



भारतीय विमानपत्तन प्राधिकरण AIRPORTS AUTHORITY OF INDIA

Ref. No. AAI/RPR/ENGG (E)/CW/WO-06/2020-21/ 15-24

Date: 25.01.2021

By Speed Post/E-Mail

सेवा में,

मेसर्स अवस्थि इलेक्ट्रिक वर्क्स,
107/265, ब्रम्ह नगर,
कानपुर-208012 (उ.प्र.)

M/s Awasthi Electric Works,
107/265, Brahma Nagar,
Kanpur-208012 (U.P.)

कार्य का नाम:-स्वामी विवेकानन्द हवाई अड्डा, रायपुर पर रनवे-24 का विस्तार सी-श्रेणी के विमान और अन्य संबंधित कार्यों के लिए उपर्युक्त एप्रन का विस्तार। उपशीर्ष:- ग्लाइड पाथ का ट्रांस-इंस्टॉलेशन के लिए विद्युत कार्य।

Name of work:- Extension of runway at 24 beginning, expansion of apron suitable for C-category of aircraft and other associated works at S.V. Airport, Raipur. SH:- Electrical works for Trans-Installation of Glide Path.

संदर्भ/Ref:- आपकी ई-निविदा जो 22.12.2020 को खोली गई/ Your e- tender opened on 22.12.2020.

महोदय/ Sir,

- उल्लिखित कार्य हेतु आपकी ई-निविदा के संबंध में आपके द्वारा उद्धरीत कुल रु. 34,58,809.00 (रुपये चौतीस लाख अन्चावन हजार आठ सौ नौ मात्र) (जी. एस. टी. रहित), जो कि आंकलन लागत राशि रु. 39,93,927.00 (रुपये उन्चालिस लाख त्रयान्वे हजार नौ सौ सत्ताईस मात्र) (जी. एस. टी. रहित) से 13.40% कम है, को अध्यक्ष, भारतीय विमानपत्तन प्राधिकरण की ओर से स्वीकृत किया जाता है।
Your e- 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 of **Rs. 34,58,809.00 (Rupees Thirty Four Lakhs Fifty Eight Thousand Eight Hundred Nine only)** excluding GST, which is **13.40% below** the estimated cost put to tender of **Rs. 39,93,927.00 (Rupees Thirty Nine Lakhs Ninety Three Thousand Nine Hundred Twenty Seven only)** excluding GST.
- सहायक महा प्रबंधक (अभि -वि), भाविप्रा, स्वामी विवेकानंदा हवाई अड्डा, रायपुर, उपरोक्त कार्य के प्रभारी होंगे। आपसे निवेदन है कि आप सहायक महा प्रबंधक (अभि -वि) भाविप्रा, स्वामी विवेकानंदा हवाई अड्डा, रायपुर, के कार्यालय में दिनांक 04.02.2021 तक उपस्थित रहकर हस्ताक्षर करने तथा करार की कार्यवाही पूर्ण करने का कष्ट करें। ठेका करार का निष्पादन एक सौ रूपए मूल्य के गैर अदालती स्टैम्प पेपर पर किया जाएगा तथा स्टैम्प पेपर का खर्च आपके द्वारा वहन किया जाएगा।

AGM Engg(E), AAI, Swami Vivekananda Airport, Raipur, shall be the Engineer - In-charge of the work. You are requested to attend the office of AGM Engg (E) AAI, Swami Vivekananda Airport, Raipur by 04.02.2021 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.

प्रशान्त
25/01/2021

स्वामी विवेकानन्द एयरपोर्ट, रायपुर (छ.ग.)-492015
Swami Vivekananda, Airport, Raipur (CG)- 492015

दूरभाष-0771-2418044
Phone.- 0771-2418044



भारतीय विमानपत्तन प्राधिकरण AIRPORTS AUTHORITY OF INDIA

3. आपसे अनुरोध है कि इस पत्र के जारी होने की तारीख से 10 दिनों के भीतर सुरक्षा राशि जो टेंडर राशि के @10% हैं को प्रस्तुत करें, अन्यथा अनुबंध के पृष्ठ 53 पर शर्त के अनुसार आपके बिल से काटा जाएगा
You are requested to furnish Security Deposit @ 10% of tender amount within 10 days from the date of issue of this letter failing which same will be deducted as per condition on page 53 of contract document from your bill.

4. आपसे अनुरोध है कि आप ठेका श्रमिक (विनियम एवं उन्मुलन) अधिनियम 1970 के उपबन्धों का अनुपालन करें। साथ ही ठेका श्रमिक (विनियम एवं उन्मुलन) केन्द्रीय नियमावली 1971 एवं केन्द्रीय एवं राज्य सरकारों के न्यूनतम वेतन तथा उससे सम्बन्धित अन्य नियमों का पालन करें।

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 of Central and State Governments, with its upto date amendments thereof.

5. आपको यह भी निर्देश दिया जाता है कि आप प्रबंधक (अभि-वि), भाविप्रा, स्वामी विवेकानंदा हवाई अड्डा, रायपुर, से अविलम्ब सम्पर्क करें जो आपको कार्यस्थल सौंपेंगे।

You are also directed to contact Manager (Engg-E), AAI, S.V. Airport, Raipur, immediately who will arrange to hand over the site to you.

6. कृपया यह भी नोट कर लें कि निविदा के अनुसार कार्य निष्पादन हेतु अनुगत समय 08 (आठ) महीने है जो दिनांक **01.04.2021** से माना जाएगा।

Please note that the time allowed for carrying out the work shall be 08 (Eight) months and same will be reckoned from **01.04.2021**.

7. इस ठेके से संबंधित किसी भी प्रकार के पत्र व्यवहार के लिए कार्य के प्रभारी को संबंधित करेंगे।
Any further correspondence in connection with the contract should normally be addressed to the Engineer - in- charge.
8. कृपया इस पत्र कि प्राप्ति सूचना दे तथा इसके साथ संलग्न अनुप्रति पर हस्ताक्षर करके टोकन के प्रतिग्रहण के रूप में अधोहस्ताक्षरी को वापस भेज दें।

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

9. कार्यआदेश के संबंध में किसी प्रकार की टंकणीय त्रुटि/विसंगति होने पर अंग्रेजी संस्करण मान्य होगा।
With reference to this work order, if in case of any typographical mistake/discrepancy arise, the English version shall prevail.

धन्यवाद / Thanking you,
संलग्न / Encl: Schedule

भवदीय / Yours faithfully,

प्रशांत
25/01/2021

सहायक महा प्रबंधक (अ-वि). / Assistant General Manager [E-E]
एएआई, स्वामी विवेकानंदा, हवाई अड्डा, रायपुर / AAI, S. V. Airport, Raipur



भारतीय विमानपत्तन प्राधिकरण AIRPORTS AUTHORITY OF INDIA

प्रतिलिपि (बाह्य):-

1. श्रम प्रवर्तन अधिकारी (केन्द्रीय) एल-7, डी/6, आदर्श सोसायटी, सेक्टर-1, अवन्ति विहार, रायपुर
2. क्षेत्रीय भविष्य निधि आयुक्त-1, कर्मचारी भविष्य निधि संगठन, (श्रम एवं रोजगार मंत्रालय, भारत सरकार), क्षेत्रीय कार्यालय छत्तीसगढ़, खंड-डी योजना नं. 32, इंदिरा गांधी व्यवसायीक परिसर, पन्डरी, रायपुर, (छ.ग.)

प्रतिलिपि (आन्तरिक):-

1. संयुक्त महाप्रबंधक (अभि-विद्युत), पूर्वी क्षेत्र, भाविप्रा, एन.एस.सी.बी.आई. हवाई अड्डा, कोलकाता
2. उप महाप्रबंधक (सतर्कता), पूर्वी क्षेत्र, भाविप्रा, एन.एस.सी.बी.आई. हवाई अड्डा, कोलकाता

आन्तरिक वितरण:-

(सूचनार्थ)

1. विमानपत्तन निदेशक, स्वामी विवेकानन्द हवाई अड्डा, रायपुर
2. सहा. महाप्रबंधक, (अभि-सिविल)-II, स्वामी विवेकानन्द हवाई अड्डा, रायपुर
3. उप महाप्रबंधक (वित्त), स्वामी विवेकानन्द हवाई अड्डा, रायपुर
4. वरिष्ठ प्रबंधक, (अभि-वि), स्वामी विवेकानन्द हवाई अड्डा, रायपुर
5. प्रबंधक, (अभि-वि)-II, स्वामी विवेकानन्द हवाई अड्डा, रायपुर

प्रशांत
25/01/2021

सहायक महाप्रबंधक (अ-वि) / Assistant General Manager [E-E]
एएआई, स्वामी विवेकानंदा, हवाई अड्डा, रायपुर / AAI, S. V. Airport, Raipur

Airports Authority of India
Swami Vivekananda Airport, Raipur

Schedule of Quantities

Name of Work:- Extension of runway at 24 beginning, expansion of apron suitable for C-category of aircraft and other associated works at S.V. Airport, Raipur. **SH:-** Electrical works for Trans-Installation of Glide Path.

S. No.	Item Description	Unit	Qty.	Rate (Rs.)	Amount (Rs.)
	SH-I: Internal Electrical Works				
1	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 Fire Retardant uPVC trunking (as per IS 14927-Part 2), with modular switch, modular plate, suitable PVC box and earthing the point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable etc. as required.				
(a)	Group C	Each	23	1000.00	23000.00
2	Wiring for light/ power plug with 4X2.5 sq. mm FRLS PVC insulated copper conductor single core cable in Fire Retardant uPVC trunking (as per IS 14927-Part 2) alongwith 2 Nos. 2.5 sq. mm FRLS PVC insulated copper conductor single core cable for loop earthing as required.	Meter	30	290.00	8700.00
3	Wiring for light/ power plug with 2X2.5 sq. mm FRLS PVC insulated copper conductor single core cable in Fire Retardant uPVC trunking (as per IS 14927-Part 2) alongwith 1 No. 2.5 sq. mm FRLS PVC insulated copper conductor single core cable for loop earthing as required.	Meter	60	135.00	8100.00
4	Supplying and drawing following sizes of FRLS PVC insulated copper conductor, single core cable in the existing surface/ recessed steel/ PVC conduit as required.				
(a)	3 x 2.5 sq. mm	Meter	180	85.00	15300.00
5	Wiring for circuit/ submain wiring alongwith earth wire with the following sizes of FRLS PVC insulated copper conductor, singlecore cable in Fire Retardant uPVC trunking (as per IS 14927-Part 2) as required.				
(a)	2 X 2.5 sq. mm + 1 X 2.5 sq. mm earth wire	Meter	50	190.00	9500.00
6	Supplying and fixing suitable size PVC Modular box with modular plate and cover in front on surface or in recess, including providing and fixing 6 pin 5/6 & 15/16 A modular socket outlet and 15/16 A modular switch, connections etc. as required.	Each	8	490.00	3920.00
7	Supplying and fixing following modular switch/ socket on the existing modular plate & switch box including connections but excluding modular plate etc. as required.				
(a)	15/16 A switch	Each	12	100.00	1200.00
(b)	6 pin 15/16 A socket outlet	Each	12	115.00	1380.00
8	Supplying and fixing brass batten/ angle holder including connection etc. as required.	Each	2	80.00	160.00
9	Supply of 9 W LED Inverter/ rechargeable bulb With Auto-Charge Technology having Emergency time backup of not less than 4 Hours at min. of 50% illumination, suitable for 230 V, 50 Hz Single phase supply complete as required.	Each	2	690.00	1380.00


25/01/2021

S. No.	Item Description	Unit	Qty.	Rate (Rs.)	Amount (Rs.)
10	Supply of 400 mm sweep wall fan having Aerodynamically designed, Balanced Blade, thermal overload protection, Jerk free oscillation (60°) & smooth running, 1400 RPM suitable for use on 230 volts, 50 Hz, single phase, A.C. supply etc. complete as required.	Each	2	2250.00	4500.00
11	Supply of 1400 RPM, 400 mm dia. Jerk free oscillation & smooth running pedestal fan with aerodynamically designed blades etc. complete as required, suitable for 230 volts, 50 Hz, single phase, A.C. supply.	Each	2	3150.00	6300.00
12	Supply of single phase, 225 mm dia. sweep Heavy Exhaust fan having thermal overload protection, with Louver and shutter/safety Guard from foreign objects, etc. complete as required suitable for use on 230 volts, 50 Hz, single phase, A.C. supply.	Each	1	3500.00	3500.00
13	Supply of indoor surface mounting 20 W (nominal capacity), LED light fitting efficacy of not less than 100 lumens, complete with LED tube rod, accessories etc and suitable for use on 230 volts, 50 Hz, single phase, A.C. supply as required.	Each	7	600.00	4200.00
14	Supply of indoor surface mounting 9 W (nominal capacity), LED light fitting efficacy of not less than 100 lumens, complete with LED tube rod, accessories etc and suitable for use on 230 volts, 50 Hz, single phase, A.C. supply as required.	Each	6	450.00	2700.00
15	Supply of 25 W (nominal capacity) LED integral Flood Light type light fitting having pressure die cast housing with toughened glass, individual LEDs with secondary optics, IP 66, inbuilt convertor, accessories etc and suitable for use on 230 volts, 50 Hz, single phase, A.C. supply as required.	Each	5	2000.00	10000.00
16	Supply of rechargeable portable type LED Emergency light with min 6 W output and having battery of suitable capacity to provide backup of min 3 Hrs. etc. complete as required.	Each	4	2350.00	9400.00
17	Installation, testing and commissioning of wall bracket /ceiling fittings of all sizes and shapes containing upto two GLS/CFL/LED lamps per fitting/wall fan, complete with all accessories including connections etc. as required.	Each	20	150.00	3000.00
18	Installation of exhaust fan in the existing opening, including making good the damage, connection, testing, commissioning etc. as required.				
(a)	Upto 450 mm sweep	Each	1	250.00	250.00
19	Supplying and fixing 3 pin 16 A Switch with socket in IP 66 enclosure suitable for outdoor installation on surface including connections etc. as required.	Each	3	700.00	2100.00
20	Providing & fixing (80 X 50) mm size UPVC cable trunking on surface including necessary couplers, joint cover, angles etc. along with all other accessories as required.	Meter	70	725.00	50750.00
21	Supply and fixing of 4 Module clip on supports suitable for fixing of switch, power Socket outlets including finishing plate etc. complete as required.	Each	12	150.00	1800.00


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S. No.	Item Description	Unit	Qty.	Rate (Rs.)	Amount (Rs.)
	SH-II: Distribution Boards & MCBs				
22	Supplying and fixing following way, single pole and neutral, sheet steel, glazed door, 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 MCB/RCCB/Isolator)				
(a)	6 way , Double door	Each	2	910.00	1820.00
(b)	8 way , Double door	Each	4	1036.00	4144.00
23	Supplying and fixing following way, horizontal type three pole and neutral, sheet steel, MCB distribution board, 415 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 MCB/RCCB/Isolator)				
(a)	6 way (4 + 18), Double door	Each	1	2750.00	2750.00
24	Supplying and fixing 5 A to 32 A rating, 240/415 V, 10 kA, "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.				
(a)	Single pole	Each	30	145.00	4350.00
(b)	Double pole	Each	8	450.00	3600.00
25	Supplying and fixing of 63 amps rating, 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.				
(a)	Four Pole	Each	1	1350.00	1350.00
26	Supplying and fixing of 25A rating, double pole, (single phase and neutral), 240 volts, residual current circuit breaker (RCCB), having a sensitivity current 300 milli amperes in the existing MCB DB complete with connections, testing and commissioning etc. as required.	Each	3	1890.00	5670.00


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S. No.	Item Description	Unit	Qty.	Rate (Rs.)	Amount (Rs.)
	SH-III: LT Panel & SPDs				
27	Design, fabrication, supply, installation, testing and commissioning of vermin & dust proof, front operated cubicle type floor mounted, OUTDOOR double door type LT panel board made out of 2.0 mm thick for body & doors and all partitions shall be of 1.6 mm thick CRCA sheet, totally enclosed type, IP 54, duly rust inhibited, stove enameled, powder coated paint, fully compartmentalized complete with double hinged front door with lockable arrangement with name plates, heavy duty rubber gaskets, removable gland plates made out of 3 mm thick sheet steel, 02nos earth stud, MS angle iron channel, internal wiring with 1.5sqmm FR copper wires/cable, connection, interconnection including necessary civil works(if required) like PCC, brick work etc. complete as required. Incomer 3 Nos. 160 A, four pole Thermal Magnetic release variable range, Moulded Case Circuit Breaker with extended rotary handle and all accessories including providing spreader terminals and auxiliary contacts (Ics=100% Icu value 25 KA). a) 9 Nos. Phase indication LED lamps with 2Amp MCB, 03 Sets ON/OFF' indicating light with 2A MCB, 03 Nos Multifunction meter, class 0.5 with LCD Display shown V, A, Hz & PF. Bus Bar 200 Amps FP bus bar of high conductivity electrolytic quality aluminium alloy. Changeover 2 Nos. 160 A, Manual Change over with extended rotary handle and all accessories including providing spreader terminals etc. complete as required. Out Going 4 Nos. 100 A, four pole Thermal Magnetic release variable range, Moulded Case Circuit Breaker with extended rotary handle and all accessories including providing spreader terminals and auxiliary contacts (Ics=100% Icu value 25 KA). Note: Output of each changeover should be distributed to 2 Nos O/Gs with suitable subsections/compartments for MCCBs, busbars, metering, cable alleys etc.	Job	1	225000.00	225000.00
28	Supply, installation, testing and commissioning of dust, damp and vermin proof cubicle free floor, indoor type factory built sheet steel enclosed modular bolted construction, suitable for operation on 415 ±10% volts, 50 Hz AC 3 phase 4 wire supply system fabricated out of CRCA sheet steel of 2.0 mm thick for frame work and 2.0 mm thick for doors/ covers, 3mm thick for gland plates i/c cleaning & finishing complete with 7 tank process for powder coating in approved shade, having TPN Aluminium bus bars of high conductivity, DMC/SMC bus bar supports, bottom base channel of section not less than ISMC 75mm, entire panel shall have a common copper earth bar of suitable size with 2 nos earth studs, including control wiring with 1.5 sqmm. PVC insulated FRLS copper conductor Single Core cable for voltage & 2.5 sq.mm for current circuits, cable alleys, cable gland plates, danger notice plates, etc. necessary metering protections & indications and mounted with the following switch gears.	Each	1	230000.00	230000.00

Qmp
25/01/2021

S. No.	Item Description	Unit	Qty.	Rate (Rs.)	Amount (Rs.)
	INCOMER i) 2 No. 100 Amps. 4P , MCCB '36KA, (Ics = Icu= 36KA) with thermal magnetic release having O/L & S/C protection equipped with extendable rotary Handle and extendable terminals with the following: a) 6 Nos. Phase indication LED lamps with 2Amp MCB, 02 Sets ON/OFF' indicating light with 2A MCB, 02 Nos Multifunction meter, class 0.5 with LCD Display shown V, A, Hz & PF.				
	AUTO TRANSFER SWITCH i) 1 No. 4 pole, 100 Amps. Open execution type with complete protection.				
	BUS-BAR : TPN aluminium main bus bars of minimum of 300 Amp capacity with heat shrinkable coloured sleeves and i/c DMC/SMC bus bars supports at required intervals complete.				
	OUT GOING: i) 3 No. 63 Amps. 4P, MCCB '36KA, (Ics = Icu= 36KA) with thermal magnetic release having O/L & S/C protection equipped with extendable Rotary handle. ii) 1 No. 100Amps. 4P, MCCB '36KA, (Ics = Icu= 36KA) with thermal magnetic release having O/L & S/C protection equipped with extendable Rotary handle with the following: 4 Set of ON-OFF indication lamps (LED type) with 2 Amp control MCBs. iii) 04 Nos 32 A, 10 kA, DP MCB				
	Power Quality Analyser & DATA LOGGER: Microprocessor based Multi channel Power Quality Analyzer and Data Logger device for electrical parameters measuring and monitoring on the data logger display as well as data archiving (storage) having inbuilt real time clock with power from a lithium-type battery				
	LAPTOP FOR DATA RECORD: 64 bit, Window 10 loaded with user friendly programs, 15" screen Laptop with all accessories having Intel Core i5 (10th Gen) or equivalent processor, HDD (1TB), RAM (8 GB), Graphic Card (1 GB) including wireless optical mouse etc. complete as required (HP Pavilion - 15-cs3006tx or equivalent)				
	The panel shall have suitable DIN bar provision for fixing the Surge Protection Device of min. 4 modules				
29	Supply and installation of pre-wired Primary protection (Class B / Type 2) surge protection device (SPD) having 100KA , 10/350 micro seconds neutral to earth, 50 KA, 10/350 micro seconds line to neutral with limiting voltage less than 1.5 KV on the mains power entry point at the incomers. The enclosure shall have IP:65 weather proof polycarbonate PVC box with cable gland. The three phase SPD shall have the followings. i) Line protected : Line-Neutral and Neutral to earth + Line to Line +Line to Ground (4 modes). ii) Nominal Operating Voltage : 220/240 V AC iii) Input power Frequency : 47-60 Hz iv) Protection : Transverse and common mode v) Response Time : <100 ns vi) Surge rating : 10/350 us pulse response vii) Voltage Protection Level : < 1.5 KV viii) Approval and Testing : Listed with UL-1449-3/IEC - 61643 - 62305 as applicable.	Each	1	19000.00	19000.00


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S. No.	Item Description	Unit	Qty.	Rate (Rs.)	Amount (Rs.)
30	Supply and installation of pre-wired Secondary protection (Class C / Type 3) surge protection device (SPD) this protection to be provided at UPS output in each phase and neutral. The protection device shall be a combination of multi stage modular MOV device to attenuate surge and noise. The LC filter shall attenuate surge voltage to limit peak surge to less than 900 Volt. The filter shall attenuate noise and power system harmonics by minimum 30 DB. The enclosure shall have IP:65 weather proof polycarbonate PVC box with cable gland. The Single phase SPD shall have the followings. i) Line protected : Line-Neutral, Line - Earth and Neutral to Earth. ii) Nominal Operating Voltage : 240 V AC (Phase to Neutral) iii) Voltage Drop : < 3 V at full load iv) Efficiency : 99% v) Response Time : <25 ns vi) Protection Modes : Transverse and Common mode vii) Filter Configuration : LC, transverse and common modes viii) Protection Stages : MOV, LPF SPD ix) Surge Rating : 40 KA, 8/20 us x) Voltage Protection Level : < 0.9 KV xi) Approvals and Testing : UL- 1449-3/ IEC 61643/ 62305 as applicable	Each	4	5800.00	23200.00
31	Providing & Fixing in position 1000 mm wide, Electrical Insulating Mat as per IS 15652:2006, 2 mm thick, suitable upto 3.3 KV, fire retardant, no effect of acids, alkalies and transformer oils, moisture proof, high tensile strength and texture finish/ cloth impression (Anti slip marking on top) etc. complete as required.	Sqm	2	900.00	1800.00
	SH-IV: CABLE LAYING WORK				
32	Supply of aluminium conductor XLPE insulated, PVC sheathed, armoured power cable of 1.1 KV grade conforming to IS-7098 Part 1(1988) amended up to date.				
(a)	3.5 X 150 Sq mm	Meter	3413	490.00	1672370.00
(b)	4 X 16 Sq mm	Meter	20	125.00	2500.00
33	Supply of copper conductor XLPE insulated, PVC sheathed, FRLSZH at outer Sheath armoured power cable of 1.1 KV grade conforming to IS-7098 Part 1(1988) amended up to date.				
(a)	3 x 10 Sqmm	Meter	60	349.00	20940.00
(b)	3 x 2.5 sq mm	Meter	130	130.00	16900.00
(c)	2 x 1.5 Sqmm	Meter	50	65.00	3250.00
34	Excavation for cable trenches in soft soil, depth upto 1.2 m including dressing of sides lift upto 1.5 m, including getting out the excavated soil, refilling with sand and or good soil after laying of cable/ pipe etc in layers of 20 cm, ramming, watering and disposal of surplus excavated soil as directed, within a lead of 50	Cum	430	190.00	81700.00
35	Excavation of the cable trenches in hard rock not exceeding 1.5 metres in width, and lift upto 1.5 metres, including getting out the excavated soil and disposal of excavated soil as directed within a lead of 50 metres.	Cum	20	450.00	9000.00
36	Filling available excavated earth (excluding rock) in trenches, sides of foundations etc. in layers not exceeding 20cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 metres.	Cum	20	100.00	2000.00
37	Providing and laying in position cement concrete 1:3:6 (1 cement : 2 coarse sand : 6 graded stone aggregate 40 mm nominal size) in road crossing/side wall of drain including form work etc as required.	Cum	2	6000.00	12000.00

S. No.	Item Description	Unit	Qty.	Rate (Rs.)	Amount (Rs.)
38	Supplying and laying of following size DWC HDPE pipe ISI marked along with all accessories like socket, bend, couplers etc. conforming to IS 14930, Part II complete with fitting and cutting, jointing etc. direct in ground (75 cm below ground level) etc., complete as required.				
(a)	90 mm dia (OD-90 mm & ID-76 mm nominal)	Meter	3220	110.00	354200.00
(b)	50 mm dia (OD -50mm & ID 40 mm nominal)	Meter	80	50.00	4000.00
39	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.				
(a)	100 mm dia.	Meter	30	900.00	27000.00
40	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/HDPE pipe as required.				
(a)	Upto 35 Sqmm	Meter	20	35.00	700.00
(b)	Above 95 sq. mm and upto 185 sq. mm	Meter	3250	40.00	130000.00
41	Supplying and making straight through joint with heat shrinkable kit including ferrules and other jointing materials for following size of PVC insulated and PVC sheathed / XLPE aluminium conductor cable of 1.1 KV grade as required.				
(a)	3.5 x 150 Sqmm	Each	6	1800.00	10800.00
42	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)	3 X 2.5 sq. mm (12/16 mm)	each	4	250.00	1000.00
(b)	3 X 10 sq. mm (22mm)	each	16	250.00	4000.00
(c)	4 X 16 sq. mm (28mm)	each	2	250.00	500.00
(d)	3.5 X 150 sq. mm (50 mm)	each	7	350.00	2450.00
SH V: EARTHING WORKS					
43	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 meter long etc. with charcoal/ coke and salt as required.	Each	2	5500.00	11000.00
44	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.	Meter	20	480.00	9600.00
45	Providing and fixing 25 mm X 5 mm G.I. strip on surface or in recess for connections etc. as required.	Meter	30	145.00	4350.00
46	Supplying and making cable route marker with cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 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	10	450.00	4500.00
Lightning Conductor					
47	Providing and fixing of lightning finial, made of 25 mm dia 300 mm long, copper tube, having single prong at top, with 85 mm dia 3mm thick copper base plate including holes etc. complete as required.	Each	3	2150.00	6450.00
48	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 meter long etc. with charcoal/ coke and salt as required.	Each	3	10500.00	31500.00


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S. No.	Item Description	Unit	Qty.	Rate (Rs.)	Amount (Rs.)
49	Jointing copper / G.I. tape (with another copper/ G I tape, base of the final or any other metallic object) by riveting / nut bolting/ sweating and soldering etc. as required.	Each	3	330.00	990.00
50	Providing and fixing copper tape 20mm X 3 mm thick on parapet or surface of wall for lightning conductor complete as required. (For horizontal run)	Meter	35	395.00	13825.00
51	Providing and fixing copper tape 20mm X 3 mm thick on parapet or surface of wall for lightning conductor complete as required. (For Vertical run)	Meter	15	410.00	6150.00
52	Providing and fixing testing joint, made of 20 mm X 3 mm thick Copper strip, 125 mm long, with 4 nos. of G.I. bolts, nuts, chuck nuts and spring washers etc. complete as required.	Each	3	260.00	780.00
53	Providing and laying copper tape 32 mm X 6 mm from earth electrode in ground as required.	Meter	20	1250.00	25000.00
SH-VI: AIR CONDITIONING WORKS					
54	Supply of 1.5 TR highly energy efficient, hi-wall mounted Split type inverter Air-conditioner with high ISEER, 5 star rating, dual inverter compressor, cordless remote, suitable for operation on 230 Volts +/- 10%, 50 Hz, single phase A.C. supply, having copper condenser coil, capable of performing cooling, dehumidifying, air circulating, filtering and ventilation complete etc. as required.	Nos	5	42000.00	210000.00
55	Installation, Testing & commissioning of A/C units as mentioned in item no-1 which includes mounting of indoor & outdoor unit including providing MS stand/ PCC platform at their respective location along with laying of refrigerant pipeline with insulation & flexible PVC covering pipe up to standard length supplied with the unit, connecting both the units, leak testing of entire system, connecting both indoor and outdoor units with three core PVC insulated flexible copper cable supplied with the unit, top up of refrigerant (if required), minor civil repairing work as per site requirement complete as required.	Job	5	2500.00	12500.00
56	Supplying and fixing 20/16 A, 240 V, IP 40, SPN AC Distribution Box/socket outlet, with 2 pole and earth, High grade Thermoplastic enclosed plug top alongwith 20/16 A "C" curve, SP, MCB, in sheet steel enclosure, on surface or in recess, with chained cover for the socket out let and complete with connections, testing and commissioning etc. as required.	Nos	5	830.00	4150.00
57	Supply of bubble top Hot and Cold water dispenser with three faucets (normal, hot and cold) having capacity not less than 15 litre, with non CFC Refrigerant and 02 Nos duly filled 20 L Water Bottles/Cans etc. as required.	Each	1	9500.00	9500.00
SH-VII: FADS & FIRE EXTINGUISHERS					
58	Supply and Installation of Microprocessor based 2 Zone non-expandable conventional fire alarm panel, should be equiped of 2 Zone capacity to take maximum 20 detections per Zone, reset function inbuilt and alarm & Fault Display by individual LEDs for each detector group. 240 volts AC power supply, automatic battery charges, 2 Nos. X 12 volt sealed maintenance free batteries sufficient for 12 hours normal working.	Each	1	13000.00	13000.00


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S. No.	Item Description	Unit	Qty.	Rate (Rs.)	Amount (Rs.)
59	Supply and Installation of 2 Channel Wireless auto dialer (GSM based) voice message. 40 (20+20) seconds voice recording. 9 nos. of tel./mobile 16 digit each. View numbers & user setting any time. Standard telephone key pads. Work with all types of GSM network. Easy menu based programming. 1 levels of password protected. Approved by various consultants.	Each	1	11500.00	11500.00
60	Supply and Installation of Conventional Type smoke Detector with LED indication, with mounting-base complete etc. as required.	Each	4	1050.00	4200.00
61	Supply and Installation of Conventional Hooter complete etc. as required.	Each	1	1290.00	1290.00
62	Supply and Installation of manual call points complete etc. as required.	Each	1	890.00	890.00
63	SITC of Response indicator complete etc. as required.	Each	2	250.00	500.00
64	Supply of carbon dioxide (CO2) type fire extinguishers conforming to IS 2878 : 1976 and cylinders fully charged of following capacity including providing suitable M.S. Stand. (a) 4.5 KG	Each	4	7000.00	28000.00
Total					3458809.00

Rupees in words:- Thirty Four Lakhs Fifty Eight Thousand Eight Hundred Nine Only.


25/01/2021
Asst. Gen. Manager (E-E)
AAI, S.V. Airport, Raipur