

PROJECT: CONSTRUCTION OF CGHS WELLNESS CENTRE AND ADMIN.BLDG. AT SECTOR-13, R.K.PURAM, NEW DELHI.								
BOQ FOR EXTERNAL ELECTRICAL WORKS								
SL.N O.	DSR 2012/ NDSR	DESCRIPTION OF ITEM	UNIT	QTY.	RATE (In Rs.)	RATE (In Rs.)	AMOUNT (In Rs.)	AMOUNT (In Rs.)
					<i>In Figures</i>	<i>In Words</i>	<i>In Figures</i>	<i>In Words</i>
		SUBHEAD- I: L.V. PANEL BOARD						
		MAIN LT PANEL						
1		Supplying, installation, testing and commissioning of L.T. panel fully compartmentalized cubical type sheet clad floor mounted totally enclosed , extensible on both sides, switch board suitable for use on 415 Volts 3-phase, 4 wire, 50 Hz system having 50KA fault capacity, housed with incoming and outgoing, Aluminium bus bars with current rating of 0.8 Amp/sq.mm, interconnection etc. with indication lamps, accessories etc, as required as per specification and schematic diagram as required.						
		Note:						
		The incoming of Transformer feeder & DG feeder as shown on drawing shall be connected through bus duct. The suitable adopter box shall be provided on top only.						
		TRANSFORMER INCOMER [1 Nos.] shall be equipped as: (750 KVA)						
		1 No. 1250A ,4P, EDO ACB with 230 V A.C. spring charged motor and with built-in microprocessor based releases for OC, S/C & E/F protection (IDMTL + instantaneous (high set)) with socket for connection (compatibility with BMS) as well as 6 NO + 6 NC auxiliary contacts (switch).						
		1 No. 24 volt D.C.Shunt release						
		1 No. 230 volt A.C.closing coil						
		1 No. 415 volt A.C. under voltage release.						
		1 No. 1250 Amp. Ammeter (digital type) with inbuilt ASS						
		1 Set of CTs 1250 A/ 5A class-1 for metering						
		1 No.Volt Meter (digital type) with inbuilt VSS & control fuses.						
		1 No. P.F. meter (digital type)						
		1 No. KWH meter (digital type)						
		1 No. C.T.1250 / 5A Class-1 for Capacitor panel.						
		Under Voltage relay 415 V A.C.						
		Over Voltage relay 415 V A.C.						

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		O/C, S/C, and E/F relay						
		Breaker control switch						
		1 Set of phase indication lights R,Y,B.						
		1set of ON-OFF-TRIP ckt. Healthy. indication lights						
		Spring charged indication.						
		D.G. SET INCOMERS [1 Nos.] shall be equipped as: (500 KVA)						
		1 No. 800A ,4P, EDO ACB with 230 V A.C. spring charged motor and with built-in microprocessor based releases for OC, S/C & E/F protection (IDMTL + instantaneous (high set)) with socket for connection (compatibility with BMS) as well as 6 NO + 6 NC auxiliary contacts (switch).						
		1 No. 24 volt D.C.Shunt release						
		1 No. 230 volt A.C.closing coil						
		1 No. 415 volt A.C. under voltage release.						
		1 Set of CTs 800 A/ 5A class-1 for metering						
		Digital Tri-Vector meter with KVAR, KW, KWH, PF, Ampere, Volts, Frequency metering						
		Battery charger 230 V/ 24 V DC, 20 A with DC ammeter and DC voltmeter. Charger should have all basic protections like over load, over Voltage reverse polarity etc.						
		Under Voltage relay 415 V A.C.						
		Over Voltage relay 415 V A.C.						
		O/C, S/C, and E/F relay						
		Three phase differential relay						
		Trip circuit supervision relay						
		Auxiliary relay						
		Master trip relay						
		Breaker control switch						
		Automatic load supervision relay						
		1 Set of phase indication lights R,Y,B.						
		1set of ON-OFF-TRIP ckt. Healthy. indication lights						
		Spring charged indication.						

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		D.G. SET INCOMERS [1 Nos.] shall be equipped as: (200 KVA)						
		1 Nos. 400A TPN MCCB (50 KA) with electronic releases						
		1 Set of CTs 400 A/ 5A class-1 for metering						
		Digital Tri-Vector meter with KVAR, KW, KWH, PF, Ampere, Volts, Frequency metering						
		Three phase differential relay						
		1 Set of phase indication lights R,Y,B.						
		1set of ON-OFF-TRIP ckt. Healthy. indication lights						
		SOLAR POWER PLANT INCOMERS [1 Nos.] shall be equipped as: (8 KVA)						
		1 Nos. 100A TPN MCCB (25 KA) with electronic releases						
		1 Set of CTs 100 A/ 5A class-1 for metering						
		Digital Tri-Vector meter with KVAR, KW, KWH, PF, Ampere, Volts, Frequency metering						
		1 Set of phase indication lights R,Y,B.						
		1set of ON-OFF-TRIP ckt. Healthy. indication lights						
		BUS BARS:-						
		1250 Amps. 4P aluminium bus bars (50 KA)						
		BUS COUPLER:-						
		1 No. 400A 4P MCCB (50 KA) with electronic releases						
		1 Sets of phase indication lights R,Y,B.						
		Interlocking: Transformer incomers and bus couplers shall be electrically and mechanically interlocked so that no different source can be parallel at any point of time.						

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		OUTGOINGS:-						
		1 Nos. 800A TPN MCCB (50KA) with electronic releases						
		1 Nos. 630A TPN MCCB (50 KA) with electronic releases						
		1 Nos. 200A TPN MCCB (35 KA) with electronic releases						
		1 Nos. 160A TPN MCCB (25 KA) with electronic releases						
		1 Nos. 100A TPN MCCB (25 KA) with electronic releases						
		1 Nos. 63A TPN MCCB (25 KA) with electronic releases						
	NDSR- EXEL-6A	1 Nos. 63A 4P MCCB (25 KA) with electronic releases	Set	1				
		Note:						
		All outgoing feeders shall have ON/OFF indication lights.						
3		Supplying, installation, testing and commissioning of free standing, front operated cubical type capacitor control panel with aluminium bus bars of current density 0.8Amps/sq.mm.& rupturing capacity(50KA), LED indicating lamps interconnections with under noted switch gears as per technical specifications and drawings complete as required. All MCCB shall have rotary operating handles. (capacitor control panel)						
a.		300 kvar capacitor control panel						
		1 No.630A ,TPN ,MCCB with electronic releases(50KA)						
		1 No. Ammeter (digital type) with inbuilt ASS						
		1 No.Volt Meter (digital type) with inbuilt VSS & control fuses.						
		1 No.12 step A.P.F.C.Relay (digital type)						
		3 Nos. CTs- 630/5 Amps. Cl-1						
		1 Set phase indication lights (R, Y, B)						
		630 Amps. TP&N aluminium bus bars (50 KA)						
		12 No. 63 Amps. TPN MCCB(35 KA) with thermo magnetic releases						
		12 No. 25 KVAR TP Shunt capacitor with discharge register and 7% D-tuned Harmonic reactor filter						
		12 No.50 Amps. TP capacitor duty contactors.						

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		1 No. Auto-Off-Manual selector switch.						
	NDSR- EXEL-6B	12 Sets self illuminated Red-Green ON-OFF push buttons.	Set	1				
		TOTAL RS.						
		SUB-HEAD -II : L.V. CABLES						
1		Supply, laying and testing of undernoted sizes of aluminium conductor XLPE insulated PVC sheathed & sleeved armoured and overall PVC sleeved 1.1 KV grade power distribution cables conforming to relevant IS code and as per specification in ground (in existing trenches) through pipe or on wall / racks cable trays including dressing and clamping the cable with MS zinc passivated clamps etc. as required.						
a)	NDSR IN- EXEL-1A	3.5 x 300 sq.mm	Meter	660				
b)	NDSR IN- EXEL-1B	3.5 x 240 sq.mm	Meter	50				
c)	NDSR IN- EXEL-1C	3.5 x 185 sq.mm	Meter	120				
d)	NDSR IN- EXEL-1D	3.5 x 120 sq.mm	Meter	50				

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e)	NDSR IN- EXEL-1E	3.5 x 95 sq.mm	Meter	50				
f)	NDSR IN- EXEL-1G	3.5 x 50 sq.mm	Meter	240				
g)	NDSR IN- EXEL-1H	3.5 x 35 sq.mm	Meter	490				
h)	NDSR IN- EXEL-1I	4 x 25 sq.mm	Meter	100				
i)	NDSR IN- EXEL-1J	4 x 16 sq.mm	Meter	690				
J)	NDSR IN- EXEL-1K	4 x 10 sq.mm	Meter	1030				
k)	NDSR IN- EXEL-1L	3 x 25 sq.mm	Meter	120				
l)	NDSR IN- EXEL-1M	3 x 16 sq.mm	Meter	200				
m)	NDSR IN- EXEL-1N	3 x 10 sq.mm	Meter	1590				

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n)	NDSR IN- EXEL-10	3 x 6 sq.mm	Meter	510				
				5900				
2		Supply and laying of undernoted sizes of hume pipe NP-2 grade under the road including 1:3:6 cement concrete bed at 750-1200 depth cutting and making good the same as required as per technical specifications.						
a)	DSR- 2012- 14.14.1	100mm dia	Meter	200				
b)	DSR- 2012- 14.14.1	250mm dia	Meter	100				
3		Supply and making end termination with brass double compression gland including providing and crimping of aluminium solderless lugs / ferrules for XLPE armoured power aluminium conductor cable 1.1 KV grade of following sizes:-						
a)	DSR- 2012- 9.1.30	3.5 x 300 sq.mm	Set	26				
b)	DSR- 2012- 9.1.29	3.5 x 240 sq.mm	Set	2				

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c)	DSR- 2012- 9.1.27	3.5 x 185 sq.mm	Set	4				
d)	DSR- 2012- 9.1.25	3.5 x 120 sq.mm	Set	2				
e)	DSR- 2012- 9.1.24	3.5 x 95 sq.mm	Set	2				
f)	DSR- 2012- 9.1.22	3.5 x 50 sq.mm	Set	12				
g)	DSR- 2012- 9.1.21	3.5 x 35 sq.mm	Set	16				
h)	DSR- 2012- 9.1.34	4 x 25 sq.mm	Set	2				
i)	DSR- 2012- 9.1.33	4 x 16 sq.mm	Set	36				

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J)	DSR- 2012- 9.1.32	4 x 10 sq.mm	Set	88				
k)	DSR- 2012- 9.1.9	3 x 25 sq.mm	Set	8				
l)	DSR- 2012- 9.1.8	3 x 16 sq.mm	Set	10				
m)	DSR- 2012- 9.1.7	3 x 10 sq.mm	Set	46				
n)	DSR- 2012- 9.1.6	2 x 6 sq.mm	Set	14				
o)	NDSR	3 x 6 sq.mm	Set	14				
4		Supply, laying and testing of undernoted sizes of copper conductor XLPE insulated PVC sheathed & sleeved armoured and overall PVC sleeved 1.1 KV grade power distribution cables conforming to relevant IS code and as per specification in ground (in existing trenches) through pipe or on wall / racks cable trays including dressing and clamping the cable with MS zinc passivated clamps etc. as required.						

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a)	NDSR IN- EXEL-1M	4 x 6 sq.mm	Meter	300				
b)	NDSR IN- EXEL-1N	4 x 4 sq.mm	Meter	100				
c)	NDSR IN- EXEL-1O	4 x 2.5 sq.mm	Meter	100				
d)	NDSR IN- EXEL-1Q	3 C x 2.5 sq.mm	Meter	4600				
5		Supply and making end termination with brass double compression gland including providing and crimping of copper solderless lugs / ferrules for XLPE armoured power copper conductor cable 1.1 KV grade of following sizes:-						
a)	DSR- 2012- 2132	4 x 6 sq.mm	Set	6				

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b)	DSR- 2012- 2133	4 x 4 sq.mm	Set	2				
c)	DSR- 2012- 2134	4 x 2.5 sq.mm	Set	8				
6		Supplying, laying, connecting, terminating, testing & commissioning of under noted sizes of PVC insulated, PVC sheathed unarmoured and overall PVC sleeved 1.1 KV grade control cables in pipe, wall, racks, cable trays, including, dressing, clamping with M.S Zinc passivated clamps etc as required conforming to relevant IS code and technical specifications.						
a)	NDSR	8C x 1.5 sq.mm	Meter	100				
b)	NDSR	10C x 1.5 sq.mm	Meter	200				
c)	NDSR	14C x 1.5 sq.mm	Meter	100				
d)	NDSR IN- EXEL-1T	4C x 35 sq.mm	Meter	45				

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7	NDSR	Supply and fixing of cable tray/steel work in position including clamps, frame work of flats, angle iron, channel with fabrication work including cutting, bending, welding, drilling bolting etc. as per design as required. One coat of primer and 2 coats of enamel paint of approved shade shall be provided.	Kg.	2000				
8		Supplying and installing following size of perforated pre-painted M.S. cable trays with perforation not more than 17.5%, in convenient sections, joined with connectors, suspended from the ceiling with M.S. suspenders including bolts & nuts, painting suspenders etc as required.						
a)	DSR- 2012- 4.1.8	300 mm width X 62.5 mm depth X 2.0 mm thickness	Meter	20				
b)	DSR- 2012- 4.1.14	600 mm width X 75 mm depth X 2.0 mm thickness	Meter	50				
9		Supplying and fixing ladder type prefabricated CRCA sheet steel Stove enameled cable tray complete with bend/tee joints, coupling plate and nut bolts washers etc. with side runner 20 x 100 x 2.5mm and centre rungs of size 15 x 30 x 2.5mm c/c 250mm. including providing and fixing of hangers etc. as required.						
a)	NDSR	300mmX 75 mm depth X 2.0 mm thickness	Meter	50				

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b)	NDSR	600mmX 75 mm depth X 2.0 mm thickness	Meter	20				
c)	NDSR	900mmX 75 mm depth X 2.0 mm thickness	Meter	20				
10	DSR- 2012- 7.10	Supplying and fixing cable route marker with route indication on 150mm dia cast iron disc bolted to 40x40x3mm angle iron grouted in 1:3:6 concrete block 150x150x300mm deep including two coats of aluminium paint on the metal work.	Each	50				
		TOTAL RS.						
		SUB-HEAD -III: EARTHING						
1	DSR- 2012-5.6	Earthing with copper earth plate 600 mm X 600 mm X 3 mm thick including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe of 2.7 metre long etc. with charcoal/ coke and salt as required.	Each	6				
2	DSR- 2012-5.4	Earthing with G.I. earth plate 600 mm X 600 mm X 6 mm thick including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe of 2.7 metre long etc. with charcoal/ coke and salt as required.	Set	10				
3		Supply and fixing of following sizes of copper/GI strip in GI pipe from earth electrode including cost of GI pipe 'B' class as required.						

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a)	NDSR	50mm x 6mm copper	Meter	100				
b)	NDSR	50mm x 6mm GI	Meter	100				
4		Supply and fixing of following of copper/GI strip on surface or in recess for connections etc. as required.						
a)	DSR- 2012- 5.20	50mm x 6mm copper	Meter	100				
b)	NDSR	50mm x 6mm GI	Meter	100				
c)	DSR- 2012-	25mm x 6mm GI	Meter	100				
5	DSR- 2012- 5.18	Providing and fixing of 6 SWG GI wire on surface or in recess for loop earthing alongwith the existing surface/recessed conduit for submain wiring / cable as required.	Meter	11800				
		TOTAL RS.						
		SUB HEAD-IV: D.G. SETS						

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1	NDSR IN- EXEL-4A	Design, supply at site, installation, testing & commissioning of 3-phase, 415 volt, 1500 RPM, 50 HZ, Diesel generator set of 500 KVA at 0.8 pf lagging diesel engine alternator set mounted on common base frame in outdoor type acoustic enclosure , day tank capacity of 990 litres,with AMF Panel,battery, battery charger, return fuel cooler, anti vibration mounting pads including residential silncer, engine alternator, pcc based auto start & synchronization set, safties with acceccories as per specification complete as required. Diesel engine shall conform to IS:10000 and alternator shall be self excited complete with AVR to IS:4722.	Set.	1				
2	NDSR IN- EXEL-4B	Design, supply at site, installation, testing & commissioning of 3-phase, 415 volt, 1500 RPM, 50 HZ, Diesel generator set of 200 KVA at 0.8 pf lagging diesel engine alternator set mounted on common base frame in outdoor type acoustic enclosure , day tank capacity of 990 litres, with AMF Panel,battery, battery charger, return fuel cooler, anti vibration mounting pads including residential/hospital silncer, engine alternator, pcc based auto start & synchronization set, safties with acceccories as per specifications complete as required. Diesel engine shall conform to IS:10000 and alternator shall be self excited complete with AVR to IS:4722.	Set.	1				
3		Supplying and fixing of undernoted 'B' class MS pipe for DG exhaust complete with bends, elbow, flanges etc. as required.						
a.	NDSR	300 mm dia pipe	Meter	50				
b.	NDSR	250 mm dia pipe	Meter	50				

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c.	NDSR	200 mm dia pipe	Meter	50				
4		Supply and fixing of 50mm thick compressed mineral wool insulation (Rock wool) for D.G. exhaust pipe with 22 gauge aluminium sheet cladding etc. as required for the under mentioned dia pipe.						
a.	NDSR	200 mm dia pipe	Meter	50				
5	NDSR	Fabrication of supports for exhaust pipe, fuel pipe or for any other purpose out of M.S. structural steel including supplying and applying of enamel paint of approved shade after one coat of steel primer of reputed company.	Kg.	2000				
6		Supplying, Laying, terminating, testing, commissioning of following sizes of Copper Conductor PVC insulated, PVC sheathed armoured cable 1100 V grade. On surface the cable run shall be fixed on G.I. clamps etc of suitable size or as directed by the E-I-C complete in all respects. Supply and providing cable identification markers. The armouring of the cable shall be properly connected with the earth conductor by clamps etc. as per specifications complete as required.						
a.	NDSR IN-EXEL-10	3 C x 6 sq.mm	Meter	100				
b.	NDSR IN-EXEL-1P	3 C x 4 sq.mm	Meter	100				

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	NDSR IN- EXEL-1Q	3 C x 2.5 sq.mm	Meter	100				
7		Making end termination with brass double compression gland including crimping of copper solderless lugs/ferrules for armoured power copper conductor cables of 1.1 KV grade of following sizes.						
a.	DSR- 2012- 2132	3 C x 6 sq.mm (Copper)	Set	4				
b.	DSR- 2012- 2133	3 C x 4 sq.mm (Copper)	Set	10				
c.	DSR- 2012- 2134	3 C x 2.5 sq.mm (Copper)	Set	4				
		TOTAL RS.						
		SUB HEAD-V: SUB-STATION EQUIPMENTS						
1		Supply, installation, testing and commissioning of unitized sub-station in weather -proof enclosure, with the following mountings as required as per specifications.						

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		METERING PANEL						
		11 KV HT metering panel board suitable for indoor installation for use on 11 KV 50 C/S earthed system including CTs and PTs complete with connections etc as required.(It shall be in the enclosure of unitised substation)						
a)		3 - Nos. PT's 11KV /Rt.3 /110V/Rt 3 cast resin type.						
b)		3 - Nos. CTs – 200/5A class -1or as per state electricity board						
c)		2 sets of HRC fuses with fuse base (H.T. fuse - 1 A & LT fuse 2-6 A)						
d)		Bus link Fuses with fuse base						
e)		2 Nos. indoor cable end box for 3C x 185 Sq.mm. 11 KV aluminium conductor XLPE cable (Incoming & outgoing Cables)						
f)		1 No. Electronic Digital trivector meter 200/5A accuracy class-1.0 or as per state electricity board approved.						
		Note:						
		Contractor shall get tested and get approvals of the metering panels as well as equipment including their sealing etc. from state electricity board as required.						
		TRANSFORMER						

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BOQ FOR EXTERNAL ELECTRICAL WORKS								
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		750 KVA copper wound 11/0.433 KV, 50 C/S, Delta star connected cast resin indoor Dry type transformer with ON load circuit tap changer unit range, minus 10% to plus 5% on HT side in steps of 2.5% complete with complete accessories as per specifications as required.						
		HT PANEL BOARD						
		HT panel board suitable for indoor installation for use on 11 KV 50 C/S earthed system having a symmetrical breaking capacity of 350MVA for 1 Sec. at 11 KV comprising triple pole VCB. Panel shall be equipped with suitable power pack and following accessories as per specifications and schematic drawing.						
		Panel shall be comprising of:						
		1- Metal Clad housing with track having 630A TP integral VCB with Electric operated draw out type mechanism (spring charged motor - 230 VAC).						
		1- Set of air insulated copper bus bar & chamber.						
		1- Set of isolating plug and receptacle.						
		1- Set of Automatic safety shutter.						
		1- Set of breaker control switch (TNC)						
		2- Sets of CT's						
		CT- I -100/5A class 5P-10(15 VA)						
		CT- II – 100/5A class -1(15 VA)						
		1 - Digital Ammeter, selector switch. (Built-in)						
		3 - Nos. PT's 11KV /Rt.3 /110V/Rt 3 of (100 VA) cast resin type.						

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		1 - H.T. Cable box for 3C x 185 sq.mm aluminium conductor XLPE cable (11 KV earthed system).						
		1 - No. Tripping coil & closing Coil 24V DC/110V A.C.						
		1 - Set of ON/OFF/Trip & circuit healthy and phase indicating lights.						
		1- 3 element O/C, EF & SC relay (IDMTL & Hi - set) with required setting.						
		1- set Auxiliary relay.						
		1- Master trip relay						
		1-set Trip circuit supervision						
		1-Restricted Earth fault relay						
		LT CUBICLE						
		Supplying, installation, testing and commissioning of indoor L.T. Cubicle fully compartmentalized cubical type sheet clad floor mounted totally enclosed , extensible on both sides, switch board suitable for use on 415 Volts 3-phase, 4 wire, 50 Hz system having 50KA fault capacity, housed with incoming and outgoing, interconnection etc. with indication lamps, accessories etc, as required as per specification and schematic diagram as required.						
		1 No. 1250A ,4P, EDO ACB with 230 V A.C. spring charged motor and with built-in microprocessor based releases for OC, S/C & E/F protection (IDMTL + instantaneous (high set)) with socket for connection (compatibility with Microsoft) as well as 6 NO + 6 NC auxiliary contacts (switch).						
		1 No. 24 volt D.C.Shunt release						

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		1 No. 230 volt A.C.closing coil						
		1 No. 415 volt A.C. under voltage release.						
		1 No. 1250 Amp. Ammeter (digital type) with inbuilt ASS						
		1 Set of CTs 1250 A/ 5A class-1 for metering						
		1 No.Volt Meter (digital type) with inbuilt VSS & control fuses.						
		1 No. P.F. meter (digital type)						
		1 No. KWH meter (digital type)						
		Under Voltage relay 415 V A.C.						
		Over Voltage relay 415 V A.C.						
		O/C, S/C, and E/F relay						
		Breaker control switch						

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		1 Set of phase indication lights R,Y,B.						
		1set of ON-OFF-TRIP ckt. Healthy. indication lights						
	NDSR IN- EXEL-5C	Spring charged indication.	Set	1				
2	NDSR	Designing, Supply, installation, testing & commissioning of outdoor two pole 11 KV H.T. structure as per drawing and specifications of 11 Mts. Height complete with following equipment to be supplied and installed complete with ACSR conductor as required.	Set	1				
3		11 KV, 100A approved make dropout fuse mounts complete with 50A DO fuses, fuse holders etc.	Set	1				
4		Operating rod of DO fuse.	Set	1				
5		Supply,installation of GI chain linked fencing made from 8 gauge GI wire with each chain block are of approx. 40mm * 40 mm. (Height of fencing is 1800 mm)	Meter	40				
6	NDSR	Supplying and fixing of non-skid rubber mat 16 mm thick and 900mm width as required including cutting to required lengths of approved make with Test Certificates for L.T. panels.	Metre	15				

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7	NDSR	Supplying and fixing of fire bucket painted red and duly filled with sand conforming to IS: 2546-1974.	Each	12				
8	NDSR	Supplying and fixing of MS stand suitable for supporting two buckets (Pedestal type)	Each	2				
9	NDSR	Supplying and fixing of MS stand suitable for supporting four buckets (Pedestal type)	Each	2				
10	NDSR	Supplying and fixing of shock restoration chart written in English and Hindi duly framed in as required.	Each	2				

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11	NDSR	Supplying and fixing of carbon dioxide fire extinguisher type 4 kgs. Capacity of approved make with wall mounting bracket as required conforming to IS: 2878/1976 (Push type).	Each	4				
12	NDSR	Supplying and fixing of first aid box as approved complete with standard kit as prescribed by Indian Red Cross.	Each	1				
13	DSR- 2012- 2.22	Supply and fixing of H.T. Danger notice plate of 250x200mm made of mild steel at least 2mm thick and vitreous enameled white on both side with inscription in signal red colour on front side as required.	Each	6				
		TOTAL RS.						
		SUB HEAD-VI : HT CABLES						
1		Supplying, laying, of following sizes XLPE, 11 KV earthed cable in existing open structure/ hume pipe including in vertical formation as per technical specification and complete as required. (The payments of cable length shall only be made upto gland in panel on both sides not for loop and connection cables of approximate length upto 2 metres either sides.)						
a.	NDSR IN- EXEL-2A	3Cx185 Sq.mm.	Meter	200				
2		Supplying and making indoor cable end termination with cast resin coumpound, including lugs and other jointing materials complete with all accessories for following sizes of 3 core, XLPE aluminium conductor cable of 11 KV grade as required.						

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a.	DSR- 2012- 10.1.3	3Cx185 Sq.mm.	set	4				
3		Supplying and making outdoor cable end termination withcast resin coumpound, including lugs and other jointing materials complete with all accessories for following sizes of 3 core, XLPE aluminium conductor cable of 11 KV grade as required.						
a.	DSR- 2012- 10.2.3	3Cx185 Sq.mm.	set	2				
4		Providing and fixing UPVC pipes as per IS:13592 suitable for 6 Kg/ sq cm pressure, including all fittings with accessories i.e bends, junctions, cowls, offsets, PVC pipe clips/holders etc. and jointing with rubber rings and cement solvent complete as per manufacturer's specifications with excavation, refilling and disposal of surplus earth, including cutting holes in walls and floors ,wherever required and making good the same, complete as directed by the Engineer-in-Charge.						
a.	NDSR	110 sq.mm outer dia	Meter	50				
b.	NDSR	200 sq.mm outer dia	Meter	100				
		TOTAL RS.						
		SUB HEAD-V : EXTERNAL LIGHTING						

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1		Supplying, installation, testing and commissioning of L.T. panel fully compartmentalized cubical type sheet clad floor mounted totally enclosed , extensible on both sides, switch board suitable for use on 415 Volts 3-phase, 4 wire, 50 Hz system having required fault capacity, housed with incoming and outgoing, Aluminium bus bars with current rating of 0.8 Amp/sq.mm, interconnection etc. with indication lamps, accessories etc, as required as per specification and schematic diagram as required. (Street lighting/ guard room Panel)						
		INCOMER:-						
		1 Nos.63 Amps. TPN MCCB(25 KA) with electronic releases.						
		1 Set phase indication lights (R, Y, B)						
		1 No. Volt Meter (digital type) with inbuilt VSS & control fuses.						
		1 No. 0-200 Amp. Ammeter (digital type) with inbuilt ASS						
		BUS BARS:-						
		200 Amps. TP&N Aluminium bus bars (25 KA)						
		OUT GOINGS:-						
		4 Nos. 63A TPN, MCB (10KA).						

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		2 Nos. 24 Hr Astronomical Timer Switch						
	NDSR- EXEL-6E	2 Nos. 63A TPN contactor	Set	1				
2	NDSR	Supply, fixing, testing & commissioning of the bollard Lighting Fixture equivalent to Philips Cat. No. BGP 150 Bollard including 1 no. 24 watt LED lamp of approved shade along with ignitor, necessary brackets, 4 meter powder coated MS pole including connections as required.	Each	15				
3	NDSR	Supply, fixing, testing & commissioning of the Gate Lighting Fixture equivalent to Philips cat no. metromonis including 1 no. 150 watt MH lamp along with ignitor, necessary brackets, including connections as required.	Each	4				
4	NDSR	Supply, fixing, testing & commissioning of the bollard Lighting Fixture equivalent to Philips Cat. No. BCP 151 Bollard including 1 no. 8 watt LED lamp of approved shade along with ignitor, necessary brackets, including connections as required.	Each	15				
		TOTAL AMOUNT (In RS.)						