electro- mechanical maintenance industry				
8	Industrial and Heavy-Duty Battery Operated Self-Propelled Articulating Boom Lift	unit	1	3,400,000.00	3,400,000.00
	Specification:				
	Max. Working Height: at least 22m				
	Max. Platform Height: at least 20m				
	Max. up and over clearance: at least 9.4m				
	Max. Working Radius: at least 12.23m				
	Platform Width: at least 0.76m				
	Platform Length: at least 1.8m				
	Height: Stowed at least 2.38m				
	Length: Stowed at least 8.99m				
	Width: at least 2.49m				
	Wheelbase: at least 2.5m				
	Ground Clearance: Center at least 0.3m				
	Max. Lift Capacity: 256kg/350kg				
	Number of platform occupants: 2/3				
	Platform rotation: ±80°				
	Turntable rotation: 355°				
	Vertical jib rotation (up/down): ±70°				
	Drive speed: Stowed at least 4.5km/h				
	Gradeability: Stowed at least 40%				
	Max. Working angle (Tilt sensor activation):3°				
	Turning radius (outside): 5.0m				
	Drive and steer: 4×2				
	Weight: at least 10000kg				
	Battery: 48V/420Ah				
	Control voltage: at least 24V				
	Pump power: at least 12kw				
	Drive motor: at least 3.3kw				
	Standard compliance: GB25849-2010, BS EN 280:2013+A1:2015				
	General Requirement:				
	Warranty: 2 years				
	Life-long technical support and assistance				
				TOTAL:	8,260,000.00

Bids received in excess of the ABC for each item shall be automatically rejected at bid opening.

- 2. The *Visayas State University* now invites bids for the above Procurement Project. Delivery of the Goods is required by *ninety* (90) calendar days upon receipt of Notice to Proceed (NTP). Bidders should have completed, within two (2) years from the date of submission and receipt of bids, a contract similar to the Project. The description of an eligible bidder is contained in the Bidding Documents, particularly, in Section II (Instructions to Bidders).
- 3. Bidding will be conducted through open competitive bidding procedures using a non-discretionary "pass/fail" criterion as specified in the 2016 revised Implementing Rules and Regulations (IRR) of Republic Act (RA) No. 9184.
  - Bidding is restricted to Filipino citizens/sole proprietorships, partnerships, or organizations with at least sixty percent (60%) interest or outstanding capital stock belonging to citizens of the Philippines, and to citizens or organizations of a country the laws or regulations of which grant similar rights or privileges to Filipino citizens, pursuant to RA No. 5183.
- 4. Prospective Bidders may obtain further information from *Visayas State University* and inspect the Bidding Documents at the address given below during *Mondays Fridays* (8:00 AM-5:00 PM).
- 5. A complete set of Bidding Documents may be acquired by interested Bidders on 02 October 23 October 2023 until 8:00 AM from the given address and website(s) below and upon payment of the applicable fee for the Bidding Documents, pursuant to the latest Guidelines issued by the GPPB, in the amount of Ten Thousand Pesos (PhP 10,000.00). The Procuring Entity shall allow the bidder to present its proof of payment for the fees in person, by facsimile, or through electronic means.
- 6. The *Visayas State University* will hold a Pre-Bid Conference on *October 9*, 2023; 2:00 *PM* at *the BAC Conference Room*, *VSU Market*, *Visca*, *Baybay City*, *Leyte* and through video conferencing *via Zoom*, which shall be open to prospective bidders.
  - Bidders are advised to contact the BAC Secretariat before the scheduled Pre-Bid Conference for the Zoom meeting details.
- 7. Bids must be duly received by the BAC Secretariat through (i) manual submission at the office address indicated below, (ii) online or electronic submission as indicated below, or (iii) both on or before 23 October 2023 until 8:30 AM. Late bids shall not be accepted.
- 8. For bidders who opt to submit their bids electronically, a hardcopy (original) of the bid must be sent to the BAC through preferred couriers. A proof (e.g. courier receipt/waybill, etc.) that a hardcopy of the bid is on transit must be presented upon submission of the electronic bid.
- 9. All Bids must be accompanied by a bid security in any of the acceptable forms and in the amount stated in **ITB** Clause 14.
- 10. Bid opening shall be on 23 October 2023 until 9:00 AM at the BAC Conference Room, VSU Market, Visca, Baybay City, Leyte and through video conferencing via Zoom.

Bids will be opened in the presence of the bidders' representatives who choose to attend the activity.

Bidders are advised to contact the BAC Secretariat before the scheduled Bid Opening for the Zoom meeting details.

- 11. This procurement project is part of the early procurement activities (EPA) of VSU for 20243 projects. Procurement activities from advertisement until recommendation of award to the HoPE shall be conducted in 2023 but issuance of award to the winning bidders shall be done in 2024 upon the release of 2024 VSU General Appropriations Act from DBM.
- 12. The Visayas State University reserves the right to reject any and all bids, declare a failure of bidding, or not award the contract at any time prior to contract award in accordance with Sections 35.6 and 41 of the 2016 revised IRR of RA No. 9184, without thereby incurring any liability to the affected bidder or bidders.
- 13. For further information, please refer to:

#### Mr. Leopoldo S. Escala Jr. (BAC Secretariat)

Office of the Head for Procurement, VSU-Main, Visca, Baybay City, Leyte

Mobile: 053 565 0600 local 1093 or 09639629709

Email: leopoldo.escala@vsu.edu.ph

or

#### Mr. Toni Marc L. Dargantes (BAC Secretariat)

Office of the VP for Planning, Resource Generation & Auxiliary Services VSU-Main, Visca, Baybay City, Levte

Mobile: 0977 7186594

Email: tmdargantes@vsu.edu.ph

14. You may visit the following websites:

> For downloading of Bidding Documents: https://www.vsu.edu.ph/philgeps-

opportunities

September 29, 2023

**DILBERTO O. FERRAREN** 

s Jemans

Chairperson, VSU BAC

# Section II. Instructions to Bidders

#### 1. Scope of Bid

The Procuring Entity, Visayas State University, wishes to receive Bids for the Supply and Delivery of Technical & Scientific Equipment, with identification number VSU-GOODS-24-01.

The Procurement Project (referred to herein as "Project") is composed of 52 items, the details of which are described in Section VII (Technical Specifications).

#### 2. Funding Information

- 2.1. The GOP through the source of funding as indicated below for 2024 in the amount of Eight Million Two Hundred Sixty Thousand Pesos (PhP 8,260,000.00).
- 2.2. The source of funding is: NGA, the General Appropriations Act 2024.

#### 3. Bidding Requirements

The Bidding for the Project shall be governed by all the provisions of RA No. 9184 and its 2016 revised IRR, including its Generic Procurement Manuals and associated policies, rules and regulations as the primary source thereof, while the herein clauses shall serve as the secondary source thereof.

Any amendments made to the IRR and other GPPB issuances shall be applicable only to the ongoing posting, advertisement, or **IB** by the BAC through the issuance of a supplemental or bid bulletin.

The Bidder, by the act of submitting its Bid, shall be deemed to have verified and accepted the general requirements of this Project, including other factors that may affect the cost, duration and execution or implementation of the contract, project, or work and examine all instructions, forms, terms, and project requirements in the Bidding Documents.

#### 4. Corrupt, Fraudulent, Collusive, and Coercive Practices

The Procuring Entity, as well as the Bidders and Suppliers, shall observe the highest standard of ethics during the procurement and execution of the contract. They or through an agent shall not engage in corrupt, fraudulent, collusive, coercive, and obstructive practices defined under Annex "I" of the 2016 revised IRR of RA No. 9184 or other integrity violations in competing for the Project.

#### 5. Eligible Bidders

- 5.1. Only Bids of Bidders found to be legally, technically, and financially capable will be evaluated.
- 5.2. Foreign ownership limited to those allowed under the rules may participate in this Project.

5.3. Pursuant to Section 23.4.1.3 of the 2016 revised IRR of RA No.9184, the Bidder shall have an SLCC that is at least one (1) contract similar to the Project the value of which, adjusted to current prices using the PSA's CPI, must be at least equivalent to:

Bidder should comply with the following requirements:

- i. Completed at least two (2) similar contracts, the aggregate amount of which should be equivalent to at least *fifty percent* (50%) of the ABC for this Project; and
- ii. The largest of these similar contracts must be equivalent to at least half of the percentage of the ABC as required above.
- 5.4. The Bidders shall comply with the eligibility criteria under Section 23.4.1 of the 2016 IRR of RA No. 9184.

#### 6. Origin of Goods

There is no restriction on the origin of goods other than those prohibited by a decision of the UN Security Council taken under Chapter VII of the Charter of the UN, subject to Domestic Preference requirements under **ITB** Clause 18.

#### 7. Subcontracts

7.1. The Bidder may subcontract portions of the Project to the extent allowed by the Procuring Entity as stated herein, but in no case more than twenty percent (20%) of the Project.

The Procuring Entity has prescribed that: **Subcontracting is not allowed**.

#### 8. Pre-Bid Conference

The Procuring Entity will hold a pre-bid conference for this Project on the specified date and time and either at its physical address and/or through videoconferencing/webcasting as indicated in paragraph 6 of the **IB**.

#### 9. Clarification and Amendment of Bidding Documents

Prospective bidders may request for clarification on and/or interpretation of any part of the Bidding Documents. Such requests must be in writing and received by the Procuring Entity, either at its given address or through electronic mail indicated in the **IB**, at least ten (10) calendar days before the deadline set for the submission and receipt of Bids.

#### 10. Documents comprising the Bid: Eligibility and Technical Components

10.1. The first envelope shall contain the eligibility and technical documents of the Bid as specified in **Section VIII** (Checklist of Technical and Financial **Documents**).

- 10.2. The Bidder's SLCC as indicated in **ITB** Clause 5.3 should have been completed within **two** (2 *years*) prior to the deadline for the submission and receipt of bids.
- 10.3. If the eligibility requirements or statements, the bids, and all other documents for submission to the BAC are in foreign language other than English, it must be accompanied by a translation in English, which shall be authenticated by the appropriate Philippine foreign service establishment, post, or the equivalent office having jurisdiction over the foreign bidder's affairs in the Philippines. Similar to the required authentication above, for Contracting Parties to the Apostille Convention, only the translated documents shall be authenticated through an apostille pursuant to GPPB Resolution No. 13-2019 dated 23 May 2019. The English translation shall govern, for purposes of interpretation of the bid.

#### 11. Documents comprising the Bid: Financial Component

- 11.1. The second bid envelope shall contain the financial documents for the Bid as specified in **Section VIII** (Checklist of Technical and Financial Documents).
- 11.2. If the Bidder claims preference as a Domestic Bidder or Domestic Entity, a certification issued by DTI shall be provided by the Bidder in accordance with Section 43.1.3 of the 2016 revised IRR of RA No. 9184.
- 11.3. Any bid exceeding the ABC indicated in paragraph 1 of the **IB** shall not be accepted.
- 11.4. For Foreign-funded Procurement, a ceiling may be applied to bid prices provided the conditions are met under Section 31.2 of the 2016 revised IRR of RA No. 9184.

#### 12. Bid Prices

- 12.1. Prices indicated on the Price Schedule shall be entered separately in the following manner:
  - a. For Goods offered from within the Procuring Entity's country:
    - i. The price of the Goods quoted EXW (ex-works, ex-factory, exwarehouse, ex-showroom, or off-the-shelf, as applicable);
    - ii. The cost of all customs duties and sales and other taxes already paid or payable;
    - iii. The cost of transportation, insurance, and other costs incidental to delivery of the Goods to their final destination; and
    - iv. The price of other (incidental) services, if any, listed in e.

#### b. For Goods offered from abroad:

i. Unless otherwise stated in the **BDS**, the price of the Goods shall be quoted delivered duty paid (DDP) with the place of destination in the Philippines as specified in the **BDS**. In quoting the price,

the Bidder shall be free to use transportation through carriers registered in any eligible country. Similarly, the Bidder may obtain insurance services from any eligible source country.

ii. The price of other (incidental) services, if any, as listed in **Section VII (Technical Specifications).** 

#### 13. Bid and Payment Currencies

- 13.1. For Goods that the Bidder will supply from outside the Philippines, the bid prices may be quoted in the local currency or tradeable currency accepted by the BSP at the discretion of the Bidder. However, for purposes of bid evaluation, Bids denominated in foreign currencies, shall be converted to Philippine currency based on the exchange rate as published in the BSP reference rate bulletin on the day of the bid opening.
- 13.2. Payment of the contract price shall be made in: Philippine Pesos.

#### 14. Bid Security

- 14.1. The Bidder shall submit a Bid Securing Declaration or any form of Bid Security in the amount indicated in the **BDS**, which shall be not less than the percentage of the ABC in accordance with the schedule in the **BDS**.
- 14.2. The Bid and bid security shall be valid until *February 23, 2024*. Any Bid not accompanied by an acceptable bid security shall be rejected by the Procuring Entity as non-responsive.

#### 15. Sealing and Marking of Bids

Each Bidder shall submit one copy of the first and second components of its Bid.

The Procuring Entity may request additional hard copies and/or electronic copies of the Bid. However, failure of the Bidders to comply with the said request shall not be a ground for disqualification.

If the Procuring Entity allows the submission of bids through online submission or any other electronic means, the Bidder shall submit an electronic copy of its Bid, which must be digitally signed. An electronic copy that cannot be opened or is corrupted shall be considered non-responsive and, thus, automatically disqualified.

#### 16. Deadline for Submission of Bids

16.1. The Bidders shall submit on the specified date and time and either at its physical address or through online submission as indicated in paragraph 7 of the **IB**.

#### 17. Opening and Preliminary Examination of Bids

17.1. The BAC shall open the Bids in public at the time, on the date, and at the place specified in paragraph 9 of the **IB**. The Bidders' representatives who are present shall sign a register evidencing their attendance. In case videoconferencing,

webcasting or other similar technologies will be used, attendance of participants shall likewise be recorded by the BAC Secretariat.

In case the Bids cannot be opened as scheduled due to justifiable reasons, the rescheduling requirements under Section 29 of the 2016 revised IRR of RA No. 9184 shall prevail.

17.2. The preliminary examination of bids shall be governed by Section 30 of the 2016 revised IRR of RA No. 9184.

#### 18. Domestic Preference

18.1. The Procuring Entity will grant a margin of preference for the purpose of comparison of Bids in accordance with Section 43.1.2 of the 2016 revised IRR of RA No. 9184.

#### 19. Detailed Evaluation and Comparison of Bids

- 19.1. The Procuring BAC shall immediately conduct a detailed evaluation of all Bids rated "passed," using non-discretionary pass/fail criteria. The BAC shall consider the conditions in the evaluation of Bids under Section 32.2 of the 2016 revised IRR of RA No. 9184.
- 19.2. If the Project allows partial bids, bidders may submit a proposal on any of the lots or items, and evaluation will be undertaken on a per lot or item basis, as the case maybe. In this case, the Bid Security as required by **ITB** Clause 15 shall be submitted for each lot or item separately.
- 19.3. The descriptions of the lots or items shall be indicated in **Section VII** (**Technical Specifications**), although the ABCs of these lots or items are indicated in the **BDS** for purposes of the NFCC computation pursuant to Section 23.4.2.6 of the 2016 revised IRR of RA No. 9184. The NFCC must be sufficient for the total of the ABCs for all the lots or items participated in by the prospective Bidder.
- 19.4. The Project shall be awarded as follows: One Project having several items, which shall be awarded as separate contracts per item.
- 19.5. Except for bidders submitting a committed Line of Credit from a Universal or Commercial Bank in lieu of its NFCC computation, all Bids must include the NFCC computation pursuant to Section 23.4.1.4 of the 2016 revised IRR of RA No. 9184, which must be sufficient for the total of the ABCs for all the lots or items participated in by the prospective Bidder. For bidders submitting the committed Line of Credit, it must be at least equal to ten percent (10%) of the ABCs for all the lots or items participated in by the prospective Bidder.

#### 20. Post-Qualification

20.1. Within a non-extendible period of five (5) calendar days from receipt by the Bidder of the notice from the BAC that it submitted the Lowest Calculated Bid, the Bidder shall submit its latest income and business tax returns filed and paid

through the BIR Electronic Filing and Payment System (eFPS) and other appropriate licenses and permits required by law and stated in the **BDS**.

#### 21. Signing of the Contract

21.1. The documents required in Section 37.2 of the 2016 revised IRR of RA No. 9184 shall form part of the Contract. Additional Contract documents are indicated in the **BDS**.

# Section III. Bid Data Sheet

# **Bid Data Sheet**

ITB	
Clause	
5.3	For this purpose, contracts similar to the Project shall be:
	a. Technical, Scientific Equipment
	b. completed within two (2) years prior to the deadline for the submission and receipt of bids.
7.1	Subcontracting is not allowed.
12	The price of the Goods shall be quoted DDP <i>VSU Main, Visca, Baybay City, Leyte</i> or the applicable International Commercial Terms (INCOTERMS) for this Project.
14.1	The bid security shall be in the form of a Bid Securing Declaration, or any of the following forms and amounts:
	a. The amount of not less than <i>One Hundred Sixty Five Thousand Two Hundred Pesos (PhP 165,200.00) or two percent (2%) of ABC</i> , if bid security is in cash, cashier's/manager's check, bank draft/guarantee or irrevocable letter of credit; or
	b. The amount of not less than Four Hundred Fifteen Thousand Pesos (PhP 413,000.00) or five percent (5%) of ABC if bid security is in Surety Bond.

15	Bidders are requested to submit two (2) more copies of its bid (Copy 1 and Copy 2) in addition to the required original hardcopy.  For filing purposes, the bidders are urged to use <b>Red</b> envelopes for its Technical and Financial Component envelopes, including the Mother (outer) Envelope.
19.3	See Section I. Invitation to Bid (Item 1) for the list of items and their corresponding total Approved Budget for the Contract (ABC) per item.
20.2	Bidders are required to submit its updated Mayor's/Business Permit during post-qualification.
21.2	Not Applicable.

Section IV.	Cananal (	Tanditions	of Contract
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#### 1. Scope of Contract

This Contract shall include all such items, although not specifically mentioned, that can be reasonably inferred as being required for its completion as if such items were expressly mentioned herein. All the provisions of RA No. 9184 and its 2016 revised IRR, including the Generic Procurement Manual, and associated issuances, constitute the primary source for the terms and conditions of the Contract, and thus, applicable in contract implementation. Herein clauses shall serve as the secondary source for the terms and conditions of the Contract.

This is without prejudice to Sections 74.1 and 74.2 of the 2016 revised IRR of RA No. 9184 allowing the GPPB to amend the IRR, which shall be applied to all procurement activities, the advertisement, posting, or invitation of which were issued after the effectivity of the said amendment.

Additional requirements for the completion of this Contract shall be provided in the **Special Conditions of Contract (SCC).** 

#### 2. Advance Payment and Terms of Payment

- 2.1. Advance payment of the contract amount is provided under Annex "D" of the revised 2016 IRR of RA No. 9184.
- 2.2. The Procuring Entity is allowed to determine the terms of payment on the partial or staggered delivery of the Goods procured, provided such partial payment shall correspond to the value of the goods delivered and accepted in accordance with prevailing accounting and auditing rules and regulations. The terms of payment are indicated in the **SCC**.

#### 3. Performance Security

Within ten (10) calendar days from receipt of the Notice of Award by the Bidder from the Procuring Entity but in no case later than prior to the signing of the Contract by both parties, the successful Bidder shall furnish the performance security in any of the forms prescribed in Section 39 of the 2016 revised IRR of RA No. 9184.

#### 4. Inspection and Tests

The Procuring Entity or its representative shall have the right to inspect and/or to test the Goods to confirm their conformity to the Project specifications at no extra cost to the Procuring Entity in accordance with the Generic Procurement Manual. In addition to tests in the SCC, Section IV (Technical Specifications) shall specify what inspections and/or tests the Procuring Entity requires, and where they are to be conducted. The Procuring Entity shall notify the Supplier in writing, in a timely manner, of the identity of any representatives retained for these purposes.

All reasonable facilities and assistance for the inspection and testing of Goods, including access to drawings and production data, shall be provided by the Supplier to the authorized inspectors at no charge to the Procuring Entity.

#### 5. Warranty

- 6.1. In order to assure that manufacturing defects shall be corrected by the Supplier, a warranty shall be required from the Supplier as provided under Section 62.1 of the 2016 revised IRR of RA No. 9184.
- 6.2. The Procuring Entity shall promptly notify the Supplier in writing of any claims arising under this warranty. Upon receipt of such notice, the Supplier shall, repair or replace the defective Goods or parts thereof without cost to the Procuring Entity, pursuant to the Generic Procurement Manual.

#### 6. Liability of the Supplier

The Supplier's liability under this Contract shall be as provided by the laws of the Republic of the Philippines.

If the Supplier is a joint venture, all partners to the joint venture shall be jointly and severally liable to the Procuring Entity.

Section V. Special Conditions of Co	ntract
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**Special Conditions of Contract** 

aaa	Special Conditions of Contract			
GCC				
Clause				
1	Delivery and Documents –			
	For purposes of the Contract, "EXW," "FOB," "FCA," "CIF," "CIP," "DDP" and other trade terms used to describe the obligations of the parties shall have the meanings assigned to them by the current edition of INCOTERMS published by the International Chamber of Commerce, Paris. The Delivery terms of this Contract shall be as follows:			
The delivery term applicable to this Contract is delivered VSU Ma Visca, Baybay City, Leyte. Risk and title will pass from the Sup Procuring Entity upon receipt and final acceptance of the Goods a destination.				
	Delivery of the Goods shall be made by the Supplier in accordance with the terms specified in Section VI (Schedule of Requirements).			
	For purposes of this Clause the Procuring Entity's Representative at the Project Site is:			
	Vivian V. Balbarino Head, Supply and Property Management Office VSU-Main, Visca, Baybay City, Leyte Contact #: 053 565 0600 local 1082/09175518871 sppmo@vsu.edu.ph  Additional Instruction: The Supplier should notify the Head of Supply and Property Management Office atleast 1 week before the scheduled delivery.			
	Incidental Services –			
	<ul> <li>The Supplier is required to provide all of the following services, including additional services, if any, specified in Section VI. Schedule of Requirements: <ul> <li>a. performance r supervision of on-site assembly and/or start-up of the supplied Goods;</li> <li>b. furnishing of tools required for assembly and/or maintenance of the supplied Goods;</li> <li>c. furnishing of a detailed operations and maintenance manual for each appropriate unit of the supplied Goods;</li> <li>d. performance or supervision or maintenance and/or repair of the supplied Goods, for a period of time agreed by the parties, provided</li> </ul> </li></ul>			
	that this service shall not relieve the Supplier of any warranty obligations under this Contract; and			

e. training of the Procuring Entity's personnel, at the Supplier's plant and/or on-site, in assembly, start-up, operation, maintenance, and/or repair of the supplied Goods.

The Contract price for the Goods shall include the prices charged by the Supplier for incidental services and shall not exceed the prevailing rates charged to other parties by the Supplier for similar services.

#### Spare Parts -

The Supplier is required to provide all of the following materials, notifications, and information pertaining to spare parts manufactured or distributed by the Supplier:

- a. such spare parts as the Procuring Entity may elect to purchase from the Supplier, provided that this election shall not relieve the Supplier of any warranty obligations under this Contract; and
- b. in the event of termination of production of the spare parts:
  - i. advance notification to the Procuring Entity of the pending termination, in sufficient time to permit the Procuring Entity to procure needed requirements; and
  - ii. following such termination, furnishing at no cost to the Procuring Entity, the blueprints, drawings, and specifications of the spare parts, if requested.

The spare parts and other components required are listed in **Section VI (Schedule of Requirements)** and the cost thereof are included in the contract price.

The Supplier shall carry sufficient inventories to assure ex-stock supply of consumable spare parts or components for the Goods for a period of 3 years.

Spare parts or components shall be supplied as promptly as possible, but in any case, within 1 month of placing the order.

#### Packaging -

The Supplier shall provide such packaging of the Goods as is required to prevent their damage or deterioration during transit to their final destination, as indicated in this Contract. The packaging shall be sufficient to withstand, without limitation, rough handling during transit and exposure to extreme temperatures, salt and precipitation during transit, and open storage. Packaging case size and weights shall take into consideration, where appropriate, the remoteness of the Goods' final destination and the absence of heavy handling facilities at all points in transit.

The packaging, marking, and documentation within and outside the packages shall comply strictly with such special requirements as shall be expressly provided for in the Contract, including additional requirements, if any, specified below, and in any subsequent instructions ordered by the Procuring Entity.

The outer packaging must be clearly marked on at least four (4) sides as follows:

Name of the Procuring Entity
Name of the Supplier
Contract Description
Final Destination
Gross weight
Any special lifting instructions
Any special handling instructions
Any relevant HAZCHEM classifications

A packaging list identifying the contents and quantities of the package is to be placed on an accessible point of the outer packaging if practical. If not practical the packaging list is to be placed inside the outer packaging but outside the secondary packaging.

#### Transportation -

Where the Supplier is required under Contract to deliver the Goods CIF, CIP, or DDP, transport of the Goods to the port of destination or such other named place of destination in the Philippines, as shall be specified in this Contract, shall be arranged and paid for by the Supplier, and the cost thereof shall be included in the Contract Price.

Where the Supplier is required under this Contract to transport the Goods to a specified place of destination within the Philippines, defined as the Project Site, transport to such place of destination in the Philippines, including insurance and storage, as shall be specified in this Contract, shall be arranged by the Supplier, and related costs shall be included in the contract price.

Where the Supplier is required under Contract to deliver the Goods CIF, CIP or DDP, Goods are to be transported on carriers of Philippine registry. In the event that no carrier of Philippine registry is available, Goods may be shipped by a carrier which is not of Philippine registry provided that the Supplier obtains and presents to the Procuring Entity certification to this effect from the nearest Philippine consulate to the port of dispatch. In the event that carriers of Philippine registry are available but their schedule delays the Supplier in its performance of this Contract the period from when the Goods were first ready for shipment and the actual date of shipment the period of delay will be considered force majeure.

The Procuring Entity accepts no liability for the damage of Goods during transit other than those prescribed by INCOTERMS for DDP deliveries. In the case of Goods supplied from within the Philippines or supplied by domestic Suppliers risk and title will not be deemed to have passed to the Procuring Entity until their receipt and final acceptance at the final destination.

	Intellectual Property Rights –
	The Supplier shall indemnify the Procuring Entity against all third-party claims of infringement of patent, trademark, or industrial design rights arising from use of the Goods or any part thereof.
2.2	Payment of staggered deliveries shall be allowed. Payment shall be on "as per cost of the items delivered" subject to inspection and acceptance.
4	The inspections and tests that will be conducted will be specified by the appropriate technical team of VSU to confirm conformity to the contract specifications at no extra cost to VSU.

# Section VI. Schedule of Requirements

The delivery schedule expressed as weeks/months stipulates hereafter a delivery date which is the date of delivery to the project site.

Item #	Qty	Unit	Description	Delivered, Weeks/Months
1	1	set	Industrial and Heavy-Duty Earth Ground Tester Kit	All Items Should Be Delivered to VSU Main
			Specification:	Campus, Visca, Baybay
			Memory: Internal memory storage up to 1500 records accessible via USB port	City, Leyte within <b>90</b> calendar days from receipt of Notice To
			Measuring Function: Interference voltage and frequency, earthing resistance 3- and 4-pole with/without clip-on current transformer, resistance 2-pole with AC, 2-and 4-pole with DC  Display: 4-digit (2999 Digit) - 7 segment liquid	Proceed (NTP), Purchase Order
			crystal display, with improved Visibility.	
			Operation: Central rotary switch and function keys.	
			Operating Temperature: -10°C to 50°C (14°F to 122°F)	
			Storage Temperature: -30°C to 60°C (-22°F to 140°F)	
			Temperature Coefficient: $\pm 0.1\%$ of reading/°C < $18$ °C > $28$ °C	
			Protection: Complied with EN60529 (IP56 for case, IP40 for battery door)	
			Max Voltage: Warning-socket clamp E, ES, S or H	
			Max Urms = 250V (pertains to misuse)	
			Safety: Protection by double and/or reinforced insulation. Max. 50 V to earth per IEC61010-1. Pollution degree 2	
			Quality Standard: DIN ISO 9001 compliance in development, designed and manufacturing	
			External field influence: Complies with DIN 43780 (8/76)	
			Measure of Interference Voltage DC + AC: Full wave rectification of measuring limits of error & method, Measuring range (1V – 50V), Display range (0.0V – 50V), Frequency range (DC/AC 45hz – 400Hz), Accuracy ( $\pm 5\%$ of rdg + 5 digit), Internal resistance (Approx. 1.5 M $\Omega$ )	
			Measure of Interference Frequency: Measurement of oscillation period of the interference voltage, Measuring Range (6.0 Hz to 400 Hz), Display range (16.0 Hz to 299.9 Hz to 999 Hz), Accuracy (±1% of rdg + 2 digit)	
			Earthing Resistance: Current and voltage measurement with probe as IEC61557-5, Open circuit voltage (20/48 V, AC), Short circuit current (250 mA AC), Noise rejection (120 dB)	

			Electrical Measurement: Position (Reference position
			$\pm 90$ ), Temperature (0°C and 35°C), Resistance of the
			probes & auxiliary earth electrodes (0 to $100 \times RA \le 100 \times RA \le $
			50 k $\Omega$ ), System frequency (99% to 101% of the
			nominal frequency), System voltage (85% to 110% of
			the nominal voltage), Operating error $(B[\%] = \pm B/fiducial\ value\ x\ 100\%, A = intrinsic\ error, En =$
			variations, $R = routine test$ , $T = type test$ ), Accuracy
			$(\pm 2\% \text{ of } rdg + 2 \text{ digit})$ , Measuring time (Typical 8
			seconds with a fixed frequency 30 sec. max. with AFC
			& complete cycle of all measuring frequencies)
			Measuring error of RH & RS (Typ. 10% of RE + RS +
			RH), Max. probe resistance & auxiliary earth
			electrode resistance ( $\leq 1 M\Omega$ )
			Automatic Switchover of Measuring Resolution in Dependence to Auxiliary Earth Electrode Resistance
			RH
			Selective Measurement of the Earthing Resistance (RE
			Clamp):(Current and voltage measurement with probe
			as per EN61557-5 & current measurement in the
			individual branch with additional current transformer.
			Resistance Measurement (R AC/DC): (Current and voltage measuring method as per IEC61557-4
			possible)
			Compensation of Lead Resistance (RK)
			Stakeless Ground Loop Measurement (Two Clamp
			Stakeless)
			GEO Earth Ground Tester
			User's Manual & Quick Reference Guide
			USB Cable
			Professional Carrying Case
			2 Clamps, 4 Earth Ground Stakes & 3 Cable Reels
			General Requirement:
			At least one-year warranty
			Provide technical assistance and training on product
			usage and service center within the Cebu or Manila.
			Product Manufacturer at least 15 years in the Electro- mechanical maintenance industry.
			Industrial and Heavy-Duty Earth Ground Loop
2	1	set	and Leakage Clamp
			Specification:
			Test the grounding components of equipment in hard-
			to-reach spaces, including areas that are indoors or
			fully paved and do not permit driving auxiliary test stakes.
			AC Leakage Current Measurement: Identify AC
			leakage without disconnecting your earth ground
			stake from the grounding system.
			Heavy-duty clamp jaw stays in alignment and in
			calibration even in every day, on-the-job industrial
			environments

			User-defined high/low alarm limits, for rapid
			measurement evaluation
			Selectable band-pass filter function removes unwanted
			noise from the AC leakage current measurement.
			Electrical specification: Maximum voltage to earth
			ground (1000V), Battery type (AA alkaline IEC/EN
			LR6 (x4)), Frequency range (40 Hz to 1 kHz), Ingress
			Protection (IEC/EN 60529: IP30 with jaw closed),
			LCD (Digital reading, 999 counts; Refresh rate, 4 per
			second), Operating temperature (-10 °C to + 50 °C), Storing temperature (-20 °C to + 60 °C), Operating
			humidity (Non-condensing), Operating altitude (2000
			m or 6561 feet), Storing altitude (12 000 m or 39,370
			feet), Reference Temperature (23 °C ±5 °C or 73 °F
			±9 °F), Measurement (IEC/EN 61010-2-032: CAT IV
			600 V / CAT III 1000 V), Current clamp for leakage
			current measurements (IEC/EN 61557-13: Class 2,
			≤30 A/m), Resistance to earth (IEC/EN 61557-5),
			Effectiveness of the Protective Measures (IEC/EN 61557-16), Electromagnetic compatibility (EMC)
			(IEC/EN 61326-1: Portable Electromagnetic
			Environment, CISPR 11: Group 1, Class B, IEC/EN
			61326-2-2, KCC Class A equipment, FCC 47 CFR 15
			subpart B)
			Earth Ground Clamp
			Loop resistance standard
			Safety information guide & Quick reference guide
			Hard case & (4) AA batteries
			General Requirement:
			At least one-year warranty
			Provide technical assistance and training on product
			usage and service center within the Cebu or Manila.
			Product Manufacturer/developer at least 15 years in
			the Electro-mechanical maintenance industry.  Industrial and Heavy-Duty Precision Acoustic
3	1	unit	Imager
			Specification:
			Quick and easy partial discharge detection & PD
			testing
			Sensors: Frequency band (2 kHz to 100 kHz),
			Detection range (0.5 to > 120 meters -1.6 to > 393
			feet), Field view (63 $^{\circ}$ ± 5 $^{\circ}$ ), Nominal frame rate (25FPS)
			Built-in digital camera (visible light): (FOV63 $^{\circ} \pm 5$
			°and fixed lens)
			Display:7" LCD with backlight, under-sunlight
			readable, Capacitive Touch screen, SoundMap image
			acoustic image, 1280 x 800 (1,024,000 pixels)
			resolution
			Image storage: Storage capacity at least 999 picture
			files and 20 video files, blended and soundmap jpg,

			png and mp4 format, 5 minutes video length and USB-
			C for data transfer  Acoustic measurement: Measurement range (12.1 dB SPL to 114.6 dB SPL ±1 dB SPL 2 kHz, 4.4 dB SPL to
			101.2 dB SPL ±2 dB SPL 19 kHz, 12.8 dB SPL to 119.2 dB SPL ±1 dB SPL 35 kHz, 19.8 dB SPL to 116.1 dB SPL ±3 dB SPL 52 kH, z, 41.4 dB SPL to 129.0 dB SPL ±1 dB SPL 80 kHz, 54.4 dB SPL to 135.5 dB SPL ±1 dB SPL 100 kHz)
			Software: Intuitive user interface, Trend graphs (Frequency and dB scale), Spot markers (dB level reading at center point of the image)  Battery: Batteries (field-replaceable, Rechargeable, 2 x Li-ion battery), Battery life (6 hours/battery includes spare battery), Battery charging (External dual-bay,
			3-hour charging time)
			Standard palettes: 3: Grayscale, Ironbow, Blue-Red  Operating temperature: 0 °C to 40 °C (32 °F to 104 °F)
			Storage temperature: -20 °C to 70 °C (-4 °F to 158 °F) Without batteries
		1	Relative humidity: 10 % to 95 % non-condensing
		1	Ingress Protection (IP): IP40 protection
			Self-diagnostic notification: Array-health test to identify when microphone array needs attention Supported languages: Dutch, English, Finish, French,
			German, Italian, Japanese, Korean, Polish, Portuguese, Russian, Simplified Chinese, Spanish, Swedish, Traditional Chinese
			Safety Compliant: IEC 61010-1 & RoHS compliant
			Electromagnetic Compatibility (EMC): IEC 61326-1: CISPR 11: Group 1, Class A, (KCC) Class A Equipment, (FCC) 47 CFR 15 subpart B.
			AC power supply and battery pack charger (including universal AC adapters)
			Two rugged lithium ion smart battery packs & USB cable
			Rugged, hard carrying case & adjustable hand strap and neck strap
			General Requirement:
			Warranty: 2 year
			Provide technical assistance and training on product
			usage and service center within the Cebu or Manila.  Product Manufacturer/developer at least 15 years in
4	1	unit	the Electro-mechanical maintenance industry.  Industrial and Heavy-Duty Three-Power Quality Analyzer
			Specification:
		1	Voltage inputs: Number of inputs (4 inputs, 3 phases
			and neutral referenced to PE 5 connectors), Measurement category (1000 V CAT III / 600 V CAT
			IV), Maximum input voltage (1000 V rms / 1000 V dc

			(1700 Vpk)), Nominal voltage range (Wye and single phase: variable 50V – 1000V) (Delta: Variable 100V
			- 1000V) IEC 61000-4-30 Class A compliance, Input
			impedance (10 M $\Omega$ between P-P & P-N, 5 M $\Omega$
			between P-PE & N-PE), Bandwidth (DC to 30 kHz for
			PQ measurements), Resolution (24-bit synchronous
			sampling), Sampling frequency (80 kS/s at 50/60 Hz), Scaling (1:1, variable for use of potential
ļ			transformers)
			Standard compliance: Power (IEEE 1459),
			Harmonics (IEC 61000-4-7: Class 1), IEEE 519
			(short time and very short time harmonics), Flicker
			(IEC 61000-4-15 Class F1) Power quality (IEC
			61000-4-30 Class A, IEC 62586 PQI-A-PI), Power
			quality compliance (EN 50160 + GOST + NEQUAL + NETCODE + FOL)
			Environmental specifications: Operating temperature
			range –(10 °C to 50 °C), Storage temperature range (-20°C to 60°C)
			IP Rating (IEC 60529: IP50)
			Vibration (IEC 60721-3-3 / 3M2)
			Power supply: Voltage range (100V – 600V -15 %/
			+10%), Power consumption (Max. 40VA), Mains
			frequency 50/60 Hz
			UPS: Li-Ion battery BP1770 with extended temperature range, On-battery runtime: 1.5 hours
			Safety: IEC 61010-1: Pollution Degree 2
			Power supply: Overvoltage Category IV 600 V with
			Mains Adapter MA-C8: Overvoltage Category II 300V
			General Requirement:
			Warranty Analyzer: 2 years (battery not included)
			Accessories: 1 year (including battery)
			<del></del>
			Calibration cycle 2 years
			Calibration cycle 2 years  Provide technical assistance and training on product
			Provide technical assistance and training on product usage and service center within the Cebu or Manila.  Product Manufacturer/developer at least 15 years in
			Provide technical assistance and training on product usage and service center within the Cebu or Manila.  Product Manufacturer/developer at least 15 years in the Electro-mechanical maintenance industry
5	1	unit	Provide technical assistance and training on product usage and service center within the Cebu or Manila.  Product Manufacturer/developer at least 15 years in the Electro-mechanical maintenance industry  Industrial and Heavy-Duty Thermal Camera
5	1	unit	Provide technical assistance and training on product usage and service center within the Cebu or Manila.  Product Manufacturer/developer at least 15 years in the Electro-mechanical maintenance industry
5	1	unit	Provide technical assistance and training on product usage and service center within the Cebu or Manila.  Product Manufacturer/developer at least 15 years in the Electro-mechanical maintenance industry  Industrial and Heavy-Duty Thermal Camera  Specification:  Detector resolution: 640 x 480
5	1	unit	Provide technical assistance and training on product usage and service center within the Cebu or Manila.  Product Manufacturer/developer at least 15 years in the Electro-mechanical maintenance industry  Industrial and Heavy-Duty Thermal Camera  Specification:  Detector resolution: 640 x 480  Super Resolution: Captures and combines 4x the data
5	1	unit	Provide technical assistance and training on product usage and service center within the Cebu or Manila.  Product Manufacturer/developer at least 15 years in the Electro-mechanical maintenance industry  Industrial and Heavy-Duty Thermal Camera  Specification:  Detector resolution: 640 x 480  Super Resolution: Captures and combines 4x the data to create a 1280 x 960 (614,400 pixels) image
5	1	unit	Provide technical assistance and training on product usage and service center within the Cebu or Manila.  Product Manufacturer/developer at least 15 years in the Electro-mechanical maintenance industry  Industrial and Heavy-Duty Thermal Camera  Specification:  Detector resolution: 640 x 480  Super Resolution: Captures and combines 4x the data to create a 1280 x 960 (614,400 pixels) image  Infrared Resolution: 307,200 pixels
5	1	unit	Provide technical assistance and training on product usage and service center within the Cebu or Manila.  Product Manufacturer/developer at least 15 years in the Electro-mechanical maintenance industry  Industrial and Heavy-Duty Thermal Camera  Specification:  Detector resolution: 640 x 480  Super Resolution: Captures and combines 4x the data to create a 1280 x 960 (614,400 pixels) image
5	1	unit	Provide technical assistance and training on product usage and service center within the Cebu or Manila.  Product Manufacturer/developer at least 15 years in the Electro-mechanical maintenance industry  Industrial and Heavy-Duty Thermal Camera  Specification:  Detector resolution: 640 x 480  Super Resolution: Captures and combines 4x the data to create a 1280 x 960 (614,400 pixels) image  Infrared Resolution: 307,200 pixels  Laser distance meter  Advanced manual focus
5	1	unit	Provide technical assistance and training on product usage and service center within the Cebu or Manila.  Product Manufacturer/developer at least 15 years in the Electro-mechanical maintenance industry  Industrial and Heavy-Duty Thermal Camera  Specification:  Detector resolution: 640 x 480  Super Resolution: Captures and combines 4x the data to create a 1280 x 960 (614,400 pixels) image  Infrared Resolution: 307,200 pixels  Laser distance meter  Advanced manual focus  Ruggedized touchscreen display with 3.5 inch
5	1	unit	Provide technical assistance and training on product usage and service center within the Cebu or Manila.  Product Manufacturer/developer at least 15 years in the Electro-mechanical maintenance industry  Industrial and Heavy-Duty Thermal Camera  Specification:  Detector resolution: 640 x 480  Super Resolution: Captures and combines 4x the data to create a 1280 x 960 (614,400 pixels) image  Infrared Resolution: 307,200 pixels  Laser distance meter  Advanced manual focus  Ruggedized touchscreen display with 3.5 inch (landscape) 640 x 480 LCD
5	1	unit	Provide technical assistance and training on product usage and service center within the Cebu or Manila.  Product Manufacturer/developer at least 15 years in the Electro-mechanical maintenance industry  Industrial and Heavy-Duty Thermal Camera  Specification:  Detector resolution: 640 x 480  Super Resolution: Captures and combines 4x the data to create a 1280 x 960 (614,400 pixels) image  Infrared Resolution: 307,200 pixels  Laser distance meter  Advanced manual focus  Ruggedized touchscreen display with 3.5 inch

		1	Professional cable locator
			Specification:
5	1	set	Industrial and Heavy-Duty Cable Locator Set
	4		the Electro-mechanical maintenance industry
			Product Manufacturer/developer at least 15 years in
			usage and service center within the Cebu or Manila.
			Provide technical assistance and training on product
			Calibration cycle: Every 2 years
			Warranty: 2 years
			General Requirement:
			EM environment. CISPR 11: Group 1, Class A
			Electromagnetic compatibility: IEC 61326-1: Basic
			Pollution Degree 2
			Safety IEC 61010-1: Overvoltage category II,
			Relative humidity 10% to 95% non-condensing
			°F)
			122 °F)  Storage temperature -20 °C to +50 °C (-4 °F to 122
			Operating temperature -10 °C to +50 °C (14 °F to
			Infrared spectral band: 7.5 µm to 14 µm (long wave)
			imager charging.
			hours per battery, 2.5 hours to full charge, Battery charging system Two-bay battery charger or in-
			LED display to show charge level, Battery life 2-3
			Two lithium ion smart battery packs with five-segment
			Battery: Batteries (field-replaceable, rechargeable),
			screen
			15 cm (approx. 6 in), IR-Fusion® technology Full
			Field of view 48 °H x 34 °V, Minimum focus distance
			Wide-angle smart lens IFOV 1.85 mRad, D:S 377:1,
			Minimum focus distance 1.5 cm (approx. 60 in),
			mRad, D:S 2941:1, Field of view 6 °H x 4.5 °V,
			full screen  4x telephoto smart lens IFOV (spatial resolution) 0.23
			18 in), IR-Fusion® technology Picture-In-Picture and
			°H x 12 °V, Minimum focus distance 45 cm (approx.
			resolution) 0.46 mRad, D:S 1529:1, Field of view 17
			screen 2x telephoto smart lens IFOV (spatial
			Fusion® technology Picture-In-Picture and full
			Minimum focus distance 15 cm (approx. 6 in),IR-
			mRad, D:S 1065:1, Field of view 34 °H x 24 °V,
			Lenses: Standard lens IFOV (spatial resolution) 0.93
			Android and LAN
			temp (50 mK) Wireless connectivity and compatibility with IOS,
			Thermal sensitivity (NETD)* $\leq 0.05$ °C at 30 °C target
			is greater)
			Accuracy: ±2 °C or 2% (at 25 °C nominal, whichever

			Voltage measurement range for Transmitter: 12 V, 50 V, 120 V, 230 V, 400 V
			Frequency range for Transmitter: 0 - 60 Hz
			Output signal for Transmitter: 125 kHz
			Voltage for Transmitter: Up to 400 V AC/DC
			Tracing depth cable location for Receiver: 0 - 2.5 m wall/underground cables
			Main voltage detection for Receiver: 0 - 0.4 m
			Operating temperature: Transmitter & Receiver (0 to 40°C)
			Storage temperature: Transmitter & Receiver (-20°C to +60°C)
			Humidity (without condensation): Transmitter & Receiver (Max. 80% relative)
			Operating altitude: Transmitter & Receiver: (Up to 2000 m)
			Electrical safety EN 61010-1
			Overvoltage category Cat. III 300 V
			General Requirement:
			Warranty 2 years
			Provide technical assistance and training on product
			usage and service center within the Cebu or Manila.
			Product Manufacturer/developer at least 15 years in
			the Electro-mechanical maintenance industry
7	1	unit	Industrial and Heavy-Duty Infrared Camera
			Specification:
			Detector resolution: 640 x 480
			Super Resolution: Captures and combines 4x the data to create a 1280 x 960 (614,400 pixels) image
			Infrared Resolution: 307,200 pixels
			Laser distance meter
			Advanced manual focus
			Ruggedized touchscreen display with 3.5 inch (landscape) 640 x 480 LCD
			Rugged, ergonomic design for one-handed use Yes
			Rugged, ergonomic design for one-nanded use Tes
			Digital zoom 2x and 4x
			Digital zoom 2x and 4x  Temperature measurement range: ≤-20 °C to 1000 °C (-4 °F to 1832 °F)  Accuracy: ±2 °C or 2% (at 25 °C nominal, whichever
			Digital zoom $2x$ and $4x$ Temperature measurement range: $\leq$ -20 °C to 1000 °C (-4 °F to 1832 °F)
			Digital zoom 2x and 4x  Temperature measurement range: ≤-20 °C to 1000 °C (-4 °F to 1832 °F)  Accuracy: ±2 °C or 2% (at 25 °C nominal, whichever is greater)  Thermal sensitivity (NETD)* ≤0.05 °C at 30 °C target
			Digital zoom 2x and 4x  Temperature measurement range: ≤-20 °C to 1000 °C (-4 °F to 1832 °F)  Accuracy: ±2 °C or 2% (at 25 °C nominal, whichever is greater)  Thermal sensitivity (NETD)* ≤0.05 °C at 30 °C target temp (50 mK)  Wireless connectivity and compatibility with IOS,

ĺ			resolution) 0.46 mRad, D:S 1529:1, Field of view 17
			°H x 12 °V, Minimum focus distance 45 cm (approx.
			18 in), IR-Fusion® technology Picture-In-Picture and
			full screen  4x telephoto smart lens IFOV (spatial resolution) 0.23
			mRad, D:S 2941:1, Field of view 6 °H x 4.5 °V,
			Minimum focus distance 1.5 cm (approx. 60 in),
			Wide-angle smart lens IFOV 1.85 mRad, D:S 377:1,
			Field of view 48 °H x 34 °V, Minimum focus distance
			15 cm (approx. 6 in), IR-Fusion® technology Full screen
			Battery: Batteries (field-replaceable, rechargeable),
			Two lithium ion smart battery packs with five-segment
			LED display to show charge level, Battery life 2-3 hours per battery, 2.5 hours to full charge, Battery
			charging system Two-bay battery charger or in-
			imager charging.
			Infrared spectral band: 7.5 µm to 14 µm (long wave)
			Operating temperature -10 °C to +50 °C (14 °F to 122 °F)
			Storage temperature -20 °C to +50 °C (-4 °F to 122 °F)
			Relative humidity 10% to 95% non-condensing
			Safety IEC 61010-1: Overvoltage category II,
			Pollution Degree 2
			Electromagnetic compatibility: IEC 61326-1: Basic
			EM environment. CISPR 11: Group 1, Class A  General Requirement:
			Warranty: 2 years
			Calibration cycle: Every 2 years
			Provide technical assistance and training on product usage and service center within the Cebu or Manila.
			Product Manufacturer/developer at least 15 years in
			the Electro-mechanical maintenance industry
8	1	unit	Industrial and Heavy-Duty Battery Operated Self- Propelled Articulating Boom Lift
			Specification:
			Max. Working Height: at least 22m
			Max. Platform Height: at least 20m
			1.10mm 1 tongo: 11018: totast 20
			Max. up and over clearance: at least 9.4m
			Max. up and over clearance: at least 9.4m
			Max. up and over clearance: at least 9.4m  Max. Working Radius: at least 12.23m  Platform Width: at least 0.76m
			Max. up and over clearance: at least 9.4m  Max. Working Radius: at least 12.23m
			Max. up and over clearance: at least 9.4m  Max. Working Radius: at least 12.23m  Platform Width: at least 0.76m  Platform Length: at least 1.8m  Height: Stowed at least 2.38m
			Max. up and over clearance: at least 9.4m  Max. Working Radius: at least 12.23m  Platform Width: at least 0.76m  Platform Length: at least 1.8m
			Max. up and over clearance: at least 9.4m  Max. Working Radius: at least 12.23m  Platform Width: at least 0.76m  Platform Length: at least 1.8m  Height: Stowed at least 2.38m  Length: Stowed at least 8.99m

Max. Lift Capacity: 256kg/350kg
Number of platform occupants: 2/3
Platform rotation: ±80°
Turntable rotation: 355°
Vertical jib rotation (up/down): ±70°
Drive speed: Stowed at least 4.5km/h
Gradeability: Stowed at least 40%
Max. Working angle (Tilt sensor activation):3°
Turning radius (outside): 5.0m
Drive and steer: 4×2
Weight: at least 10000kg
Battery: 48V/420Ah
Control voltage: at least 24V
Pump power: at least 12kw
Drive motor: at least 3.3kw
Standard compliance: GB25849-2010, BS EN 280:2013+A1:2015
General Requirement:
Warranty: 2 years
Life-long technical support and assistance

Section VII. Technical Specifications

## **Technical Specifications**

Item #	Qty	Unit	Description	Statement of Compliance
1	1	set	Industrial and Heavy-Duty Earth Ground Tester Kit	[Bidders must state here either "Comply"
			Specification:	or "Not Comply"
			Memory: Internal memory storage up to 1500	against each of the
			records accessible via USB port	individual parameters
			Measuring Function: Interference voltage and frequency, earthing resistance 3- and 4-pole with/without clip-on current transformer, resistance 2-pole with AC, 2-and 4-pole with DC	of each Specification stating the corresponding performance
			Display: 4-digit (2999 Digit) - 7 segment liquid crystal display, with improved Visibility.	parameter of the equipment offered. Statements of
			Operation: Central rotary switch and function keys.	Statements of "Comply" or "Not
			Operating Temperature: -10°C to 50°C (14°F to 122°F)	Comply" must be supported by evidence
			Storage Temperature: -30°C to 60°C (-22°F to 140°F)	in a Bidders Bid and cross-referenced to
			Temperature Coefficient: $\pm 0.1\%$ of reading/°C < $18^{\circ}C > 28^{\circ}C$	that evidence. Evidence
			Protection: Complied with EN60529 (IP56 for case, IP40 for battery door)	shall be in the form of manufacturer's un-
			Max Voltage: Warning-socket clamp E, ES, S or H	amended sales
			Max Urms = 250V (pertains to	literature,
			misuse)	unconditional
			Safety: Protection by double and/or reinforced insulation. Max. 50 V to earth per IEC61010-1. Pollution degree 2	statements of specification and compliance issued by
			Quality Standard: DIN ISO 9001 compliance in development, designed and manufacturing	the manufacturer, samples, independent
			External field influence: Complies with DIN 43780 (8/76)	test data etc., as appropriate. A
			Measure of Interference Voltage DC + AC: Full wave rectification of measuring limits of error & method, Measuring range (1V – 50V), Display range (0.0V – 50V), Frequency range (DC/AC 45hz – 400Hz), Accuracy (±5% of rdg + 5 digit), Internal resistance (Approx. 1.5 MΩ)	statement that is not supported by evidence or is subsequently found to be contradicted by the evidence presented will render the Bid under
			Measure of Interference Frequency: Measurement of oscillation period of the interference voltage, Measuring Range (6.0 Hz to 400 Hz), Display range (16.0 Hz to 299.9 Hz to 999 Hz), Accuracy (±1% of rdg + 2 digit)	evaluation liable for rejection. A statement either in the Bidder's statement of compliance or the
			Earthing Resistance: Current and voltage measurement with probe as IEC61557-5, Open circuit voltage (20/48 V, AC), Short circuit current (250 mA AC), Noise rejection (120 dB)  Electrical Measurement: Position (Reference position ±90), Temperature (0°C and 35°C),	supporting evidence that is found to be false either during Bid evaluation, post-qualification or the

	I	1	Resistance of the probes & auxiliary earth electrodes
			(0 to $100 \times RA \le 50 \text{ k}\Omega$ ), System frequency (99% to
			101% of the nominal frequency), System voltage
			(85% to 110% of the nominal voltage), Operating
			$error(B[\%] = \pm B/fiducial\ value\ x\ 100\%, A =$
			intrinsic error, $En = variations$ , $R = routine test$ , $T = 0$
			type test), Accuracy ( $\pm 2\%$ of rdg + 2 digit),
			Measuring time (Typical 8 seconds with a fixed frequency 30 sec. max. with AFC & complete cycle of
			all measuring frequencies) Measuring error of RH &
			RS (Typ. 10% of $RE + RS + RH$ ), $Max$ . probe
			resistance & auxiliary earth electrode resistance ( $\leq 1$ $M\Omega$ )
			Automatic Switchover of Measuring Resolution in
			Dependence to Auxiliary Earth Electrode Resistance RH
			Selective Measurement of the Earthing Resistance
			(RE Clamp):(Current and voltage measurement with
			probe as per EN61557-5 & current measurement in
			the individual branch with additional current
			transformer.  Resistance Measurement (R AC/DC): (Current and
			voltage measuring method as per IEC61557-4
			possible)
			Compensation of Lead Resistance (RK)
			Stakeless Ground Loop Measurement (Two Clamp
			Stakeless)
			GEO Earth Ground Tester
			User's Manual & Quick Reference Guide
			USB Cable
			Professional Carrying Case
			2 Clamps, 4 Earth Ground Stakes & 3 Cable Reels
			General Requirement:
			At least one-year warranty
			Provide technical assistance and training on product
			usage and service center within the Cebu or Manila.
			Product Manufacturer at least 15 years in the
			Electro-mechanical maintenance industry.
2	1	set	Industrial and Heavy-Duty Earth Ground Loop and Leakage Clamp
			Specification:
			Test the grounding components of equipment in hard-
			to-reach spaces, including areas that are indoors or
			fully paved and do not permit driving auxiliary test stakes.
			AC Leakage Current Measurement: Identify AC
			leakage without disconnecting your earth ground
			stake from the grounding system.
			Heavy-duty clamp jaw stays in alignment and in
			calibration even in every day, on-the-job industrial
			environments

execution of the Contract may be regarded as fraudulent and render the Bidder or supplier liable for prosecution subject to the applicable laws and issuances.]

			resolution Image storage: Storage capacity at least 999 picture files and 20 video files, blended and soundmap jpg,
			I
			acoustic image, 1280 x 800 (1,024,000 pixels)
			readable, Capacitive Touch screen, SoundMap image
			Display:7" LCD with backlight, under-sunlight
			°and fixed lens)
			Built-in digital camera (visible light): (FOV63 $^{\circ} \pm 5$
			feet), Field view (63 $^{\circ}$ ± 5 $^{\circ}$ ), Nominal frame rate (25FPS)
			Detection range $(0.5 \text{ to} > 120 \text{ meters } -1.6 \text{ to} > 393$
			Sensors: Frequency band (2 kHz to 100 kHz),
			testing
			Quick and easy partial discharge detection & PD
			Specification:
3	1	unit	Industrial and Heavy-Duty Precision Acoustic Imager
			the Electro-mechanical maintenance industry.
			Product Manufacturer/developer at least 15 years in
			usage and service center within the Cebu or Manila.
			Provide technical assistance and training on product
			At least one-year warranty
			General Requirement:
			Hard case & (4) AA batteries
			Safety information guide & Quick reference guide
			Loop resistance standard
			Earth Ground Clamp
			KCC Class A equipment, FCC 47 CFR 15 subpart B)
			CISPR 11: Group 1, Class B, IEC/EN 61326-2-2,
			61326-1: Portable Electromagnetic Environment,
			Electromagnetic compatibility (EMC) (IEC/EN
			Protective Measures (IEC/EN 61557-16),
			(IEC/EN 61557-13: Class 2, $\leq$ 30 A/m), Resistance to earth (IEC/EN 61557-5), Effectiveness of the
			Current clamp for leakage current measurements
			61010-2-032: CAT IV 600 V / CAT III 1000 V),
			±5 °C or 73 °F ±9 °F), Measurement (IEC/EN
			000 m or 39,370 feet), Reference Temperature (23 °C
			Operating humidity (Non-condensing), Operating altitude (2000 m or 6561 feet), Storing altitude (12
			°C), Storing temperature (-20 °C to + 60 °C),
			per second), Operating temperature (-10 $^{\circ}$ C to + 50
			LCD (Digital reading, 999 counts; Refresh rate, 4
			LR6 (x4)), Frequency range (40 Hz to 1 kHz), Ingress Protection (IEC/EN 60529: IP30 with jaw closed),
			ground (1000V), Battery type (AA alkaline IEC/EN
			Electrical specification: Maximum voltage to earth
			measurement.
			Selectable band-pass filter function removes unwanted noise from the AC leakage current
			measurement evaluation
			User-defined high/low alarm limits, for rapid

			png and mp4 format, 5 minutes video length and
			USB-C for data transfer  Acoustic measurement: Measurement range (12.1 dB SPL to 114.6 dB SPL ±1 dB SPL 2 kHz, 4.4 dB SPL to 101.2 dB SPL ±2 dB SPL 19 kHz, 12.8 dB SPL to 119.2 dB SPL ±1 dB SPL 35 kHz, 19.8 dB SPL to 116.1 dB SPL ±3 dB SPL 52 kH, z, 41.4 dB SPL to 129.0 dB SPL ±1 dB SPL 80 kHz, 54.4 dB SPL to 135.5 dB SPL ±1 dB SPL 100 kHz)  Software: Intuitive user interface, Trend graphs
			(Frequency and dB scale), Spot markers (dB level reading at center point of the image)  Battery: Batteries (field-replaceable, Rechargeable, 2 x Li-ion battery), Battery life (6 hours/battery includes spare battery), Battery charging (External dual-bay, 3-hour charging time)
			Standard palettes: 3: Grayscale, Ironbow, Blue-Red Operating temperature: 0 °C to 40 °C (32 °F to 104 °F)
			Storage temperature: -20 °C to 70 °C (-4 °F to 158 °F) Without batteries
			Relative humidity: 10 % to 95 % non-condensing
			Ingress Protection (IP): IP40 protection  Self-diagnostic notification: Array-health test to
			identify when microphone array needs attention Supported languages: Dutch, English, Finish, French, German, Italian, Japanese, Korean, Polish, Portuguese, Russian, Simplified Chinese, Spanish,
			Swedish, Traditional Chinese Safety Compliant: IEC 61010-1 & RoHS compliant
			Electromagnetic Compatibility (EMC): IEC 61326-1: CISPR 11: Group 1, Class A, (KCC) Class A
			Equipment, (FCC) 47 CFR 15 subpart B.  AC power supply and battery pack charger (including universal AC adapters)
			Two rugged lithium ion smart battery packs & USB cable Rugged, hard carrying case & adjustable hand strap
			and neck strap
			General Requirement:
			Warranty: 2 year
			Provide technical assistance and training on product usage and service center within the Cebu or Manila.
4	1	unit	Product Manufacturer/developer at least 15 years in the Electro-mechanical maintenance industry.  Industrial and Heavy-Duty Three-Power Quality
	_	-	Analyzer
			Specification:
			Voltage inputs: Number of inputs (4 inputs, 3 phases and neutral referenced to PE 5 connectors), Measurement category (1000 V CAT III / 600 V CAT
			IV), Maximum input voltage (1000 V rms / 1000 V dc

			(landscape) 640 x 480 LCD  Rugged, ergonomic design for one-handed use Yes
			Ruggedized touchscreen display with 3.5 inch
		†	Advanced manual focus
			Laser distance meter
			Infrared Resolution: 307,200 pixels
			data to create a 1280 x 960 (614,400 pixels) image
		+	Super Resolution: Captures and combines 4x the
			Detector resolution: 640 x 480
		WIII C	Specification:
5	1	unit	Industrial and Heavy-Duty Thermal Camera
			Product Manufacturer/developer at least 15 years in the Electro-mechanical maintenance industry
		1	usage and service center within the Cebu or Manila.
			Provide technical assistance and training on product
			Calibration cycle 2 years
			Accessories: 1 year (including battery)
		1	Warranty Analyzer: 2 years (battery not included)
			General Requirement:
		1	V
			Mains Adapter MA-C8: Overvoltage Category II 300
			Power supply: Overvoltage Category IV 600 V with
			Safety: IEC 61010-1: Pollution Degree 2
		<u> </u>	temperature range, On-battery runtime: 1.5 hours
		1	UPS: Li-Ion battery BP1770 with extended
			+10%), Power consumption (Max. 40VA), Mains frequency 50/60 Hz
			Power supply: Voltage range (100V – 600V -15 %/
		1	Vibration (IEC 60721-3-3 / 3M2)
			IP Rating (IEC 60529: IP50)
		1	(-20°C to 60°C)
			range –(10 °C to 50 °C), Storage temperature range
			Environmental specifications: Operating temperature
			+ NETCODE + FOL)
			61000-4-30 Class A, IEC 62586 PQI-A-PI), Power quality compliance (EN 50160 + GOST + NEQUAL
			(IEC 61000-4-15 Class F1) Power quality (IEC
			(short time and very short time harmonics), Flicker
			Harmonics (IEC 61000-4-7: Class 1), IEEE 519
		1	Standard compliance: Power (IEEE 1459),
			at 50/60 Hz), Scaling (1:1, variable for use of potential transformers)
			synchronous sampling), Sampling frequency (80 kS/s
			for PQ measurements), Resolution (24-bit
			between P-PE & N-PE), Bandwidth (DC to 30 kHz
			$-1000V$ ) IEC 61000-4-30 Class A compliance, Input impedance (10 M $\Omega$ between P-P & P-N, 5 M $\Omega$
			<del>-</del>
			phase: variable 50V – 1000V) (Delta: Variable 100V

			Digital zoom 2x and 4x
			Temperature measurement range: $\leq$ -20 °C to 1000 °C (-4 °F to 1832 °F)
			Accuracy: ±2 °C or 2% (at 25 °C nominal, whichever is greater)
			Thermal sensitivity (NETD)* ≤0.05 °C at 30 °C
			target temp (50 mK)
			Wireless connectivity and compatibility with IOS, Android and LAN
			Lenses: Standard lens IFOV (spatial resolution) 0.93
			mRad, D:S 1065:1, Field of view 34 °H x 24 °V, Minimum focus distance 15 cm (approx. 6 in),IR- Fusion® technology Picture-In-Picture and full
			screen 2x telephoto smart lens IFOV (spatial resolution) 0.46 mRad, D:S 1529:1, Field of view 17 °H x 12 °V, Minimum focus distance 45 cm (approx. 18 in), IR-Fusion® technology Picture-In-Picture
			and full screen
			4x telephoto smart lens IFOV (spatial resolution) 0.23 mRad, D:S 2941:1, Field of view 6 °H x 4.5 °V,
			Minimum focus distance 1.5 cm (approx. 60 in),
			Wide-angle smart lens IFOV 1.85 mRad, D:S 377:1, Field of view 48 °H x 34 °V, Minimum focus distance 15 cm (approx. 6 in), IR-Fusion® technology Full screen
			Battery: Batteries (field-replaceable, rechargeable), Two lithium ion smart battery packs with five-
			segment LED display to show charge level, Battery life 2-3 hours per battery, 2.5 hours to full charge, Battery charging system Two-bay battery charger or in-imager charging.
			Infrared spectral band: 7.5 µm to 14 µm (long wave)
			Operating temperature -10 °C to +50 °C (14 °F to 122 °F)
			Storage temperature -20 °C to +50 °C (-4 °F to 122 °F)
			Relative humidity 10% to 95% non-condensing
			Safety IEC 61010-1: Overvoltage category II, Pollution Degree 2
			Electromagnetic compatibility: IEC 61326-1: Basic EM environment. CISPR 11: Group 1, Class A
			General Requirement:
			Warranty: 2 years
			Calibration cycle: Every 2 years
			Provide technical assistance and training on product usage and service center within the Cebu or Manila.
			Product Manufacturer/developer at least 15 years in the Electro-mechanical maintenance industry
6	1	set	Industrial and Heavy-Duty Cable Locator Set
			· · ·
			Specification:

			Voltage measurement range for Transmitter: 12 V, 50 V, 120 V, 230 V, 400 V	
			Frequency range for Transmitter: 0 - 60 Hz	
			Output signal for Transmitter: 125 kHz	
			Voltage for Transmitter: Up to 400 V AC/DC	
			Tracing depth cable location for Receiver: 0 - 2.5 m wall/underground cables	
			Main voltage detection for Receiver: 0 - 0.4 m	
			Operating temperature: Transmitter & Receiver (0 to 40°C)	
			Storage temperature: Transmitter & Receiver (-20°C to +60°C)	
			Humidity (without condensation): Transmitter & Receiver (Max. 80% relative)	
			Operating altitude: Transmitter & Receiver: (Up to 2000 m)	
			Electrical safety EN 61010-1	
			Overvoltage category Cat. III 300 V	
			General Requirement:	
			Warranty 2 years	
			Provide technical assistance and training on product usage and service center within the Cebu or Manila.  Product Manufacturer/developer at least 15 years in the Electro-mechanical maintenance industry	
7	1	unit	<b>Industrial and Heavy-Duty Infrared Camera</b>	
			+	
		0,2220	Specification:	
	-	7		
			Specification:	
			Specification:  Detector resolution: 640 x 480  Super Resolution: Captures and combines 4x the	
			Specification:  Detector resolution: 640 x 480  Super Resolution: Captures and combines 4x the data to create a 1280 x 960 (614,400 pixels) image	
			Specification:  Detector resolution: 640 x 480  Super Resolution: Captures and combines 4x the data to create a 1280 x 960 (614,400 pixels) image Infrared Resolution: 307,200 pixels	
			Specification:  Detector resolution: 640 x 480  Super Resolution: Captures and combines 4x the data to create a 1280 x 960 (614,400 pixels) image Infrared Resolution: 307,200 pixels  Laser distance meter	
			Specification:  Detector resolution: 640 x 480  Super Resolution: Captures and combines 4x the data to create a 1280 x 960 (614,400 pixels) image Infrared Resolution: 307,200 pixels  Laser distance meter  Advanced manual focus  Ruggedized touchscreen display with 3.5 inch	
			Specification:  Detector resolution: 640 x 480  Super Resolution: Captures and combines 4x the data to create a 1280 x 960 (614,400 pixels) image  Infrared Resolution: 307,200 pixels  Laser distance meter  Advanced manual focus  Ruggedized touchscreen display with 3.5 inch (landscape) 640 x 480 LCD  Rugged, ergonomic design for one-handed use Yes  Digital zoom 2x and 4x	
			Specification:  Detector resolution: 640 x 480  Super Resolution: Captures and combines 4x the data to create a 1280 x 960 (614,400 pixels) image Infrared Resolution: 307,200 pixels  Laser distance meter  Advanced manual focus  Ruggedized touchscreen display with 3.5 inch (landscape) 640 x 480 LCD  Rugged, ergonomic design for one-handed use Yes  Digital zoom 2x and 4x  Temperature measurement range: ≤-20 °C to 1000 °C (-4 °F to 1832 °F)	
			Specification:  Detector resolution: 640 x 480  Super Resolution: Captures and combines 4x the data to create a 1280 x 960 (614,400 pixels) image  Infrared Resolution: 307,200 pixels  Laser distance meter  Advanced manual focus  Ruggedized touchscreen display with 3.5 inch (landscape) 640 x 480 LCD  Rugged, ergonomic design for one-handed use Yes  Digital zoom 2x and 4x  Temperature measurement range: ≤-20 °C to 1000 °C (-4 °F to 1832 °F)  Accuracy: ±2 °C or 2% (at 25 °C nominal, whichever	
			Specification:  Detector resolution: 640 x 480  Super Resolution: Captures and combines 4x the data to create a 1280 x 960 (614,400 pixels) image  Infrared Resolution: 307,200 pixels  Laser distance meter  Advanced manual focus  Ruggedized touchscreen display with 3.5 inch (landscape) 640 x 480 LCD  Rugged, ergonomic design for one-handed use Yes  Digital zoom 2x and 4x  Temperature measurement range: ≤-20 °C to 1000 °C (-4 °F to 1832 °F)  Accuracy: ±2 °C or 2% (at 25 °C nominal, whichever is greater)	
			Specification:  Detector resolution: 640 x 480  Super Resolution: Captures and combines 4x the data to create a 1280 x 960 (614,400 pixels) image  Infrared Resolution: 307,200 pixels  Laser distance meter  Advanced manual focus  Ruggedized touchscreen display with 3.5 inch (landscape) 640 x 480 LCD  Rugged, ergonomic design for one-handed use Yes  Digital zoom 2x and 4x  Temperature measurement range: ≤-20 °C to 1000 °C (-4 °F to 1832 °F)  Accuracy: ±2 °C or 2% (at 25 °C nominal, whichever	
			Specification:  Detector resolution: 640 x 480  Super Resolution: Captures and combines 4x the data to create a 1280 x 960 (614,400 pixels) image  Infrared Resolution: 307,200 pixels  Laser distance meter  Advanced manual focus  Ruggedized touchscreen display with 3.5 inch (landscape) 640 x 480 LCD  Rugged, ergonomic design for one-handed use Yes  Digital zoom 2x and 4x  Temperature measurement range: ≤-20 °C to 1000 °C (-4 °F to 1832 °F)  Accuracy: ±2 °C or 2% (at 25 °C nominal, whichever is greater)  Thermal sensitivity (NETD)* ≤0.05 °C at 30 °C target temp (50 mK)  Wireless connectivity and compatibility with IOS,	
			Specification:  Detector resolution: 640 x 480  Super Resolution: Captures and combines 4x the data to create a 1280 x 960 (614,400 pixels) image  Infrared Resolution: 307,200 pixels  Laser distance meter  Advanced manual focus  Ruggedized touchscreen display with 3.5 inch (landscape) 640 x 480 LCD  Rugged, ergonomic design for one-handed use Yes  Digital zoom 2x and 4x  Temperature measurement range: ≤-20 °C to 1000 °C (-4 °F to 1832 °F)  Accuracy: ±2 °C or 2% (at 25 °C nominal, whichever is greater)  Thermal sensitivity (NETD)* ≤0.05 °C at 30 °C target temp (50 mK)  Wireless connectivity and compatibility with IOS, Android and LAN	
			Specification:  Detector resolution: 640 x 480  Super Resolution: Captures and combines 4x the data to create a 1280 x 960 (614,400 pixels) image  Infrared Resolution: 307,200 pixels  Laser distance meter  Advanced manual focus  Ruggedized touchscreen display with 3.5 inch (landscape) 640 x 480 LCD  Rugged, ergonomic design for one-handed use Yes  Digital zoom 2x and 4x  Temperature measurement range: ≤-20 °C to 1000 °C (-4 °F to 1832 °F)  Accuracy: ±2 °C or 2% (at 25 °C nominal, whichever is greater)  Thermal sensitivity (NETD)* ≤0.05 °C at 30 °C target temp (50 mK)  Wireless connectivity and compatibility with IOS,	
			Detector resolution: 640 x 480  Super Resolution: Captures and combines 4x the data to create a 1280 x 960 (614,400 pixels) image Infrared Resolution: 307,200 pixels  Laser distance meter  Advanced manual focus  Ruggedized touchscreen display with 3.5 inch (landscape) 640 x 480 LCD  Rugged, ergonomic design for one-handed use Yes  Digital zoom 2x and 4x  Temperature measurement range: ≤-20 °C to 1000 °C (-4 °F to 1832 °F)  Accuracy: ±2 °C or 2% (at 25 °C nominal, whichever is greater)  Thermal sensitivity (NETD)* ≤0.05 °C at 30 °C target temp (50 mK)  Wireless connectivity and compatibility with IOS, Android and LAN  Lenses: Standard lens IFOV (spatial resolution) 0.93 mRad, D:S 1065:1, Field of view 34 °H x 24 °V, Minimum focus distance 15 cm (approx. 6 in),IR-	
			Detector resolution: 640 x 480  Super Resolution: Captures and combines 4x the data to create a 1280 x 960 (614,400 pixels) image Infrared Resolution: 307,200 pixels  Laser distance meter  Advanced manual focus  Ruggedized touchscreen display with 3.5 inch (landscape) 640 x 480 LCD  Rugged, ergonomic design for one-handed use Yes  Digital zoom 2x and 4x  Temperature measurement range: ≤-20 °C to 1000 °C (-4 °F to 1832 °F)  Accuracy: ±2 °C or 2% (at 25 °C nominal, whichever is greater)  Thermal sensitivity (NETD)* ≤0.05 °C at 30 °C target temp (50 mK)  Wireless connectivity and compatibility with IOS, Android and LAN  Lenses: Standard lens IFOV (spatial resolution) 0.93 mRad, D:S 1065:1, Field of view 34 °H x 24 °V,	

ĺ		ĺ	resolution) 0.46 mRad, D:S 1529:1, Field of view 17	
			$^{\circ}H \times 12 ^{\circ}V$ , Minimum focus distance 45 cm (approx.	
			18 in), IR-Fusion® technology Picture-In-Picture	
			and full screen	
			4x telephoto smart lens IFOV (spatial resolution)	
			0.23 mRad, D:S 2941:1, Field of view 6 °H x 4.5 °V, Minimum focus distance 1.5 cm (approx. 60 in),	
			Wide-angle smart lens IFOV 1.85 mRad, D:S 377:1,	
			Field of view 48 °H x 34 °V, Minimum focus distance	
			15 cm (approx. 6 in), IR-Fusion® technology Full screen	
			Battery: Batteries (field-replaceable, rechargeable),	
			Two lithium ion smart battery packs with five-	
			segment LED display to show charge level, Battery	
			life 2-3 hours per battery, 2.5 hours to full charge, Battery charging system Two-bay battery charger or	
			in-imager charging.	
			Infrared spectral band: 7.5 µm to 14 µm (long wave)	
			Operating temperature -10 °C to +50 °C (14 °F to 122 °F)	
			Storage temperature -20 °C to +50 °C (-4 °F to 122 °F)	
			Relative humidity 10% to 95% non-condensing	
			Safety IEC 61010-1: Overvoltage category II,	
			Pollution Degree 2	
			Electromagnetic compatibility: IEC 61326-1: Basic EM environment. CISPR 11: Group 1, Class A	
			General Requirement:	
			Warranty: 2 years	
			Calibration cycle: Every 2 years	
			Provide technical assistance and training on product	
			usage and service center within the Cebu or Manila.	
			Product Manufacturer/developer at least 15 years in	
			the Electro-mechanical maintenance industry  Industrial and Heavy-Duty Battery Operated Self-	
8	1	unit	Propelled Articulating Boom Lift	
			Specification:	
			Max. Working Height: at least 22m	
			Max. Platform Height: at least 20m	
			The state of the s	
			Max. up and over clearance: at least 9.4m	
			Max. up and over clearance: at least 9.4m	
			Max. up and over clearance: at least 9.4m  Max. Working Radius: at least 12.23m	
			Max. up and over clearance: at least 9.4m  Max. Working Radius: at least 12.23m  Platform Width: at least 0.76m	
			Max. up and over clearance: at least 9.4m  Max. Working Radius: at least 12.23m  Platform Width: at least 0.76m  Platform Length: at least 1.8m	
			Max. up and over clearance: at least 9.4m  Max. Working Radius: at least 12.23m  Platform Width: at least 0.76m  Platform Length: at least 1.8m  Height: Stowed at least 2.38m	
			Max. up and over clearance: at least 9.4m  Max. Working Radius: at least 12.23m  Platform Width: at least 0.76m  Platform Length: at least 1.8m  Height: Stowed at least 2.38m  Length: Stowed at least 8.99m	

Max. Lift Capacity: 256kg/350kg
Number of platform occupants: 2/3
Platform rotation: ±80°
Turntable rotation: 355°
Vertical jib rotation (up/down): ±70°
Drive speed: Stowed at least 4.5km/h
Gradeability: Stowed at least 40%
Max. Working angle (Tilt sensor activation):3°
Turning radius (outside): 5.0m
Drive and steer: 4×2
Weight: at least 10000kg
Battery: 48V/420Ah
Control voltage: at least 24V
Pump power: at least 12kw
Drive motor: at least 3.3kw
Standard compliance: GB25849-2010, BS EN 280:2013+A1:2015
General Requirement:
Warranty: 2 years
Life-long technical support and assistance

# Section VIII. Checklist of Technical and Financial Documents

### **Checklist of Technical and Financial Documents**

#### I. TECHNICAL COMPONENT ENVELOPE

Legal Documents

## Class "A" Documents

(a)	Valid PhilGEPS Registration Certificate (Platinum Membership) (all pages);
Technica	l Documents
(f)	Statement of the prospective bidder of all its ongoing government and private contracts, including contracts awarded but not yet started, if any, whether similar or not similar in natura and complanity to the contract to be hide and
(g)	similar or not similar in nature and complexity to the contract to be bid; <u>and</u> Statement of the bidder's Single Largest Completed Contract (SLCC) similar to the contract to be bid in the amount of <u>at least 50% of the ABC</u> or <b>at least</b>
	Four Million One Hundred Thirty Thousand Pesos (PhP 4,130,000.00);
	Statement of at least two (2) similar completed contracts, the aggregate amount of which should be equivalent to <u>at least 50% of the ABC</u> or <b>at least Four Million One Hundred Thirty Thousand Pesos (PhP 4,130,000.00)</b> and
	the largest of these similar contracts must be equivalent to at least half of the said aggregate amount or at least Two Million and Sixty Five Thousand
(h)	Pesos (PhP 2,065,000.00); and Original copy of Bid Security. If in the form of a Surety Bond, submit also a certification issued by the Insurance Commission;
(i)	or Original copy of Notarized Bid Securing Declaration; and Conformity with the Technical Specifications; and
(i) (j) (k)	Schedule of Requirements/production and delivery schedule; <u>and</u> Manpower requirements; <u>and</u>
	After-sales service/parts; and
(m)	Original duly signed Omnibus Sworn Statement (OSS); and if applicable, Original Notarized Secretary's Certificate in case of a corporation, partnership, or cooperative; or Original Special Power of Attorney of all members of the joint venture giving full power and authority to its officer to sign the OSS and do acts to represent the Bidder.
<u>Financia</u>	Documents .
(n)	The Supplier's audited financial statements, showing, among others, the Supplier's total and current assets and liabilities, stamped "received" by the BIR or its duly accredited and authorized institutions, for the preceding calendar year which should not be earlier than two (2) years from the date of bid submission; <b>and</b>
(0)	The prospective bidder's computation of Net Financial Contracting Capacity (NFCC) – at least equal to ABC ( <b>PhP 8,260,000.00</b> );
	or A committed Line of Credit from a Universal or Commercial Bank in lieu of its NFCC computation (at least 10% of ABC or <b>PhP 826,000.00</b> ).

II.	FINANCIAL COMPONENT ENVELOPE				
	(a)	Original of duly signed and accomplished Financial Bid Form; <b>and</b>			
	$\Box$ (b)	Original of duly signed and accomplished Price Schedule(s)			

## Guidelines on the Preparation of Electronic Bid (e-Bid) (for bidders who prefer electronic bid submission)

- 1. Convert all documents into Portable Document Format (PDF) and should be printable.
- 2. Properly label all documents for prompt identification. Filename of documents, whichever are applicable to the bidder, should be as follows:

	Document	Filename (in PDF form)
1.	PhilGEPS Certificate of Registration	PhilGEPS
	(Platinum)	
2.	Statement of On-Going Government	Statement of On-Going
	& Private Contracts	Contracts
3.	Statement of Bidder's Single Largest	SLCC
	Completed Contract	
4.	Statement of at least two (2) similar	Statement of Completed
	completed contracts	Contracts
5.	Bid Security	Bid Security
6.	Technical Specifications	Technical Specifications
7.	SCHEDULE of	Schedule of Requirements
	Requirements/Production and	-
	delivery schedule	
8.	Manpower Requirements	Manpower Requirements
9.	After Sales service/parts	After Sales
10.	Omnibus Sworn Statement	Omnibus Sworn Statement
11.	Audited Financial Statements	Audited Financial Statements
12.	Net Financial Contracting Capacity	NFCC
13.	Committed Line of Credit	CLC
14.	Bid Form	Bid Form
15.	Price Schedule	Price Schedule

- 3. Create two (2) folders that are password-protected. The first folder should contain all requirements under Technical Component checklist as presented under Section VIII. The second folder should contain all requirements under Financial Component checklist.
- 4. Compress the two (2) folders and name as follows: a) first folder: **Technical Documents**, b) second folder: **Financial Documents**.
- 5. Email the 2 compressed folders to Mr. Leopoldo Escala at <u>leopoldo.escala@vsu.edu.ph</u> before the deadline (October 23, 2023; 8:30 AM)



