



संख्या / No: AAI/BD/AGM(E-E)/CW-07/2022-23/130

दिनांक / Date: 09-01-2023

सेवा मे / To,

M/s. Voltas Limited,
Godrej Waterside Tower – 2,
8th Floor, Unit No. 805, Plot No. 5,
Block – DP, Sector-V, Salt Lake,
Kolkata - 700091

E-Mail: smukharjee@voltas.com

विषय/Subject: Provision of VRF/VRV type Air-conditioning of Departure Area in Terminal Building at Bagdogra Airport along with Operation for 7 years and AICMC for 5 years (i.e. after 2 years of DLP) – [For SITC Works]

संदर्भ / Ref : 1) E-Tender ID No.: 2022_AAI_135122_1

प्रिय महोदय / Dear Sir(s),

1. उपर्युक्त कार्य हेतु आपका निविदा अध्यक्ष, भारतीय विमानपत्तन प्राधिकरण की ओर से स्वीकृत किया जाता है, आपके द्वारा बताए गए मद मूल्यों पर आपकी उद्धृत राशि कुल रु. 1,39,75,006.50 (जी.एस.टी. छोड़कर), जो कि टेंडर की न्यायोचित राशि रु. 1,92,00,014.50 से 27.21% नीचे है।

Your tender for the work mentioned above is hereby accepted on behalf of Chairman, Airports Authority of India at the item rates quoted by you totaling to **Rs. 1,39,75,006.50** (Rupees One Crore Thirty Nine Lakh Seventy Five Thousand Six and Paise Fifty Only) excluding GST, which is 27.21% (Twenty Seven point Two one percent) below the Justified Cost of Rs. 1,92,00,014.50 (excluding GST).

3. सहायक महाप्रबंधक (अभि.-विद्युत), भा.वि.प्रा., बागडोगरा हवाई अड्डा, बागडोगरा-734421, इस कार्य के लिए प्रभारी इंजीनियर होंगे। आपसे निवेदन है कि आपकी ओर से आप अथवा आपके द्वारा अधीकृत प्रतिनिधि नियुक्त करें जो करारनामे पर हस्ताक्षर करने के लिए अधिकृत हो तथा वह दिनांक 03.02.2023 तक सहायक महाप्रबंधक (अभि.-विद्युत) के कार्यालय में करार पर हस्ताक्षर करने एवं उसको पूरा करने हेतु उपस्थित हो। ठेके का करारनामा रु. 100/- (रुपया एक सौ मात्र) के नॉन ज्युडिशियल स्टाम्प पेपर पर निष्पादित किया जाएगा तथा स्टाम्प पेपर का खर्च आपके द्वारा वहन किया जाएगा।

Assistant General Manager (Engg. -Elect.), AAI, Bagdogra Airport, Bagdogra-734421 shall be the Engineer-in-charge of the work. You are requested to attend the office of Assistant General Manager (Engg. -Elect.), AAI, Bagdogra Airport, Bagdogra – 734421 by 03.02.2023 to sign and complete the contract agreement. The contract agreement shall be executed on a non-judicial stamp paper of value Rs. 100/- (Rupees One Hundred only) and the cost of the stamp paper shall be borne by you.

6. आपके निविदा से साथ प्राप्त बयाना राशि रु. 7,17,978/- को संविदा दस्तावेज के पृष्ठ 16 | GCC पर दी गई क्लॉज़ जी.सी.सी. 1(ए) के अनुसार सुरक्षा जमा के हिस्से के रूप में परिवर्तित कर दिया गया है। कृपया इस पत्र के 10 दिन में सुरक्षा जमा के लिए रु. 6,79,523/- जमा करवा दें, ऐसा नहीं करने पर संविदा दस्तावेज के पृष्ठ 16 | GCC पर दी गई क्लॉज़ जी.सी.सी. 1(ए) के अनुसार आपके रनिंग बिल से काट ली जाएगी।

The earnest money amount of Rs. 7,17,978/- (Rupees Seven Lakhs Seventeen Thousand Nine Hundred and Seventy Eight only) received along with your tender has been converted as part of security deposit as per GCC clause 1(A) on page 16 | GCC of the contract document. Please deposit Rs. 6,79,523/- (Rupees Six Lakhs Seventy Nine Thousand Five Hundred and Twenty Three only) towards Security Deposit within 10 days from issue of this letter, failing which, the same will be deducted from your running bills as per GCC clause 1(A) on page 16 | GCC of the contract document.

7. आपसे निवेदन है कि आप केंद्रीय और राज्य सरकारों 1970 के अधिनियम श्रम अनुबंध नियम तथा 1971 के केंद्रीय नियम (नियमन तथा उन्मूलन) एवं केन्द्र तथा राज्य सरकार के न्यूनतम वेतन अधिनियम और नियमों के प्रावधानों का अनुपालन अवश्य करें।

You are requested to comply with the provision of Contract Labour (Regulation & Abolition) Act 1970 and Contract Labour (Regulation & Abolition) Central Rules 1971 and minimum wages act and rules thereof Central and State Governments.

8. कृपया ध्यान दें कि कार्य को पूरा करने के लिए अनुमानित समय 06 (छः) महीने होगा और इसकी गणना इस पत्र के जारी होने के 10वें दिन के बाद से गिना जाएगा।

Please note that the time allowed for carrying out the work shall be 06 (Six) months and same shall be reckoned from the 10th day after issue of this letter.

6. आपको निर्देश दिया जाता है कि आप तुरंत सहायक महा प्रबंधक (अभि.-विद्युत), भा.वि.प्रा., बागडोगरा हवाईअड्डा, बागडोगरा-734421 से मिले वह आपको साईट सौंपने की व्यवस्था करेंगे।

You are directed to contact with the Assistant General Manager (Engg. -Elect.), AAI, Bagdogra Airport, Bagdogra-734421 who will arrange to hand over the site to you.

7. इस ठेके के संबंध में आगे का कोई भी पत्राचार इंजीनियर-इन-चार्ज को किया जाएगा।

Any further correspondence in connection with the contract should normally be addressed to the Engineering-in-Charge.

8. कृपया पावती भेजे और स्वीकृति प्रतिलिपि के तौर पर संलग्नित पत्र की हस्ताक्षरित प्रति इस कार्यालय को अवश्य भेजे।

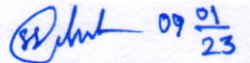
Please acknowledge the receipt and return the duplicate copy of this letter enclosed herewith after signing it to the undersigned as a token of acceptance.

9. यदि अंग्रेजी और हिन्दी पाठ में कोई असंगति पाया जाता है तो अंग्रेजी पाठ को सही माना जाएगा।

If there is any discrepancy between English and Hindi then meaning derived in English will be given precedence.

संलग्न/Encl : i) Schedule of work.

निष्ठा पूर्वक/Yours faithfully,

 09/01/23

(शुभ्र शान्त घोष /Subhra Santa Ghosh)

सहायक महा प्रबंधक (अभि.-विद्युत),

Assistant General Manager (Engg. -Elect.),

ए.ए.आई./बागडोगरा विमानतल

AAI, Bagdogra Airport.

सिलिगुड़ी-734421/Siliguri-73421

AIRPORTS AUTHORITY OF INDIA
ENGINEERING ELECTRICAL WING
BAGDOGRA AIRPORT

SCHEDULE OF QUANTITY

Name of Work: Provision of VRF/VRV type Air-conditioning of Departure Area in Terminal Building at Bagdogra Airport along with Operation for 7 years and AICMC for 5 years (i.e. after 2 Years of DLP). [For SITC Works]

Sl.No	Description of Work / Item(s)	Quantity	Units	Rate (Rs)	Amount (Rs)
1	Supply, Installation, Testing and Commissioning of variable Refrigerant Flow modular type airconditioning system complete with indoor & outdoor units with individual cordless controller as per the following capacities of the IDU and ODU.				
1.1	Supply Installation, Testing & Commissioning of modular type Variable Refrigerant Flow/Variable Refrigerant Volume air cooled Outdoor units suitable for cooling, having all hermetically sealed inverter type Scroll Compressor(s), minimum two compressors for above 14 HP modules, microprocessor based Controller, top discharge type condensing unit(s), with R 410 A Refrigerant, vibration isolators, with suitable concrete foundation etc. complete as required. The unit shall deliver the rated capacity at AHRI Conditions and work even at 50°C ambient temperature without tripping. The unit shall be suitable to work on 415V +/- 10%, 3 Phase, 50Hz AC power supply. The unit shall be filled with first charge of the refrigerant and ready for use as required. The COP at AHRI conditions shall not be less than 3.1 and IEER not less than 6.5 .	420.00	Per HP	₹ 13,975.00	₹ 58,69,500.00
1.2	Supply, installation, testing and commissioning of minimum 4 TR capacity 4-way flow VRV/VRF Cassette Type Indoor ceiling mounted Indoor unit equipped with washable synthetic media pre-filter, fan section with low noise fan/dynamically balanced blower, multispeed motor, coil section with DX copper coil, electronic expansion valve, outer cabinet, cord less remote control, drain pan, necessary accessories etc., suitable for operation on 230 V ± 10%, 50 Hz, single phase AC supply, complete as required. The unit shall have automatic force shut down provision in case of fire on receiving signal from BMS System. The cooling capacity of indoor unit will be at air inlet conditions of 27 Degree C DB and 19 Degree C WB temperature.	68.00	Each	₹ 35,897.00	₹ 24,40,996.00
1.3	Supply, installation, testing and commissioning of High Static Ductable Indoor units of minimum 8.0 TR capacity and external static pressure VRF/VRV ceiling mounted ductable type Indoor unit equipped with washable synthetic media pre-filter, fan section with low noise fan/dynamically balanced blower, multispeed motor, coil section with DX copper coil, electronic expansion valve, corded remote control, outer cabinet, vibration isolators, drain pan, other necessary supports etc., suitable for operation on single phase AC supply 230 V ± 10%, 50 Hz complete as required. The unit shall have automatic force shut down provision in case of fire on receiveing signal from BMS System. The cooling capacity of indoor unit will be at air inlet conditions of 27°C DB and 19°C WB temperature.	9.00	Each	₹ 71,985.00	₹ 6,47,865.00

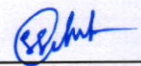
Sl.No	Description of Work / Item(s)	Quantity	Units	Rate (Rs)	Amount (Rs)
2	Supply, Installation, testing and commissioning including vaccumiazation and Nitrogen testing among following nominal sizes of soft/hard drawn copper refrigerant piping for VRV/VRF system, complete with fittings, with suitable adjustable ring type hanger supports, jointing/brazing including accessories, insulated with XPLE Class-O tubular insulation/with Class-O closed cell elastometric nitrile rubber tubular sleeves sections of specified thickness as given below for Suction and Liquid lines, all accessories as per specifications etc. as applicable for the system : NOTE:- 1)The Copper Piping & Piping Circuit should be with Minimum Number of joints, which shall be attained by : (i) Using One End Expanded Tubes (ii) Bending the tubes instead of using elbow joints wherever 90 degree bending is required. (2) Piping should be routed at site in such a manner, that brazed joints in the refrigeration piping are kept to a minimum. (3) The makes of tube fittings shall be same as that of tubes. (4) The thickness of fittings used shall be same as that of the pipe.				
2.1	6.4 mm dia (OD) (Soft drawn) with tube thickness 1.2 mm with 19 mm thick insulation	25.00	Metre	₹ 428.00	₹ 10,700.00
2.2	9.5 mm dia (OD) (Soft drawn) with tube thickness 1.2 mm with 19 mm thick insulation	265.00	Metre	₹ 546.00	₹ 1,44,690.00
2.3	12.7 mm dia (OD) (Soft drawn) with tube thickness 1.2 mm with 19 mm thick insulation	140.00	Metre	₹ 669.00	₹ 93,660.00
2.4	15.86 mm dia (OD) (Soft drawn) with tube thickness 1.2 mm with 19 mm thick insulation	207.50	Metre	₹ 909.00	₹ 1,88,617.50
2.5	19 mm dia (OD) (Hard drawn) with tube thickness 1.2 mm with 19 mm thick insulation	195.00	Metre	₹ 913.00	₹ 1,78,035.00
2.6	22.2 mm dia (OD) (Hard drawn) with tube thickness 1.2 mm with 19 mm thick insulation	110.00	Metre	₹ 1,024.00	₹ 1,12,640.00
2.7	25.4 mm dia (OD) (Hard drawn) with tube thickness 1.2 mm with 19 mm thick insulation	103.00	Metre	₹ 1,219.00	₹ 1,25,557.00
2.8	28.58 mm dia (OD) (Hard drawn) with tube thickness 1.2 mm with 19 mm thick insulation	125.00	Metre	₹ 1,481.00	₹ 1,85,125.00
2.9	31.8 mm dia (OD) (Hard drawn) with tube thickness 1.62 mm with 19 mm thick insulation	85.00	Metre	₹ 1,721.00	₹ 1,46,285.00
2.10	34.9 mm dia (OD) (Hard drawn) with tube thickness 1.62 mm with 19 mm thick insulation	90.00	Metre	₹ 2,025.00	₹ 1,82,250.00
2.11	38.1 mm dia (OD) (Hard drawn) with tube thickness 1.62 mm with 19 mm thick insulation	140.00	Metre	₹ 2,330.00	₹ 3,26,200.00
2.12	41.27 mm dia (OD) (Hard drawn) with tube thickness 1.62 mm with 19 mm thick insulation	123.00	Metre	₹ 2,690.00	₹ 3,30,870.00
2.13	44.5 mm dia (OD) (Hard drawn) with tube thickness 1.62 mm with 19 mm thick insulation	50.00	Metre	₹ 3,230.00	₹ 1,61,500.00
2.14	47.8 mm dia (OD) (Hard drawn) with tube thickness 1.62 mm with 19 mm thick insulation	38.00	Metre	₹ 3,967.00	₹ 1,50,746.00
3	Supply, Installation, Testing and Commissioning of Refnet Joints & Branch Distributors for Indoor & Outdoor units as applicable to the system design as per OEM recommendation.	85.00	Each	₹ 397.00	₹ 33,745.00
4	Supply, installation, balancing and commissioning of fabricated at site GSS sheet metal rectangular/round ducting complete with neoprene rubber gaskets, elbows, splitter dampers, vanes, hangers, supports etc. as per OEM standards as per approved drawings and specifications of following sheet thickness complete as required.				

Sl.No	Description of Work / Item(s)	Quantity	Units	Rate (Rs)	Amount (Rs)
4.1	24 G (Thickness 0.63 mm sheet)	300.00	SQ Metre	₹ 904.00	₹ 2,71,200.00
4.2	22 G (Thickness 0.80 mm sheet)	150.00	SQ Metre	₹ 1,095.00	₹ 1,64,250.00
4.3	Thickness 1.00 mm sheet	75.00	SQ Metre	₹ 1,317.00	₹ 98,775.00
5	Supply and fixing of 19 mm Thickness mat finish closed cell nitrile rubber (class 0) thermal insulation finished with adhesive and aluminium foil pasted and fixed. The joints shall be sealed with 50mm wide and 3 mm thick self adhesive nitrile rubber tape insulation	525.00	SQ Metre	₹ 689.00	₹ 3,61,725.00
6	SITC of Supply / Return Air Aluminium powder coated Grilles/ Diffuser with volume control damper as required as per site conditions.	15.00	SQ Metre	₹ 14,435.00	₹ 2,16,525.00
7	SITC of Supply / Return Air Aluminium powder coated Grilles/ Diffuser Without volume control damper as required as per site conditions.	15.00	SQ Metre	₹ 8,090.00	₹ 1,21,350.00
8	Providing & fixing rigid UPVC piping complete with fittings, supports as per specifications and pre insulated with 6mm thick closed cell elastomeric nitrile rubber tubular thermal insulation.				
8.1	25 MM Dia	300.00	Metre	₹ 234.00	₹ 70,200.00
8.2	32 MM Dia	150.00	Metre	₹ 297.00	₹ 44,550.00
9	Supplying and drawing 2c x 1.5 Sqmm shielded with fine tinned copper braid and protected with PVC sheath in the existing surface/ recessed steel/ PVC conduit as required.	1500.00	Metre	₹ 212.00	₹ 3,18,000.00
10	Supplying and drawing 3c x 1.5 sqmm of FRLS PVC insulated copper conductor, single core cable in the existing surface/ recessed steel/ PVC conduit as required.	1200.00	Metre	₹ 123.00	₹ 1,47,600.00
11	Supplying and fixing of 25 mm size of steel conduit along with accessories in surface/recess including painting in case of surface conduit, or cutting the wall and making good the same in case of recessed conduit as required.	2000.00	Metre	₹ 143.00	₹ 2,86,000.00
12	Providing and fixing 6 SWG dia G.I. wire on surface or in recess for loop earthing along with existing surface/ recessed conduit/submain wiring/ cable as required.	200.00	Metre	₹ 33.00	₹ 6,600.00
13	Supply of 4 CORE 35 sq.mm. XLPE insulated and PVC sheathed aluminium conductor armoured Power Cable of 1.1KV grade, confirming to IS 7098, Part-I 1988 with up to date amendments and confirming to technical specifications.	100.00	Metre	₹ 323.00	₹ 32,300.00
14	Laying and fixing of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 KV grade of Upto 35 sq. mm (clamped with 1mm thick saddle) on wall surface as required.	100.00	Metre	₹ 159.00	₹ 15,900.00
15	Supplying and making end termination with brass compression gland and aluminium lugs for following size of PVC insulated and PVC sheathed / XLPE aluminium conductor cable of 1.1 KV grade as required.				
15.1	4 X 35 sq. mm (32mm)	50.00	Metre	₹ 476.00	₹ 23,800.00
16	Supplying and installing following size of perforated Hot Dipped Galvanised Iron cable tray (Galvanisation thickness not less than 50 microns) with perforation not more than 17.5%, in convenient sections, joined with connectors, suspended from the ceiling with G.I. suspenders including G.I. bolts & nuts, etc. as required.				
16.1	150 mm width X 50 mm depth X 1.6 mm thickness	200.00	Metre	₹ 781.00	₹ 1,56,200.00
16.2	300 mm width X 50 mm depth X 1.6 mm thickness	200.00	Metre	₹ 1,090.00	₹ 2,18,000.00

Sl.No	Description of Work / Item(s)	Quantity	Units	Rate (Rs)	Amount (Rs)
17	Supplying and installing following size of perforated Hot Dipped Galvanised Iron cable tray "bends" (galvanisation not less than 50 microns) with perforation not more than 17.5%, in convenient sections, joined with connectors, suspended from the ceiling with G.I. suspenders including G.I. bolts & nuts, etc. as required.				
17.1	150 mm width X 50 mm depth X 1.6 mm thickness	50.00	Each	₹ 781.00	₹ 39,050.00
17.2	300 mm width X 50 mm depth X 1.6 mm thickness	50.00	Each	₹ 1,080.00	₹ 54,000.00
				Total Amount Rs.	₹ 1,39,75,006.50

(Total Amount: Rupees One Crore Thirty Nine Lakh Seventy Five Thousand Six and Paise Fifty Only)

* Note: GST will be paid on production of actual tax invoice as per prevailing rates Govt. Of India

 09/01/23

Asstt. Gen. Manager (Engg-Elect)
AAI, Bagdogra Airport
Bagdogra-734421