



भारतीय विमानपत्तन प्राधिकरण AIRPORTS AUTHORITY OF INDIA

No: AAI/RHQ-SR/ENGG/SM (E-E)/WO-02/FMC/22-23/103

Date: 14.03.2023

M/s. Lakshmi Electrical Enterprises,
No. 1c, C.L.C. Works Road,
New colony,
Chromepet,
Chennai - 600 044.

Name of Work: Facility Management Contract of E&M Installations at RHQ-SR Residential Colony, Chennai Airport, Chennai.

REF: 1. AAI E-Bid No: 2023_AAI_141887_1
2. Tender (Price Bid) opened: 17.02.2023

Dear Sirs,

1. Your tender for the above-mentioned work is hereby accepted by the Competent Authority on behalf of the Chairman, Airports Authority of India, at the item rates quoted by you totaling to **Rs. 1,57,74,452/- (Rupees One Crore Fifty-Seven Lakhs Seventy-Four Thousand Four Hundred and Fifty-Two Only)** Plus applicable GST @ 18% which is 7.85% below the estimated cost put to tender of Rs. 1,71,18,342/- Plus applicable GST @ 18%.
2. Deputy General Manager Engg (E-E), AAI, New Operational Office, Southern Region, Chennai Airport, Chennai Shall be Engineer - in - charge of the work. You are requested to attend this office by **20.03.2023** 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). The cost of the stamp paper shall be borne by you.
3. Please Deposit **Rs. 15,77,445/- (Rupees Fifteen Lakhs Seventy-Seven Thousand Four Hundred and Forty-Five Only)** towards Security Deposit within 10 days from the date of issue of this letter, failing which, the same will be deducted from your running bills as per the Clause of 1-A of Clauses of Contract.
4. You are requested to comply with the provision of Contract Labour (Regulation and Abolition) Act 1970 and contract Labour (Regulation and Abolition) Central rules 1971 and minimum wages act and rules thereof Central and State Governments.

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5. You are also directed to contact Senior Manager (Engg-E), AAI, RHQ-SR, Chennai Airport immediately who will arrange to hand over the site.
6. Please note that the time allowed for carrying out the work shall be **02 (Two) Years** which shall be reckoned from 01.04.2023.
7. Any further correspondence in connection with the contract should normally be addressed to the Deputy General Manager Engg (E), AAI, New Operational Office, Southern Region, Chennai Airport.

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.

Thanking you,

Encl: 1) Schedule of Quantities – Schedule 'A'

Yours faithfully,

[Signature]
14/03/2023
Sm (E-E)

Senior Manager Engg (E)
AAI, RHQ-SR, Chennai Airport

एल.एस. सिन्हा / L.S. SINGHA

वरिष्ठ प्रबंधक (इंजी. - विद्युत) / Senior Manager (Engg. - Electrical)
भारतीय विमानपत्तन प्राधिकरण / Airports Authority of India
क्षेत्रीय मुख्यालय, दक्षिणी क्षेत्र / Regional Headquarters, Southern Region
प्रचालन इकाई/ऑफिस कॉम्प्लेक्स / Operational Office Complex
चेन्नई हवाई अड्डा, चेन्नई - 16 / Chennai Airport, Chennai - 16

SCHEDULE OF WORK

Name of Work: Facility Management Contract of E & M Installations at RHQ-SR Residential Colony, Chennai Airport, Chennai.

S.No.	Description of Item	Qty	Unit	Rate (Rs.) (without GST)	Amount (Rs.) (without GST)
1.00	SH I: Monitoring and Maintenance of E & M Installations				
1.01	Monitoring and Maintenance of Utility Services/Internal and External Electrical Services at AAI RHQ SR Residential Colony/CPWD Quarters comprising of 11 KV VCB Panels (03 Nos.), 2 Nos. of 11 KV/433 Volt Transformers (1000KVA- 1 No and 500KVA - No), 2 Nos. of 125 KVA LT DG Sets, LT Panels, associated Earthing System of Utilities, Light Fittings, Power Points, Circuit/Submain Wiring, DBs, LT Panels, Street Light Poles/External Lights, Signage etc., at Quarters (As per Annexure 'A5' - List of Inventories) for round the Clock 24X7 Basis (Three Shift Basis - 8 Hours For One Shift), Monitoring, Control and General Maintenance for 100% Serviceability including Co-ordination with TANGEDCO and i/c providing consumable material like cotton waste, oil, grease & other sundry material required for cleaning etc., attending minor faults of Equipments/Repairs/Replacement of defective components with AAI Supplied New Components, ensuring 100% Serviceability/satisfactory working condition of the Systems, Routine and General Preventive Maintenance on Daily/Weekly/Monthly/Quarterly/Half Yearly/Yearly Basis as per Standard Manufacturers' Practices and as per Techno Commercial Specifications (TCS), Maintenance of Records and Log Books and reporting as and when required, complete Upkeeping of the Installations, on all days including Sundays & Holidays as specified and as directed by Engineer-In-Charge as required. * It shall be noted that the BOQ item no.1 shall not accept quote less than minimum wages as on date of publication of tender (Ref Pg.No. SCC 5 of tender document).	24	Month	313,500.00	7,524,000.00
1.02	Monitoring and Maintenance of Water Supply/Sewage Treatment Installations at AAI RHQ SR Residential Colony comprising of Water Supply Installations (Borewell Submersible Pumps/Open Well Submersible Pumps/Jet Pumps) and Sewage Treatment Installations (Pumps/Aerator/Filters/LT Panels) etc., (As per Annexure 'A6' - List of Inventories) for round the Clock 24X7 Basis (Three Shift Basis - 8 Hours For One Shift), Monitoring, Control and General Maintenance for 100% Serviceability including providing consumable material like cotton waste, oil, grease & other sundry material required for cleaning etc., attending minor faults of Equipments/Repairs/Replacement of defective components with AAI Supplied New Components, ensuring 100% Serviceability/satisfactory working condition of the Systems, Routine and General Preventive Maintenance on Daily/Weekly/Monthly/Quarterly/Half Yearly/Yearly Basis as per Standard Manufacturers' Practices and as per Techno Commercial Specifications (TCS), Maintenance of Records and Log Books and reporting as and when required, complete Upkeeping of the Installations etc., on all days including Sundays & Holidays as specified and as directed by Engineer-In-Charge as required. * It shall be noted that the BOQ item no.2 shall not accept quote less than minimum wages as on date of publication of tender (Ref pg.no. SCC.5 of tender document).	24	Month	248,900.00	5,973,600.00
1.03	Providing Supervisory Engineering Services for All E&M Installations Covering Item 1 to 2 as above including Monitoring/Control/Co-ordination/Maintenance of Utility Services/Internal and External Electrical Services for General Duty (Timing as decided by EIC) , Maintenance of Records and Log Books and reporting as and when required, on all days as specified and as directed by Engineer-In-Charge as required. * It shall be noted that the BOQ item no.3 shall not accept quote less than minimum wages as on date of publication of tender (Ref pg.no. SCC 5 of tender document).	24	Month	34,573.00	829,752.00

S.No.	Description of Item	Qty	Unit	Rate (Rs.) (without GST)	Amount (Rs.) (without GST)
2.00	SH: II A ISC of HT Panels and LT ACBs of Power Supply Installations.				
2.01	Overhauling and Servicing of (400 - 1250) Amp 11 KV HT VCBs by Deploying Authorised Service Personnel of Manufacturer/Service Dealer/ Specialised Agency experienced in similar nature of work, provided at Various Power Houses/ Substations including drawing out of the VCB, opening the same, Inspection, Servicing, Cleaning of Contact Surfaces, Overhauling of Operating Mechanism, Lubrication of Moving Parts, Cleaning of CTs, PTs, Busbars and Chambers, Checking of Busbars and bus links, Replacement of Gasket of Panel, Checking of Electrical and Mechanical Operation, measuring of Contact Resistance, Checking of IR values, Testing of ON OFF Time, replacement of minor defective spares supplied by AAI (excluding supply of spares), Testing and Commissioning etc., as required. ISC of VCBs(NAD Colony - 3 Nos VCBs (Make:CG)				
2.02	First Year	3	Each	30,000.00	90,000.00
2.03	Second Year	3	Each	30,000.00	90,000.00
2.04	Overhauling and Servicing of following capacity Trip Circuit Battery Charging Unit by Deploying Authorised Service Personnel of Manufacturer/ Service Dealer/ Specialised agency experienced in similar nature of work, provided at Various Power Houses/ Substations including Inspection, Servicing, Cleaning of Charger, Checking of Charger Circuit (Control and Power Circuit) including Instruments/ Relays/ Meters/ Transformers/ Rectifiers/ Filters, attending faults, Replacement of Defective Components (Excluding Cost of Spares), Checking of Batteries, Terminals, Checking of Operation, Testing and Commissioning etc., as required.				
2.05	Less than 30V battery charger				
2.06	First Year	1	Each	10,000.00	10,000.00
2.07	Second Year	1	Each	10,000.00	10,000.00
2.08	Inspection/Overhauling/Servicing of ACBs of L&T/ GE/ C&S Make of Various Capacities provided in the various LT Panels at Various Power Houses/ SSs by Deploying Authorised Service Personnel of Manufacturer/ Service Dealer/ Specialised Agencies experienced in Servicing of ACBs including cleaning of ACBs, opening the same, inspection, servicing, cleaning of contact surfaces, arc chutes, overhauling of operating mechanism, lubrication of moving parts, Checking of UV Coils, Trip Circuits, Checking of Control Circuits, replacement of minor defective spares supplied by AAI (excluding supply of spares), testing and commissioning etc., as required. (NAD Colony -5 Nos)				
2.09	First Year	3	Each	4,000.00	12,000.00
2.10	Second Year	5	Each	4,000.00	20,000.00
2.11	Testing of Releases provided in various ACBs in various LT Panels, Testing of Tripping, Timing, etc., i/c adjustment of Settings if required at site by Secondary Injection Test as required. (i. NAD Colony -5 Nos)				
2.12	First Year	3	Each	3,500.00	10,500.00
2.13	Second Year	5	Each	3,500.00	17,500.00

S.No.	Description of Item	Qty	Unit	Rate (Rs.) (without GST)	Amount (Rs.) (without GST)
2.14	SH: II B Calibration of Relays and Testing of CTs.				
2.15	Calibration of Relays [(Electro-Mechanical/ Static/ Digital/ Microprocessor Based Relays)-(O/C and E/F)] provided in various HV/LV Panels, Testing of Insulation Values, Pick-up Value, Timing, Burden, etc., i/c adjustment of Settings if required at site, Relay Co-ordination with immediate Up and Down Circuit etc., as required, conforming to IS 9124 - 1979 by Secondary Injection Test as required.				
2.16	First Year	6	Each	10,000.00	60,000.00
2.17	Second Year	6	Each	10,000.00	60,000.00
2.18	Calibration of Auxillary Relays/Master Trip Relay provided in various HV/LV Panels, Testing of Insulation values, Pick-up Value, Drop Off, Burden etc., as required, conforming to IS 9124 - 1979 by Secondary Injection Test as required.				
2.19	First Year	2	Each	8,000.00	16,000.00
2.20	Second Year	2	Each	8,000.00	16,000.00
2.21	Testing of 11 KV CTs (3 Nos. of Current Rating of Upto 400 Amps associated with Relays (OC/EF/Master) provided in various HV Panels, Tesing of Polarity, Ratio, Insulation values, Testing of Ammeter connected in the Panel, Marking of available CT Ratio, Checking of Trip Circuit and Breaker Operation/Tripping etc., as required, conforming to IS 9124 - 1979 by Primary Injection Test (Maximum upto 50% of Rating of CTs-Testing at 25% and 50% of Original Rating) as required.				
2.22	First Year	9	Each	5,000.00	45,000.00
2.23	Second Year	9	Each	5,000.00	45,000.00
2.24	SH II C : Filtration of Transformer Oil and Servicing of OLTCs.				
2.25	Filtration of Transformer Oil of following Equipments conforming to IS 6792/72 and IS 1866 as required with up to date amendments, including transporting Filtration Plant and BDV Test Kit, Replacement of Silica Gel, Acidity Testing of Oil at Chemical Testing Lab, Submission of Reports, Checking of Cable Tightness, Gasketting of Cable End Boxes etc. as required.				
2.26	NAD RESIDENTIAL COLONY SUBSTATION 1000KVA 11KV/433V Transformer Approx Oil Qty in ltrs 1000.00				
2.27	First Year	1	Each	18,000.00	18,000.00
2.28	Second Year	1	Each	18,000.00	18,000.00
2.29	NAD RESIDENTIAL COLONY SUBSTATION 500KVA 11KV/433V Transformer Approx Oil Qty in ltrs 540.00				
2.30	First Year	1	Each	7,000.00	7,000.00
2.31	Second Year	1	Each	7,000.00	7,000.00

S.No.	Description of Item	Qty	Unit	Rate (Rs.) (without GST)	Amount (Rs.) (without GST)
2.32	Supply of Transformer Oil conforming to IS 335/1983 for topping up of oil for Transformer during filtration of Oil and for replacement of Oil for the Transformers. (Barrel = 210 Ltrs)				
2.33	First Year	1	Barrel	35,000.00	35,000.00
2.34	Second Year	1	Barrel	35,000.00	35,000.00
2.35	Testing of Power Transformer of following rating 11 / 0.433 KV i/c testing of Insulation resistance, Magnetising current, winding resistance with micro-Ohm meter and Magnetic balance, etc., as required.				
2.36	NAD RESIDENTIAL COLONY SUBSTATION 500KVA 11KV/433V Transformer				
2.37	First Year	1	Each	5,000.00	5,000.00
2.38	Second Year	1	Each	5,000.00	5,000.00
2.39	Providing and Fixing Glass Cover, Rubber Beading for Marshalling Boxes of Transformers as required.				
2.40	First Year	1	Each	5,000.00	5,000.00
2.41	Second Year	1	Each	5,000.00	5,000.00
3.00	SH-III Servicing of E & M Installations.				
3.01	Lifting of Submersible Pumps of various capacities from the existing Bore Well/Well and reinstalling the Submersible Pumps in the existing bore well / well (After servicing/ repairing both are exclusive) complete as required.	5	Job	3,500.00	17,500.00
3.02	Rewinding of 1 No. 1.5 / 2 HP borewell / submersible / Monoblock motor pumpset, including replacement of damaged parts such as inlet base, bushes, thrust bearing set, neck rings etc, including reassembling, painting, testing, transpotation etc as required.	2	Job	2,500.00	5,000.00
3.03	Rewinding of 1 No. 3HP borewell / submersible pumpset, including replacement of damaged parts such as inlet base, bushes, thrust bearing set, neck rings etc, including reassembling, painting, testing, transpotation etc as required.	2	Job	3,500.00	7,000.00
3.04	Rewinding of 1 No. 5HP submersible / monoblock motor pumpset, including replacement of damaged parts such as inlet base, bushes, thrust bearing set, neck rings etc, including reassembling, painting, testing, transpotation etc as required.	2	Job	2,500.00	5,000.00
3.05	Rewinding of 1 No. 7.5HP to 10 HP borewell / submersible pumpset, including replacement of damaged parts such as inlet base, bushes, thrust bearing set, neck rings etc, including reassembling, painting, testing, transpotation etc as required.	4	Job	7,500.00	30,000.00
3.06	Lifting of 3 HP/5 HP Sewage Submersible pump in the existing raw sewage sump and servicing of shaft, replacement of mechanical seal & bearing and installation of servicable Sewage Submersible pump in the sump etc., as required.	2	Job	7,500.00	15,000.00

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S.No.	Description of Item	Qty	Unit	Rate (Rs.) (without GST)	Amount (Rs.) (without GST)
3.07	Servicing of 7.5 HP Pressure Filter pump including replacement of damaged parts like Pump shaft, Bearing, Oil seal, Mechanical seal, Screw & Gasket etc., and reinstallation of servicable pump as required.	1	Job	5,500.00	5,500.00
3.08	Rewinding and Servicing 3 HP Booster pump including replacement of damaged parts like Pump shaft, Bearing, Oil seal, Mechanical seal, Screw & Gasket etc., and reinstallation of servicable pump as required.	1	Job	3,000.00	3,000.00
3.09	Supply of of following dia heavy duty GI pipe (6 meter) including cutting and threading including coupler, bend, flange with threading, gasket, nut bolts, washers etc complete as required.				
3.10	80 mm dia	5	Job	4,200.00	21,000.00
3.11	100 mm dia	5	Job	7,500.00	37,500.00
3.12	Comprehensive Maintenance Contract of 7/8 LPH RO water purifier Kent make inclusive of monthly servicing, attending faults/ breakdowns and taking rectification action as and when required, maintaining the serviceability / satisfactory working condition of the plant, including replacing of One set of Membrane and Filters and including providing test reports for the same, etc complete as required.	24	Month	1,000.00	24,000.00
3.13	Repair & Rewinding of all capacities of exhaust fan i/c replacement of spares as required.	10	Job	550.00	5,500.00
3.14	Repair & Rewinding of high speed heavy duty pedestal / wall mounting fan i/c replacement of spares / bearings etc. as required.	5	Job	650.00	3,250.00
3.15	Maintenance of Conventional/ Microprocessor Based Fire Alarm System [FAS] including all Associated Accessories of all FAS Types/ Models/ Make installed at following Locations including Repairs and Maintenance, attending Faults of Systems, Replacement of Defective Components with AAI Supplied New Components, ensuring 100% Serviceability/ Satisfactory Working Condition of FAS, Routine and General Preventive Maintenance on Monthly/ Quarterly/ Half yearly/ Yearly Basis as per Standard Manufacturers' Practices, Break-Down Maintenance, Maintenance of Records/Service Reports and Reporting as and when required, complete Up-keeping of the Installations [FAS], as specified and as directed by Engineer-In-Charge as required.				
3.16	Com Stores (AAI-SR Colony)-(Eight Zone - Make : Morlay IAS)	24	Month	2,500.00	60,000.00
3.17	Maintenance of Addressable Type Fire Alarm System [FAS] (by OEM/ authorized dealer of OEM) including all Associated Accessories of all FAS Types/Models/Make installed at following Locations including programming, repairs and maintenance, attending Faults of Systems, replacement of defective components with AAI supplied new components, ensuring 100% Serviceability/Satisfactory Working Condition of FAS, Routine and General Preventive Maintenance on Monthly/Quarterly/Half yearly/Yearly Basis as per Standard Manufacturers' Practices, Break-Down Maintenance, Maintenance of Records/Service Reports and Reporting as and when required, complete Up-keeping of the Installations [FAS], as specified and as directed by Engineer-In-Charge as required.				

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S.No.	Description of Item	Qty	Unit	Rate (Rs.) (without GST)	Amount (Rs.) (without GST)
3.18	Com Stores (AAI-SR Colony) (Single Loop-Make:Morley)	24	Month	2,000.00	48,000.00
3.19	Supply of UL Listed Intelligent Addressable type Optical Smoke cum Heat Detector complete with all accessories like base, base box etc., to be installed under/above false ceiling - roof/concealed space etc., including interconnecting with loop cable complete as required (suitable for Existing Morlay IAS fire alarm system).	3	Each	4,000.00	12,000.00
3.20	Supply and fixing of UL Listed Addressable Hooter cum Strobe complete with address switch including base plate, box, necessary accessories etc., as required (suitable for Existing Morlay IAS fire alarm system).	1	Each	4,500.00	4,500.00
3.21	Supply of UL Listed Addressable type Manual Call Point (Pull Station Type) complete with Input Module, Push Botton, enclosed in box with provision for cable or conduit coupling, painted as required (suitable for Edward fire alarm system).	1	Each	4,500.00	4,500.00
3.22	Supplying & laying of 2Cx1.5 sqmm fire alarm armoured cable, 600/1000V rated with annealed copper conductor having XLPE insulation, steel wire armouring & FRLS outer sheath complete as required	50	RM	35.00	1,750.00
3.23	Supply of 12V 7AH maintenance free battery with buy back offer	6	Each	850.00	5,100.00
4.00	DSR ELECTRICAL -2022				
4.01	Execution of Items of CPWD Delhi Schedule Rates (DSR) E&M 2022 as and when required for attending Repair and Maintenance, Breakdowns and Upkeep of Internal and External Electrical Installations as per Direction of Engineer-In-Charge at All Locations under AAI RHQ SR Residential Colony Chennai Airport conforming to CPWD General Specifications for Electrical Works Part-I (Internal) 2013, Part-II (External) 1994 and Part - IV (Substation) 2013 and also to relevant BIS Specifications. Note: The Bidder shall quote the Rate in INR only for the Job corresponding to the Base Rate (Rs. 6,00,000.00 as per Proposed Estimate) and Percentage (%) Above/ Below shall be calculated by AAI (Based on Quoted Rate w.r.t Base Rate) and the same % worked out will be applied on DSR Rates while executing the DSR Items and will be paid as per Payment Methodology given in Annexure -E).	1	Job	490,000.00	490,000.00
Total Amount of Rs.					15,774,452.00

**(Rupees One Crore Fifty Seven Lakhs Seventy Four Thousand Four Hundred and Fifty Two Only)
Plus Applicable GST**

S. Sindhu
14/03/2023
Senior Manager (Engg. (E))
AAI, RHQ, SR, Chennai.
S. Sindhu

एल.एस. सिन्धु / L.S. SINDHU
ज्येष्ठ प्रबंधक (इंजी. - विद्युत) / Senior Manager (Engg. - Electrical)
राष्ट्रीय विमानतट प्राधिकरण / Airports Authority of India
क्षेत्रीय, दक्षिणी क्षेत्र / Regional Headquarters, South
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