



Balmer Lawrie & Co Ltd (बामर लॉरी एंड कंपनी लिमिटेड)
(A Government of India Enterprise) (भारत सरकार का एक उद्यम)
Engineering & Projects (इंजीनियरिंग और परियोजनाएं)
21, Netaji Subhas Road (21, नेताजी सुभाष रोड)
Kolkata - 700 001 (कोलकाता – 700 001)

Electrical Installation Work for Central Warehouse
at

AMTZ, ANDHRA PRADESH (ए एम टी जेड, आंध्र प्रदेश में केन्द्रीय
वॉरहाउस के लिए विद्युत अधिष्ठापन कार्य)

Tender No. EP / AMTZ / CWH / ELE / 01

मूल्यंकित भाग (भाग-2) / PRICED PART (PART-II)

NOTES:

- 1.0 Details of the items under this Schedule shall be read in conjunction with the corresponding Specifications, Drawings and other Tender Documents.
- 2.0 The work shall be carried out as per approved drawings, Specifications and the description of the items in this Schedule and/or Engineer's instructions. Drawings enclosed with these documents are only for providing some preliminary of the work involved.
- 3.0 Items of work provided in this Schedule but not covered in the Specifications shall be executed strictly as per instructions of the Engineer-In-Charge.
- 4.0 Unless specifically mentioned otherwise in the Contract, the Tenderer shall quote for the finished items and shall provide for the complete cost towards power, fuel, tools, tackles, equipment, Constructional Plant, Temporary Work, labour, materials, levies, taxes, transport, layout, re-pairs, rectification, maintenance till handing over, supervisions, colonies, shops, establishments, services, temporary roads, revenue expenses, contingencies, overheads, profits and all incidental items not specifically mentioned but reasonably implied and necessary to complete the work according to the contract.
- 5.0 The Quantities of the various items mentioned in the Schedule of Items are approximate and may vary or may be deleted altogether. The Contractor, in his own interest, should get an indication of the probable extent of the work to be executed under any particular item in this Schedule before undertaking any preliminary and enabling work or purchasing bought out components related to the work.
- 6.0 Rates shall be quoted both in figures and in words in clear legible writing. No over writing is allowed. All scoring and cancellations should be countersigned by the Tenderer. In case of illegibility, the rates written in word will be considered final. All entries shall be in English language.
- 7.0 Engineer's decision shall be final and binding on the Contractor regarding clarification of items in this Schedule with respect to the other sections of the Contract.
- 8.0 For extra items, rates shall be derived from similar item rates included in the schedule of work. Where there is no such similar item available in the schedule, rate shall be analyzed as follows:

Rate for extra item = Cost of material (a) + cost of labour inclusive of all necessary tools, tackles, equipment, machinery and consumable (b) required to carry out the work + 15% of (a+b) towards profit and overhead + taxes, duties etc. as applicable.

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Sl no.	Description of Item	Unit	Qty	Unit Rate (SUPPLY + INSTALLATION) UNIT RATE (Rs.)	Amount (SUPPLY + INSTALLATION) in (Rs.)
	Power Receiving Station				
1.0	Supply, installation, Testing, Commissioning of 11 KV outdoor type Power Receiving System	Job	1		
	Outdoor type Package Substation				
2.0	Supply, installation, Testing, Commissioning of 11 KV Outdoor type skid mounted compact substation as per Technical specification and dwgs including 400 KVA Trf	Set	1		
2.1	The cost of third Party Inspection Charges of the 11 KV Outdoor Skid Mounted Compact Substation at the Manufacturers Factory by approved TPI Agency	Ls	1		
3.0	SITC of 200 KVA DG Set with Acoustic Enclosure				
3.1	SITC of 200 KVA DG Set with Acoustic Enclosure : - Supply (including delivery, unloading, stacking and storage at site), installation, testing, commissioning of 200 KVA DG set with AMF Control Panel as per tender document, complete with all accessories, high pressure fuel piping connection, all instruments and associated control wiring: Acoustic enclosure complete with all accessories; Residential type silencers for suppression of the noise up to acceptable limit, including supply of mineral wool insulation, supporting structure, al cladding etc. necessary to complete the job; Cushy-foot Anti vibration pads	set	1		
3.2	Supply, installation, testing, commissioning of of suitable Dia. Insulated single flue or multiple flue exhaust piping as per recommendation of the DG manufacturer in running meter with mineral wool insulation, aluminium cladding complete with MS black pipe, bends, socket expansion joints, gaskets, flanges, supporting structure complete	Mtr	30		
3.3	Supply, installation, testing, commissioning of AMF Cum Control Panel with 1 no. 400 A ACB	Set	1		
	i) 430A, 4P ACB, 50 KA Micro processor Based Releases - 1 No.; ii) 2A, control fuse - 3 Nos.; iii) LED Type R-Y-B Phase Indication Lamps - 1 set ; iv) 1250/5A, CL-1, 15 VA tape wound CT's - 3 Nos; v) Multi Function Meter-1 Set				
3.4	The cost of third party inspection charges of the 320 KVA DG set and AMF cum Control Panel at the Manufacturers Factory by approved TPI agency	LS	1		
3.5	Running of DG for the testing and trial run for 2 days (12 hours per day) in available load and commissioning the set (including supply of consumables like HSD and lube oil)	LS	1		

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3.6	Liaison charge for obtaining premission from local electricity authority and / or CEA, and pollution control Board on behalf of the purchaser for commissioning the 1 nos. 200 KVA DG set including preparation and submission of drawing, test notice and other technical as well as commercial formalities as required. the statutory fees will be paid by the purchaser.	LS	1		
4.0	30 KVA UPS System				
4.1	Supply (including delivery, unloading , stacking and storage at site), Installation, testing, commissioning at site of UPS 30 KVA, 415V three phase input, 415V three phase output with battery and accessories as specified in the tender document. This cost includes supply and installation of 4 pole 63 A incoming isolator and 4 pole 63A outgoing isolator switch with metal enclosure and external operating handle.	NOS	1		
4.2	The cost of Third Party Inspection Charges of the 30 KVA UPS by approved TPI Agency	No.	1		
	415V MCC				
5.0	Supply (including delivery, unloading , stacking and storage at site) and installation (including erection on chanel, testing and commissioning ,setting of all relays at site) of following floor / wall mounted vertical 415 V MCC / SDB Panels as per SLD / load list / technical specification attached.				
5.1	Main LT PMCC, Floor mounted, top cable entry, double front, compartmentalised Panel matching with MCC Room layout (as specified in the Technical specification, tender drawings). • MFM of the Main incoming feeders shall have the facility to display all three line currents L1, L2, L3 in the same screen. • Digital KWH meter with 4-20mA for remote reading provision in future for the Main incoming feeders	Nos.	1		
5.2	The cost of Third Party Inspection Charges of the Main MCC by approved TPI Agency	No.	1		

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	Cabling				
6.0	Supply (delivery, unloading and storing of cables at site) and laying of cables (including supply of necessary clamping hardware, cable markers etc.) either through conduits, or in RCC Trenches or buried underground or on cable tray/ladder, or by clamping hardware, cable markers etc.) either through conduits, or in RCC Trenches or buried underground or on cable tray / ladder, or by clamping with wall / structure / machine frame suitably of following sizes of cables as specified. Cost of cabletray, trench, buried trench is excluded from this item and covered in some other items)				
	11 KV XLPE POWER CABLE				
6.1	3 Core 185 Sq.mm stranded Al. Conductor, 11 KV grade (Earth) , XLPE Cable	Mtr	70		
	415V LT Cables				
6.2	3 -1/2 Core 240 Sq.mm stranded Al. Conductor, XLPE insulated, taped PVC inner sheathed, armoured, extruded PVC outersheathed, 1.1 KV grade cable	Mtr	240		
6.3	3 -1/2 Core 35 Sq.mm stranded Al. Conductor, XLPE insulated, taped PVC inner sheathed, armoured, extruded PVC outersheathed, 1.1 KV grade cable	Mtr	500		
6.4	3 -1/2 Core 25 Sq.mm stranded Al. Conductor, XLPE insulated, taped PVC inner sheathed, armoured, extruded PVC outersheathed, 1.1 KV grade cable	Mtr	170		
6.5	4 Core 16 Sq.mm stranded Al. Conductor, XLPE insulated, taped PVC inner sheathed, armoured, extruded PVC outersheathed, 1.1 KV grade cable	Mtr	1200		
6.6	4 -Core 16 Sq.mm stranded Cu Conductor, XLPE insulated, taped PVC inner sheathed, armoured, extruded PVC outersheathed, 1.1 KV grade cable	Mtr	80		
6.7	4 Core 10 Sq.mm stranded Al. Conductor, XLPE insulated, taped PVC inner sheathed, armoured, extruded PVC outersheathed, 1.1 KV grade cable	Mtr	1000		
6.8	3 -Core 4 Sq.mm stranded Cu. Conductor, XLPE insulated, taped PVC inner sheathed, armoured, extruded PVC outersheathed, 1.1 KV grade cable	Mtr	100		

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7.0	Cable Termination : Non-Flameproof Termination of following sizes of XLPE/PVC insulated armoured cables, including supply of double compression type brass cable glands, lugs etc.				
	11 KV XLPE Power Cable Jointing Kit				
7.1	3 Core 185 Sq.mm stranded Al. Conductor, 11 KV grade (Earth) , XLPE Cable - with heat shrinkable terminal kit (Raychem / M Seal make)	Set	4		
	415V LT Cables				
7.2	3 -1/2 Core 240 Sq.mm stranded Al. Conductor, XLPE insulated, taped PVC inner sheathed, armoured, extruded PVC outersheathed, 1.1 KV grade cable	Nos.	16		
7.3	3 -1/2 Core 35 Sq.mm stranded Al. Conductor, XLPE insulated, taped PVC inner sheathed, armoured, extruded PVC outersheathed, 1.1 KV grade cable	Nos.	12		
7.4	3 -1/2 Core 25 Sq.mm stranded Al. Conductor, XLPE insulated, taped PVC inner sheathed, armoured, extruded PVC outersheathed, 1.1 KV grade cable	Nos.	8		
7.5	4 Core 16 Sq.mm stranded Al. Conductor, XLPE insulated, taped PVC inner sheathed, armoured, extruded PVC outersheathed, 1.1 KV grade cable	Nos.	24		
7.6	4 -Core 16 Sq.mm stranded Cu Conductor, XLPE insulated, taped PVC inner sheathed, armoured, extruded PVC outersheathed, 1.1 KV grade cable	Nos.	10		
7.7	4 Core 10 Sq.mm stranded Al. Conductor, XLPE insulated, taped PVC inner sheathed, armoured, extruded PVC outersheathed, 1.1 KV grade cable	Nos.	80		
7.8	3 -Core 4 Sq.mm stranded Cu. Conductor, XLPE insulated, taped PVC inner sheathed, armoured, extruded PVC outersheathed, 1.1 KV grade cable	Nos.	8		
	Plant Illumination				
8.0	Power Distribution Boards (PDB)				
	Supply & installation of following Power Distribution Boards (PDB) on wall/column or recessed mounted on wall.				
8.1	Supply, Installation, testing and commissioning of 415V, IP-43, LT non-compartmentalised, fixed type, vertical, front opening, surface mounting, double door, IP-43 with metal door, door earthing, surface / recess wall mounted, top and bottom cable entry Power Distribution Board (TPNDB - A)	Nos.	3		
	Make : Legrand - TPN DB - DPX 250 ER MCCB DBs VTPN DB - Cat No. - 0678 32 / approved equivalent		.		

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	Incomer : one no. 415V, DPX 250 ER, 4P, 250A, MCCB cat no. 0252 36 with inbuilt adjustable thermal magnetic trip release and earth leakage module; with spreader link 6250 18; rotary handle 0262 11				
	Bus Bar : 415V, 250A, 3 ph, 4W, Cu bus bar				
	Outgoing MCB :12 nos. - 4P, 25A, 10 KA MCB cat no. 6033 21				
8.2	Supply, Installation, testing and commissioning of 415V, IP-43, LT non-compartmentalised, fixed type, vertical, front opening, surface mounting, double door, IP-43 with metal door, door earthing, surface / recess wall mounted, top and bottom cable entry Power Distribution Board (TPNDB - B)	Nos.	1		
	Make : Legrand - TPN DB - DPX 250 ER MCCB DBs VTPN DB - Cat No. - 0678 32 / approved equivalent				
	Incomer : one no. 415V, DPX 250 ER, 4P, 250A, MCCB cat no. 0252 36 with inbuilt adjustable thermal magnetic trip release and earth leakage module; with spreader link 6250 18; rotary handle 0262 11				
	Bus Bar : 415V, 250A, 3 ph, 4W, Cu bus bar				
	Outgoing MCB : i) 10 nos. - DP 25A, 10 KA MCB cat no. 6032 70 and ii) 3 nos. - 4P, 25A, 10 KA MCB cat no. 6033 21				
8.3	Supply, Installation, testing and commissioning of 415V, IP-43, LT non-compartmentalised, fixed type, vertical, front opening, surface mounting, double door, IP-54 with metal door, door earthing, surface / recess wall mounted, top and bottom cable entry Power Distribution Board (TPNDB - C)	Nos.	1		
	Make : Legrand - TPN DB - DPX 125 ER MCCB DBs VTPN DB - Cat No. - 0678 02 / approved equivalent				
	Incomer : one no. 415V, DPX 125, 4P, 125A, MCCB cat no. 6253 49 with spreader link 6250 05; rotary handle 0262 01				
	Bus Bar : 415V, 125A, 3 ph, 4W, Cu bus bar				
	Outgoing MCB : i) 10 nos. - DP 25A, 10 KA MCB cat no. 6032 70 and ii) 3 nos. - 4P, 25A, 10 KA MCB cat no. 6033 21				

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9.0	Lighting Distribution Boards				
	Supply & installation of following LPs/SBs on wall/column or recessed mounted on wall.				
9.1	Wall / column / recess mounted IP 43, TPN, 6 Way, 8+ 18 Module Lighting Distribution Board (LPB) - 40 Amp. FP RCCB (cat no. 6021 33) as Incomer and 15 nos. 16 Amp, 10KA SP MCB (cat no. 6032 34) as outgoing feeders (Make :Legrand : Ekinox TPN DB 6077 16 IP-43 - IK 09 with metal door or, approved equivalent)	Nos.	12		
9.2	Wall / column / recess mounted IP 43, SPN, 16 Way, 16 module Lighting Distribution Board (LPC) - 25 Amp. DP RCCB (cat no. 0086 09) as Incomer and 12 nos. 16 Amp, 10KA SP MCB (cat no. 6032 33) as outgoing feeders (Make :Legrand : Ekinox TPN DB 6077 13 IP-43 - IK 09 with metal door or, approved equivalent)	Nos.	3		
9.3	Wall / column / recess mounted IP 43, SPN, 12 Way, 12 module Lighting Distribution Board (LPD) - 25 Amp. DP RCCB (cat no. 0086 09) as Incomer and 9 nos. 16 Amp, 10KA SP MCB (cat no. 6032 33) as outgoing feeders (Make :Legrand : Ekinox TPN DB 6077 12 IP-43 - IK 09 with metal door or, approved equivalent)	Nos.	2		
10.0	Switch Boards & Receptacles				
	Supply & installation of following Switch Boards (along with 10A modular switches of approved colour, blank cover, GI 2 mm thick GI modular metal box embedded in wall, grid plate, FRONT PLATE with cover of approved colour suitable for modular switch) on wall/column/ work station or recessed mounted on wall. In case of concealed wiring, the switch board shall be mounted in 2mm thick GI metal box embedded in wall, base plate, face plates of colour approved by owner, (for concealed type wiring), earthing of the outlet boxes . The job includes cutting of walls and making it good (for concealed wiring). Colour of Face Plate and Switch shall be decided by the Owner during execution of work.				
10.1	Switch Board (4 module) (SWA) - Switchboard with 4 nos. one module 10A piano switch; (Surface / Recess Mounted)	Nos.	12		

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10.2	Switch Board (12 module) (SWD) - Switchboard with 7 nos. one module 10A piano switch; 1 no. two module fan regulator; 1 no. 6/15A, 5 pin two module International plug socket with 1 no one module 10A switch; (Surface / Recess Mounted)	Nos.	2		
10.3	Switch Board (8 module) (SWE) - Switchboard with 5 nos. one module 10A piano switch; 1 no. 6/15A, 5 pin two module International plug socket with 1 no one module 10A switch; (Surface / Recess Mounted)	Nos.	2		
10.4	Switch Board (8 module) (SWF) - Switchboard with 8 nos. one module 10A piano switch (Surface / Recess Mounted)	Nos.	2		
11.0	Receptacles				
11.1	Modular Power Board (4 module metal box) (RA) - Supply, Installation, Testing and commissioning of 250V, 1 no. Single phase and Neutral 16A, 5 Pin 3 module power socket outlets with 1 no. 1 module 16A SP Modular Switch mounted in 2mm thick GI box including embedding of outlet boxes in wall, earthing of the outlet boxes . (Surface / Recess Mounted)	pts	40		
11.2	Modular Power Board (6 module metal box) (RB) - Supply, Installation, Testing and commissioning of 250V, 2 no. 6/15A, 5 pin two module International plug socket with 2 no one module 10A switch mounted in 2mm thick GI box including embedding of outlet boxes in wall, earthing of the outlet boxes (Surface / Recess Mounted)	pts	35		
11.3	Supply & Installation of 25A Modular Motor Starter Unit (RC) of North West make (cat. No. C12M01 J) (2 module) for Air Conditioning units and 25A, 5 pin power socket unit (3 module) mounted in 2mm thick 6 module GI box including embedding of outlet boxes in wall, earthing of the outlet boxes . (Surface / Recess Mounted)	pts	10		

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12.0	Outdoor Lighting				
12.1	BOUNDARY WALL LIGHTING Type STA : Supply and Fixing of 30 W LED street lights, model BAJAJ 169907 BRLEP 30W LED WH or equivalent BL approved, around the Boundary wall. The light fitting to be fixed 2.2 mtr above the existing boundary wall with support of appropriate angle / 2 inch dia MS pipe as per requirement which includes MS angle / pipe, bolts, nuts, clamps and connectors, associated civil work etc to complete the job. Rate shall also include Marshalling box including 16A DP MCB, 3c x 2.5 sq mm flexible cable from MCB to light fittings, connector suitable for 4c x 16 sq mm cable in out . For detail, ref tender dwg.	Nos.	24		
12.2	BOUNDARY WALL LIGHTING Type STB : Supply and Fixing of 120 W LED street lights, model BAJAJ 169888 BRTFG 120W LED WW or equivalent BL approved, around the Boundary wall. The light fitting to be fixed 2.2 mtr above the existing boundary wall with support of appropriate angle / 2 inch dia MS pipe as per requirement which includes MS angle / pipe, bolts, nuts, clamps and connectors, associated civil work etc to complete the job. Rate shall also include Marshalling box including 16A DP MCB, 3c x 2.5 sq mm flexible cable from MCB to light fittings, connector suitable for 4c x 16 sq mm cable in out . For detail, ref tender dwg.	Nos.	11		
12.3	Post top lantern Type STI : Supply and fixing of LED post top spherical lantern type model BAJAJ 111741 BLPTSP 25W NW LED or equivalent BL approved	Nos.	4		
13.0	Ware House Bay Lighting				
	Supply, Installation, Testing, Commissioning of Light Fitting, mounting / hanging arrangement with ceiling rose, cutting hole and sealing arrangement in PEB 150 MM Sheet (for fixtures in PEB structure) with all necessary consumables to complete the job				
13.1	Type HA : 150W LED Highbay Luminaire with ingress protection IP 66 type model Bajaj 169709 BGHB 150W LED GIV or equivalent BL approved	Nos.	12		
13.2	Type HB : 140W LED Linear Highbay Luminaire with ingress protection IP 54 type model Bajaj 112744 BTS 140W LED Fixture or equivalent BL approved. Each highbay fixture shall be fixed at the parling of the warehouse with 2 nos. 3/4th " dia steel hanging rod with average length of each rod is 2.5 mtr. The rate includes supply and installation of necessary hanging rod.	Nos.	316		

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	Indoor Lighting				
14.0	Supply, Installation, Testing, Commissioning of Light Fitting, mounting / hanging arrangement with ceiling rose, cutting hole and sealing arrangement in PEB 150 MM Sheet (for fixtures in PEB structure) with all necessary consumables to complete the job				
14.1	Type DA : Recess mounted LED Circular Downlight fixture 1X18W, neutral white type model BAJAJ 112679 BPSLR 18W NW or equivalent BL approved	Nos.	16		
14.2	Type DC : Recess mounted 2' x 2' LED Square Light fixture 1 x 36 W, cool white type model BAJAJ 112644 BZRSQ 36W GZ1 CW or equivalent BL approved	Nos.	15		
14.3	Type SB : Linear general purpose Office / Parking / Stair Area 18W, neutral white, 4 feet LED batten fitting (with LED tube light) type model BAJAJ 112410 BCLSB 18 NW or equivalent BL approved	Nos.	17		
14.4	Type SC : Industrial Single 18W LED Tube Light luminaire with 18W neutral white LED tube light , degree of protection IP-65 type model BAJAJ 112687 BJI 118 LED PC or equivalent BL approved	Nos.	1		
14.5	Type SD : Industrial Twin 18W LED Tube Light luminaire with 2 x 18W neutral white LED tube light , degree of protection IP-65 type model BAJAJ 112688 BJI 218 LED PC or equivalent BL approved	Nos.	36		
	Ceiling Fan & Exhaust Fan				
15.0	Supply, Installation, testing & commissioning of ceiling fans / exhaust fans including all associated masonry work, down rod.				
15.1	Ceiling Fan (F) 1400 mm sweep with 4 step 2 module Fan Electronic Regulator (make : Crompton / Havells / Bajaj)	Nos.	1		
15.2	Exhaust Fan (EX) 300 mm sweep (make : Crompton / Havells / Bajaj)	Nos.	4		

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	Lighting Wiring				
	Sub Main Cable Wiring for Plant & Admin Block				
16.0	Cabling from Lighting Distribution Boards [LPA / LPB / LPC] to lighting fittings, switch boards and Wiring to the RB type power plug points from Lighting / Power DBs : Supply of all materials (including supply of 3 Core 2.5 sq mm copper conductor, XLPE insulated, taped PVC innersheathed, armoured, extruded PVC outersheathed cable; glands; lugs; saddles; MS JB's of adequate size and entries; GI Spacers etc.), installation, termination, testing, commissioning of cable wiring for lighting by surface wiring with armoured cables. The fixtures shall be mounted / hanging from ceiling / wall . (for technical detail of cable pl refer cable specification attached elsewhere in this document)	Mtr.	8500		
	Concealed - Wiring / Above False Ceiling or, normal Wiring using PVC conduit/ Cabling/Casing Capping				
17.0	Supply of PVC insulated copper conductor 600V Grade stranded flexible wires of Havells/Finolex/ Polycab/ National make (for phase, neutral & earth) for interconnection between DBs and switchboards/outlet boxes and routing of wires through 25/32 mm dia heavy duty, PVC conduit including supply and fixing/concealing of conduits and necessary junction boxes in wall/ceiling /floor with cleating, etc and termination of wires on DBs /Switchboards/outlet boxes. Conduits & accessories shall be of Standard make. The job includes cutting of walls and making it good for concealed wiring. Wires shall be of the following sizes :				
17.1	2 nos 2.5 sq.mm.(Ph-N)+ 1 nos 1.5 sqmm (E)	RM	450		
17.2	2 nos 4.0 sq.mm.(Ph-N)+ 1 no 2.5 sqmm (E)	RM	700		
18.0	Point Wiring : i) Concealed Wiring / Above False Ceiling or, ii) normal Wiring using 1 inch ISI FRLS Heavy Duty PVC conduit/ Cabling/Casing Capping				
	i) Supply of 1.5 Sq.mm 600 V Grade FRLS PVC insulated copper conductor stranded flexible wires (separate three wires for phase, neutral & earth)				
	ii) Routing of wires through 25 / 32 mm dia heavy duty PVC conduit including supply & fixing of conduits, necessary JB's. The job includes cutting of walls and making it good for concealed wiring. Conduits and accessories shall be of Standard make.				

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	iii) Embedding of switch boxes, JBs, earthing, concealing of conduits in wall/ceiling/floor with cleating, casing capping etc.				
18.1	One point controlled by one 10 A Switch (average route length 8 mtr)	Nos	40		
18.2	Two point controlled by one 10 A Switch (average route length 12 mtr)	Nos	15		
	Grounding				
19.0	Supply, fabrication and installation of 50 dia. 3.8 tr. Long GI pipe earth station complete with earth treatment and masonry work as per tender specification and tender drawing	Nos.	30		
20.0	Supply, laying and connection of main earth grid (at 600 mm below floor level) with 50 x 6 GI Strip and riser including welding connection and earth excavation & backfilling	Mtr	300		
21.0	Supply, laying, fixing and connection of equipment earthing lead with different sizes of conductor as specified, including floor chipping and repair (wherever required)				
21.1	50 x 6 GI Flat	Mtr	700		
21.2	25 x 3 GI Flat	Mtr	200		
21.3	8 swg GI wire (including provision of socket at both end of each piece)	Mtr	3000		
21.4	12 swg GI wire (including provision of socket at both end of each piece)	Mtr	4000		
22.0	PRE FABRICATED CABLE TRAY				
	Supply, fabrication, welding, cutting, bending and fixing of pre-fabricated perforated / ladder type Hot dip Galvanised low carbon steel cable tray with nominal rung spacing 12 inch, including supply of jointing coupler with nut bolts and washers, fabrication of bends as per requirement, hanger support @ 2.0 Mtr spacing (supply rate will includes supply of pre-fabricated cable tray and couplers, cost of installation includes all other things like supply and installations of other accessories like cable tray support / hanger; touch up galvanised painting at site and other consumables etc. all)				
22.1	Cable Tray 600W x 100H x 2.5 mm thickness ladder type tray	Mtr	300		
22.2	Cable Tray 300W x 50H x 2 mm thickness perforated tray	Mtr	600		
22.3	Cable Tray 200W x 25H x 2 mm thickness perforated tray	Mtr	600		
22.4	Cable Tray 50W x 25H x 2 mm thickness perforated tray	Mtr	1800		

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23.0	Excavation in soft soil, sand filling, including provision of, sand, 2nd class bricks from sides and 2nd class brick/recast PCC slab on top for protection of the cables, and backfilling with earth as well as cable tags and markers etc. as per technical specification for cable trenches of following sizes: (Rates shall be inclusive of supply of sand, brick, PCC slab - 40mm thick, cable tag, markers etc).				
23.1	300mm (Wide) x 600mm (Deep)	Mtr	60		
	Miscellaneous				
24.0	Supply, fabrication & erection of cable tray, Lightning Arrester Air Terminal, and misc. steel structures for various support, mounting of light fittings, local panels, receptacles etc., including supply & application of two coats of paints as specified.	Kg	11500		
25.0	Supply and placing of 8 mm thickness rubber floor mats corrugated and rated for various switch board and panels. The material shall be conforming to IS:5424 and shall carry ISI certification.				
25.1	3 KV grade, 2m x 1m	Nos.	12		
25.2	11 KV grade, 2m x 1m	Nos.	4		
26.0	Supply and installation of danger tag board of standard size and type (in local language & English)				
26.1	415 volt danger tag board	Nos.	16		
26.2	11 kv danger tag board	Nos.	8		
27.0	Follow up with local electricity authority and central electricity authority in respect of submission of all relevant documents/drawings/test reports etc. , getting the installation approved from CEA/CCOE/SEB or, any other authority for power connection, getting permanent power supply connection to the premises of Owner etc. (all statutory fees to the supply authority shall be paid by owner / owner's representative)	Lot	1		
28.0	COMMUNICATION POINTS				
28.1	Supplying and drawing of PVC unarmoured 2 pair telephone cable with supply and fixing of Surface/Recessed PVC conduit as required.	RM	400		
28.2	Supplying and drawing of PVC unarmoured 50 pair telephone cable with supply and fixing of Surface/Recessed PVC conduit as required.	RM	40		

Schedule of Work
Electrical Installation Work for AMTZ, Vizag

Sl no.	Description of Item	Unit	Qty	Unit Rate (SUPPLY + INSTALLATION) UNIT RATE (Rs.)	Amount (SUPPLY + INSTALLATION) in (Rs.)
28.3	50 pair Telephone double door Telephone Junction Box with SS back mounting frames and Connecting modules in 2 columns and have the full size front doors-2 Nos. fitted with panel lock & key on door with door handle , door stopper & door seals, cutouts and gland plate forcable entry	Each	1		
28.4	Supplying and fixing of RJ-11 telephone socket outlet with GI sheet box and modular cover plate complete as required:- Single RJ-11 socket in One Plate	Each	25		
29.0	LAN POINTS				
29.1	Supplying and Drawing of LAN Cable CAT-6 (A) UTP Caba in the existing surface/ recessed steel/ PVC conduit as required.	RM	1000		
29.2	Supplying, installation, testing & commissioning of RJ-45 Flush mounted information outlets wired according to T 5688 standard with a surface mount box complete as required. - Single Outlet in one Face plate	Each	25		
30.0	ISOLATORS:				
30.1	Supply and fixing of 100A 4P MCCB with enclosure with IP43 protection suitable for surface and flush mounting available in CRCA sheet steel RAL9003 powder coated confirms to IS 8623-1 & 3, IEC 61439-1&3 including connections and labour charges etc.	Nos	1		
30.2	Supply and fixing of 63A 4P MCCB with enclosure with IP43 protection suitable for surface and flush mounting available in CRCA sheet steel RAL9003 powder coated confirms to IS 8623-1 & 3, IEC 61439-1&3 including connections and labour charges etc.	Nos	1		
30.3	Supply and fixing of 32A 4P MCCB with enclosure with IP43 protection suitable for surface and flush mounting available in CRCA sheet steel RAL9003 powder coated confirms to IS 8623-1 & 3, IEC 61439-1&3 including connections and labour chargesetc	Nos	1		
31.0	TOTAL BASIC PRICE (Rs.)				
32.0	ADD FOR GST UNDER WORKS CONTRACT (@ 18 %)				
33.0	GRAND TOTAL (INCLUSIVE OF GST) (Rs.)				
	(Rupees)				
	GSTIN of the Supplier :				