



WHEREAS 'IBA' intends to procure services under tender # CW/17/23-24 titled 'Design, Supply, Installation, Testing & Commissioning of 145.58KwP Solar Store Office, PEB Shed Roof Mounted and Car Port Grid Tied PV Systems at IBA Karachi' as per the attached Scope of Work and Specifications, and has extended an offer to the 'CONTRACTOR' under the terms outlined in this agreement.

NOW IT IS HEREBY AGREED & DECLARED BY AND BETWEEN THE PARTIES AS FOLLOWS:

WITNESSETH

IBA' hereby appoints 'THE CONTRACTOR' as the official executor for the 'Works' specified herein, with 'IBA' defining the scope of works/jobs of appropriate scale and detailing the *Design, Supply, Installation, Testing & Commissioning of 145.58KwP Solar Store Office, PEB Shed Roof Mounted and Car Port Grid Tied PV Systems at IBA Karachi*. 'THE CONTRACTOR' accepts this appointment from 'IBA' under the terms and conditions set forth below. The terms and conditions specified in tender document # CW/17/23-24 shall also form an integral part of this agreement.

Article I
DUTIES & SCOPE OF WORK & AGREEMENT

- 1.1 This Agreement encompasses the 'services & works' related to the '*Design, Supply, Installation, Testing & Commissioning of 145.58KwP Solar Store Office, PEB Shed Roof Mounted and Car Port Grid Tied PV Systems at IBA Karachi*', in accordance with the scope of services, design & drawing, Specifications, schedule of work, and timeline as defined in the bidding documents.
- 1.2 "THE CONTRACTOR" agrees to provide services, material, tools & plants, equipment related to execution of work/job to "IBA" whenever and wherever is required as per the terms & conditions of this Agreement.
- 1.3 "THE CONTRACTOR" will coordinate for required/assigned works/jobs/project with Sr. Manager Contracts (Project) and Head of Procurement, of the "IBA"
- 1.4 "THE CONTRACTOR" shall provide all items including material, equipment, gadget and manpower according to the Bill of Quantities of the said Contract.
- 1.5 It will be responsibility of THE CONTRACTOR to remove all, debris /sludge /garbage / waste material/left over material, machineries, equipment and manpower from the site at their own cost after completion of works/jobs/project. However, a Clearance Note / Certificate will be required from IBA on completion of the Project within the time stipulated in this Contract.
- 1.6 Any additional work/job, if required / necessary etc over and above/extra the Work Order, will be executed on the basis of Variation Order and upon Agreement of IBA that it will be paid by IBA separately.
- 1.7 Entry & Endorsement in Measurement Book for all jobs done as per BOQ,/variation order is mandatory, and all payment shall be made as per MB recorded. The Measurement Book is to be countersigned by Project Supervisor on each occurrence / daily basis.
- 1.8 THE CONTRACTOR will require to obtain Entry Pass of their employee / labour / manpower etc. and Gate pass for all the materials, tools & plants/equipment which is the property of the contractor and which he desires to take it out, from IBA, Security Office.
- 1.9 Any alteration/deletion/addition will only be considered if provided in writing by Sr. Manager Contracts (Project) by way of issuing a Variation Order. No verbal instruction(s) / order(s) will be considered valid.
- 1.10 IBA power supply shall provide connection with submeter for which the Contractor shall pay as per power consumed.
- 1.11 THE CONTRACTOR is responsible for the safety of its Manpower working at site during all its activities including protection of the life & environment on the site. The material in use at SITE will be stored in a safe manner in accordance with the protocols of the CONTRACTOR. The worker will work with all PPA (Personnel Protection Arrangement). IBA is no smoking zone. Hence usage of liquor, smoking, Pan, Guttkka etc is strictly prohibited. All workers at site shall use safety helmets, shoes and other safety measures as advised by the Engineer Incharge.
- 1.12 No Photography is allowed at IBA premises without prior approval.
- 1.13 All electrical equipment & electrical connections installed by THE CONTRACTOR for the purposes of execution of the Works will be properly insulated.

- 1.14 Life Insurance / Security of worker will be the responsibility of THE CONTRACTOR

Article II

SCOPE OF PROFESSIONAL SERVICES & WORKS

- 2.1 "THE CONTRACTOR" hereby agrees and acknowledges for the execution of works in accordance with the Description & Specification vide Tender # CW/17/23-24 and as per direction of the Engineer Incharge IBA.
- 2.2 "THE CONTRACTOR" hereby agrees and acknowledges the acceptance of attending the meetings with the IBA officials as & when required subject to the receipt of reasonable notice given by IBA.
- 2.3 All staff & labour of the contractor must have CNIC and clearly mentioned to discourage work through child labor.
- 2.4 Project dept's subordinates, shall at all reasonable times have access to the site for inspection of works under or in course of execution in pursuance of the contract and the contractor shall afford every facility for and every assistance in obtaining the right to such access. Physical inspection will be carried out by the Project Department and Head of Procurement. Ordered material is subjected to final inspection at the time of delivery IBA premises to check quantity and specifications are in accordance with the delivery challan issued by the concern authorized dealer.
- 2.5 THE CONTRACTOR shall be responsible for all risks of loss of or damage to physical property or facilities or related services on the premises which arise during and in consequence of its performance of the contract and are solely attributable to the acts of the CONTRACTOR.
- 2.6 Date of Completion of work / job / project will be October 30, 2024 or the extended period agreed by IBA subject to the fulfilment of responsibilities on the part of IBA and in case of any delay on the part of IBA the completion date will be extended to a date mutually agreed.
- 2.7 The Defects Liability Period shall be three months after issuance of the final completion certificate.
- 2.8 The Contractor shall submit all Post design documents as per the project schedule. This project schedule shall be submitted within two weeks after receiving LOA and start their execution after approval on all post design documents from Project department.
- ~~2.9~~ Retention money of 10% (Ten percent) shall be deducted from each running bill & 50% (Fifty percent) of the retention amount shall be released upon issuance of substantial completion along with the final bill, while the balance of 50% (Fifty percent) shall be released upon successful completion of Defects Liability Period.
- 2.10 THE CONTRACTOR shall submit all necessary documents, regarding solar panels one day before delivery, in project department.

**Article III
REMUNERATION**

3.1 The cost offered by THE CONTRACTOR is Rs. 20,447,380.00 (inclusive of all taxes) vide tender # CW/17/23-24. The cost is inclusive of labor, equipment, tools & plants / transportation / supplies / etc. The breakup is appended below

| Sr No | Product | Unit | Qty | Unit Price (PKR) | Amount (PKR) |
|-------|---|------|---------|------------------|--------------|
| 1 | <u>MODULE MOUNTING STRUCTURE STORE OFFICE BUILDING</u> | | | | |
| i) | Designing, Supplying, Fabrication & Installation of PV Mounting structure (Aluminum), Roof Mount Fixed Tilt angle. The Module Mounted Structure (MMS) shall Comprising of Corrosion resistant anodized aluminum Section or Hot dipPEB galvanized Steel Profile. The mounting structures and the civil pads must be designed structurally to be suitable to withstand all static loads (weight of modules, wind loads etc) min wind speed pressure 150Km/hour in harsh environment. The design submission must be as per ASTM-A36, ASTM-123 and ASCE 7-10, for anodized aluminum AL6005/6063. The mounting structure components are bonded together to guarantee potential equalization. The tilt angle shall be not more than 20 deg for self-cleaning purposes and not less than 5 deg for optimal exposure to direct solar irradiation. The work is to be carried out strictly as per approved drawing, design and specification and the rate quoted is inclusive of the following: | Watt | 73080.0 | 14.11 | 1,031,280.00 |
| a | Designing of the structure as per design specification approved | | | | |
| b | Layout at Site | | | | |
| c | Footing & Foundation work as per drawing and specification | | | | |
| d | Placing of Anchor Bolts & Base Plate as per design & length & Details | | | | |
| e | Tilt angle is to be maintained as per recommended. | | | | |
| f | The Contractor shall remove all the debris and clear the site as per direction | | | | |
| g | The Contractor shall submit the detail technical shop drawing before execution of work. | | | | |
| h | After completion of the work the contractor shall submit the as built drawing. | | | | |
| | <u>MODULE MOUNTING STRUCTURE CAR PORT</u> | Unit | Qty | Unit Price(PKR) | Amount(PKR) |

| | | | | | |
|-----|--|------|---------|-------|--------------|
| ii) | <p>Designing, Supplying, Fabrication & Installation of PV Mounting structure (Aluminum), Roof Mount Fixed Tilt angle. The Module Mounted Structure (MMS) shall Comprising of Corrosion resistant anodized aluminum Section or Hot dipPEB galvanized Steel Profile. The mounting structures and the civil pads must be designed structurally to be suitable to withstand all static loads (weight of modules, wind loads etc) min wind speed pressure 150Km/hour in harsh environment. The design submission must be as per ASTM-A36, ASTM-123 and ASCE 7-10, for anodized aluminum AL6005/6063. The mounting structure components are bonded together to guarantee potential equalization. The tilt angle shall be not more than 20 deg for self-cleaning purposes and not less than 5 deg for optimal exposure to direct solar irradiation. The work is to be carried out strictly as per approved drawing, design and specification and the rate quoted is inclusive of the following:</p> | Watt | 50460.0 | 25.87 | 1,305,390.00 |
| a | Designing of the structure as per design specification approved | | | | |
| b | Layout at Site | | | | |
| c | Footing & Foundation work as per drawing and specification | | | | |
| d | Placing of Anchor Bolts & Base Plate as per design & length & Details | | | | |
| e | Tilt angle is to be maintained as per recommended. | | | | |
| f | The Contractor shall remove all the debris and clear the site as per direction | | | | |
| g | The Contractor shall submit the detail technical shop drawing before execution of work. | | | | |
| h | After completion of the work the contractor shall submit the as built drawing. | | | | |

| | MODULE MOUNTING STRUCTURE PEB SHED | Unit | Qty | Unit Price(PKR) | Amount(PKR) |
|------|---|------|---------|-----------------|-------------|
| iii) | Designing, Supplying, Fabrication & Installation of PV Module Mounting structure(MMS) for PEB Shed . The Module Mounted Structure (MMS) shall comprising of Corrosion resistant anodized Aluminum section Profile. The mounting structures must be designed structurally to be suitable to withstand all static loads (weight of modules, wind loads etc) min wind speed pressure 150Km/hour in harsh environment. The design submission must be as per ASTM-A36, ASTM-123 and ASCE 7-10, for anodized aluminum AL6005/6063. The mounting structure components are bonded together to guarantee potential equalization. The tilt angle shall flush type along with PEB shed for optimal exposure to direct solar irradiation. The work is to be carried out strictly as per approved drawing, design and specification and the rate quoted is inclusive of the following: | Watt | 22040.0 | 18.81 | 414,669.00 |
| a | Designing of the structure as per design specification approved | | | | |
| b | Layout at Site | | | | |
| c | Placing of Anchor Bolts & aluminum profile as per design length & Details | | | | |
| d | Tilt angle is to be maintained as per recommended. | | | | |
| e | The Contractor shall remove all the debris and clear the site as per direction | | | | |
| f | The Contractor shall submit the detail technical shop drawing before execution of work. | | | | |
| g | After completion of the work the contractor shall submit the as built drawing. | | | | |

| 2 | PV Modules-145.58KWp: | Unit | Qty | Unit Price(PKR) | Amount(PKR) |
|---|---|------|----------|-----------------|--------------|
| i | <p>Supply, Installation, Testing & Commissioning (SITC) Mono Crystalline N-type 144 Cells Photovoltaic Solar Modules Tier 1 Type anti-reflective high transparency low iron tempered glass, with earthing provision. The modules STC parameters must be as under</p> <p>(a) Min Power Pmax 580 or above Wp rated power</p> <p>(b) Open circuit voltage (Voc) +/- 5% 48.47V-53.57V</p> <p>(c) MPP Voltage Vmpp 41.2V - 41.8V</p> <p>(d) MPP Current Impp 12.75A - 13.04A</p> <p>(e) Short Circuit Current Isc +/-5% 13.65A - 13.92A</p> <p>(f) Module Efficiency 22.0-22.5%</p> <p>(g) Operating Temp. Degree Centigrade -40 ~ +85</p> <p>(h) Maximum System Voltage 1500V UL 1000V IEC</p> <p>(i) Maximum Series Fuse Rating 25 A</p> <p>(j) Junction Box Protection Degree, IP 68</p> <p>(k) Connection box, 4.0mm2 conductor cross section,</p> <p>(m) Cable with, MC4 male and female connectors,</p> <p>(o) Anodized Aluminum Frame and Support Bars</p> <p>(p) PVC duct, Clamps & Accessories, support and labels to be stalled under PV Array.</p> <p>The Contractor shall provide manufacturer warranty for solar panel for a period not less than 25 years. Contractor must submit all the required certificates for each PV solar panel from manufacturer as per specification.</p> <p>All works and materials must be according to the drawings, specifications and supervisor engineer instruction's and approval.</p> | Watt | 145580.0 | 49.45 | 7,199,507.00 |

| 3 | GRID-TIED INVERTER (PCU) | Unit | Qty | Unit Price(PKR) | Amount(PKR) |
|----|--|------|-----|-----------------|--------------|
| i) | <p>Supply, Installation, Testing & Commissioning (SITC) DC/AC grid tie 3-phase inverter with data communication unit with Ethernet connection. The inverter must be suited to any PV module configuration and depending on the system design and installation proposed and for the future extended also. (Leading Market brand, having annual production greater than 1GW). The DC max power input rating should be at least 1.2 times that of AC power at standard test condition (STC). The inverter unit shall be suitable for indoor and outdoor installations with IP65. The inverter must include the safety concepts such as (triple protection with Opti protect, electronic strings fuses, self-learning string failure detection, DC surge arrester type (2) to ensure max availability. The inverter includes online monitoring with Wi-Fi Dongle. All works and materials must be according to the drawings, specifications and supervisor engineer instruction's and approval.</p> <p>Make: Huawei Power Rating: 100KW & above.</p> | Each | 1 | 2,566,990.00 | 2,566,990.00 |
| | Brief specification is as under: | | | | |
| a | Max Input DC Voltage: 1100V | | | | |
| b | MPPT Operating Voltage Range : 200V~1000V, | | | | |
| c | Min 10 Independent MPPT Trackers, | | | | |
| d | Minimum Efficiency 98.0%, | | | | |
| e | Warranty : 10 Years | | | | |
| f | Inverter should be compatible with the existing installed inverters for online monitoring on a single platform. | | | | |
| g | Certification Required : EN 62109-1/-2, IEC 62109-1/-2, EN 50530, IEC 62116, IEC 60068, IEC 61683, IEC 61000-6-3, EN 50549 | | | | |

| 4 | <u>DC BOX</u> | Unit | Qty | Unit Price(PKR) | Amount(PKR) |
|---|--|------|-----|-----------------|-------------|
| a | DC Combiner Box for Store Office, PEB Shed & Car Port | | | | |
| | <p>Supply, Installation, Testing & Commissioning (SITC) of DC box/Array Junction Box with all accessories for indoor usage with proper cable glands as per cable size. DC Combiner Box shall be provided One SPD (Surge Protection device) and One DC Fuse Protection 2Pole per string. DC Fuse Protection 2 Pole 20A/25A,1000VDC, Qty=14 DC SPD's Type II , Qty=14</p> <p>Fuse Make: Schneider/ABB/Zjbeny or Equivalent DC SPD's Make: Schneider/Dehn/Zjbeny or Equivalent</p> | Each | 1 | 647,968.00 | 647,968.00 |
| 5 | <u>AC COMBINER BOX (LV PANEL)</u> | | | | |
| a | LV Panel for Store Office, PEB Shed & Car Port | | | | |
| | <p>Supply, Installation, Testing & Commissioning (SITC) of AC Combiner Box (LV Panel) with wall mounted, Locally fabricated in 16 gauge, Colour Code:RAL7035, MS Powder Coated, Copper Glands, Lugs, Phase indication lights, Digital Ammeter & Voltmeter, Busbar Tin Coated for 3 Phases, Neutral & Earth with Polycarbonate cover. Glands at Bottom In & Out, CT's, Energy meter with all related accessories for indoor usage(IP Rating 42) with dust proof enclosure.</p> <p>AC Breaker 250A adj,4P,MCCB,400V/415V, Qty:01 AC SPD 4Pole, 40kA with HRC Fuses Energy Meter: Janitza or Equivalent CT's: Ficco/Saci or Equivalent MCCB Make: Schnieder/ABB/Terasaki or Equivalent</p> | Each | 1 | 651,381.00 | 651,381.00 |

| 6 | CABLES | Unit | Qty | Unit Price(PKR) | Amount(PKR) |
|------|--|-------|------|-----------------|--------------|
| a | DC CABLES | | | | |
| | Supply, Installation & Testing of DC Cable, 1 Core 6mm ² Cu/XLPO/XLPO cable complete in all respect with accessories to connect the PV solar cells together and to the inverter directly to have a complete operational circuit, clamps, trays and cable end terminations which shall be DC plug and socket connectors. The allowable voltage drop for DC cables between PV Arrays and inverter less than 1%. Minimum voltage capacity 1500VDC, Highest permissible voltage conductor/conductor should be 1.8kV DC, Standard Double insulated: Cross link polyolefin, Tinned copper conductor: Certified from DIN VDE 0295 CL.5, Fine-wire, IEC 60228 CL.5, Cable should be Certified from TUV Approved. Standard:EN50618 Make: Pakistan Cable/Fast Cable/ Jiukai or Equivalent as Engineer Approved. | Meter | 2850 | 482.12 | 1,374,039.00 |
| b | AC Cables | | | | |
| | Supply, Connecting and termination of the power cables with all required works in different sizes of ducts/pipes, Cable lugs, clamps and all needed fittings to connect cables terminals from source to destination. According to drawings, specifications, instructions, and demand of the supervising engineer as follow: Brand: Pakistan Cable as Engineer Approved. | | | | |
| i) | 4C x 95mm ² ,0.6/1kV Cu/XLPE/PVC Pure Copper | Meter | 20 | 21,701.23 | 434,025.00 |
| c | Earthing Cables | | | | |
| | Supply, Installation & Testing of Earthing Cable, Including PVC Pipe with related accessories. Brand : Pakistan Cable/Fast Cable or Equivalent as Engineer Approved. | | | | |
| i) | 1 core 2.5/4 sqmm, CU/PVC/FLEX (Green) | Meter | 360 | 188.14 | 67,732.00 |
| ii) | 1 core, 16 sqmm, Bare Conductor | Meter | 50 | 2,586.98 | 129,349.00 |
| iii) | 1 core, 50 sqmm, CU/PVC/FLEX (Green) | Meter | 20 | 11,664.93 | 233,299.00 |
| iv) | 1 core, 10 sqmm, CU/PVC/FLEX (Green) | Meter | 45 | 1,424.00 | 64,081.00 |
| 7 | EARTHING SYSTEM | Unit | Qty | Unit Price(PKR) | Amount(PKR) |

| | | | | | |
|----|---|------|---|-----------|------------|
| i) | <p>Supply, Installation, testing and commissioning of Earth Electrodes (Rod Type) for Earthing System with 25mm Dia 3 meters (10feet) long driven copper rod, complete with clamps lugs, washer/bolts, connected with 2x70mmsq bare copper 50mm dia G.I pipe/UPVC pipe class 'D/E' up to Earth chamber, job includes cad-welding of copper conductor to earth electrode rod at one end and provision/fixing of cable lugs at other end, including all accessories and RCC inspection chamber, heavy duty G.I. Cover having earth symbol, etc as per the specifications and Drawings and to the entire satisfaction and approval of the Engineer. Earthing result should be less than 5 Ohm for AC combiner, less than 1 Ohm for DC combiner and less than 5 Ohm for structure/lighting protection system.</p> | Each | 5 | 37,475.93 | 187,380.00 |
|----|---|------|---|-----------|------------|

| | | | | | |
|-----|--|------|---|-----------|-----------|
| 8 | LIGHTNING PROTECTION SYSTEM | | | | |
| | Air-Terminal | | | | |
| i) | <p>Supply, Installation, Testing & Commissioning of Early Streamer Emission (ESE) type lightning arrester.</p> <p>Supporting Mast The mounting pole used to support the lightning air terminal shall be minimum length of 05 Mtr. , non-corrosive and made up of medium class GI / SS pipe of 1.5" diameter having base plate at bottom for securely fixing the mast on roof top. The mounting pole and supports shall be securely fixed with the brackets to withstand the maximum wind velocity of that area. All the work should be carried out as per the specified specifications and instruction of the Engineer-in-Charge. Protection Radius : Minimum 80 Mtr. Protection Level: II</p> | Each | 1 | 40,692.00 | 40,692.00 |
| | Lightning Strike Counter: | | | | |
| ii) | <p>Supply, Installation, Testing & Commissioning of non-electronic & nonresectable (Not require any external power supply) type lightning strike counter to count the lightning stroke having display with IP-67 enclosure including all accessories and connection. (6/7 digit)</p> | Each | 1 | 16,962.00 | 16,962.00 |

| 9 | REMOTE MONITORING SYSTEM | Unit | Qty | Unit Price(PKR) | Amount(PKR) |
|-----|---|-------|-----|-----------------|-------------|
| | DATA MANAGER with REMOTE MONITORING SYSTEM | | | | |
| i) | <p>Design, Supply, installation, testing and commission of data Manager with Remote Monitoring System consists of the following parameter:</p> <p>a) Total energy generation of PV Plant</p> <p>b) Instantaneous Power been generated by solar PV plant</p> <p>c) Performance ratio of PV plant</p> <p>d) Current load of client</p> <p>e) Load profile v/s energy generation.</p> <p>f) Daily Solar Plant report in PDF from</p> <p>Data should be store on server for not more than 10 min time interval. Data must be access through internet via user friendly GUI.</p> | Each | 1 | 2,616.00 | 2,616.00 |
| 10 | CABLE TRAY | | | | |
| i) | <p>Supply and installation of following sizes 16SWG heavy Duti G.I Perforated Cable Tray 100mm x 75mm with 16 SWG G.I. Covers as per details given in the drawings and specifications. Complete with all installation material such as angle iron support of size, MS round bar, elbows, Tee, Nuts, Bolts, Washer, Hilti drop-in anchour, etc. Complete in all respect, as per the specification and drawings.</p> | Meter | 30 | 3,527.70 | 105,831.00 |
| ii) | <p>Supply and installation of following sizes 16SWG heavy Duti G.I Perforated Cable Tray 150mm x 75mm with 16 SWG G.I. Covers as per details given in the drawings and specifications. Complete with all installation material such as angle iron support of size, MS round bar, elbows, Tee, Nuts, Bolts, Washer, Hilti drop-in anchour, etc. Complete in all respect, as per the specification and drawings.</p> | Meter | 15 | 4,521.30 | 67,820.00 |

| 11 | CIVIL & MISCELLANEOUS WORK | Unit | Qty | Unit Price(PKR) | Amount(PKR) |
|--|--|-------|-----|-----------------|----------------------|
| i) | Supply and installation of 3 inch UPVC Class E conduit sockets, Bends, Elbows, T-Joints, Clamps, complete in all respects. | Meter | 60 | 15,051.50 | 903,091.00 |
| ii) | Providing & Supply of adjustable & moveable trolley type ladder with working plate form for cleaning of Solar PV Modules, Maximum height of 5'-0" | Each | 1 | 1,763,850.00 | 1,763,850.00 |
| iii) | Construct of concrete manholes/cable chambers (900mm x 900mm x 900mm deep) with heavy duty RCC covers with anti-rust paint, including all required sleeves for pulling underground power cables laid in pipes. | Each | 1 | 259,903.00 | 259,903.00 |
| v) | Removing of heat insulation tiles from roof to designated dumping point as directed by client Engineer | Job | 1 | 293,975.00 | 293,975.00 |
| vi) | Re-fixing pavers as in position including providing sand etc required & Removal/Cutting of trees etc. | Job | 1 | 293,975.00 | 293,975.00 |
| Total Estimated Cost in PKR without Tax | | | | | 20,055,805.00 |
| Sales Tax Amount (on applicable items only) | | | | | 391,575.00 |
| Total Estimated Cost in PKR with Tax | | | | | 20,447,380.00 |

- 3.2 This Agreement includes, the "Design, Supply, Installation, Testing & Commissioning of 145.58KwP Solar Store Office, PEB Shed Roof Mounted and Car Port Grid Tied PV Systems at IBA Karachi", as per "IBA" requirement mentioned in Tender BoQ
- 3.3 Performance Security equivalent to 5% of the total amount of the Work Order must be deposited with IBA, Karachi. The Security Deposit will be released after the completion of the liquidity damages period, which is three months after issuance of satisfactory work and submission of a certificate for assignment. This excludes the completion of O&M and Net Metering services. However, if any delays are attributable to acts or omissions on the part of IBA, the Security Deposit will not be withheld beyond the agreed period.
- 3.4 All Government taxes (including Income tax and stamp duty), levies and charges will be charged as per applicable rates / denomination of Purchase / Work Order.
- 3.5 Stamp duty 0.35% for Services against total value of Work Order will be levied accordingly.
- 3.6 All rules, regulations and policies will be governed in accordance with the SPPRA and IBA confirms that this Contract has been issued after following SPPRA regulations.
- 3.7 Tax(es)/Challan(s)/Levy(ies), if any or additional will be paid/borne by M/s Iceberg Industries as per SRO/Notification which are directly applicable on this project.
- 3.8 A liquidity damages @5% per month or in case of days on prorated basis, of the total outstanding payment, will be imposed in case of delayed work in case the delay is attributable to any act or omission on the part of CONTRACTOR.
- 3.9 THE CONTRACTOR will provide minimum One qualified Engineer, one supervisor /Surveyor at site in addition to skilled /unskilled labour as required.

- 3.10 The contractor shall bear all costs/ expenses associated with the preparation of this Agreement and the Procuring Agency shall in no case be responsible for those expenses.
- 3.11 IBA will not pay any charges(s) regarding cartage / carriage / transportation / food / wages / accidental etc.
- 3.12 THE CONTRACTOR of the product should only be done by Professional applicators as recommended by the Manufacturer/Supplier of the Product.
- 3.13 The Contractor shall start the work with in fifteen days of signing this agreement otherwise the LOA shall stand Cancelled and bid security shall be forfeited as per rule.

Article IV
ARBITRATION

- 4.1 In case of any dispute, difference or question which may at time arise between the parties hereto or any person claiming under them, touching or arising out in respect of this agreement or this subject matter thereof shall be referred to the arbitration and an Arbitrator will be appointed by mutual consent, whose decision and findings will be final and binding on both the parties. The Arbitration proceedings will be governed by the Arbitration Act, 1940 and the Substantive and procedural law of Pakistan. The venue shall be Karachi.

Article V
TERMINATION

- 5.1 "IBA" may terminate this agreement with 30 days' notice. If the job is not executed according to the timeline and the delay is solely attributable to the CONTRACTOR and/or if the quality found not as per specification requirement at any time during the execution of work, IBA will issue notice to the CONTRACTOR allowing it to remedy the deficiencies, In case the said deficiencies are not remedied within 15 days of the receipt of the notice then IBA may terminate this Agreement.
- 5.2 IBA reserves the right to accept or reject any or all agreement(s) or terminate proceedings at any stage in accordance to the rules & regulations framed by SPPRA.

Article VI
INDEMNITY

- 6.1 "THE CONTRACTOR" shall indemnify and keep IBA and any person claiming through IBA fully indemnified and harmless from and against all damages, cost and expenses caused to or incurred by "THE CONTRACTOR" due to its gross negligence and willful default.

Article VII
NOTICE

- 7.1 Any notice given under this AGREEMENT shall be sufficient if it is in writing and if sent by courier or registered mail or by E-mail.

Article VIII
INTEGRITY PACT

- 8.1 Its intention not to obtain the work of any contract, right, interest, privilege, or other obligation or benefit from the IBA or any administrative or financial offices thereof or any other department under the control of the IBA through any corrupt practice(s).
- 8.2 Without limiting the generality of the forgoing THE CONTRACTOR represents and warrants that it has fully declared the charges, fees, commission, taxes, levies etc, paid or payable to anyone and not given or agreed to give and shall not give or agree to give to anyone within the IBA directly or indirectly through any means any commission, gratification,

bribe, gifts, kickback whether described as consultation fee or otherwise, with the object of obtaining or including the procurement or service contract or order or other obligations whatsoever from the IBA, except that which has been expressly declared pursuant hereto.

- 8.3 THE CONTRACTOR accepts full responsibility and strict liability for making any false declaration/statement, not making full disclosure, misrepresenting facts or taking any action likely to degrade the purpose of declaration, representation and warranty. It agrees that any contract/order obtained aforesaid shall without prejudice to any other right & remedies available to the IBA under any law, contract, or other instrument, be stand void at the discretion of the IBA.
- 8.4 Notwithstanding any right and remedies exercised by the IBA in this regard, contractor agrees to indemnify the IBA for any loss or damage incurred by it on account of its corrupt business practice & further pay compensation to the IBA in any amount equivalent to the loss of any commission, gratification, bribe, gifts, kickback given by THE CONTRACTOR as aforesaid for the purpose of obtaining or inducing procurement/work/service or other obligation or benefit in whatsoever from the IBA if such corrupt business practices are proved in the court of law.

Article IX **SEVERABILITY**

- 9.1 If any terms covenant or condition of this agreement shall be deemed invalid or unenforceable in a court of law or equity, the remainder of this agreement shall be valid & enforced to the fullest extent permitted by prevailing law.

Article X **FORCE MAJURE**

- 10.1 THE CONTRACTOR shall not be asked for return of consideration amount, in part or full nor can be used in a court of law, when failure in providing services outlined in this Agreement is due to an event beyond the control of THE SUPPLIER and which could not have been foreseen, prevented or avoided by a judicious person of able mind and body. These include, but are not restricted to, Acts of God, Acts of public enemy (including arson and terrorist activities), Acts of Government(s), fires, floods, epidemics, strikes, freight embargoes and unusually severe weather. Moreover, liquidated damages will not be imposed for any delay due to Force Majeure.

Article XI **PAYMENT**

- 11.1 Payment will be made after completion of complete works/jobs/project and submission of final bill/invoice. Complete Measurement with Clearance Note / Certificate endorsed from Project Department is required before processing bill/invoice.
- 11.2 The Contractor shall be entitled to receive from the IBA, Karachi Secured Advance against an INDENTURE BOND in P W Account Form No. 31 (Fin. R. Form No. 2 acceptable to the Procuring Agency of such sum as the Engineer may consider proper in respect of non-perishable materials brought at the Site but not yet incorporated in the Permanent Works provided that:
- (i) The materials are in accordance with the Specifications for the Permanent Works;
 - (ii) Such materials have been delivered to the Site and are properly stored and protected against loss or damage or deterioration to the satisfaction and verification of the Engineer but at the risk and cost of the Contractor.

- (iii) The Contractor 's records of the requirements, orders, receipts and use of materials are kept in a form approved by the Engineer, and such records shall be available for inspection by the Engineer;
- (iv) The Contractor shall submit with his monthly statement the estimated value of the materials on Site together with such documents as may be required by the Engineer for the purpose of valuation of materials and providing evidence of ownership and payment therefore.
- (iv) Ownership of such materials shall be deemed to vest in the Procuring Agency and these materials shall not be removed from the Site or otherwise disposed of without written permission of the Procuring Agency.
- (vi) The sum payable for such materials on Site shall not exceed 75 % of the (i) landed cost of imported materials, or (ii) ex-factory / ex-warehouse price of locally manufactured or produced materials, or (iii) market price of stands other materials;
- (vii) Secured Advance should not be allowed unless & until the previous advance, if an, fully recovered;
- (viii) Detailed account of advances must be kept in part II of running account bill; and
- (ix) Secured Advance may be permitted only against materials/quantities anticipated to be consumed / utilized on the work within a period of 2 months from the date of issue of secured advance and definitely not for full quantities of materials for the entire work/contract
- (b) Recovery of Secured Advance:
 - (i) Secured Advance paid to the Contractor under the above provisions shall be affected from the monthly payments on actual consumption basis, but not later than period specified in the rules not more than two months (even if unutilized); other conditions.
 - (ii) As recoveries are made the outstanding accounts of the items concerned in Part II should be reduced by making deduction entries in the column; —deduct quantity utilized in work measured since previous bill, equivalent to the quantities of materials used by the contractor on items of work shown as executed in part I of the bill.

Article XI
MISCELLANEOUS

- 11.1 Works/job/project will be handed over by the "IBA" or vet the cost with authentic stamp and signature.
- 11.2 IBA, Karachi reserves the right to change / alter / remove any item or reduce / enhance quantity without assigning any reason. Over and above the Work Order if any alteration(s), arise charges are incurred these will be as per the Variation Order.
- 11.3 Upon termination of this agreement THE CONTRACTOR shall be permitted to remove all its devices and equipment which may have been placed on the premises from time to time.

- 11.4 All equipment, ladders / scaffoldings / platforms for any heights, plungers, brushes, application Rollers, buckets etc. will be brought by THE CONTRACTOR as per standard safety regulations.
- 11.5 THE CONTRACTOR will be responsible for taking all safety measures during the working of his staff at any surfaces. Proper safety kept / harness will be applied by the CONTRACTOR.
- 11.6 All surfaces where work was carried out required to be cleaned from stains through related equipment / tools / materials etc.
- 11.7 The terms and conditions of the AGREEMENT have been read over to the parties which admit being correct and abide by the same.
- 11.8 The validity of the contract will be effective from the date of issue of the Work Order.
- 11.9 All terms and conditions of bidding / Tender document will be an integral part of this agreement and can't be revoked.
- 11.10 Any additional work/job, if required / necessary etc over and above/extra the Work Order, will be executed based on Variation Order.

Article XII

GENERAL CONDITIONS OF CONTRACT

12.1 **Contract**

The IBA, Karachi will, after receipt of the performance security from the successful contractor send the Agreement provided in the Tender Document, to the successful contractor. Within seven working days of the receipts of such Agreement the contractor shall sign and date the contract and return it to the IBA, Karachi.

12.2 **Contract documents and information**

The contractor shall not, without the IBA, Karachi's prior written consent, make use of the Agreement, or any provision thereof, or any document(s), specifications, drawing(s), pattern(s), sample(s) or information furnished by or on behalf of the IBA, Karachi in connection herewith except for purposes of performing the Agreement or disclose the same to any person other than a person employed by the Agreement or in the performance of the Agreement. Disclosure to any such employed person shall be made in confidence and shall extend only as far as may be necessary for the purposes of such performance.

12.3 **Standards**

Design, Supply, Installation, Testing & Commissioning of 145.58KwP Solar Store Office, PEB Shed Roof Mounted and Car Port Grid Tied PV Systems at IBA Karachi under this agreement shall conform the specs provided in the bidding document.

12.4 **Patent Right**

The contractor shall indemnify and hold the department harmless against all third-party claims of infringement of patent, trademark or industrial design rights arising from any part thereof.

12.5 **Price**

The contractor is bound to Design, Supply, Installation, Testing & Commissioning of 145.58KwP Solar Store Office, PEB Shed Roof Mounted and Car Port Grid Tied PV Systems at IBA Karachi based on approved rates vide tender # CW/17/23-24 and extra charges are payable on account of any agreed variation order. The CONTRACTOR will facilitate IBA to file Net Metering application to KE and the final decision will be made by the KE as per applicable regulations.

12.6 Contract Amendment

The IBA, Karachi may, at any time, by written notice served on the contractor, alter, amend, omit, increase, decrease, or otherwise change the nature, quality, quantity and scope, of all/ any with the percentage as prescribed in Work Order. The contractor shall not execute the change until and unless the IBA, Karachi has allowed the said change, by written order served on the contractor. The change, mutually agreed upon, shall constitute part of the obligations under this Agreement, and the provisions of the Agreement shall apply to the said Change. No variation in or modification in the Agreement shall be made, except by written amendment signed by both the IBA, Karachi and the contractor.

12.7 Assignment/ Subcontract

The contractor shall not assign or sub-contract its obligations under this Agreement, in whole or in part, except with the IBA, Karachi prior written consent which shall not be unreasonably withheld. The contractor shall guarantee that any and all assignees or sub-contractor of the Agreement shall, for performance of any part under the Agreement, comply fully with the terms and conditions of the Agreement applicable to such part of the Agreement.

12.8 Liquidated Damages

If the contractor fails/ delays in performance of any of the obligations, under the Agreement/ violates any of the provisions of the Agreement/ commits breach of any of the terms and conditions of the Agreement the IBA, Karachi may, without prejudice to any other right of action/ remedy it may have, deduct from the Agreement Price, as liquidated damages subject to the clauses stated in this Agreement.

12.9 Blacklisting

If the contractor fails/ delays in performance of any of the obligations, under the contract/ violates any of the provisions of the contract / commits breach of any of the terms and conditions of the contract the IBA, Karachi may, at any time, without prejudice to any other right of action it may have, black list the contractor, either indefinitely or for a stated period, for further tenders in public sector however no blacklisting will be done in violation to the principles of natural justice as enlisted in the Constitution of Islamic republic of Pakistan. If the contractor is found to have engaged in corrupt or fraudulent practices in competing for the without prejudice to any other right of action it may have, blacklist the contractor, either indefinitely or for a stated period, for further tenders in public sector.

12.10 Forfeiture of Performance Security

If the contractor fails/ delays in performance of any of the obligations, under the Agreement/ violates any of the provisions of the contract / commits breach of any of the terms and conditions of the contract the IBA, Karachi may without prejudice to any other right of action it may have, forfeit performance security of the contractor. Failure to supply required services within the specified time period will invoke penalty as specified in this document. In addition to that, performance security amount will be forfeited, and the contractor will not be allowed to participate in future tenders as well subject to the specific clause of this Agreement.

12.11 Termination for Default

If the contractor fails/ delays in performance of any of the obligations, under the Agreement/ violates any of the provisions of the Agreement / commits breach of any of the terms and conditions of the Agreement the IBA, Karachi may, at any time, without prejudice to any other right of action / remedy it may have, by written notice served on the Agreement indicate the nature of the default(s) and terminate the Agreement, in whole or in part, without any compensation to the contractor. Provided that the termination of the contract shall be resorted to only if the contractor does not cure its failure/ delay, within fifteen (15) working days (or such longer period as the IBA, Karachi

may allow in writing), after receipt of such notice subject to the specific clause of this Agreement.

12.12 Termination of Insolvency

If the contractor becomes bankrupt or otherwise insolvent, the IBA, Karachi, at any time, without prejudice to any other right of action/ remedy it may have, by written notice served on the contractor, indicate the nature of the insolvency and terminate the Agreement, in whole or in part, without any compensation to the contractor.

12.13 Taxes And Duties

The contractor shall be entirely responsible for all the taxes, duties and other such levies imposed and shall make inquiries with the concerned authorities of Income Tax and Sindh Revenue Board.

12.14 Extension in Time for Performance of Obligations Under the Agreement

If the Agreement encounters conditions simpering timely performance of any of the obligations, under the contract, at any time, the contractor shall, by the written notice served on the IBA, Karachi promptly indicating the facts of the delay, its likely duration, and its cause(s). As soon as practicable after receipt of such notice, the IBA, Karachi shall evaluate the situation and may, at its exclusive discretion, without prejudice to any other remedy it may have, by written order served on the contractor, extend the Agreement's time for performance of its obligations under the Agreement.

12.15 Statutes And Regulations

The Agreement shall be governed by and interpreted in accordance with the laws of Pakistan. The contractor shall, in all matters arising in the performance of the Agreement, conform, in all respects, with the provisions of all Central, Provincial and Local Laws, Statutes, Regulations and By-Laws in force in Pakistan, and shall give all notices and pay all fees required to be given or paid and shall keep the IBA, Karachi indemnified against all penalties and Liability(ies) of any kind for breach of any of the same.

12.16 Governing law and Jurisdiction

This Agreement shall be governed, construed, and interpreted in accordance with the laws of Islamic Republic of Pakistan. The Courts at Karachi shall have the exclusive territorial jurisdiction in respect of any dispute or difference of any kind arising out of or in connection with the Agreement.

IN WITNESS WHEREOF both the parties hereto have set & subscribed their respective hands to this agreement at Karachi on the date as mentioned above.

“IBA”
NAME: Dr. Muhammad Asad Ilyas
CNIC # 42301-4497722-9
Address:
Registrar, Institute of Business
Administration Main Campus, University
Road, Karachi

Registrar
Former Chairperson Accounting & Law Department
Institute of Business Administration (IBA).
Karachi, Pakistan

M/s Iceberg Industries
NAME: M. ZUBAIR GHAURI (GM FINANCE)
CNIC # 42000-0384501-9
Address:
Office # 51-D, Commercial Area “A”,
Phase-II, D.H.A. Karachi



WITNESS:

1.
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Associate Registrar, Institute of Business
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2.
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Focal Person IBA
Muhammad Nasimulhaque Malik