



भारतीय विमानपत्तन प्राधिकरण AIRPORTS AUTHORITY OF INDIA



संदर्भ सं./ Ref. No.:

दिनांक: / Dated:

Ref. No. AAI/RHQ-SR/ENGG/AGM(E)-II/WO-06/2020-21/02 Dated: 12.01.2021

M/s. Chennai Engineering Services
Plot No.30, Door No.1-536.
Krishna Nagar, 1st Street,
Manapakkam,
Chennai-600 125.

Name of Work: Facility Management Contract of E & M Installations at RHQ-SR, (2021-23) Chennai Airport, Chennai.

REF: 1. AAI E-Bid No. 2020_AAI_62661_1

2. Your Quote on E-Bid (Price Bid) opened on 29.12.2020 at 1530 Hrs.

Dear Sirs,

1. Your e-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.4,97,25,987/- (Rupees Four Crores Ninety Seven Lakhs Twenty Five Thousand Nine Hundred and Eighty Seven Only) Plus Applicable GST @ 18%** which is 16.17% below the Estimated Cost put to Tender of Rs.5,93,16,358 Plus GST @ 18%. The quoted amount is exclusive of PF/ESI/Bonus.
2. Jt. General Manager-Engg (E), AAI, RHQ-SR, Chennai Airport, Chennai shall be the Engineer-In-Charge of the work. You are requested to attend to the Office of Jt. General Manager-Engg (E), AAI, RHQ-SR, Chennai Airport, Chennai by **29.01.2021** 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.
3. The Performance Bank Guarantee for an amount of **Rs.14,91,780/-** shall be submitted within 30 Days from the date of issue of this award letter and other terms and conditions shall be as per condition of Clause 1 of AAI General Condition of Contract.
4. Security Deposit Amount of **Rs.24,86,299/-** shall be deposited within 30 Days from the date of issue of this award letter failing which, the same shall be recovered from each running bill as per condition of contract. The BG submitted agency EMD will be returned on submission of undertaking as per **Annexure - A** enclosed.

Contd..2..



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संदर्भ सं.: / Ref. No.:

..2..

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5. 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 there of Central and State Governments.
6. You are also directed to contact Asst. General Manager Engg (E)-II, AAI, RHQ-SR, New Operational Office, Chennai Airport immediately who will arrange to hand over the site.
7. Please note that the time allowed for carrying out the work shall be **24 (Twenty Four) Months** which starts from **01.02.2021 to 31.01.2023.**
8. Any further correspondence in connection with the contract should normally be addressed to the Jt. General Manager Engg (E), AAI, Operational Office, Southern Region, Chennai Airport, Chennai 600 027.
9. 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 Quantity.
2) Annexure - A

Yours faithfully,

Jt. General Manager Engg (E)
AAI, RHQ-SR, Chennai Airport

SCHEDULE - A**SCHEDULE OF QUANTITIES**

Name of work : Facility Management Contract of E & M Installations at AAI - RHQ-SR, (2021-23) Chennai Airport, Chennai

SL. NO.	DESCRIPTION	UNIT	QTY	RATE	TOTAL AMOUNT
1	SH I: Monitoring and Maintenance of E & M Installations				
1.01	Monitoring and Maintenance of Utility Services at ATS Complex Power House Cum Sub-Station comprising of 11 KV VCB Panels (05 Nos.), 2 Nos. of 2000 KVA 11 KV/433 V Transformers, 2 Nos. of 750 KVA LT DG Sets, Bus Ducts, LT Panels, Capacitor Panels, Battery Banks, HT/LT Cabling, associated Earthing System of Utilities etc., (As per Annexure 'A1' - 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 AAI Metro Chennai Airport Intake and KDT Substations 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 etc., on all days including Sundays & Holidays as specified and as directed by Engineer-In-Charge as required.	Month	24	285169.00	6844056.00
1.02	Monitoring and Maintenance of Internal and External Electrical Services at ATS Complex including Ancillary Buildings at ATS Complex comprising of Light Fittings, Power Points, Circuit/Submain Wiring, DBs, LT Panels, Aviation Obstruction Lights, Lightning Arrestors, Street Light Poles/External Lights, Signage etc., at ATS Complex (As per Annexure 'A2' - 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 ATS Substation 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 etc., on all days including Sundays & Holidays as specified and as directed by Engineer-In-Charge as required.	Month	24	181169.00	4348056.00

SL. NO.	DESCRIPTION	UNIT	QTY	RATE	TOTAL AMOUNT
1.03	Monitoring and Maintenance of Water Supply Installations at ATS Complex comprising of Water Supply Pumps, RO Plant, LT Panels etc., at Pump House of ATS Complex, Including Operation of Elevators at ATS Complex as per the Direction of Engineer-In-Charge (As per Annexure 'A3' - 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 ATS Switch Room 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 etc., on all days including Sundays & Holidays as specified and as directed by Engineer-In-Charge as required.	Month	24	166999.00	4007976.00
1.04	Monitoring and Maintenance of Utility Services/Internal and External Electrical Services at AAI Operational Offices comprising of Light Fittings, Power Points, Circuit/Submain Wiring, DBs, LT Panels, Aviation Obstruction Lights, Lightning Arrestors, Street Light Poles/External Lights, Signage etc., at RHQ SR Operational Offices (As per Annexure 'A4' - List of Inventories) on General Duty Basis (8 Hours of Duty of Time as decided by Engineer-In-Charge), Monitoring, Control and General Maintenance for 100% Serviceability including Co-ordination with Chennai Airport Admin Power House Cum Substation 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 etc., on all days as specified and as directed by Engineer-In-Charge as required.	Month	24	87999.00	2111976.00

SL. NO.	DESCRIPTION	UNIT	QTY	RATE	TOTAL AMOUNT
1.05	Monitoring and Maintenance of Utility Services/Internal and External Electrical Services at AAI RHQ SR Residential Colony comprising of 11 KV VCB Panels (03 Nos.), 2 Nos. of 11 KV/433 Volt Transformers (500KVA and 315 KVA), 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.	Month	24	235999.00	5663976.00
1.06	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.	Month	24	153999.00	3695976.00

SL. NO.	DESCRIPTION	UNIT	QTY	RATE	TOTAL AMOUNT
1.07	Monitoring and Maintenance of Utility Services/Internal and External Electrical Services at MSSR Porur Power House Cum Sub-Station/MSSR Building comprising of 11 KV VCB Panels (03 Nos.), 2 Nos. of 250 KVA 11 KV/433 Volt Transformers, 2 Nos. of 160 KVA LT DG Sets, LT Panels, associated Earthing System of Utilities, Light Fittings, Power Points, Circuit/Submain Wiring, DBs, LT Panels, Aviation Obstruction Lights, Lightning Arrestors, Street Light Poles/External Lights, Signage etc., Including Operation of Elevator, AC Units, Water Supply Installations and Water Softening/Treatment Units (As per Annexure 'A7' - 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.	Month	24	153999.00	3695976.00
1.08	Monitoring and Maintenance of Utility Services/Internal and External Electrical Services at WT Station Mugulivakkam Power House Cum Sub-Station comprising of 11 KV VCB Panels (03 Nos.), 2 Nos. of 250 KVA 11 KV/433 V Transformers, 2 Nos. of 62.5 KVA LT DG Sets, LT Panels, associated Earthing System of Utilities, Light Fittings, Power Points, Circuit/Submain Wiring, DBs, LT Panels, Aviation Obstruction Lights, Lightning Arrestors, Street Light Poles/External Lights, Signage etc., Including Operation of AC Units, Water Supply Installations and Water Softening/Treatment Units (As per Annexure 'A8' - 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.	Month	24	153999.00	3695976.00

SL. NO.	DESCRIPTION	UNIT	QTY	RATE	TOTAL AMOUNT
1.09	Monitoring and Maintenance of Utility Services/Internal and External Electrical Services at Outer Marker comprising of 1 No. of 15 KVA LT DG Set, LT Panel, associated Earthing System of Utilities, Light Fittings, Power Points, Circuit/Submain Wiring, DBs, LT Panels, Aviation Obstruction Lights, Lightning Arrestors, Street Light Poles/External Lights, Signage etc., Including Operation of AC Units, Water Supply Installations and Water Softening/Treatment Units (As per Annexure 'A9' - 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.	Month	24	84999.00	2039976.00
1.10	Monitoring and Maintenance of Utility Services/Internal and External Electrical Services at ASR/MSSR Power House Cum Sub-Station/MSSR Building in Operational Area of Chennai Airport comprising of 11 KV VCB Panels (07 Nos.), 2 Nos. of 500 KVA 11 KV/433 Volt Transformers, 2 Nos. of 320 KVA LT DG Sets, LT Panels, associated Earthing System of Utilities, Light Fittings, Power Points, Circuit/Submain Wiring, DBs, LT Panels, Aviation Obstruction Lights, Lightning Arrestors, Street Light Poles/External Lights, Signage etc., Including Operation of AC Units, Water Supply Installations and Water Softening/Treatment Units (As per Annexure 'A10' - 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 ATS SS/Old Airport Power House/Remote Bays Power House 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. complete Upkeeping of the Installations, on all days including Sundays & Holidays as specified and as directed by Engineer-In-Charge as required.	Month	24	206999.00	4967976.00
1.11	Providing Supervisory Engineering Services for All E&M Installations Covering Item 1 to 10 as above including Monitoring/Control/Co-ordination/Maintenance of Utility Services/Internal and External Electrical Services for round the Clock 24X7 Basis (Three Shift Basis - 8 Hours For One Shift)/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.	Month	24	159999.00	3839976.00

SL. NO.	DESCRIPTION	UNIT	QTY	RATE	TOTAL AMOUNT
2	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 [CG Make VCBs-3 Nos. At NAD Colony SS + JYOTHI Make-3 Nos. At MSSR Porur SS+ KIRLOSKAR Make-06 Nos. at ATS Complex SS + CG make - 7 Nos at ELDIS Radar]				
2.02	First Year	Each	19	1499.00	28481.00
2.03	Second year	Each	19	1499.00	28481.00
2.04	Overhauling and Servicing of 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	First Year	Each	9	1499.00	13491.00
2.06	Second Year	Each	9	1499.00	13491.00
2.07	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.				
2.08	First Year	Each	16	999.00	15984.00
2.09	Second Year	Each	16	999.00	15984.00

SL. NO.	DESCRIPTION	UNIT	QTY	RATE	TOTAL AMOUNT
2.10	Calibration 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.				
2.11	First Year	Each	16	499.00	7984.00
2.12	Second Year	Each	16	499.00	7984.00
2.13	SH: II B Calibration of Relays and Testing of CTs.				
2.14	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.				
2.15	First Year	Each	11	499.00	5489.00
2.16	Second Year	Each	11	499.00	5489.00
2.17	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.				
2.18	First Year	Each	141	199.00	28059.00
2.19	Second Year	Each	141	199.00	28059.00
2.20	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.				
2.21	First Year	Each	16	599.00	9584.00
2.22	Second Year	Each	16	599.00	9584.00
2.23	SH II C : Filtration of Transformer Oil and Servicing of OLTCs.				
2.24	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.				

SL. NO.	DESCRIPTION	UNIT	QTY	RATE	TOTAL AMOUNT
2.25	<u>MSSR PORUR SUBSTATION</u> 250 KVA 11KV/433V Transformer Approx Oil Qty in ltrs 370.00				
2.26	First Year	Each	2	1999.00	3998.00
2.27	Second Year	Each	2	1999.00	3998.00
2.28	<u>ATS COMPLEX SUBSTATION</u> 2 MVA 11KV/433V Transformer Approx Oil Qty in ltrs 2130.00				
2.29	First Year	Each	2	3999.00	7998.00
2.3	Second Year	Each	2	4499.00	8998.00
2.31	<u>NAD RESIDENTIAL COLONY SUBSTATION</u> 500KVA 11KV/433V Transformer Approx Oil Qty in ltrs 540.00				
2.32	First Year	Each	1	1999.00	1999.00
2.33	Second Year	Each	1	1999.00	1999.00
2.34	<u>NAD RESIDENTIAL COLONY SUBSTATION</u> 315 KVA 11KV/433V Transformer Approx Oil Qty in ltrs 350.00				
2.35	First Year	Each	1	1999.00	1999.00
2.36	Second Year	Each	1	1999.00	1999.00
2.37	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.				
2.38	First Year	Barrel	4	18999.00	75996.00
2.39	Second Year	Barrel	4	19999.00	79996.00
2.40	<u>ELDIS RADAR SUBSTATION</u> 400KVA 11KV/433V Transformer				
2.41	First Year	Each	2	1999.00	3998.00
2.42	Second Year	Each	2	1999.00	3998.00
2.43	Testing of Power Transformer of following rating 11 / 0.433 KV i/c testing of Insulation resistance, Magnetising current, winding resistance with mico-Ohm meter and Magnetic balance, etc., as required.				
2.44	<u>MSSR PORUR SUBSTATION</u> 250 KVA 11KV/433V Transformer				
2.45	First Year	Each	2	1999.00	3998.00
2.46	Second Year	Each	2	1999.00	3998.00

SL. NO.	DESCRIPTION	UNIT	QTY	RATE	TOTAL AMOUNT
2.47	ATS COMPLEX SUBSTATION 2 MVA 11KV/433V Transformer				
2.48	First Year	Each	2	3499.00	6998.00
2.49	Second Year	Each	2	3499.00	6998.00
2.5	NAD RESIDENTIAL COLONY SUBSTATION 500KVA 11KV/433V Transformer				
2.51	First Year	Each	1	4499.00	4499.00
2.52	Second Year	Each	1	4499.00	4499.00
2.53	NAD RESIDENTIAL COLONY SUBSTATION 315 KVA 11KV/433V Transformer				
2.54	First Year	Each	1	2999.00	2999.00
2.55	Second Year	Each	1	2999.00	2999.00
2.56	ELDIS RADAR SUBSTATION 400KVA 11KV/433V Transformer				
2.57	First Year	Each	2	2999.00	5998.00
2.58	Second Year	Each	2	2999.00	5998.00
2.59	Providing and Fixing Glass Cover, Rubber Beading for Marshelling Boxes of Transformers as required.				
2.6	First Year	Each	1	999.00	999.00
2.61	Second Year	Each	1	999.00	999.00
2.62	Servicing of Voltamp Make OLTC available in 2 MVA, 11 KV/433 V Transformer at ATS Complex Power House by OEM/OEMs' Authorised Service Dealer completely including removing of Oil from the tank, flushing out of deposits, cleaning of contacts, checking and tightening of contacts and fasteners, checking of transient resistance, topping up of New oil/Filtration of Oil through oil Filtration machine (excluding supply of oil), lubricating the mechanism, replacing top cover gasket, Checking of RTCC Panel, checking of operation electrically and manually (local & remote operation), replacement of minor defective spares supplied by AAI (excluding supply of spares), etc., as required.				
2.63	First Year	Each	2	14999.00	29998.00
2.64	Second Year	Each	2	17499.00	34998.00
2.65	SH II D : CMC of Active Harmonic Filter				
2.66	Comprehensive Annual Maintenance Contract of Active Harmonic Filters of Capacity 35A including replacement of all spares, consumables, manpower required for trouble shooting arrangement of all tools and plants, routine preventive and breakdown maintenance etc. as required as per good Engineering practice for maintaining the system in operational and serviceable state. .				

SL. NO.	DESCRIPTION	UNIT	QTY	RATE	TOTAL AMOUNT
2.67	MSSR Porur- 1No				
2.68	First Year	Each	1	19999.00	19999.00
2.69	Second Year	Each	1	19999.00	19999.00
3	SH-III (A): 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.	Job	4	2999.00	11996.00
3.02	Rewinding of 1 No. 5HP / 7.5 HP borewell 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.	Job	2	6999.00	13998.00
3.03	Rewinding of 1 No. 10 HP borewell 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.	Job	2	9999.00	19998.00
3.04	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.	Job	1	6999.00	6999.00
3.05	Rewinding of 5 HP Foot mount motor including dismantling and reinstallation etc as required.	Job	1	6999.00	6999.00
3.06	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.	Job	1	7999.00	7999.00
3.07	Comprehensive Annual Maintenance Contract of 2 Nos 400 LPH RO Plant inclusive of monthly servicing, attending faults/ breakdowns and taking rectification action as and when required, maintaining the serviceability / satisfactory working condition of the plants, adding antiscalant chemicals to avoid scaling of pipelines as and when required, replacement of prefilter cattridge once in three months, including sand filter ,maintaining the required taste and required TDS level (30 to 120) including providing test reports for the same, etc as required. (excluding Membrane).	Month	24	2999.00	71976.00
3.08	Comprehensive Maintenance Contract of 10 LPH RO water purifier Ozone 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.	Month	24	999.00	23976.00
3.09	Supply of RO membrane for RO plant of 400LPH capacity (Make CSM , model RE 4040 -BN or its equivalent).	Nos	4	7499.00	29996.00

SL. NO.	DESCRIPTION	UNIT	QTY	RATE	TOTAL AMOUNT
3.1	Annual Maintenance Contract of Fire Hydrant System consisting of Jockey/ Electrical/ Diesel pumps with associated Electro Meachanical installations at ATS Complex, carrying out regular monthly checks required, attending breakdowns as and when required, carrying out B checks for Engines excluding supply of B check spares and other spares as required.	Month	22	1999.00	43978.00
3.11	Repair & Rewinding of 1400/1200 mm Sweep Ceiling fan i/c replacement of spares as required.	Job	50	499.00	24950.00
3.12	Repair & Rewinding of all capacities of exhaust fan i/c replacement of spares as required.	Job	50	749.00	37450.00
3.13	Maintenance of Conventional/ Microprocessor Based Fire Alarm System [FAS] including all Associated Accessories and Auto Dialer 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.				
3.14	Localizer 07 (Two Zone - Make : Ravel)	Month	24	999.00	23976.00
3.15	Localizer 25 (Two Zone - Make : Ravel)	Month	24	749.00	17976.00
3.16	GLIDE PATH 07 (Two Zone - Make : Ravel)	Month	24	749.00	17976.00
3.17	GLIDE PATH 25 (Two Zone - Make : Ravel)	Month	24	749.00	17976.00
3.18	GBAS (Two Zone - Make Morley IAS)	Month	24	749.00	17976.00
3.19	Remote Receiver Station (Four Zone - Make : Ravel)	Month	24	999.00	23976.00
3.2	Com Stores (AAI-SR Colony)-(Eight Zone - Make : Morlay IAS)	Month	24	999.00	23976.00

SL. NO.	DESCRIPTION	UNIT	QTY	RATE	TOTAL AMOUNT
3.21	Maintenance of Addressable Type Fire Alarm System [FAS] including all Associated Accessories and Auto Dialer 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.				
3.22	ATS Complex (8 Loop, Make: Edward)	Month	24	2499.00	59976.00
3.23	Operational Offices Admin Building(NAD) (Four Loop - Make: EDWARD)	Month	14	1499.00	20986.00
3.24	DVOR 07 (Single Loop - Make : EDWARD)	Month	24	1499.00	35976.00
3.25	DVOR 12 (Single Loop - Make : EDWARD)	Month	24	1499.00	35976.00
3.26	New ASR/MSSR (Single Loop - Make : MORLAY)	Month	24	1499.00	35976.00
3.27	MSSR Porur (Two Loop - Make : EDWARD)	Month	24	1499.00	35976.00
3.28	WT STATION (Single Loop - Make : EDWARD)	Month	24	1499.00	35976.00
3.29	SH III(B) : AMC of Automatic Sliding Door				
3.30	Annual Maintenance contract of 2Nos Automatic Sliding Doors including Routine/preventive quarterly maintenance, attending Break down Maintenance , attending Minor & Major repair works,ensuring 100% serviceability and satisfactory working condition as per standard manufacturers practices and documentation of service/ complaints/PMI Checks etc as required (spares excluded).				
3.31	First year (2020-21)	Month	12	1499.00	17988.00
3.32	Second Year (2021-22)	Month	12	1499.00	17988.00
4	SH-IV: Annual Rate Contract for Internal Electrical works				
4.01	Wiring for light point/ fan point / exhaust fan point / call bell point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable in surface / recessed steel conduit, with piano type switch, phenolic laminated sheet suitable size MS box and earthing the point with 1.5 sq.mm. FRLS PVC insulated copper conductor single core cable etc. as required.				
4.02	Group B	Points	25	999.00	24975.00
4.03	Group C	Points	50	1099.00	54950.00

SL. NO.	DESCRIPTION	UNIT	QTY	RATE	TOTAL AMOUNT
4.04	Wiring for light point / fan point / exhaust fan point / call bell point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable in surface / recessed steel conduit, with modular switch, modular plate, suitable GI box and earthing the point with 1.5 sq.mm. FRLS PVC insulated copper conductor single core cable etc. as required.				
4.05	Group B	Points	25	1009.00	25225.00
4.06	Group C	Points	50	1199.00	59950.00
4.07	Supplying and fixing metal box of 150mm X 75mm X 60mm deep (nominal size) on surface or in recess with suitable size of phenolic laminated sheet cover in front including providing and fixing 3 pin 5/6 amps socket outlet and 5/6 amps piano type switch, connection, painting etc. as required.	Each	25	399.00	9975.00
4.08	Supplying and fixing metal box of 180mm X 100mm X 60mm deep (nominal size) on surface or in recess with suitable size of phenolic laminated sheet cover in front including providing and fixing 6 pin 5/6 & 15/16 amps socket outlet and 15/16 amps piano type switch, connection, painting etc. as required.	Each	25	599.00	14975.00
4.09	Supplying and fixing suitable size GI box with modular plate and cover in front on surface or in recess, including providing and fixing 3 pin 5/6 amps modular socket outlet and 5/6 amps modular switch, connection etc. as required. (For light plugs to be used in non residential buildings).	Each	100	399.00	39900.00
4.1	Supplying and fixing suitable size GI box with modular plate and cover in front on surface or in recess, including providing and fixing 6 pin 5/6 & 15/16 amps modular socket outlet and 15/16 amps modular switch, connection etc. as required.	Each	50	549.00	27450.00
4.11	Supplying and fixing following size/ modules, PVC box alongwith modular base & cover plate for modular switches in recess etc as required				
4.12	3 Module	Each	200	179.00	35800.00
4.13	6 Module	Each	100	249.00	24900.00
4.14	8 Module	Each	50	379.00	18950.00
4.15	12 Module	Each	50	379.00	18950.00
4.16	Wiring for circuit/ submain wiring alongwith earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface/ recessed steel conduit as required.				
4.17	2 X 1.5 sq.mm + 1 X 1.5 sq.mm earth wire	Mtr	200	199.00	39800.00
4.18	2 X 2.5 sq.mm + 1 X 2.5 sq.mm earth wire	Mtr	200	209.00	41800.00
4.19	2 X 4 sq.mm + 1 X 4 sq.mm earth wire	Mtr	200	239.00	47800.00

SL. NO.	DESCRIPTION	UNIT	QTY	RATE	TOTAL AMOUNT
4.2	2 X 6 sq.mm + 1 X 6 sq.mm earth wire	Mtr	100	269.00	26900.00
4.21	Supplying and fixing of following sizes 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.				
4.22	20 mm	Mtr	300	149.00	44700.00
4.23	25 mm	Mtr	200	169.00	33800.00
4.24	Supplying and fixing of following sizes of medium class PVC conduit along with accessories in surface/recess including cutting the wall and making good the same in case of recessed conduit as required.				
4.25	20 mm	Mtr	100	69.00	6900.00
4.26	25 mm	Mtr	200	79.00	15800.00
4.27	Supplying and fixing of following sizes of medium class PVC Casing 'N' Caping along with accessories in surface as required.				
4.28	20 mm	Mtr	300	49.00	14700.00
4.29	25 mm	Mtr	200	69.00	13800.00
4.3	Supplying and drawing following sizes of FRLS PVC insulated copper conductor, single core cable in the existing surface / recessed steel / PVC conduit as required.				
4.31	3 x 1.5 sq. mm	Mtr	300	49.00	14700.00
4.32	3 x 2.5 sq. mm	Mtr	200	69.00	13800.00
4.33	3 x 4 sq. mm	Mtr	200	99.00	19800.00
4.34	Supply and fixing rotary stepped type electronic fan regulator (1 module) on the existing modular plate switch box including connections but excluding modular plate etc. as required.	Each	50	199.00	9950.00
4.35	Supplying and fixing following modular switch/ socket on the existing modular plate & switch box including connections but excluding modular plate etc. as required				
4.36	5/6 Amps switch	Each	200	59.00	11800.00
4.37	15/16 Amps switch	Each	100	89.00	8900.00
4.38	3 pin 5/6 Amps socket outlet	Each	200	99.00	19800.00
4.39	6 pin 15/16 Amps socket outlet	Each	100	129.00	12900.00

SL. NO.	DESCRIPTION	UNIT	QTY	RATE	TOTAL AMOUNT
4.4	Supplying and fixing of following ways surface/ recess mounting, vertical type, 415V, TPN MCB distribution board of sheet steel, dust protected, duly powder painted, inclusive of 200 A tinned copper bus bar, common neutral link, earth bar, din bar for mounting MCB's (but without MCB's and incomer) as required • (Note : Vertical type MCB TPDB is normally used where 3 phase outlets are required.)				
4.41	TPN 8 Way (8+24) MCB DB double door	Each	5	3199.00	15995.00
4.42	TPN 4 (8+12) Way MCB DB double door	Each	5	1799.00	8995.00
4.43	Supplying and fixing following way, single pole and neutral, sheet steel, MCB distribution board, 240 V, on surface/ recess, complete with tinned copper bus bar, neutral bus bar, earth bar, din bar, interconnections, powder painted including earthing etc. as required. (But without MCBIRCCB/Isolator)				
4.44	SPN 8 Way MCB DB double door	Each	5	899.00	4495.00
4.45	SPN 6 Way MCB DB double door	Each	5	799.00	3995.00
4.46	SPN 4 Way MCB DB double door	Each	5	599.00	2995.00
4.47	Supplying and fixing following rating, 415 volts, Four pole MCB, C curve in the existing MCB DB complete with connections, testing and commissioning etc., as required				
4.48	40A FP MCB	Each	20	919.00	18380.00
4.49	63A FP MCB	Each	20	1049.00	20980.00
4.5	Supplying and fixing following rating, 415 volts, Four pole RCCB, C curve in the existing MCB DB complete with connections, testing and commissioning etc., as required				
4.51	40A FP RCCB, 300mA	Each	10	1699.00	16990.00
4.52	63A FP RCCB, 300 mA	Each	10	1749.00	17490.00
4.53	40A FP RCCB, 100mA	Each	10	1749.00	17490.00
4.54	63A FP RCCB, 100 mA	Each	10	1799.00	17990.00
4.55	Supplying and fixing of 5 amps to 32 amps rating, 240/415 volts, "C" curve, miniature circuit breaker suitable for inductive load of following poles in the existing MCB DB complete with connections, testing and commissioning etc. as required. Single pole	Each	50	149.00	7450.00

SL. NO.	DESCRIPTION	UNIT	QTY	RATE	TOTAL AMOUNT
4.56	Supplying and fixing of 5 amps to 32 amps rating, 240/415 volts, "C" curve, miniature circuit breaker suitable for inductive load of following poles in the existing MCB DB complete with connections, testing and commissioning etc. as required. Double pole	Each	20	399.00	7980.00
4.57	Supplying and fixing of 5 amps to 32 amps rating, 240/415 volts, "C" curve, miniature circuit breaker suitable for inductive load of following poles in the existing MCB DB complete with connections, testing and commissioning etc. as required. Triple pole	Each	20	649.00	12980.00
4.58	Supplying and fixing 20 A, 240 V, SPN Industrial type socket outlet, with 2 pole and earth, metal enclosed plug top alongwith 20 A "C" curve, SP, MCB, in sheet steel enclosure, on surface or in recess, with chained metal cover for the socket outlet and complete with connections, testing and commissioning etc. as required.	Each	20	899.00	17980.00
4.59	Supplying and fixing 20 A, 415 V, TPN Industrial type socket outlet, with 4 pole and earth, metal enclosed plug top alongwith 20 A "C" curve, TPMCB, in sheet steel enclosure, on surface or in recess, with chained metal cover for the socket outlet and complete with connections, testing and commissioning etc. as required.	Each	20	1749.00	34980.00
4.6	Providing illumination with standard coloured serial lamps sets for one day on different occassions (Containing minimum 20 Nos of lamps per set) on the ADMN building, ATS and other ancillary building and trees as directed by the Engineer-In - Charge.	set	20000	19.00	380000.00
4.61	Providing illumination with multicolour LED colour wash flood light for one day on different occassions with required cables and all accessories to illuminate the fasia of the buildings as directed by the Engineer -In- Charge.	Each	1000	179.00	179000.00
5	SH-V: Annual Rate Contract for External Electrical Works				
5.01	SH-V-A : Cabling Works				
5.02	Laying of one number PVC insulated and PVC sheathed/ XLPE power cable of 1.1 KV grade of following size direct in ground including excavation, sand cushioning, protective covering and refilling the trench etc as required.				
5.03	Upto 35 sq. mm	Mtr	50	299.00	14950.00
5.04	Above 35 sq. mm and upto 95 sq. mm	Mtr	50	399.00	19950.00
5.05	Above 95 sq. mm and upto 185 sq. mm	Mtr	50	449.00	22450.00
5.06	Above 185 sq. mm and upto 400 sq. mm	Mtr	100	499.00	49900.00
5.07	Laying of one number PVC insulated and PVC sheathed/ XLPE power cable of 1.1 KV grade of following size in the existing RCC/ HUME/ METAL pipe as required.				
5.08	Upto 35 sq. mm	Mtr	50	19.00	950.00
5.09	Above 35 sq. mm and upto 95 sq. mm	Mtr	50	29.00	1450.00

SL. NO.	DESCRIPTION	UNIT	QTY	RATE	TOTAL AMOUNT
5.1	Above 95 sq. mm and upto 185 sq. mm	Mtr	50	49.00	2450.00
5.11	Above 185 sq. mm and upto 400 sq. mm	Mtr	100	69.00	6900.00
5.12	Laying of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 KV grade of following size in the existing masonry open duct as required.				
5.13	Upto 35 sq. mm	Mtr	50	19.00	950.00
5.14	Above 35 sq. mm and upto 95 sq. mm	Mtr	50	29.00	1450.00
5.15	Above 95 sq. mm and upto 185 sq. mm	Mtr	100	39.00	3900.00
5.16	Above 185 sq. mm and upto 400 sq. mm	Mtr	200	49.00	9800.00
5.17	Laying and fixing of one number PVC insulated and PVC sheathed/ XLPE power cable of 1.1 KV grade of following size on wall surface as required.				
5.18	Upto 35 sq. mm (clamped with 1mm thick saddle)	Mtr	50	29.00	1450.00
5.19	Above 35 sq. mm and upto 95 sq. mm (clamped with 25x3mm MS flat clamp)	Mtr	50	59.00	2950.00
5.2	Above 95 sq. mm and upto 185 sq. mm (clamped with 25x3mm MS flat clamp)	Mtr	50	69.00	3450.00
5.21	Above 185 sq. mm and upto 400 sq. mm (clamped with 40x3mm MS flat clamp)	Mtr	50	89.00	4450.00
5.22	Laying and fixing of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 KV grade of following size on cable tray as required.				
5.23	Upto 35 sq. mm (clamped with 1mm thick saddle)	Mtr	50	29.00	1450.00
5.24	Above 35 sq. mm and upto 95 sq. mm (clamped with 25x3mm MS flat clamp)	Mtr	50	39.00	1950.00
5.25	Above 95 sq. mm and upto 185 sq. mm (clamped with 25x3mm MS flat clamp)	Mtr	50	49.00	2450.00
5.26	Above 185 sq. mm and upto 400 sq. mm (clamped with 40x3mm MS flat clamp)	Mtr	50	69.00	3450.00
5.27	Supplying and making cable route marker with cement concrete 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size) of size 60 cm X 60 cm at the bottom and 50 cm X 50 cm at the top with a thickness of 10cm including inscription duly engraved as required.	Each	5	499.00	2495.00
5.28	Supplying and fixing cable route marker with 10 cm X 10 cm X 5 mm thick G.I. plate with inscription there on, bolted /welded to 35 mm X 35 mm X 6 mm angle iron, 60 cm long and fixing the same in ground as required.	Each	10	399.00	3990.00

SL. NO.	DESCRIPTION	UNIT	QTY	RATE	TOTAL AMOUNT
5.29	Laying of one number PVC insulated and PVC sheathed / XLPE power cable of 11 KV grade of following size direct in ground including excavation, sand cushioning, protective covering and refilling the trench etc as required. Above 120 sq. mm and upto 400 sq. mm	Mtr	100	499.00	49900.00
5.3	Laying of one number PVC insulated and PVC sheathed / XLPE power cable of 11 KV grade of following size in the existing RCC/ HUME/ METAL pipe as required. Above 120 sq. mm and upto 400 sq. mm	Mtr	100	79.00	7900.00
5.31	Laying of one number PVC insulated and PVC sheathed / XLPE power cable of 11 KV grade of following size in the existing masonry open duct as required. Above 120 sq. mm and upto 400 sq. mm	Mtr	100	69.00	6900.00
5.32	Retrievel of one number PVC/XLPE insulated and PVC sheathed power cable of 1.1KV grade of size upto 400 Sqmm from ground including excavation and refilling the trench etc.. as required.	Mtr	50	149.00	7450.00
5.33	Retrievel of one number PVC/XLPE insulated and PVC sheathed power cable of 1.1KV grade of size upto 400 Sqmm from the existing RCC/ HUME/ STONEWARE/ METAL/ GI PIPES/ Duct/ TRAY/ TERRACE etc., as required.	Mtrs.	100	99.00	9900.00
5.34	Retrievel of one number PVC/XLPE insulated and PVC sheathed power cable of 11KV grade of size upto 300 Sqmm from ground including excavation and refilling the trench etc.. as required.	Mtr	50	199.00	9950.00
5.35	Retrievel of one number PVC/XLPE insulated and PVC sheathed power cable of 11KV grade of size upto 300 Sqmm from the existing RCC/ HUME/ STONEWARE/ METAL/ Duct/ GI Pipe etc., as required.	Mtrs.	100	139.00	13900.00
5.36	Retrievel of one number PVC/XLPE insulated and PVC sheathed power cable of 1.1KV grade of size exceeding 120 sqmm but not exceeding upto 400 Sqmm from ground including excavation and relaying after fault rectification using same brick, fresh sand cushioning protective covering and refilling the trench etc.. as required.	Mtr	50	399.00	19950.00
5.37	Retrievel of one number PVC/XLPE insulated and PVC sheathed power cable of 11KV grade of size exceeding 120 sqmm but not exceeding upto 300 Sqmm from ground including excavation and relaying after fault rectification using same brick, fresh sand cushioning protective covering and refilling the trench etc.. as required.	Mtr	50	499.00	24950.00
5.38	Laying of one number PVC/XLPE insulated and PVC sheathed power cable of 1.1KV grade of size exceeding 120 sqmm but not exceeding 400 sqmm direct in ground including excavation upto 0.75 Mtrs Depth, sand cushioning, protective covering refilling the trench etc. as required	Mtr	50	399.00	19950.00
5.39	Laying of one number PVC/XLPE insulated and PVC sheathed Power cable of 1.1KV grade of size exceeding 120 sqmm but not exceeding 400sqmm direct in ground including demolishing cement concrete/bituminous road, excavation of trench of upto 0.75 Mtr Depth refilling the trench making the surface to original finish with CC of 1:3:6 ratio on top (150 mm) etc. as required	Mtr	50	599.00	29950.00

SL. NO.	DESCRIPTION	UNIT	QTY	RATE	TOTAL AMOUNT
5.4	Supplying and making indoor 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.				
5.41	4 X 16 sq. mm (28mm)	Each	4	299.00	1196.00
5.42	4 X 25 sq. mm (28mm)	Each	4	299.00	1196.00
5.43	3½ X 35 sq. mm (32mm)	Each	4	349.00	1396.00
5.44	3½ X 50 sq. mm (35mm)	Each	4	369.00	1476.00
5.45	3½ X 70 sq. mm (38mm)	Each	4	399.00	1596.00
5.46	3½ X 95 sq. mm (45mm)	Each	4	449.00	1796.00
5.47	3½ X 120 sq. mm (45mm)	Each	4	549.00	2196.00
5.48	3½ X 150 sq. mm (50mm)	Each	4	549.00	2196.00
5.49	3½ X 185 sq. mm (57mm)	Each	4	599.00	2396.00
5.5	3½ X 240 sq. mm (62mm)	Each	4	649.00	2596.00
5.51	3½ X 300 sq. mm (70mm)	Each	4	699.00	2796.00
5.52	3½ X 400 sq. mm (82mm)	Each	4	749.00	2996.00
5.53	Supplying and making straight through joint with heat shrinkable kit including ferrules and other insulated and PVC sheathed / XLPE aluminium conductor cable of 1.1 KV grade as required.				
5.54	4 X 16 sq. mm	Each	10	949.00	9490.00
5.55	4 X 25 sq. mm	Each	10	1199.00	11990.00
5.56	3½ X 35 sq. mm	Each	10	1199.00	11990.00
5.57	3½ X 50 sq. mm	Each	10	1199.00	11990.00
5.58	3½ X 70 sq. mm	Each	10	1499.00	14990.00
5.59	3½ X 95 sq. mm	Each	10	1499.00	14990.00
5.6	3½ X 120 sq. mm	Each	10	1599.00	15990.00
5.61	3½ X 150 sq. mm	Each	10	1999.00	19990.00
5.62	3½ X 185 sq. mm	Each	10	2499.00	24990.00
5.63	3½ X 240 sq. mm	Each	10	2499.00	24990.00

SL. NO.	DESCRIPTION	UNIT	QTY	RATE	TOTAL AMOUNT
5.64	3½ X 300 sq. mm	Each	10	2999.00	29990.00
5.65	3½ X 400 sq. mm	Each	10	2999.00	29990.00
5.66	Supplying and making indoor cable end termination with heat shrinkable jointing kit complete with all accessories including lugs suitable for following size of 3 Core, XLPE Aluminium Conductor cable of 11 KV grade as required				
5.67	150 Sq. mm	Each	2	3299.00	6598.00
5.68	185 Sq.mm	Each	2	3299.00	6598.00
5.69	Supplying and making indoor cable end termination with heat shrinkable jointing kit complete with all accessories including lugs suitable for following size of 3 Core, XLPE Aluminium Conductor cable of 33 KV grade as required 150 Sq. mm	Each	2	7499.00	14998.00
5.7	Supplying and making straight through cable jointing with heat shrinkable jointing kit complete with all accessories including ferrules suitable for following size of 3 Core, XLPE Aluminium Conductor cable of 11 KV grade as required				
5.71	150 Sq. mm	Each	2	7999.00	15998.00
5.72	185 Sq.mm	Each	2	7999.00	15998.00
5.73	Supplying and making straight through cable jointing with heat shrinkable jointing kit complete with all accessories including ferrules suitable for following size of 3 Core, XLPE Aluminium Conductor cable of 33 KV grade as required. 150 Sq. mm	Each	2	17999.00	35998.00
5.74	Supplying and installing following size of perforated pre-painted M.S. cable trays with perforation not more than 17.5%, in convenient sections, joined with connectors, suspended from the ceiling with M.S. suspenders including bolts & nuts, painting suspenders etc as required. 300 mm (W) X 62.5 mm (D) X 2.0 mm Thickness	Mtrs.	20	349.00	6980.00
5.75	Supplying and making OF HEAT SHRINKABLE OUTER COVERING SLEEVE for following size of PVC/XLPE insulated and PVC sheathed Aluminium conductor cable of 1.1/11/33 KV grade as required.				
5.76	Upto 3 1/2 x 095-150 Sq.mm 1.1 KV	Mtrs.	1	699.00	699.00
5.77	Upto 3 1/2 x 185-400 Sq.mm 1.1 KV	Mtrs.	10	799.00	7990.00
5.78	Upto 3 x 120-185 Sq.mm 11/33 KV	Mtrs.	2	899.00	1798.00
5.79	Upto 3 x 240-300 Sq.mm 11/33 KV	Mtrs.	5	999.00	4995.00
5.8	Locating the Cable fault on LT/HT feeder cables laid directly in ground/ duct/ pipe including providing Cable Fault Tracer (Rental) etc., as required.				

SL. NO.	DESCRIPTION	UNIT	QTY	RATE	TOTAL AMOUNT
5.81	LT CABLES [ONLY IN CASE OF EMERGENCY]	Job	4	19999.00	79996.00
5.82	HT CABLES	Job	4	19999.00	79996.00
5.83	Supplying and laying of 75 mm OD HDPE Pipe of PE 80 PN 6 ISI Marked along with all accessories like socket, bend etc., confirming to IS 4984 complete with fitting and cutting, jointing etc., direct in ground (1.2 mtr below the ground level) including excavation and refilling the trench but excluding sand cushioning and protective covering etc., as required.	Mtrs.	50	399.00	19950.00
5.84	Supplying and laying of 125 mm OD HDPE Pipe of PE 80 PN 6 ISI Marked along with all accessories like socket, bend etc., confirming to IS 4984 complete with fitting and cutting, jointing etc., direct in ground (1.2 mtr below the ground level) including excavation and refilling the trench but excluding sand cushioning and protective covering etc., as required.	Mtrs.	50	799.00	39950.00
5.85	SH-V-B : EARTHING				
5.86	Earthing with G.I. earth plate 600 mm X 600 mm X 6 mm thick including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe of 2.7 metre long etc. with charcoal/ coke and salt as required	Each	4	4999.00	19996.00
5.87	Earthing with copper earth plate 600 mm X 600 mm X 3 mm thick including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe of 2.7 metre long etc. with charcoal/ coke and salt as required	Each	2	8999.00	17998.00
5.88	Supplying and laying 25 mm X 5 mm copper strip at 0.50 metre below ground as strip earth electrode, including connection/ terminating with nut, bolt, spring, washer etc. as required. (Jointing shall be done by overlapping and with 2 Sets of brass nut bolt & spring washer spaced at 50mm)	Mtr	25	699.00	17475.00
5.89	Supplying and laying 25 mm X 5 mm G.I strip at 0.50 metre below ground as strip earth electrode, including connection/ terminating with G.I. nut, bolt, spring, washer etc. as required. (Jointing shall be done by overlapping and with 2 Sets of G.I. nut bolt & spring washer spaced at 50mm)	Mtr	25	99.00	2475.00
5.9	Providing and fixing 25 mm X 5 mm copper strip in 40 mm dia G.I. pipe from earth electrode including connection with brass nut, bolt, spring, washer excavation and re-filling etc. as required	Mtr	25	1049.00	26225.00
5.91	Providing and fixing 25 mm X 5 mm G.I. strip in 40 mm dia G.I. pipe from earth electrode including connection with G.I. nut, bolt, spring, washer excavation and re-filling etc. as required	Mtr	25	499.00	12475.00
5.92	Providing and fixing 25 mm X 5 mm copper strip on surface or in recess for connections etc. as required	Mtr	25	899.00	22475.00
5.93	Providing and fixing 25 mm X 5 mm G.I. strip on surface or in recess for connections etc. as required	Mtr	25	149.00	3725.00

SL. NO.	DESCRIPTION	UNIT	QTY	RATE	TOTAL AMOUNT
5.94	Earthing with G.I. earth pipe 4.5 metre long, 40 mm dia including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe etc. with charcoal/ coke and salt as required	Each	1	4999.00	4999.00
5.95	Providing and laying earth connection from earth electrode with 6 SWG dia G.I. Wire in 15 mm dia G.I. pipe from earth electrode including connection with G.I. thimble excavation and re-filling as required	Each	25	199.00	4975.00
5.96	Providing and fixing 6 SWG dia G.I. wire on surface or in recess for loop earthing as required	Mtr	25	39.00	975.00
5.97	Providing and fixing H.T. danger notice plate of 250 mm X 200 mm, made of mild steel, at least 2 mm thick, and vitreous enameled white on both sides, and with inscription in single red colour on front side as required.	Each	5	199.00	995.00
5.98	Providing and fixing MV danger notice plate of 200 mm X 150 mm, made of mild steel, at least 2 mm thick, and vitreous enameled white on both sides, and with inscription in single red colour on front side as required.	Each	5	199.00	995.00
5.99	SH-V-C : SITC of Switch Gear Works				
6	Supply, Replacement, Testing and Commissioning of 400 A, 4P, 50KA, MCCB with Micro Processor release protection, in the existing Panel with CT operated multifunction digital metering class 1.0 with RS485, ON/OFF/Trip Indication Lamps and Phase Indication Lamps i/c providing Handle, providing and fixing 600 A Busbar, with all accessories, interconnection, connection, earthing, painting of door, etc. as required.	Job	2	29999.00	59998.00
6.01	Supply, Replacement, Testing and Commissioning of 250 A , 4P, 50KA MCCB with Micro Processor release protection, in the existing Panel with CT operated multifunction digital metering class 1.0 with RS485, Equivalent), ON/OFF/Trip Indication Lamps and Phase Indication Lamps i/c providing Handle, providing and fixing 400 A Busbar, with all accessories, interconnection, connection, earthing, painting of door, etc. as required.	Job	1	27999.00	27999.00
6.02	Supply, Replacement, Testing and Commissioning of 400 A 4P MCCB with Micro Processor release in the existing Panel including providing Handle, with all accessories, interconnection, connection, earthing, painting of door, etc. as required.	Job	1	19999.00	19999.00
6.03	Supply, Replacement, Testing and Commissioning of 250 A 4P MCCB with thermal magnetic release in the existing Panel including providing Handle, with all accessories, with all accessories, interconnection, connection, earthing, painting of door, etc. as required.	Job	1	19549.00	19549.00
6.04	Supply, Replacement, Testing and Commissioning of multifunction digital metering class 1.0 with RS485 (having measuring parameters V, A, F, KW, KVA, KAVr, KWh, KVAh, KVArh, PF, THD)in the existing Panel including with all accessories, interconnection, connection, etc. as required.	Job	10	4499.00	44990.00

SL. NO.	DESCRIPTION	UNIT	QTY	RATE	TOTAL AMOUNT
6.05	Supply, Replacement, Testing and Commissioning of LED indication lamps (R/Y/G) in the existing Panel including with all accessories, interconnection, connection, etc. as required.	Each	300	169.00	50700.00
6.06	Supply, Replacement, Testing and Commissioning of Blue LED indication lamp in the existing Panel including with all accessories, interconnection, connection, etc. as required.	Each	100	199.00	19900.00
6.07	SH-V-D : Labour Works				
6.08	Cleaning of cable trenches by lifting the cables, supporting the cables, removing waste materials I/c malba, debris etc., and transporting and dumping the same to waste dumping yard etc. as required.	Mtr	100	199.00	19900.00
6.09	Cleaning of bus ducts I/c removing of covers, checking of bus bars, bus supports, tightening of busses and supports and re-fixing of covers, testing, commissioning etc., as required.	Mtr	50	149.00	7450.00
6.1	Providing one Skilled Wireman and two Unskilled Khalasi to attend any urgent Preventive Maintenance/ Breakdown Maintenance/ Emergency Work at Electrical Installations provided in Main Power House/ Substations with necessary T&P as and when required.	Days	6	179.00	1074.00
6.11	Providing Labour and Hire Charges for deploying Excavator (JCB) i/c Operator for tracing the cable faults, excavation and refilling of Cable trench after work etc., as required.	Hrs	10	899.00	8990.00
6.12	Providing one FITTER and ONE Unskilled Khalasi to attend any urgent Preventive Maintenance/ Breakdown Maintenance/ Emergency Work at Electrical Installations provided in Main Power House/Substations with necessary T&P as and when required.	Days	6	1499.00	8994.00
6.13	Providing Labour and Hire Charges for deploying WELDING MACHINE i/c WELDER, Welding Rods etc., for WELDING WORKS as required.	Hrs	8	199.00	1592.00
6.14	Providing Labour and Hire Charges for deploying Lorry/ Truck/ Tractor i/c Operator and loaders for shifting of debris/ wastes from Power Houses/ Substations etc., to waste dump yard as required.	Days	5	2999.00	14995.00
6.15	Hire Charges for deploying TEMPO/ SMALL Truck i/c Operator for shifting of Diesel from Diesel Distribution Station to Power Houses etc., as required.	Days	5	1999.00	9995.00
6.16	Providing labour and hire charges for deploying Crane (upto 10 Ton) i/c operator for lifting/ Shifting of Equipments/ Cable Drums, etc., as required.	Hrs	12	1499.00	17988.00
6.17	SH-V-E : Civil Works				
6.18	Providing, laying and fixing following dia G.I. pipe (medium class) in ground complete with G.I. fittings including trenching (75 cm deep) and re-filling etc as required				

SL. NO.	DESCRIPTION	UNIT	QTY	RATE	TOTAL AMOUNT
6.19	100 mm dia	Mtrs.	6	999.00	5994.00
6.2	150 mm dia	Mtrs.	12	1499.00	17988.00
6.21	Providing, laying and fixing following dia RCC pipe NP2 class (light duty) in ground complete with RCC collars, jointing with cement mortar 1:2 (1 cement : 2 fine sand) including trenching (75 cm deep) and refilling etc as required. 300 mm dia	Mtrs.	12	699.00	8388.00
6.22	Supplying and laying of "B" Class G.I pipe of following dia, i/c excavation of bituminous/ concrete road/ pavement, excavation of Soil to maximum depth of 1.2 Mtrs from ground refilling the Soil and with CC of ratio 1:3:6 on top for 0.15 Mtrs after laying Pipe and plastering, making good the same etc., as required.				
6.23	100 mm Dia	Mtrs.	6	1399.00	8394.00
6.24	150 mm Dia	Mtrs.	6	1799.00	10794.00
6.25	Construction and Supply of Pre-Cast RCC Manhole Chamber of Internal Dimension 1MX1MX1M (External 1.2MX1.2MX1.2M) with CC of 1:2:4 of thickness 100mm with Square Top Cover of 600X600mm size with L angle reinforced at all side of top and bottom of cover, lifting hook including finishing with Cement Coat as required.	Jobs	2	14999.00	29998.00
6.26	Making of cable trenches of sizes 1 Mtr. (L) X 0.6 Mtr. (W) X 0.6 Mtr. (D) including demolishing of cement concrete/ flooring on existing floor, excavation of trenches of required width upto a depth of 0.8 Mtr. below the concrete area and getting out the excavated soil/sand within a lead of 50 M providing and laying in position 1:4:8 (1 cement : 4 sand : 8 graded stone graded stone 40 mm nominal size.) cement concrete at bottom [20 cm] excluding the cost of centring and shuttering, making of brick wall of thickness 9 inch as required with good quality bricks and cement mortar 1:6 (1 cement :6 coarse sand) and plastering the surface of walls of cable trenches with cement plaster 1:6 (1 cement : 6 fine sand) matching with existing trench etc., as required.	Mtr	10	2999.00	29990.00
6.27	Fabrication, Supply and Fixing of 6mm thick chequered plates including providing and fixing 40mmx40mmx6mm angle iron supports on cable trenches, 25mmx6mm MS flat around the chequered plate by welding, providing lifting hook etc., as required.	Kg	100	99.00	9900.00
6.28	Supply, fabrication and installation of the MS channel/ angle/ flat for cable tray/ support including cutting, welding, drilling, fixing, grinding, painting etc., as required for composite M.S. works as & when required basis.	Kgs	300	89.00	26700.00
6.29	Painting of Power Supply Installations with two coats of synthetic enamel paint of approved shade, quality and brand i/c scrapping and cleaning, providing putty wherever required, inscription etc., as required.				
6.3	Spraying	Sq Mtr	300	99.00	29700.00
6.31	Brushing	Sq Mtr	300	89.00	26700.00
6.32	Providing Civil Works as required as detailed below:				

SL. NO.	DESCRIPTION	UNIT	QTY	RATE	TOTAL AMOUNT
6.33	Cement concrete in 1:3:6 (1 cement: 3 coarse sand: 6 graded stone aggregate 20mm nominal size)	Cum	2	4999.00	9998.00
6.34	Cement mortar in 1:6 (1 cement: 6 coarse sand)	Cum	2	3999.00	7998.00
6.35	Brick work with bricks of class designation 60 in foundation and plinth in 1:6 (1 cement: 6 coarse sand)	Cum	2	5999.00	11998.00
6.36	Cement plaster 12mm thick of mixture 1:6	Sq Mtr	10	209.00	2090.00
6.37	Steel rod for RCC Slabs	Kgs	100	69.00	6900.00
6.38	SH-V-F : Supply of Cables				
6.39	Supply of Aluminium Conductor, XLPE insulated, PVC sheathed, armoured power cable of 1.1 KV grade of following Sizes conforming to IS 7098 (Part-1) as amended upto date as required. [AS AND WHEN REQUIRED BASIS ONLY]				
6.4	4 X 16 sq. mm	Mtrs.	100	119.00	11900.00
6.41	4 X 25 sq. mm	Mtrs.	100	149.00	14900.00
6.42	3½ X 35 sq. mm	Mtrs.	100	189.00	18900.00
6.43	3½ X 50 sq. mm	Mtrs.	100	209.00	20900.00
6.44	3½ X 70 sq. mm	Mtrs.	100	299.00	29900.00
6.45	3½ X 95 sq. mm	Mtrs.	100	399.00	39900.00
6.46	3½ X 120 sq. mm	Mtrs.	100	509.00	50900.00
6.47	3½ X 150 sq. mm	Mtrs.	100	589.00	58900.00



SL. NO.	DESCRIPTION	UNIT	QTY	RATE	TOTAL AMOUNT
6.48	Supply of compact circular stranded Al conductor provided with conductor screening of semi-conducting compound XLPE insulated provided with insulation screening over individual cores, consisting of extruded semi-conducting compound followed by lapped semi-conducting copper tapes, cores laid together with suitable filters, in the interscribes covered with inner sheath by extrusion, galvanized flat steel strip armoured and overall PVC sheathed cable, suitable for 11 KV (E) System conforming to IS 7098 (Part-II) 1985 as amended upto date and of following Size as required. [AS AND WHEN REQUIRED BASIS ONLY]				
6.49	3 X 240 Sq.mm	Mtrs.	50	1099.00	54950.00
Total Amount in Rs.					49,725,987.00
Add: GST @ 18%					8,950,678.00
Total Amount i/c GST in Rs.					58,676,665.00

(Rupees Five Crores Eighty Six Lakhs Seventy Six Thousand Six Hundred and Sixty Five Only)


 12/01/2021
 JT. GENERAL MANAGER (ENGG-E)
 AAI/RHQ-SR/CHENNAI AIRPORT

Annexure-A

Declaration

(To be submitted on contractor's letter head)

Whereas, I/We, (Name of Agency) _____, have awarded the work of Facility Management Contract of E & M Installations at RHQ- SR, (2021-23) Chennai Airport, Chennai vide letter no. No. AAI/RHQ-SR/ENGG/AGM(E)-II/WO-06/2020-21 Dated:12.01.2021.

I/We, hereby submit following declaration for return of EMD BG by AAI, submitted by us along with tender.

If, I/We fail to sign the contract, or to submit performance guarantee before defined in the tender documents.

I/We shall be suspended for one year and shall not be eligible to bid for AAI tenders from date of issue of suspension order.

Signature of the contractors(S)