

बिहार राज्य भवन निर्माण निगम, लि० पटना
(बिहार सरकार का उपक्रम)
दर आमंत्रण हेतु कोटेशन आमंत्रण सूचना सं०-९०/२०१८-१९

भवन निर्माण विभाग के निबंधित संवेदकों/ख्याति प्राप्त फर्मों/कंपनियों से दिनांक: ०८.१०.२०१८ के अपराह्न ३:०० बजे तक राज्य के विभिन्न जिलान्तर्गत ७२० क्षमता वाले अनुसूचित जनजाति आवासीय विद्यालय के निर्माण कार्य में विद्युत सामग्रियों की आपूर्ति एवं अधिष्ठापन तथा अन्य संबंधित कार्यों के गैर अनुसूचित मर्दों के लिए मुहरबंद कोटेशन उप महाप्रबंधक, पी०आई०यू०, पटना/महाप्रबंधक (उत्तर/दक्षिण)/मुख्य महाप्रबंधक, बिहार राज्य भवन निर्माण निगम लि०, पटना के कार्यालय में प्राप्त किया जाएगा और उसी दिन ३:३० बजे अपराह्न में कोटेशनदाताओं या उनके द्वारा अधिकृत प्रतिनिधियों के समक्ष खोला जायेगा।

- उक्त कोटेशन से संबंधित विस्तृत विवरणी निगम के वेबसाइट www.bsbccl.bih.nic.in पर उपलब्ध है।
- यह कोटेशन दर निर्धारण के लिए आमंत्रित किया गया है।
- विशेष जानकारी हेतु अधोहस्ताक्षरी के कार्यालय में कार्यावधि में सम्पर्क करें।

विशेष शर्तें:-

१. कोटेशनदाताओं को अपना दर अंक एवं अक्षरों में उद्धृत करना है।
२. दर सभी प्रकार के करों को लेकर अंकित किया जायेगा।
३. दर कार्यस्थल पर समानों की ढुलाई को लेकर किया जाएगा, उन्हें किसी प्रकार का अतिरिक्त ढुलाई दर देय नहीं होगा।
४. कोटेशन के साथ अद्यतन आयकर एवं GST प्रमाण-पत्र देना होगा।
५. विशेष सूचना के लिए सूचनापट्टा या वेबसाइट www.prdbihar.gov.in एवं www.bsbccl.bih.nic.in देखें या अधोहस्ताक्षरी से सम्पर्क करें।

ह०/-

मुख्य महाप्रबंधक,
बिहार राज्य भवन निर्माण निगम लि०, पटना।

ज्ञापांक:-

दिनांक:

प्रतिलिपि:- निदेशक, सूचना एवं जन-सम्पर्क विभाग, बिहार, पटना को e-advertisement के माध्यम से दैनिक समाचार पत्रों में प्रकाशनार्थ समर्पित।

ह०/-

मुख्य महाप्रबंधक,
बिहार राज्य भवन निर्माण निगम लि०, पटना।

ज्ञापांक:-

2766

दिनांक:

13.09.18

प्रतिलिपि:- आई०टी० मैनेजर, बिहार राज्य भवन निर्माण निगम लि०, पटना को सूचनार्थ एवं निगम के वेबसाइट पर अपलोड करने हेतु प्रेषित।

मुख्य महाप्रबंधक,
बिहार राज्य भवन निर्माण निगम लि०, पटना।

क्रम सं०	योजनाकानाम	कार्य की विवरणी	ईकाई	उद्धृत दर
1	2	3	4	5
1	विभिन्न जिलान्तर्गत 720 क्षमता वाले अनुसूचित जनजाति आवासीय विद्यालय के निर्माण कार्य में विद्युत सामग्रियों की आपूर्ति एवं अधिष्ठापन से संबंधित कार्य	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		Up to 35 sq. mm		
b		Above 35 sq. mm and up to 95 sq. mm		
c		Above 95 sq. mm and up to 185 sq. mm		
2		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.		
a		4 X 10 sq. mm (25 mm)	Per Meter	
b		4 X 16 sq. mm (28mm)	Per Meter	
c		4 X 25 sq. mm (28mm)	Per Meter	
d		3½ X 70 sq. mm (38mm)	Per Meter	
e		3.5C X 95 Sq.mm aluminium	Per Meter	
f		3½ X 150 sq. mm (50mm)	Per Meter	
g		3½ X 185 sq. mm (57mm)	Per Meter	
3		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 :		
		240 sq. mm 3 core	Per Meter	
4		Supplying and making OUTDOOR cable end jointing with cast resin compound, including lugs and other jointing materials, for following size of 3 core, XLPE aluminium conductor cable of 11 KV grade as required:		
		240 sq. mm 3 core	Per Meter	
5	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.			
a	150 mm dia meter	Each		
b	300 mm dia meter	Each		
6	Supply, installation, testing and commissioning of surface mounted Square 18W LED light White colour, PMMA Low glare diffusers, IP- 20 indoor installations, 50x250x50 height max dimensions, 100 Lumens/per watt ,1800Lumens, Colour temperature:-6000K cool white fixtures along with all hardware, control gears as per the light type and system , Make:-Philips/Wipro/Bajaj etc. Reputed (Class A Std.)	Each		
7	Supply, installation, testing and Commissioning of Acrylic high grade diffuser, plastic moulded body frame with radiant surface Linear 38 Watt LED light, IP- 65 indoor instalaltions, 1200x 150x100 high max dimensions, Color temperature:- 5000K, CRI Not less than 80 fixture Make:-Philips/Wipro/Bajaj etc. Reputed (Class A Std.).	Each		
8	Supply of Linear 18 Watt LED light fixture moulded body frame with radiant surface, Acrylic high grade diffuser, Surface mounted - 600 long fixture, IP- 20 grade, 600x 25x70 high max dimensions, Lumen output:100 Lumens/per watt and total Lumen package of 600 Lumens , Colour temperature: 5000K	Each		
9	Supply of 12 Watt LED of Aluminium Die CAST, Diffused light cover Bulkhead, IP-65 grade, Surface mounted - 250x150x125 mm light, Lumen output:-100 Lumens/per watt and total Lumen package of 1200 Lumens, RI-Not less than 80, Color temperature:-6000K fixture as per details below :	Each		
	ADDRESSABLE FIRE DETECTION AND ALARAM SYSTEM			
10	Supply, installation, testing and commissioning of following loop Analogue addressable main control panel in a tier cabinet with dress plates covering the empty tiers, with 640 character LCD display and full WERTY keypad for programming including addressable power supply and battery backup for 24 hours in standby and 5 mints in alarm complete as required.			
	1 Loop panel	Each		
11	Supply, installation, testing and commissioning of addressable Manual Call Point.	Each		
12	Supply, installation, testing and commissioning of Fire Alarm Hooter (sound output of minimum 100 dB up to a distance of 2 meter) with strobe light of 110 cd intensity with power supply arrangement complete as required and suitable for wall/ceiling mounting as per follows:	Each		
13	Supply, installation, testing and commissioning of Fire Alarm Hooter (sound output of minimum 100 dB up to a distance of 2 meter) with strobe light of 110 cd intensity with power supply arrangement complete as required and suitable for wall/ceiling mounting as per follows:	Each		
14	Supply and fixing of 2x1.5 Sq.mm. copper FRLS Fire survival wires rated for 2 hours in existing PVC conduits	Per Meter		
	PA SYSTEM			
15	Supply, installation, testing and commissioning FM Tuner player for BGM system with USB input Make: Bosch or equivalent Reputed make.	Each		
16	Supply, installation, testing and commissioning of high quality professional grade BOOSTER amplifier minimum 6 inputs Make: Bosch or equivalent Reputed make.	Each		

17		Supply and installation of Ceiling mounted 6W speaker with line matching transformer and ceiling ring.	Each	
18		Wall mount speaker with wall mount bracket as per BOSCH or equivalent Reputed make.	Each	
19		Supply and drawing through existing conduits 2x30/0.20mm flexible shielded twin twisted PVC insulated cable	Each	
20		Supply, installation, testing and commissioning Zone selection console with 6 zones provision and with all call facility with paging microphone, Call station 6 zone with Keypad and 6 zone selector panel ,Make : Bosch or equivalent Reputed make.	Each	
13		Supply and fixing of equipment rack to accommodate 1 nos. amplifier, FM tuner, Zone controller, CD Player and zone panel to accommodate all the above PA system equipment	Each	
14		Supply and fixing the following sizes of MS medium grade conduits (IS : 9537 Part-III) complete with accessories such as bends, junction boxes, pull boxes etc., in recess or on surface including cutting chases in the walls/floors and making good the same complete as required.		†
a		19 mm	Each	
b		25 mm	Each	
		Addressable Emergency Lighting System		
15		Batteries incorporated into each luminaire shall be Polymer Lithium Ion technology and incorporate over voltage, over current and deep discharge protection circuitry. Provides at least 3 hours luminaire operation when fully charged.	Each	
16		Supply, installation, testing and commissioning of Emergency Lighting Control Panel with two lighting lines with maximum of 254 devices on both lines, up to 127 devices per line, luminaire line length 500/1000 Metres .The System shall work on Extra Low Voltage and shall be Addressable. Conforms to SFS - EN-50172 either locally or remote access,	Each	
17		Supply, installation, testing and commissioning of following items:-		
a		ELS Panel Transformer 230 V with an output of 35V AC and is placed between mains and EL2 Control panel	Each	
b		Key pad with an LCD to control read and configure the Main ELS Control Panel.	Each	
c		Addressable Exit Signage visible from 20 mtr with integral battery capacity of 3 Hrs and bicoloured LED status indicator. Available in Left, Right, Down signs	Each	
d		Common mounting base which is used to mount luminaires and exit signs.	Each	
18		Supply, installation, testing and commissioning of following items:-		
a		Configuration and programming software tool for use with Emergency lighting control panel. Software is used to configure light levels, set up lighting areas and create input and output parameters during set up and commissioning.	Each	†
b		Under-voltage monitoring device that constantly assesses the condition of a mains lighting circuit. Triggers at 75% of the nominal lighting circuit supply	Each	
c		Hand held Address Programmer designed to address the luminaires and exit signs. Designed to be light, robust and easy to use it operates from a single PP3 size battery.	Each	
d		Supply and fixing of 2x1.5 Sq.mm copper FRLS Fire survival wires rated for 2 hours in PVC conduits	Each	
		CCTV System		
19		Supplies, Installation, Testing & Commissioning of 1/4" dome 36 IR CCD, 1.3MP, 0.2lx (F2.0), Internal Sync., BLC / AGC Varifocal lens, dome camera with PoE Make: Dhua, LG, Samsung, Panasonic, Honeywell or equivalent.	Each	
21		Supply, Installation, Testing & Commissioning of POE switches of following ports 10/100mbps /PoE +4 port Gigabit switch with web view:-		
		16 Ports PoE 10/100 Network switch	Each	
22		Supply, Installation, Testing & Commissioning of 19 U rack complete with twin power strips, internal provisions to mount the Poe, NVR, Hard disc etc. complete as required		
23		Supply, Installation, Testing & Commissioning of CAT6 E patch cables to interconnect PoE, NVR, hard disc etc. Complete as required cable	Each	
24		Supply, installation, testing and commissioning of Network Video Recorders recording HD1@25fps recording, 6SATA HDD+1CD/DVD-RW 6TB expandable up to 32TB, 4 USB Port, 1 RJ 45, RS-485, HDMI/TV/BNC/VGA Simultaneous video output, CMOB, KVMS, PAL Make : LG, Panasonic or equivalent.	Each	
		16 Channels NVR CP-Plus MODEL NO. UNR-332T82	Each	†
25		Supply, Installation, Testing & Commissioning of 32" LED Colour monitor Grey Cabinet, AC230V, PAL Make : Samsung/LG/Panasonic		
26		Supply and fixing the following sizes of MS medium grade conduits (IS : 9537 Part-III) complete with accessories such as bends, junction boxes, pull boxes etc., in recess or on surface including cutting chases in the walls/floors and making good the same complete as required.		
a		19 mm	Each	
b		25 mm	Each	
27		Note:- Supply, Installation, Testing & Commissioning of CAT6 e cable the above quote shall include all hardware, software as required for the functionality of the system which may not be described above. The proprietary soft wares to run the complete system to the clients satisfactions One year onsite warranty with technical and other supports for effective operation Training the clients staff for easy operation and handling the system the wiring of Camera and mike shall be done by the electrical venders under the supervision of CCTV vender Shall include testing of all Cat-6e cables during installation stage The vender shall prepare shop drawings for approvals. The vender shall submit the as built drawings dully approved by the consultant All GTP to be approved by the consultants before sourcing the materials	Each	
		Cabling for Telecommunications		



		NON-SCHEDULE ITEMS		
28		Supply and laying of High Conductivity Solid Annealed Bare Copper industrial Telephone (Switchboard) Cables with High Density Polyethylene Insulation, Paired, Polyester and Sheathed with High Oxygen Index, Fire Retardant, PVC Compound, Grey Outer Sheath generally conforming ITD Specification		†
		0.61MM 5 Pair armoured	Each	
29		Supplying and drawing co-axial TV cable RG-11 grade, 0.7 mm solid copper conductor PE insulated, shielded with fine tinned copper braid and protected with PVC sheath in the existing surface/ recessed steel/ PVC conduit as required.	Per Meter	
30		Providing and fixing in position 75 mm x 75 mm x 75 mm G.I. box covered with plate type shuttered type data jack outlet - RJ-45 on plate	Each	
31		Supply and installation, testing and connecting of following Krone type tag boxes with tag blocks		
a		10 pair	Each	
b		20 pair	Each	
c		30 pair	Each	
		Miscellaneous Items		
32		Supplying and drawing of UTP 4 pair CAT 6 LAN Cable in the existing surface/ recessed Steel/ PVC conduit as required.		
		1 run of cable	Per Meter	
33		Supplying and fixing Cable End Box (Loose wire box)(IP 43) suitable for following triple pole and neutral, sheet steel, MCB distribution board, 415 V, on surface/ recess, complete with testing and commissioning etc. as required.		
a		2.24.2 For 6 way, Double door TPN MCBDB	Each	†
b		8 way, Double door TPN MCB DB		
34		Supplying & fixing suitable size GI box with modular plate and cover in front on surface or in recess including providing and fixing 25 A modular socket outlets and 25 A modular SP MCB, "C" curve including connections, painting etc. as required.	Each	
35		MDB - 3 SCHOOL POWER		
		Incoming		
		160A, 415V, Ics=Icu=25KA rupturing capacity, FP, MCCB with extended rotary handle - 1 No.	Each	
		1 no. Type 1+2 Class-I+II lightning surge arrester 3 pole plus neutral. OBO make type no. V25-B+C 3NPE385 as per item no. 5094478 with MPCB	Each	
		Busbar		
		Heat shrunk colour coded aluminium bus bars with SMC/DMC busbar supports, nuts & bolts with spring washers.	Each	
		A Set of TPN 200A Al Bus Bars. Current density shall be 1A/sq.mm	Each	
		Instrumentation for Incoming		
		1 No. three phase 0-500V Digital voltmeter with selector switch	Each	
		1 No. 0-200A digital ammeter with CT's 200/5A and selector switch	Each	
		1 set of LED type phase indicating lamps with HRC fuses	Each	†
		Outgoings		
		11 Nos. 25-40A, 415V, 25KA rupturing(Ics=Icu) capacity, TPN, MCCB with extended rotary handle	Each	
36		MDB - 3 AS DESCRIBED ABOVE AND AS PER DRAWINGS	Each	
		MDB - 4 SCHOOL LIGHTING		
		Incoming		
		63A, 415V, Ics=Icu=25KA rupturing capacity, FP, MCCB with extended rotary handle - 1 No.	Each	
		1 no. Type 1+2 Class-I+II lightning surge arrester 3 pole plus neutral. OBO make type no. V25-B+C 3NPE385 as per item no. 5094478 with MPCB	Each	
		Busbar		
		Heat shrunk colour coded aluminium bus bars with SMC/DMC busbar supports, nuts & bolts with spring washers.	Each	
		A Set of TPN 200A Al Bus Bars. Current density shall be 1A/sq.mm	Each	
		Instrumentation for Incoming		
		1 No. three phase 0-500V Digital voltmeter with selector switch	Each	
		1 No. 0-50A digital ammeter with CT's 50/5A and selector switch	Each	
		1 set of LED type phase indicating lamps with HRC fuses	Each	
		Outgoings		
		5 Nos. 25-40A, 415V, 25KA rupturing(Ics=Icu) capacity, TPN, MCCB with extended rotary handle	Each	†
		MDB - 4 AS DESCRIBED ABOVE AND AS PER DRAWINGS	Each	
37		MDB - 2 BOYS HOSTEL / MDB - 1 Girls HOSTEL		

		Incoming		
		250A, 415V, Ics=Icu=25KA rupturing capacity, FP, MCCB with extended rotary handle - 1 No.	Each	
		1 no. Type 1+2 Class-I+II lightning surge arrester 3 pole plus neutral. OBO make type no. V25-B+C 3NPE385 as per item no. 5094478 with MPCB	Each	
		Busbar		
		Heat shrinked colour coded aluminium bus bars with SMC/DMC busbar supports, nuts & bolts with spring washers.	Each	
		A Set of TPN 300A Al Bus Bars. Current density shall be 1A/sq.mm	Each	
		Instrumentation for Incoming		
		1 No. three phase 0-500V Digital voltmeter with selector switch	Each	
		1 No. 0-250A digital ammeter with CT's 250/5A and selector switch	Each	
		1 set of LED type phase indicating lamps with HRC fuses	Each	†
		Outgoings		
		20 Nos. 32-40A, 415V, 25KA rupturing(Ics=Icu) capacity, TPN, MCCB with extended rotary handle , Also ELCB of desired rating	Each	
		MDB - 2 AS DESCRIBED ABOVE AND AS PER DRAWINGS	Each	
38		METER BOARD - MB-1		
		Incomer		
		125A, 415V, Ics=Icu=25KA rupturing capacity, FP, MCCB with extended rotary handle - 1 No.	Each	
		1 no. Type 1+2 Class-I+II lightning surge arrester 3 pole plus neutral. OBO make type no. V25-B+C 3NPE385 as per item no. 5094478 with MPCB	Each	
		Busbar		
		Heat shrinked colour coded aluminium bus bars with SMC/DMC busbar supports, nuts & bolts with spring washers.	Each	
		A Set of TPN 200A Al Bus Bars. Current density shall be 1A/sq.mm	Each	
		Instrumentation for Incoming		
		1 No. three phase 0-500V Digital voltmeter with selector switch	Each	
		1 No. 0-125A digital ammeter with CT's 125/5A and selector switch	Each	
		1 set of LED type phase indicating lamps with HRC fuses	Each	†
		Meter compartments		
		Meter Compartments with electronic meters three phase direct type - 10 nos.	Each	
		The vendor shall submit details before fabrication		
		Outgoings		
		25-32A FP MCB - 12 Nos.	Each	
39		METER BOARD - MB-2		
		Incomer		
		125A, 415V, Ics=Icu=25KA rupturing capacity, FP, MCCB with extended rotary handle - 1 No.	Each	
		1 no. Type 1+2 Class-I+II lightning surge arrester 3 poles plus neutral. OBO make type no. V25-B+C 3NPE385 as per item no. 5094478 with MPCB	Each	
		Busbar		
		Heat shrinked colour coded aluminium bus bars with SMC/DMC busbar supports, nuts & bolts with spring washers.	Each	
		A Set of TPN 200A Al Bus Bars. Current density shall be 1A/sq.mm	Each	
		Instrumentation for Incoming		
		1 No. three phase 0-500V Digital voltmeter with selector switch	Each	†
		1 No. 0-125A digital ammeter with CT's 125/5A and selector switch	Each	
		1 set of LED type phase indicating lamps with HRC fuses	Each	
		Meter compartments		
		Meter Compartments with electronic meters three phase direct type - 11 nos.	Each	
		The vendor shall submit details before fabrication		
		Outgoings		
		25-32A FP MCB - 13 Nos.	Each	
40		METER BOARD - MB-3		
		Incomer		

W

		125A, 415V, Ics=Icu=25KA rupturing capacity, FP, MCCB with extended rotary handle - 1 No.	Each	
		1 no. Type 1+2 Class-I+II lightning surge arrester 3 poles plus neutral. OBO make type no. V25-B+C 3NPE385 as per item no. 5094478 with MPCB	Each	
		Busbar		
		Heat shrunk colour coded aluminium bus bars with SMC/DMC busbar. supports, nuts & bolts with spring washers.	Each	
		A Set of TPN 200A Al Bus Bars. Current density shall be 1A/sq.mm	Each	
		Instrumentation for Incoming		
		1 No. three phase 0-500V Digital voltmeter with selector switch	Each	
		1 No. 0-125A digital ammeter with CT's 125/5A and selector switch	Each	
		1 set of LED type phase indicating lamps with HRC fuses	Each	
		Meter compartments		
		Meter Compartments with electronic meters three phase direct type - 8 nos.	Each	
		The vendor shall submit details before fabrication		
		Outgoings		
		25-32A FP MCB - 10 Nos.	Each	
41		Supplying of following sizes of 11 KV grade aluminium conductor XLPE armoured cable conforming to IS : 7098 Part- II		
		185 sq. mm 3 core	Per Meter	
42		Supplying of following types and sizes of 1.1 KV grade XLPE insulated copper / aluminium conductor armoured cable conforming and PVC inner and outer sheath as per IS : 7098 Part- I & II and conductor as per is : 8130		
		4c6.0 Sq.mm copper	Per Meter	
		4C10 Sq.mm aluminium	Per Meter	
		4C16 Sq.mm aluminium	Per Meter	
		4C25 Sq.mm aluminium	Per Meter	
		3.5C70 Sq.mm aluminium	Per Meter	
		3.5C95 Sq.mm aluminium	Per Meter	
		3.5C150 Sq.mm aluminium	Per Meter	
		3.5C185 Sq.mm aluminium	Per Meter	
43		Supplying and making indoor end termination with brass compression gland and COPPER lugs for following size of PVC insulated and PVC sheathed / XLPE Copper conductor cable of 1.1 KV grade as required.		
		4c X 6.0 Sq.mm copper	Per Meter	
44		Constructing of following sizes masonry manhole with precast heavy duty SFRC Covers		
		600x 600x 750 mm deep	Each	
		450 x 450 x 600 mm deep	Each	
		PANELS		
		NON-SCHEDULE ITEMS		
		Note : For MCCB thermal setting shall be 80% to 100% of rated capacity. The breaking capacity as specified shall be Ics value and Icu shall be minimum equal to Ics value if not specified otherwise. Ics=Icu= as specified. All meters shall be digital type. All MCCB shall be with extended rotary handles on the door. All MCCB shall be THERMAL AND MAGNETIC adjustable type .All ACB shall be with electronic IDMT release. Aluminium bus bars shall be rated at 1A/ Sq.mm. All CT shall be cast resin type. All panel control wiring shall be done with FRLS single core flexible wires. All multifunction meter to be with communication ports. All MCCB to be provided with ON LED indication		
45		Supply, installation, testing and commissioning of L.T. metal clad cubicle type panel board suitable for 415 V AC three phase 4 wire system, 45KA fault level, completely compartmentalised, Aluminium Bus Bars, designation labels as per requirement.	Each	
		Importantnote: The minimum paint / Powder Coating thickness shall be 65 micron.		
		MAIN LT PANEL		
46		1 No. 800A, 415V, 35KA rupturing(Icu=Ics) capacity, MDO manual operated FP Air Circuit Breaker with IDMT electronic release, U/V, S/T coils and operation counter.	Each	
		1 No. 0-500V voltmeter with selector switch	Each	

		1 no. Class B lightning surge arrester 3 pole plus neutral. OBO make type no. MCD-50-B 3+1- OS 320V with MPCB as per drawing	Each	
		1 set of indicating lamps to indicate OPEN, CLOSE TRIP for breaker	Each	
		TNC switch for breaker ON-OFF operation	Each	
		1 No. 0-800A digital ammeter with CT's 800/5A	Each	
		1 No. 0-400A digital ammeter with CT's 400/5A	Each	
		1 No. CT's of 800/5A rating for capacitor panel	Each	
		1 No. power analyser Neptune M20 PHASE TRAC	Each	
		BUSBARS		
47		One set of 1000A 3 Phase and 500A Neutral TPN busbars of aluminium with colour coded heat shrinkable sleeves and with SMC/DMC supports at every 600mm intervals and at both ends	Each	
		Appx cross section of busbars - 1000A - 100x10mm	Each	
		Appx cross section of busbars - 500A - 100x6mm	Each	
		OUTGOINGS :		
		2 Nos. 315A, 415V, 35KA rupturing(Ics=Icu) capacity, TPN, MCCB with extended rotary handle with power analyser with 300/5A CTs	Each	
		3 Nos. 250A, 415V, 35KA rupturing(Ics=Icu) capacity, TPN, MCCB with extended rotary handle with power analyser with 250/5A CTs	Each	
		3 Nos. 160A, 415V, 35KA rupturing(Ics=Icu) capacity, TPN, MCCB with extended rotary handle with power analyser with 150/5A CTs	Each	
		4 Nos. 125A, 415V, 35KA rupturing(Ics=Icu) capacity, TPN, MCCB with extended rotary handle with power analyser with 125/5A CTs	Each	
		2 Nos. 100A, 415V, 35KA rupturing(Ics=Icu) capacity, TPN, MCCB with extended rotary handle with power analyser with 100/5A CTs	Each	
		1 Nos. 63A, 415V, 35 KA rupturing capacity, TPN, MCCB with extended rotary handle and 20KVAR capacitor bank 63A AC-3 capacitor duty contactor and ON delay timers.	Each	
		MAIN LT PANEL AS DESCRIBED ABOVE AND AS PER DRAWINGS		
48		Supplying, installation, testing & commissioning of factory made automatic power factor control panel of following KVAR capacity having single phase MPP type, self-healing, low loss capacitor filled with suitable capacitor grade oil & housed in AL can mounted on modular racks of max 50 KVAR capacity and minimum 12.5KVAR and having current limiting contactor circuit to suppress switching inrush current to improve capacitor life. The system shall have multistep microprocessor based power factor controller provided in the command module having two set points for target P.F setting, automatic adjustment of C/K, Digital PF display. The system shall be provided with a Master MCCB of required capacity to power factor correction panel, checking its main operating parameters such as overloads and short-circuits. Provisions should be there to enhance the capacity of the panel by adding additional racks of as mentioned above and to be added vertically upwards so as to avoid occupying extra space horizontally. The other general specifications shall be as under :	Each	
		Note : The capacitors shall be of type LL-10 Mono long life capacitors of Ductile or equivalent specified make General Specifications : Rated voltage : 400 to 440V A.C, 3 Phase,50 Hz, Permissible over voltage : 1.1 Vn, Permissible over current : 1.3 In, Temperature range : 50 deg Dielectric loss : Below 0.2 W/KVAR		
		Conforms to :		
		Capacitors : IS 2834/1986, IEC : 831/1&2		
		PF Correction panel : IEC 439/ 1-2		
		150KVAR CAPACITOR PANEL		
		Incomer		
49		315A FP Isolator - 1 no.	Each	
50		25KVAR x 6 = 150KVAR	Each	
51		Each 25KVAR bank to have 63A TP capacitor duty contactor and 63A TP MCB, on-off indicator, on-off push buttons for manual operation	Each	
52		Total KVAR capacity : 150KVAR	Each	
		ESSENTIAL SUPPLY PANEL		
53		160A, 415V, Ics=Icu=35KA rupturing capacity, FP, MCCB with extended rotary handle - 1 No.	Each	

54	1 no. Type 1+2 Class-I+II lightning surge arrester 3 poles plus neutral. OBO make type no. V25-B+C 3NPE385 as per item no. 5094478 with MPCB	Each	
	Busbar		
55	Heat shrunk colour coded aluminium bus bars with SMC/DMC busbar supports, nuts & bolts with spring washers.	Each	
56	One set of TPN 200A Al Bus Bars. Current density shall be 1A/sq.mm	Each	
	Instrumentation for Incoming		
57	1 No. three phase 0-500V Digital voltmeter with selector switch	Each	
58	1 No. 0-150A digital ammeter with CT's 150/5A and selector switch	Each	
59	1 set of LED type phase indicating lamps with HRC fuses	Each	
	Outgoings		
60	4 Nos. 40-63A, 415V, 35KA rupturing(Ics=Icu) capacity, TPN, MCCB with extended rotary handle	Each	
61	25A-40A FP 10KA MCB - 9Nos.	Each	
62	ESSENTIAL SUPPLY PANEL AS DESCRIBED ABOVE AND AS PER DRAWINGS	Each	
63	Panel Must be I & T / ABB or equivalent High grade	Each	
	EXTERNAL LIGHTING		
	Non-Schedule Items		
64	Supply of following prewired light fittings/ light tracks, complete with all accessories such as side holders, ballast, wherever required, complete factory wired with copper conductor as required with lamp, Make:-Philips/Bajaj/Havells/Leggero or		
	Lamp : 120W LED	Each	
	Lamp : 72W LED	Each	
65	Supply and fixing of 7.5M high poles, polygon, hot dip galvanised, service access door with terminal and SP MCB and earthing terminal, with single arm 1.5M long with flange plate to mount on concrete foundation through bolts in precast foundation.	Each	
a	7.5M high pole with base plate and foundation, foundation bolts etc. complete as required.	Each	
b	7.5m high pole with base plate and foundation, foundation bolts etc. Complete as required double arm 1.5 m long	Each	
66	Supply and erection of following sizes of 65mm dia GI pole with baseplate. A looping box shall be polycarbonate IP-68 box of size 150X200X65MM (approx. size) with screw less three pole three way terminal with grommets provided at bottom of the pole with looping screw less terminals and outgoing SP MCB with earthing arrangement, the looping box door shall be vandal resistance, Looping box for outgoing cord etc. complete as required. Wiring the light fixture from the looping box to the light fixture with 3C1.5flexible sheathed cable		
	1.0M high pole complete as required for post top lanterns on gate pillars.	Each	
	H.T. PANEL AND TRANSFORMER		
67	HT PANEL 11KV VCB AT ESS		
68	Supply, installation, testing and commissioning of 1 Panel 11 KV switchboard fitted with VACCUUM CIRCUIT BREAKERS with accessories as below and as per detailed specifications. 1 No. fully draw out VCB TP 630A and 20 KA breaking capacity with closing and tripping circuit suitable for 24V DC and motorised spring charged complete with auxiliary contacts ON/OFF indicator, spring charged/discharge indicator, operation counter,1 Set of dual core current transformers of ratios 25/50/5A with metering core of class 1-0 and burden of 15 VA and protection core 5 P 1 0, burden 15 VA,1 Set of P.Ts 11KV /1.734/110V/1.734 100VA burden with HRC fuses on H.T. and L.T. side,1 Set of IDMT relay for over current and earth fault with high set element (CDG-61),1 Set of Ammeter with Selector switch ,1 set of KWH and KW meter digital type,1 Set indicating lamps for ON-OFF and FAULT,1 set of annunciator with alarm and hooter with fault indication,1 Set trip healthy, trip failure circuit with audible alarm, circuit breaker control switch ,Earth bar for all panels and sliding earth contact for movable truck portions of Breaker, Testing terminal block for panels, Panel interior illuminating lamp with door switch for all panels, Designation labels on front and rear, Tripping battery 24V supply with a Self Contained floor mounting cabinet complete with required number of lead acid maintenance free storage batteries of capacity suitable for the DC load of the 1 panel board and with a float cum boost charger with DC Voltmeter	Each	
	TRANSFORMER 500KVA, 11KV /433V		



69	Supply, Installation, Testing Commissioning , inspection of Outdoor , 11KV / 433V , 500KVA Transformer (as per IS : 2026, P1 to P5), 3 phase, % impedance as per IS ; Dyn with Cable Termination box with disconnecting facility for 11KV 3C-185sq mm XLPE cable at 11 KV side ,Cable Termination box with disconnecting facility for LV with 3nos. 3.5C300sq mm XLPE cable at LV side ,OLTC with RTCC Tap Changer +5 to -15% @ 1.25 % in 16 equal steps , Oil Surge Relay, Bidirectional rollers. Oil Conservator with filter cap, drain plug & oil level gauge, Earthing terminals 2 no's for body earthing.433V neutral separately bought out on a bushing for neutral earthing, Pressure release device. Double diaphragm explosion vent. , Radiators (Detachable type) with top & bottom shut off valve , First filling of filtered dehydrated oil as per IS : 335 including makeup fill during installation & 10% extra ,Silica gel breather with connecting pipe & oil seal, Rating, Diagram & Terminal marking plate of SS ,Sampling Valves for filtration, drainage and filling with plugs, Air release plugs, Thermometer pocket with plug, LiftingLugs. Double float Buchholz relay with gas release cock, alarm & shut off valve on either side with separate set of contacts for trip and alarm.150 mm Oil temperature indicator (OTI) with alarm, MarshallingBox, Clampingdevice, JackingPads, The work shall be complete in all respects up to the satisfaction of Engg-in-charge.	Each	
70	Supply, installation, testing and commissioning of double pole structure made out of 13M long steel tubular poles complete with AB switch gang operated device and HG fuse assembly and all other hardware material as required.	Each	
71	Supplying and erection of three piece non-linear resistor type lightning arrestor suitable for 3 wire, 11 KV overhead lines with rated voltage of 9 KV (rms) with a nominal discharge current rating of 5 KA and complete with galvanised clamping arrangement, G.I. bolts, nuts, washers etc. as required.	Each	
72	Supplying and erection of a set of cross bracing frame work for 11 KV overhead line double pole structure having four members fabricated out of 50 mm x 50 mm x 6 mm. angle iron to form a rectangle of minimum size 1400 mm width x 2500 mm height, complete with 50 mm x 6 mm flat iron clamps bolts and nuts including drilling holes and painting with primer and finish paint as required.	Each	
73	Supplying and erection of 11KV pin insulator complete with large steel head G.I. pin, nut, washers etc. as required.	Each	
74	Supplying and erection of 11KV dis insulator for 11KV overhead lines with galvanised insulator fittings, ball and socket type, and complete with galvanised strain clamp, bolts, nuts, washers etc. as required.	Each	
75	Supplying and erection of galvanised stay set for 11 KV overhead line complete with 19/20 mm dia. x 1.8 metres long stay rod, anchor plate of size 45 cm x 45 cm x 7.5 mm thick, thimble, stay clamps, turn buckle (20 mm x 600 mm), 7/4.00 mm. dia. G.I. stay wire and 11 KV strain insulator etc. in cement concrete 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 40 mm. nominal size) foundation including excavation and refilling etc. as required.	Each	
76	Supplying and fixing of G.I. pipe of 100 mm dia. (nominal), 3 metres length along the pole for protection of underground cables as required.	Each	
77	Supplying and fixing 11KV metering cubicle as per Jaipur supply company rules and guidelines and to be duly approved by by state electricity board including the required 11KV PT and CT with provision for mounting of 3 phase Trivector meter by the supply company	Each	
78	SITC of 2 HP Submersible Pump with Starter and cable of necessary length	Each	

[Handwritten Signature]
22/01/18