

भारतीय विमानपत्तन प्राधिकरण
AIRPORTS AUTHORITY OF INDIA

स0न0: भाविप्रा/एसएपी/इंजी(वि)/हेंगर-ओए/डब्ल्यू ओ-159/2022-23/3565-71

दिनांक: 05.04.2023

Ref. No. AAI/SAP/Engg(E)/Hanger-OA /W.O-159/2022-23/

Dt. 05.04.2023

सेवा में,

मै. मास्टर इलेक्ट्रिक स्टोर,
एफ-2/87-88, सेक्टर- 11,
रोहिणी, दिल्ली - 110085

M/s Master Electric store,
F-2/87-88, Sector-11,
Rohini, Delhi-110085

विषय: ओल्ड एरिया, सफदरजंग हवाई अड्डा, नई दिल्ली में विविध विद्युत कार्य। उपशीर्ष: एफआईयू हेंगर एवं अन्य विद्युत कार्यों का नवीनीकरण।

Subject:- Misc. electrical works at Old area, Safdarjung Airport, New Delhi. SH:- Renovation of FIU Hanger and other Electrical works.

संदर्भ i) आपकी खोली गई ई-निविदा दिनांक 21.03.2023. (Bid Invitation No: 2023_AAI_146415 _1).

Ref: Your e-bid opened on 21.03.2023.

महोदय,

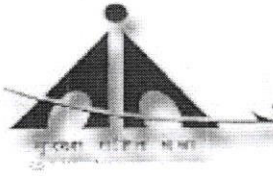
1. उपरोक्त कार्य हेतु आपका टेंडर अध्यक्ष, भारतीय विमानपत्तन प्राधिकरण की ओर से स्वीकृत किया जाता है, आपके द्वारा बताए आइटम मूल्यों पर आपका टेंडर कुल **₹ 75,38,645/-** (मात्र पचहत्तर लाख अड़तीस हजार छह सौ पैंतालीस रुपये) है जो कि अनुमानित/उचित लागत राशि **₹ 80,31,905/-** से **6.14%** कम है (जी.एस.टी. को छोड़कर)।

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. 75,38,645/-** (Rupees Seventy Five Lakhs Thirty Eight Thousand Six Hundred and Forty Five Only) which is **6.14%** below from the estimated/Justified cost of **Rs. 80,31,905/- (excluding GST)**.

2. सहायक महा प्रबंधक अभियांत्रिकी (विद्युत), भारतीय विमानपत्तन प्राधिकरण, सफदरजंग हवाई अड्डा, नई दिल्ली 110003, इस कार्य के इंजीनियरिंग प्रभारी होंगे। आपसे अनुरोध है कि आप संविदा करार पर हस्ताक्षर करने एवं उसे पूरा करने हेतु **19.04.2023** तक सहायक महा प्रबंधक (अभि.-वि.), भारतीय विमानपत्तन प्राधिकरण, सफदरजंग हवाई अड्डा, नई दिल्ली-110003 के कार्यालय में उपस्थित हों। संविदा करार **Rs. 100/-** (मात्र सौ रुपये) के गैर न्यायिक (नॉन-जुडिशियल) स्टाम्प पेपर पर बनाया जाएगा तथा स्टाम्प पेपर की लागत आपके द्वारा वहन की जाएगी।

Asstt. Gen. Manager Engg (Electrical), Safdarjung Airport, New Delhi, shall be the Engineer-in-charge of the work. You are requested to attend the office of the Asstt. Gen. Manager Engg (Elect), AAI, Safdarjung Airport, New Delhi by **19.04.2023** to sign and complete the contract agreement. The contract agreement shall be executed on a non-judicial stamp paper of value of **Rs.100/-** (Rupees one hundred only) and the cost of the stamp paper shall be borne by you.

[Handwritten Signature]
05/4/23



भारतीय विमानपत्तन प्राधिकरण AIRPORTS AUTHORITY OF INDIA

3. आपकी निविदा के साथ प्राप्त Rs. 1,60,638/- (मात्र एक लाख साठ हजार छह सौ अड़तीस रुपये) की अग्रिम धन राशि को संविदा दस्तावेज के पृष्ठ ई एन आई टी निविदा -3 पर एन.आई.टी. के खण्ड-16 के अनुसार प्रतिभूति जमा के रूप में प्रयुक्त तथा संपरिवर्तित किया जाएगा। कृपया इस पत्र के जारी होने की तिथि से 30 दिनों के भीतर शेष प्रतिभूति जमा के रूप में Rs. 5,93,227/- (मात्र पांच लाख तिरानवे हजार दो सौ सत्ताईस रुपये) जमा करें अन्यथा इस राशि की कटौती संविदा कागजात के पृष्ठ जी सी सी- 16 पर जी सी सी के खण्ड-1A के अनुसार आपके चालू बिलों से कर ली जाएगी।

The earnest money amount Rs. 1,60,638/- (Rupees One Lakhs Sixty Thousand Six Hundred and Thirty Eight Only) received along with your tender will be treated and converted as part of security deposit as per conditions at clause no. 16 on page no. E-NIT Tender - 3 of contract document. Please deposit Rs. 5,93,227/- (Rupees Five Lakhs Ninety Three Thousand Two Hundred and Twenty Seven Only) towards security deposit within 30 days from the date of issue of this letter failing which, the same will be deducted as per condition of clause no.- 1A at page no. GCC- 16 of the contract document.

4. आप से अनुरोध है कि आप संविदा श्रम (विनियम एवं उन्मूलन) अधिनियम 1970 तथा संविदा श्रम (विनियम एवं उन्मूलन) केन्द्रीय नियम 1971 एवं न्यूनतम मजदूरी अधिनियम के प्रावधानों और केन्द्रीय व राज्य सरकारों के तदसंबंधी नियमों का अनुपालन करें।

You are requested to comply with the provision of contract labour (Regulation & abolition) Act of 1970 and contract labour (Regulation & Abolition) Central Rules 1971 and minimum wages Act and Rules there of Central and state Govt.

5. आपको प्रबंधक (विद्युत) भारतीय विमानपत्तन प्राधिकरण, सफदरजंग हवाई अड्डा, नई दिल्ली से तत्काल संपर्क करने का भी निर्देश दिया जाता है। आपको कार्यस्थल (साइट) सौंपने का कार्य उनके द्वारा ही किया जाएगा।

You are also directed to contact Manager (Engg.-E), Airports Authority of India, Safdarjung Airport, New Delhi, immediately who will arrange to hand over the site to you.

6. कृपया नोट करें कि कार्य पूरा करने के लिए आपको 04(चार) महीने, का समय प्रदान किया जाता है। जोकि दिनांक 13-04-2023 से प्रारम्भ माना जाएगा।

Please note that the time allowed for carrying out the work shall be 04 (Four) months and same shall be reckoned from 13.04.2023.

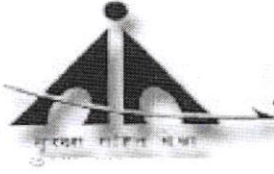
7. ई-निविदा में उठाए गए सभी प्रश्न, स्पष्टीकरण इत्यादि तथा उनका भा.वि.प्रा द्वारा दिया गया उत्तर भी अनुबंध का भाग होगा।

All queries, clarifications etc. raised during e-tendering process and replies there of shall also form part of the agreement.

8. संविदा के सम्बन्ध में भविष्य में किसी भी प्रकार का पत्र व्यवहार इंजीनियर-प्रभारी के नाम से किया जाएगा।

Any further correspondence in connection with the contract should be addressed to the Engineer In-Charge.


25/4/23



भारतीय विमानपत्तन प्राधिकरण
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9. कृपया पत्र की पावती भेजें तथा साथ में संलग्न इस पत्र की दूसरी प्रति पर स्वीकारोक्ति के रूप विधिवत हस्ताक्षर करके हमें वापस भेजें।
Please acknowledge the receipt and return the duplicate copy of this letter enclosed herewith after duly signing it to the undersigned as a token of acceptance.
10. ठेके की त्रुटि दायित्व अवधि बारह महीने है जोकि कार्य समाप्ति की तिथि से गिना जाएगा।
The defect liability period is 12(Twelve) Months after actual date of completion.
11. जीएसटी प्रावधानों का अनुपालन न करने और किसी इनपुट क्रेडिट के अवरुद्ध होने की स्थिति में एएआई की क्षतिपूर्ति करना आपकी जिम्मेदारी होगी।
In case of non- compliance of GST provisions and blockage of any input credit, it shall be your responsibility to indemnify AAI.
12. जीएसटी को छोड़कर दरों में सभी कर शामिल हैं। हालांकि, जीएसटी, जैसा लागू हो, अनुबंध के नियमों और शर्तों के अनुसार वैध जीएसटी चालान के खिलाफ एजेंसी द्वारा एएआई को प्रदान की गई किसी भी कर योग्य आपूर्ति/सेवाओं/निर्माण के लिए ठेकेदार को भुगतान किया जाएगा।
The rates are inclusive of all taxes but excluding of GST. However, GST, as applicable, shall be paid to the contractor for any taxable supply/ services/ construction rendered by the agency to AAI against a valid GST invoices as per terms and conditions of the contract.
13. सभी इनपुट क्रेडिट आपके द्वारा एएआई को दिए जाएंगे।
All input credits will be passed on to AAI by you.
14. यदि कोई विसंगति पाई जाती है तो अंग्रेजी भाषा ही मान्य होगी।
In case of any discrepancy, English version will be taken as correct.

भवदीय

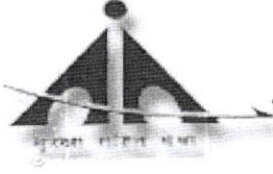
Yours faithfully

(एल.पी.एस. सोलंकी) / (L.P.S. Solanki)

सहायक महाप्रबन्धक अभि.(वि.) Asstt. G.M. Engg (E)
अध्यक्ष, भारतीय विमानपत्तन प्राधिकरण की ओर एवं तरफ से
For & on behalf of Chairman, Airports Authority of India

संलग्न: शडयूल ऑफ कुएंन्टिटीज

Encl: Schedule of Quantities



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N.O.O/

Copy to

1. ईडी, एफआईयू, ओल्ड एरिया, सफदरजंग हवाई अड्डा, नई दिल्ली।
2. संयुक्त महाप्रबंधक (इंजी. -ई), आईएमयू, सीएचक्यू, नई दिल्ली।
3. उप महाप्रबंधक (वित्त), आरएयू, ओल्ड एरिया, सफदरजंग हवाई अड्डा, नई दिल्ली।
4. संबंधित फाइल।
5. कार्य आदेश।
6. एग्रीमेंट फाइल।

(एल.पी.एस. सोलंकी) / (L.P.S. Solanki)

सहायक महाप्रबंधक अभि.(वि.) Asstt. G.M. Engg (E)
अध्यक्ष, भारतीय विमानपत्तन प्राधिकरण की ओर एवं तरफ से
For & on behalf of Chairman, Airports Authority of India

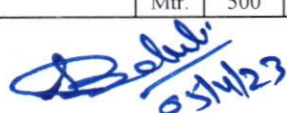
Schedule of Work

Name of Work:- Misc. electrical works at Old area, Safdarjung Airport, New Delhi. **SH:-** Renovation of FIU Hanger and other Electrical works.

S. No.	Description of Item	Unit	Qty.	Rate	Amount
SH-I: Fitting, Fixtures and Misc items					
1	Supply of recess mounted LED of size 600mm x 600mm made of CRCA sheet housing, fixture should have rated system lumen output of minimum 3600 lumen with rated efficacy at system level (not chip level) ≥ 100 lumens/watt, life of fixture is not less than 50000 hrs @ L-70 lumen maintenance, CCT upto 5700K - 6500K, CRI minimum 80, PF ≥ 0.95 , THD $< 10\%$ and an operating voltage range of 140 to 270V, internal surge protection $> 2KV$, with unified glare rating (UGR) ≤ 19 . The fixture should comply with the other parameters as per IS10322.	Each	80	1860	148800.00
2	Supply of recess mounted Inverter LED Panel with Battery backup of 2 Hrs of size 600mm x 600mm made of CRCA sheet housing, fixture should have rated system lumen output of minimum 3600 lumen with rated efficacy at system level (not chip level) ≥ 100 lumens/watt, life of fixture is not less than 50000 hrs @ L-70 lumen maintenance, CCT upto 5700K - 6500K, CRI minimum 80, PF ≥ 0.95 , THD $< 10\%$ and an operating voltage range of 140 to 270V, internal surge protection $> 2KV$, with unified glare rating (UGR) ≤ 19 . The fixture should comply with the other parameters as per IS10322.	Each	20	5030	100600.00
3	Supply of surface mounted Inverter LED Panel with Battery backup of 2 Hrs of size 600mm x 600mm made of CRCA sheet housing, fixture should have rated system lumen output of minimum 3600 lumen with rated efficacy at system level (not chip level) ≥ 100 lumens/watt, life of fixture is not less than 50000 hrs @ L-70 lumen maintenance, CCT upto 5700K - 6500K, CRI minimum 80, PF ≥ 0.95 , THD $< 10\%$ and an operating voltage range of 140 to 270V, internal surge protection $> 2KV$, with unified glare rating (UGR) ≤ 19 . The fixture should comply with the other parameters as per IS10322.	Each	10	5120	51200.00
4	Supply of 20W ($\pm 10\%$) 4 feet Inverter Batten having 4 Hrs battery backup high efficacy low power consumption LED Batten light fittings made of Extruded Aluminum having IP20 rating have rated system lumens output of minimum 2000 lumens with rated efficacy at system level (not chip level) ≥ 100 lumens/Watt, life of fixture is not less than 50000 hrs @ L-70 lumen maintenance, CCT upto 5700K - 6500K, CRI minimum 80, PF ≥ 0.95 , THD $< 10\%$ and an operating voltage range of 140 to 270V, internal surge protection $> 2KV$. The fixture should comply with the other parameters as per IS10322.	Each	50	1232	61600.00
5	Supply of 90W ($\pm 10\%$) LED Street Lightfully made of pressure die cast aluminum having rated minimum lumen output of 9900 Lumens with rated efficacy at system level (not chip level) > 110 lumens/Watt, life of fixture is not less than 50000 hrs @ L-70 lumen maintenance, CCT upto 5700K - 6500K, CRI minimum 70, PF ≥ 0.95 , THD $< 10\%$ and an operating voltage range of 140 to 270V, internal surge protection $> 4KV$. The fixture should comply with the other parameters as per IS10322. The Street light should be of Al pressure die cast construction & with toughened glass. The driver should also be fully enclosed IP65 PDC construction. The connection from driver to led engine should be through waterproof glands and not any open connectors to maintain the product IP rating. All cables used in the product should be IS compliant. The eye bolt used should be M16 and Zinc Plated. Safety chain provision should be available for second level protection. IK Rating of IK07 or above with an integrated secondary PC lens cover. The fixture should comply with the other parameters as per IS10322.	Each	30	4090	122700.00
6	Supply of 15W ($\pm 10\%$) recessed type round downlighter with high efficacy low power consumption, having IP20 rating compatible have rated system lumens output of minimum 1500 lumens with rated efficacy at system level (not chip level) ≥ 100 lumens/Watt, life of fixture is not less than 50000 hrs @ L-70 lumen maintenance, CCT upto 5700K - 6500K, CRI minimum 80, PF ≥ 0.95 , THD $< 10\%$ and an operating voltage range of 140 to 270V, internal surge protection $> 2KV$. The fixture should comply with the other parameters as per IS10322.	Each	35	850	29750.00

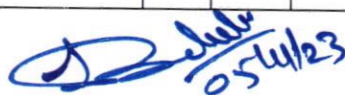
B. Singh
05/4/23

S. No.	Description of Item	Unit	Qty.	Rate	Amount
7	Supply of 10W (±10%) 2 feet high efficacy low power consumption LED mirror light fittings made of Extruded Aluminum having IP20 rating & have rated system lumens output of minimum 1000 lumens with rated efficacy at system level (not chip level) ≥ 100 lumens/Watt, life of fixture is not less than 50000 hrs @ L-70 lumen maintenance, CCT upto 5700K - 6500K, CRI minimum 80, PF ≥ 0.95 , THD $< 10\%$ and an operating voltage range of 140 to 270V, internal surge protection $> 2KV$. The fixture should comply with the other parameters as per IS10322.	Each	10	310	3100.00
8	Supply of 150W (±10%) fully integral highbay fixture having rated minimum lumen output of 20000 Lumens with rated efficacy at system level (not chip level) > 100 lumens/Watt, life of fixture is not less than 50000 hrs @ L-70 lumen maintenance, CCT upto 5700K - 6500K, CRI minimum 80, PF ≥ 0.95 , THD $< 10\%$ and an operating voltage range of 140 to 270V, internal surge protection $> 2KV$. The fixture should comply with the other parameters as per IS10322. The highbay should be of Al pressure die cast construction & with toughened glass. The driver should also be fully enclosed IP65 PDC construction. The connection from driver to led engine should be through waterproof glands and not any open connectors to maintain the product IP rating. All cables used in the product should be IS compliant. The eye bolt used should be M16 and Zinc Plated. Safety chain provision should be available for second level protection. IK Rating of IK04 or above with an integrated secondary PC lens cover. The fixture should comply with the other parameters as per IS10322.	Each	50	8970	448500.00
9	Installation, Testing, Commissioning of recess type/ wall bracket /ceiling/ highbay fittings/ fixtures of all sizes and shapes, complete with all accessories including connections etc. as required.	Each	305	200	61000.00
10	Ceiling Fan of size 1200mm sweep including all accessories, suitable to operate at 220-240V, 50Hz. (Make: Havells, Model: ES Plus or equivalent as per AAI Approved make list)	Each	20	1598	31960.00
11	Wall Fan having 400mm sweep, suitable to operate at 220-240V, 50Hz. (Make: Halonix, Model: Krypton Wall fan or equivalent as per AAI Approved make list)	Each	10	3657	36570.00
12	Pedestal Fan 450mm sweep, suitable to operate at 220-240V, 50Hz. (Make: Havells, Model: Sprint Hi-Speed or equivalent as per AAI Approved make list)	Each	10	4120	41200.00
13	Exhaust Fan, 300 mm sweep, 1300-1400 rpm, heavy duty type, metal body, suitable to operate at 220-240V, 50Hz. (Make: Halonix, Model: Krypton HS or equivalent as per AAI Approved make list)	Each	10	1768	17680.00
14	Exhaust Fan, 250 mm sweep, 1200-1400 rpm, plastic body, suitable to operate at 220-240V, 50Hz. (Make: Halonix, Model: Helion DX or equivalent as per AAI Approved make list)	Each	10	1879	18790.00
15	Exhaust Fan, 450 mm sweep, 1300-1400 rpm, heavy duty type, metal body, suitable to operate at 220-240V, 50Hz. (Make: Halonix, Model: Krypton HDEF or equivalent as per AAI Approved make list)	Each	10	5610	56100.00
16	Heat Convector 2000W, 220-240V, 50Hz, single phase AC (Model: Havells cista; Bajaj RX-8 or equivalent as per AAI Approved make list)	Each	20	2500	50000.00
17	Oil filled room heater 2500-2900W, 220-240V, 50Hz, single phase, 11 wave fins, 400W PTC fan heater with adjustable thermostat, caster wheels, over heat protection & Tilt over protection (Make: Havells 11 WAVE FIN OFR; Crompton ACGRH-INSTAFERVE11; Bajaj or equivalent as per AAI Approved make list)	Each	20	13454	269080.00
18	Room Heater Double Rod (Model Bajaj Model No. Bajaj Deluxe 2000W or equivalent as per AAI Approved make list)	Each	20	1870	37400.00
19	Installation of exhaust fan in the existing opening, including making good the damage, connection, testing, commissioning etc. as required.				
19.01	Upto 450 mm sweep	Each	20	200	4000.00
20	Installation, testing and commissioning of ceiling fan, including wiring the down rods of standard length (upto 30 cm) with 1.5 sq. mm FRLS PVC insulated, copper conductor, single core cable etc. as required.	Each	20	200	4000.00
Total of SH - I				Rs.	1594030.00
SH-II: Cable Laying					
21	Supply of following sizes of 1.1kv grade multicore Aluminium conductor XLPE insulated PVC sheathed armoured cable (as per IS : 7098:1988 with upto date amendments) complete as required as per specifications.				
(a)	4 core, 25 Sqmm, Aluminium cable	Mtr.	500	233	116500.00



S. No.	Description of Item	Unit	Qty.	Rate	Amount
(b)	3.5 core, 35 Sqmm, Aluminium cable	Mtr.	500	265	132500.00
(c)	3.5 core, 185 Sqmm, Aluminium cable	Mtr.	750	1050	787500.00
22	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.				
(a)	Upto 35 sq. mm	Mtr.	500	260	130000.00
(b)	Above 95 sq. mm and upto 185 sq. mm	Mtr.	80	260	20800.00
23	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.				
(a)	Upto 35 sq. mm	Mtr.	200	25	5000.00
(b)	Above 95 sq. mm and upto 185 sq. mm	Mtr.	550	25	13750.00
24	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.				
(a)	Upto 35 sq. mm (clamped with 1mm thick saddle)	Mtr.	200	37	7400.00
(b)	Above 95 sq. mm and upto 185 sq. mm (clamped with 25/40x3mm MS flat clamp)	Mtr.	50	45	2250.00
25	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.				
a	3½ X 35 sq. mm (32mm)	Each	10	250	2500.00
b	3½ X 185 sq. mm (57mm)	Each	8	500	4000.00
c	4 X 25 sq. mm (28mm)	Each	20	230	4600.00
26	Supply & Laying of 160 mm dia (PE-80 & PN-10) HDPE pipe as per IS 4984 through trenchless technology by drilling the bore of suitable dia directly in ground upto the depth of 3 meters from the ground level including necessary joining, coupling, splicing etc complete as required.	Mtr.	550	970	533500.00
Total of SH:II				Rs.	1760300.00
SH-III EXTERNAL LIGHTNING PROTECTION SYSTEM AND SURGE PROTECTION DEVICES					
27	SITC of Parallel Connectors for (700mm air terminal) connecting two conductors in parallel manner. Material- StSt, with clamping range- Rd / Rd 7-10 mm & Complied as per Standard EN 62561-1.	Each	22	980	21560.00
28	SITC of Expansion Pieces at every 20 meter on horizontal connected by MV clamp. Material of the clamp- Al, Dimension Ø8 mm having Length approx. 395 mm & Complied as per Standard EN 62561-2.	Each	14	460	6440.00
29	SITC of MV Clamps (Multipurpose connecting clamp) of Material- StSt, With clamping range Rd 8-10 mm & Standard EN 62561-1	Each	28	375	10500.00
30	SITC of Conductor Holders for Downpipes, having clamping range Ø pipe- 50-120 mm, Conductor holder support- Rd 6-8 mm, of material- StSt to instal the down conductors on downpipes with fixed conductor leading.	Each	10	510	5100.00
31	SITC of Universal connector of Material- StSt, with clamping range- 8-10mm, with truss head screw M10x35 mm & Complied as per Standard EN 62561-1.	Each	100	350	35000.00
Roof Conductor					
32	SITC of Roof Conductor holder for metal sheet for standing seam - Material- StSt, Complied as per Standard EN 62561-1.	Each	450	350	157500.00
33	SITC of Roof Conductor holder for roof of Material- StSt for Rd 8-10 mm & Complied as per Standard EN 62561-4.	Each	450	620	279000.00
34	Glue for down holder (lord make) 490 ml	Each	5	11000	55000.00
Roof conductor for side offices - both side					
35	SITC of Roof Conductor of Diameter Ø- 8 mm, Cross-section- 50 mm ² , of Material- AlMgSi & Complied as per Standard EN 62561-2.	Mtr	700	350	245000.00
36	SITC of Roof Conductor holder for Parapet wall/Side wall of Material- StSt, for Rd 8-10 mm Fl 20 mm, Height- 20 mm & Complied as per Standard EN 62561-4. With accessories Screw and Gitty, Material SS (M5 x 50mm).	Each	250	400	100000.00

S. No.	Description of Item	Unit	Qty.	Rate	Amount
37	SITC Of Lightning strike counter for digitally recording impulse currents The counter is preferably installed on the down conductors of the lightning protection system or between the equipotential bonding bar and the earth termination system. Operating current (8/20 μ s): 1 kA Max. discharge current (10/350 μ s): 100 kA Clamping range Rd: 8-10 mm Clamping range FI: max. 30 mm Degree of protection: IP 65.	Each	2	30100	60200.00
38	SITC of UNI Disconnecting Clamps with intermediate plate for round and flat conductor of Material- StSt, Material thickness- 2.5 mm, with clamping range- Rd / FI 8-10 / 30 mm; & Complied as per Standard EN 62561-1.	Each	12	420	5040.00
39	SITC of High voltage special cable (3-3.5mtr length) - CUI having Surge withstand capability of 100 kV (1.2/50 μ s), complying to EN 62561-2 - for prevention against step & touch potential for living being.	Each	12	29100	349200.00
40	SITC of Universal connector for Connecting CUI Cable to Al Conductor (required 2 nos. for each).	Each	24	270	6480.00
41	SITC of GI strip holder of material- StSt, EN62561-1.	Each	24	600	14400.00
42	SITC of Copper bonded rod with Low carbon steel, high tensile strength copper bonded rod with min 254 microns of copper plating, UL listed with company name marked on rod. Diameter- 17.2 mm, Length- 3 meters, Material- Copper Bonded, Coating thickness- 250 microns, min, 20 kg backfilled compound, - Material Carbon based backfill/earthing compound, Fulgurite formation test at direct lightning (10/350 μ s) (test from Laboratory having accreditation from KEMA/VDE/Dakks/ILAC/NABL), lightning long duration test at- 100C No fulgurites/Pass, Environmentally Friendly ROHS certified, Resistivity- < 0.12 Ω M, Complying Standard- IEC 62561-7 , Testing Approvals Certified from- NABL accredited Laboratories. Poly plastic pit cover of material- Polymer Body & Cover, Product Code- HEP, Dimensions- 308 mm (L) x 308 mm (W) X 214 mm (H), Weight 2.5 kg (5.50 LBS)., Approvals- Tested acc. IEC / EN 62561-2, UL 467.	Each	12	23200	278400.00
43	StSt 316 grade clamp to terminate the load on earth electrode. Dimension- 160x35x3 mm.	Each	12	360	4320.00
44	SITC of Clamp to hold 30X3.5mtr Strip together as per IEC/EN 62561-1	Each	20	289	5780.00
45	SITC of GI flat (30*3.5mm) Strip. Having width- 30mm, Thickness- 3.5mm, Material- Hot dipped Galvanized Iron & Complied as per IEC 62561-2.	Mtr	220	400	88000.00
46	SITC of 3 Phase / Type1+2 Lightning current & Surge Protection Device at mains LT panel (3 phase, 415 V) for (L-N) Single-pole combined lightning current and surge arrester, Type 1 SPD The device shall be non-exhausting metal encapsulated, spark gap based technology and tested as per latest and valid IEC 61643-11:2011 or EN 61643-11:2012 standards. It shall be capable to discharge Lightning current (10/350 μ s) of 25kA (L-N) and 100kA(N-E) and voltage protection level of device shall be $\leq$ 1.5 KV. The device shall have inbuilt fuse for L-N. Follow current extinguishing capability [L-N]/[N-PE] : 100kArms / 100Arms. The device shall have built in fuse and operation of SPD shall be independent of Line current for L N SPD. The short circuit with stand capability of the device shall be 100 KArms for L-N SPD. The device shall have mechanical indication for both the states (green for 'healthy' and red for failure) on L-N and N-PE. The device shall be certified by KEMA /VDE or NABL lab as per IEC 61643-11:2011 or or EN 61643-11:2012 for testing of all parameter at 10/350 μ s and 8/20 μ s. with transparent enclosure IP65	Each	1	125769	125769.00
Total of SH:III				Rs.	1852689.00
SH-IV:- Analogue Addressable Fire Detection and Alarm System & Fire Suppression					
47	Supplying, installation, testing & commissioning of repeater panel wih 320 character/ Touch screen LCD display with inbuilt reset, acknowledge and silence switches complete as required. (Repeater panel shall be compatable with existing Bosch make panel Model No. FPA5000).	Each	1	210201	210201.00



S. No.	Description of Item	Unit	Qty.	Rate	Amount
48	Supplying, installation, testing & commissioning of intelligent analog addressable photothermal detector complete with mounting base complete as required.	Each	25	4210	105250.00
49	Supplying, installation, testing & commissioning of fault isolator complete with base as required	Each	5	3212	16060.00
50	Supplying, installation, testing & commissioning of addressable beam detector with short circuit isolator (inbuilt or separte) complete with emitter and receiver including connections with remote test features etc complete as required.	Each	3	61232	183696.00
51	Supplying, installation, testing & commissioning of addressable manual call point complete as required.	Each	2	5090	10180.00
52	Supplying, installation, testing & commissioning of addressable horn cum strobe complete as required	Each	5	10930	54650.00
53	Supplying & laying of 2x1.5 sqmm fire alarm armoured cable, 600/1000V rated with annealed copper conductor having XLPE insulation, steel wire armouring & FRLS outer sheath complete as required.	Mtrs.	500	180	90000.00
54	Supply, Installation, Testing & Commissioning of Aerosol based Fire Suppression System consisting of Aerosol generator having aerosol mass of 30gm shall be thermally actuated by means of aluminium alloy thermal sensor complying to UL 33 that can be mounted over the generator itself. The housing shall be constructed of stainless steel shell. Housing shall be sealed with a non-permeable membrane. Units shall have passed salt spray corrosion testing per BIS / NABL / EN / UL Standard 2127 as part of their listing. Aerosol generated shall be potassium based. Agent shall have no ozone depletion potential and no global warming potential. Agent shall be listed by the US EPA under the SNAP program. Fixed Condensed Aerosol Systems per NFPA 2010. UL approved design density of the aerosol should be less than 100g/cu.mtr for Class A, B & C fires as per NFPA. The Aerosol generator should have self life of 15 years. Aerosol generator shall be supplied with Stainless steel Bracket & Thermal Sensor.	Each	10	19000	190000.00
55	Supply, Installation, Testing & Commissioning of Aerosol based Fire Suppression System consisting of Aerosol generator having aerosol mass of 60gm shall be thermally actuated by means of aluminium alloy thermal sensor complying to UL 33 that can be mounted over the generator itself. The housing shall be constructed of stainless steel shell. Housing shall be sealed with a non-permeable membrane. Units shall have passed salt spray corrosion testing per BIS / NABL / EN / UL Standard 2127 as part of their listing. Aerosol generated shall be potassium based. Agent shall have no ozone depletion potential and no global warming potential. Agent shall be listed by the US EPA under the SNAP program. Fixed Condensed Aerosol Systems per NFPA 2010. UL approved design density of the aerosol should be less than 100g/cu.mtr for Class A, B & C fires as per NFPA. The Aerosol generator should have self life of 15 years. Aerosol generator shall be supplied with Stainless steel Bracket & Thermal Sensor.	Each	2	25000	50000.00
Total of SH:IV				Rs.	910037.00
SH-V:- SITC of AC					
56	Supply of 1.5 TR Inverter type, 5 star rating as per latest BEE norms, Hi- wall, Split air-conditioner with rotary compressor operating on refrigerant R-32A/ R-410A. The body of indoor unit shall be made of ABS/HIPS/GS, condensing unit should be of 100% copper coil & having all safety, air filters, evaporator, condenser, cordless remote, electronic operation control & all accessories supplied with the unit by OEM etc as per manufacturer standards suitable for operation on 230 volts, 50 Hz, Single phase, AC supply, complete as required at site. (Make : LG & Daikin).	Each	14	53433	748062.00
57	Installation, testing, commissioning of hi-wall A/C units etc. and making of necessary hole on concrete/brick wall and making good the damages i/c providing suitable size PVC pipe for drawing the gas/drain pipe and wire etc through the concrete/brick wall as required.	Each	14	2789	39046.00
58	Supply and fitting of Appropriate size and thickness of MS Stand / L-Chair for fixing outdoor unit or Condensing Units along with necessary anchor fastner/bolt & nuts etc on concrete/brick wall or floor etc. as required.	Each	14	2543	35602.00
59	Supply & fixing of extra copper refrigerant piping of standard gauge for installation of above units as required at site.	Mtrs.	60	987	59220.00

S. No.	Description of Item	Unit	Qty.	Rate	Amount
60	Supply & fixing of hard PVC drain piping of proper dia for installation of above units as required at site beyond company provided standard length.	Mtrs.	60	435	26100.00
61	Supply, Installing, Testing and Commissioning of Voltage Stabilizer suitable for 2 TR split AC units on wall including providing connections etc. as required. (Model-V Guard VGB 500 or equivalent).	Each	14	4567	63938.00
Total of SH:V				Rs.	971968.00
SH-VI:- LT Panel					
62	SITC of dust & vermin proof outdoor floor mounted distribution feeder pillar with IP 55 protection of suitable size on cement concrete foundations generally conforming to IS 8623 and to withstand rough usage and weather. The panel shall be fabricated with 14 SWG M.S. sheet with suitable flat iron frame work complete with hinged door on front with locking arrangement, doors/ covers for individual inside compartments, suitable angle/ channels frame in the bottom, legs for grouting in foundation, painting etc. including supplying and fixing of following accessories and making inter connections, earth connection with existing earthing etc. as per AAI specification (A) INCOMER (i) 250A, 25 KA, 4P T/M Release MCCB with extended rotary handle.(Make L&T or equivalent) - 01 no. (B) Bus bars 300A, Al Busbar. (C) OUTGOINGS (i) 100A, 25 KA, 4P T/M release MCCB with extended rotary handle (Make-L&T or equivalent)- 7 Nos (ii) 63A, 25 KA, 4P T/M release MCCB with extended rotary handle (Make-L&T or equivalent)- 7 Nos (D) Metering /Indication (i) Ammeter with CT's and selector switch for incommer-1 set (ii) LED indicating lamp-RYB and on for I/C- 1 set (iii) Voltmeter with selector switch for I/C-1 set (iv) LED indicating lamp for ON Indication -For outgoing feeder- 14 Nos (v) Suitable heavy duty strip connector & interconnection With suitable size copper flexible cable/ Aluminum strip.	Each	1	412121	412121.00
63	Supply of PVC insulated and FR PVC Round Sheathed, Copper Conductor (flexible) industrial cable, 1100 Volt, conforming to IS 694.				
a)	3 core , 1.5 sq mm cable (100 Mtr).	Each	5	7500	37500.00
Total of SH:VI				Rs.	449621.00

SUMMARY

Total of SH:I	1594030.00
Total of SH:II	1760300.00
Total of SH:III	1852689.00
Total of SH:IV	910037.00
Total of SH:V	971968.00
Total of SH:VI	449621.00
Total Rs.	7538645.00

(Rupees Seventy Five Lakhs Thirty Eight Thousand Six Hundred and Forty Five Only)


05/11/23

(L.P.S. Solanki)
A.G.M. (Engg.-E)
Safdarjung Airport