

TENDER NO. BHEL/NR/SCT/NIMOO/SITE OFFICE/635

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## TENDER SPECIFICATION

TENDER NO. BHEL/NR/SCT/NIMOO/SITE OFFICE/635

FOR

Construction & Development of Site Office at Nimoo Bazgo HEP, Distt. Leh,  
J&K

PART II – PRICE BID



भारत हैवी इलेक्ट्रिकल्स लिमिटेड  
**Bharat Heavy Electricals Limited**  
(A Govt. Of India Undertaking)  
Power Sector – Northern Region,  
Plot No. 25, Sector - 16A ,  
Distt. Gautam Budh Nagar, NOIDA – 201 301. INDIA

**RATE SCHEDULE**

**TENDER NO. BHEL/NR/SCT/NIMOO/SITE OFFICE/635**

SI No	CODE	DESCRIPTION OF ITEM	UNIT	TOTAL QTY	RATE	AMOUNT
		<b>(A) CIVIL WORKS</b>				
		<b>EARTHWORK/SITE CLEARANCE/ROADWORK</b>				
1	C1	Clearing jungle including uprooting of rank vegetation, grass, brushwood, trees and saplings of girth upto 30 cm measured at a height of 1 m above ground level and removal of rubbish upto a distance of 200 m outside the periphery of the area cleared	sqm	600.00		
2	C2	Surfact dressing of the ground including removing vegetation and in-equalities not exceeding 15 cm deep and disposal of rubbish, lead upto 50m and lift upto 1.5m in all kinds of soil.	sqm	600.00		
3	C3	Earth work in excavation in all types of ordinary and hard soil by mechanical means (Hydraulic excavator)/manual means including stacking the excavated soil, dressing of sides and ramming of bottom, dewatering of accumulated water from any source and keeping the surface dry for subsequent works such as concreting form work etc. and disposal of surplus excavated soil as directed, disposed soil to be neatly levelled and dressed lead upto 50 meters and lift upto 1.5meter complete.	Cu.M	70.00		
4	C4	Back filling available excavated earth in trenches, plinth, slides of foundations etc., including re-excavating the deposited soil excavated earlier, breaking clods, laying at all depths and heights in layers not exceeding 20 cm in depth, consolidating each deposited layer by ramming and watering complete lead upto 50 Metre and lift upto 1.5 Meter.	Cu.M	40.00		
5	C5	Disposal of surplus excavated earth and debris including re-excavating the deposited soil earlier, transportation, loading, unloading, laying at all depths and heights, leveling and dressing both the area (viz. From where earth is transported and where it is deposited) to required levels and slopes, complete with all lifts as directed.				
	a)	upto 1 km	Cu.M	30.00		
6	C9	<b>Providing and tilling</b> of quarry dust as levelling course compacting <b>the same with 8 to 10 ton road roller</b> complete in all respects as directed by Engineer-in Charge	cum	25.00		
7	C11	Supplying the good earth from outside the site including the cost of filling the same within the site in layer not exceeding 20cm in depth & consolidating each deposited layer by ramming and watering including all leads & lifts etc. complete.	cum	25.00		
8	C12	Providing approved quality <b>Yellow/silver sand</b> and filling the same where required under floors etc., watering, ramming, consolidating, grading and finishing to final levels and slopes for all lifts and leads involved, complete as directed. (Payment to be made for solid measure of the consolidated filling)	Cu.M	10.00		
		<b>PCC</b>				
9	C14	<b>Plain cement concrete</b> of mix 1:3:6 (1 cement : 3 coarse sand and 6, 20 mm down graded stone aggregate) for column footing, levelling, floors etc., including cost of all materials, lead, lift, labour charges, consolidation, shuttering, curing etc. complete.	Cu. M	18.00		
10	C15	Making plinth protection 50 mm thick of cement concrete 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size) over 75 mm bed of dry brick ballast 40 mm nominal size well rammed and consolidated and grouted with fine sand including finishing the top smooth .	sqm	38.00		
11	C16	Providing and laying and laying <b>damp proof course</b> 40 mm thick with concrete grade 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size <b>and applying a coat of residual petroleum</b> of penetration 80/100 of approved quality using 1.7 kg per sq. metre on damp proof course after cleaning the surface with brushes and finally with a piece of cloth lightly soaked in KEROSENE OIL.	Sq m	12.00		
12	C17	Providing and fixing at ground level precast 1:2:4 (1 cement: 2 coarse sand: 4 graded stone aggregate 20 mm nominal size)cement cement concrete reinforced with 1.6 mm MS wire in kerbs,RCC sleepers, edgings,drains,etc. as per approved pattern and placed in position with	cum	1.00		
		<b>RR MASONRY</b>				
13	C18	<b>Random rubble masonry</b> with hard stone in foundation and plinth including levelling up with cement concrete 1:6:12 (1 Cement : 6 coarse sand : 12 graded stone aggregate 20mm nominal size) at plinth level with : Cement mortar 1:6 (1 Cement : 6 coarse sand) complete with supply of all materials	Cu. M	14.00		
		<b>RCC</b>				
14	C20	<b>Reinforced cement concrete</b> of mix 1:1.5:3 (1 cement, 1.5 coarse sand and ,3 :20 mm down graded aggregate) for column footing, sunshades, shelves, lintels etc. including cost of materials, lead lift, labour charges for concreting, curing etc. complete.	Cu. M.	19.00		
15	C21	<b>Centring and shuttering including providing all shuttering material</b> , strutting, propping etc. and removal of form work for : Lintels, beams, plinth beams, girders, bressumers and cantilevers.	sqm	100.00		
16	C22	Providing and placing mild steel/ tor <b>steel reinforcement</b> for RCC work including cost of all materials, labour for cutting, bending, binding and placing in position complete as per drawing and instruction of Engineer.	MT	1.80		
17	C23	Fabricating and fixing in position, M.S.Holding down bolts with sleeves and washers, nuts and lock nuts etc. including threading of required length and type as per instructions of Engineer I/C				
	a)	Upto 20 mm dia. bolt	kg	70.00		
		<b>ROOFING</b>				
18	C24	Supply fabrication and erection of structural steel beams,channels,plates,steel tubular trusses, purlines,gates, wind ties, base plates, gusset plates, bolts, nuts etc. complete as per drawings, specifications & instructions of engineer including cost of all materials leads, lifts labour charges etc. and one coat of primer and two coats of approved enamel paint for finished products at site complete as per technical specification and direction of engineer				

SI No	CODE	DESCRIPTION OF ITEM	UNIT	TOTAL QTY	RATE	AMOUNT
	a)	Trusses (medium grade pipes),Purlins side ties, bottom ties	MT	2.80		
	b)	structural steel for columns, crane girders,etc	MT	2.20		
	c)	Wind ties (Flats) 50 x 6 mm thick, angles,box sections,soild bars for rails etc	MT	0.20		
19	C25	Steel work in built up section/framed work including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer using structural steel for gates, railings, frames,gratings etc.	kg	50.00		
20	C27	Providing 1 mm thick corrugated G.S. sheet roofing fixed with polymer coated J or L hooks, bolts and nuts 8 mm diameter with bitumen and G.I. limpet washers or with G.I. limpet washers filled with white lead and including a coat of approved steel primer and two coats of approved paint on overlapping of sheets complete (upto a pitch of 60 degrees) excluding the cost of purlins, rafters and trusses.	Sq.M	190.00		
	C27a)	Providing double skin Side Cladding with atleast 10 mm <b>Exterior grade</b> cement bonded particle boards/calcium silicate boards of approved make with atleast 25 mm gap in between filled with atleast 25 mm thick expanded polystyrene core having bulk density of 15 Kg./ Cu.m. Panels will be strengthened on all four sides by "W" shaped pre-profiled steel section made from 1 mm GI steel sheet / coil <b>complete with supply of materials for double skin and supporting framework as well</b> as required, all labour, T&P and all materials complete in all respects for side cladding in site climatic conditions and as per specifications	Sqm	200.00		
21	C29	Providing .8 mm thickridges or hips of width 60 cm over all width plain G.S.sheet fixed with polymer coated J. or L hooks, bolts and nuts 8mm dia G.I. limpet and bitumen washers complete.	RM	14.00		
		<b>CEILING</b>				
22	C31	False ceiling of size 610 x 610 mm made out of 6 mm thick cement Boards (Asbestos Free)/hardboards/as approved with 32 mm thick expanded polystyrene core having bulk density 15 kg/cum. The cement boards and expanded polystyrene cores are bonded together using Polyvinyl Acetate based bonding or approved material. The false ceiling panels are placed onto a suspended grid frame of size 610 x 610 mm made from PPS/ALUMINIUM/GI 'L&T' sections of 0.63 mm. The false ceiling grid is suspended from the roof framework with the help of galvanized wire of 3.0-mm dia <b>complete with supply of all materials, labour and T&amp;P</b>	sqm	135.00		
		<b>FINISHING</b>				
23	C34	Providing and laying Ceramic glazed floor tiles 300 x 300 mm (thickness to be specified by the manufacturer) of 1st quality conforming to NITCO, ORIENT, SOMANY KAJRIA, or equivalent make in colours such as white, Ivory, Grey, Fume Red Brown, laid on 20 mm thck cement mortar 1:4 (1 cement : 4 coarse sand) including the joints with white cement and matching pigment etc. complete.	Sq.M	10.00		
24	C35	Providing and laying vitrified floor tiles in 60x60 cm size (thickness to be specified by the manufacturer) of NITCO ORIENT, SOMANY KAJRIA, or equivalent make with water absorptions less than 1% and flexural strength not less than 30N/mm2, in all colours and shades, laid on 20 mm thick cement mortar 1:4 (1 cement : 4 coarse sand) including grouting the joints with white cement and matching pigments etc., complete	Sq.M	125.00		
25	C36	Providing and fixing 18 mm thick granite slab top on kitchen pantry, toilet, counters including making cutouts for wash basins, sinks fixed over 20 mm thick 1:3 cement mortar (1 cement : 3 coarse sand) complete including rubbing, polishing, grinding edge formation as per Architect's drawings (from South Indian quarries).Black colour	Sqm	2.00		
26	C38	<b>Plastering work</b> with cement mortar <b>1:6</b> (1 cement : 6 fine sand) 12 mm thick after scrapping and cleaning the masoary joints including scaffolding, cost of materials, labour, mixing , leads & lifts, curing etc. complete.	Sq. M	20.00		
27	C40	Providing and fixing Powder coated (thickness 40-50 microns) Al work for doors, windows, ventilators and partitions with extruded built up standardsection of approved make conforming to IS:733 and IS:1285, poeder coated to reqd. shade, fixed with rawl plugsand screws or with fixing clips or with expansion hold fasteners including necessary filling up of gaps at junctions, at top, bottom and sides with reqd PVC/ NEOPRENE felt etc. AL sections shall be smooth, rust free, straight, mitred and jointed mechanically wherever reqd including cleat angle, Aluminium snap beading for glazing/panelling, C.P. brass/ stainless steel screws, all complete ads per drawings/Engr. I/C <b>with provision and supply of Al grill as instructed.</b>				
	a)	For fixed portion	kg	15.00		
	b)	For shutters of doors, windows and ventilators including providing & fixing hinges/pivots and providing and fixinf of fittings wherever reqd. including the cost of PVC/neoprene gasket reqd. complete in all respects.	kg	15.00		
28	C41	Providing and fixing glazing in Al work for doors, windows, ventilators and partitions etc. with PVC/ neoprene gasket complete including glazing and panelling with plain/black glass panes of 5.5 mm thick (wt not less than 13.75 kg/sqm)	Sq. M	10.00		
29	C42	Providing and fixing double action hydraulic floor spring of approved brand and manufacture as per IS, Hardwyn make( model 3000) or equivalent for doors including cost of cutting floors as reqd. , embedding in floors and cover plates with brass pivot and single piece M.S sheet outer box with slide plate.etc. with stainless steel cover plate as per direction of Engr. I/C	No.	2.00		
30	C44	<b>Providing and fixing steel glazed windows and ventilators</b> of operable standard rolled steel section joints mitred and welded with 15 x 3 mm lugs, 10 cm long, with steel lugs embedded in cement concrete blocks 15 x 10 x 10 cm of 1:3:6 (1 cement : 3 coarse sand : 6 approved graded hard stone aggregate 20 mm nominal size) or with wooden plugs and screws or raw plugs and screws or with fixing clips or with bolts and nuts as required <b>including providing and fixing of glass panels</b> with glazing clips and special metal sash putty of approved make complete including painting with two coats of approved quality synthetic enamel paint over a base coat of red oxide zinc chromate primer including the cost of minor repair work, if required. Windows and ventilators will be <b>provided with horizontal steel bars (8 mm x 8 mm)</b> , welded to the frame @ 150 mm including supply of MS frames, bars glazing etc. all complete	Sq. M	15.00		

SI No	CODE	DESCRIPTION OF ITEM	UNIT	TOTAL QTY	RATE	AMOUNT
31	C46	Providing and fixing ISI marked flush door shutters non decorative type , core of block board construction with frame of ist class hard wood and well matched teak 3 ply veneering with vertical grains or cross bands and face veneers on both faces of shutters 30 mm thick including ISI marked stainless steel butt hinges, handle,bolts, complete with necessary screws and other accessories	Sq. M	4.50		
32	C47	Providing and fixing ISI marked flush door shutters decorative type , core of block board construction with frame of ist class hard wood and well matched teak 3 ply veneering with vertical grains or cross bands and face veneers on both faces of shutters 30 mm thick including ISI marked stainless steel butt hinges, handle,bolts, complete with necessary screws and other accessories	Sq. M	13.00		
33	C48	Providing and laying Ceramic glazed wall tiles 300x200 mm (thickness to be specified by the manufacturer) of 1st quality conforming to IS : 13755 of NITCO, ORIENT, SOMANY KAJARIA, or equivalent make in colours such as White, Ivory, Grey, Fume Red Brown, laid on 20 mm thick cement Mortar 1:4 ( 1 cement : 4 Coarse sand) including pointing the joints with white cement and matching pigment etc., complete(2.1 m.ht.).	Sq. M	10.00		
34	C49	Providing three coats of <b>white wash</b> to give a smooth and even shade including cost of materials, cleaning and preparation of surface, scaffolding etc. complete.	sqm	20.00		
35	C50	Finishing walls/ surfaces with <b>water proofing cement paint</b> of approved brand and manufacture and of required shade to give an even shade.	sq.M	150.00		
36	C51	Distempering with <b>Oil bound washable distemper</b> of approved brand and manufacture and of required shade to give an even shade on new wall ( 2 or more coats) over and including priming coat with cement primer.	sq.M	300.00		
37	C52	Painting with synthetic enamel paint of approved brand and manufacture to give an even shade in two or more coats on new work	sqm	20.00		
		<b>SANITARY/SEWAGE</b>				
38	S1	Providing and fixing <b>white vitreous china water closet squatting pan (Indian type / Oriss pattern WC pan)</b> size 580 x 440 mm with 100 mm sand cast iron P trap, 12.5 Lit. high level CI flushing clastern with fittings RS or CI brackets 32 mm dia meter galvanised iron flush pipe with fitting and clamps 20 mm GI over flow pipe with special and mosquito proof coupling of approved design and GI chain and pull complete including painting of clastern and fittings, cutting and making good the walls and floors where required.	No.	1.00		
39	S2	Providing and fixing <b>white vitreous china pedestal type water closet (European type W.C. pan)</b> with seat and lid, 10 litre low level white P.V.C. flushing cistern with manually controlled device (handle lever), conforming to IS : 7231, Parryware/Hindware/Seabrid /Orient (Coral) with all fittings and fixtures complete including cutting and making good the walls and floors wherever required : <b>W.C. pan with ISI marked white solid plastic seat and lid</b>	No.	2.00		
40	S3	Providing & fixing flat back <b>white vitreous china wash basin</b> 550 x 400 mm size with single 15 mm C.P.brass pillar with R.S. or C.I. brackets painted white 15 cm C.P. brass pillar taps C.P. brass chain with rubber plug, 32 mm dia CP Brass trap and M.I. unions, C.P. waste, C.P. connection, soap dish, waste pipe complete including cutting and making good the walls wherever required under counter complete in all respects	No.	2.00		
41	S4	Providing and fixing Salem Stainless Steel A ISI 304 (18/8) kitchen sink as per I.S. 13983 with C.I. brackets and stainless steel plug 40 mm including painting of fittings and brackets, cutting and making good the walls wherever required : <b>Kitchen sink with drain board 510x1040mm bowl depth 200mm</b>	No.	1.00		
42	S5	<b>Providing and fixing white vitreous china flat back or wall corner type lipped front urinal basin</b> of 430 x 260 x 350 mm and 340 x 410 x 265 mm sizes respectiely with automatic flushing cisternwith standard flush pipe and C.P. brass spreaders with brass unions and G.I. clamps complete, includign painting of fittings and brackets, cutting and making good the walls and floors wherever required:				
	a)	One urinal basin with 5 litre white P.V.C. automatic flushing cistern Parryware/Hindware/Seabird/Orient (Coral)	no.	1.00		
43	S7	Providing and fixing 100 mm sand cast iron gratingfor gully, floor or Nahanitrap.	each	10.00		
44	S8	Providing and fixing bevelled edge mirror of superior glass (of approved quality) complete lwith 6 mm thick hard board ground fixed to wooden cleats with C.P. brass screws and washers complete.	sqm	1.00		
45	S9	Providing and fixing 600x120x5mm glass shelf with edges round of supported on anodised aluminium angle frame with C.P brass brackets and guard rail complete fixed with 40 mm long screws, rawl plugs etc. complete	each	2.00		
46	S10	Providing and fixing PTMT towel rail complete with brackets fixed to wooden cleats with CP brass screws with concealed fitting arrangement of approved quality colour and make (Prayag or equivalent).				
	a)	450mm long towel rail with total elgnth of 495mm, 78mm wide and effective hight of 88mm, weighin not less than 170gms.	each	1.00		
	b)	600mm long towel rail with total length of 645mm, width 78mm and effective height of 88mm, weighing not less than 190gms.	each	1.00		
47	S11	Providing and fixing PTMT 15 mm Urinal spreader size 95x69x100 mm with 1/2" BSP thread and shapes as per BIS specification,weighing not less than 60gms (Prayag or equivalent)	each	1.00		
48	S12	Providing and fixing PTMT liquid soap container 109mm wide, 125mm high and 112mm distance from wall of standard shape with bracket of the same materials with snap fittings of approved quality colour and make, weighing not less than 105gms (Prayag or equivalent)	each	2.00		
49	S13	Providing, laying and jointing <b>glazed stone ware pipes</b> grade A with stiff mixture of cement mortar in the proportion of 1:1 (1 cement : 1 fine sand) including testing of joints etc., complete 100 mm dia pipe.	RM	30.00		
50	S14	Providing, laying, fitting and jointing <b>medium grade GI pipes</b> , confirming to IS 1239 for water lines at various elevations with all fittings stop cock, valve bends, elbows, tees, reducers., etc. making grooves in the brick wall, etc. (Internal work), trenching, refilling etc. (external work) including cost of all materials, labour charges etc. complete as per specifications and drawings.				

SI No	CODE	DESCRIPTION OF ITEM	UNIT	TOTAL QTY	RATE	AMOUNT
	(a)	25 mm dia G.I. Pipe (External work)	RM	40.00		
	(b)	20 mm dia G.I. Pipe (Internal work)	RM	20.00		
	c)	15 mm dia G.I. Pipe (Internal work)	RM	30.00		
51	S15	Providing and fixing <b>GM full way valve</b> with C.I wheel of approved quality etc. complete.				
	(a)	25 mm nominal bore	No.	2.00		
52	S16	Providing and fixing C.P. <b>brass 15 mm stop cock</b> of approved quality of weight not less than 250 gms.	NO	2.00		
53	S17	Providing and fixing C.P. <b>brass 15 mm bib cock</b> of approved quality of weight not less than 250 gms.	No.	4.00		
54	S19	Construction of 2.0x0.90x1.60 size <b>Septic tank</b> in all types of soil with 250 mm thick brick masonry in cement Mortar of 1:6 15 cm thick cement concrete 1:4:8 grade in bed, 75 mm thick 1:2:4 grade cement concrete flooring and 100 mm thick over RCC slab of 1:2:4 grade, 75 mm thick partition wall, 15 mm thick plaster on brick wall finished with neat cement providing M.S. rugs etc., complete as per drawing including excavation, disposal of surplus earth with a load of 50 Mtr. item includes all material, labour, leads, lifts etc., complete but excluding C.I manhole cover.	NO.	1.00		
55	S20	Providing and fixing <b>square mouth stone ware gully trap</b> grade'A' conforming to IS:651 complete with G.I. Grating, brick masonry chamber with bricks of class designation '50' and water tight C.I. Cover with frame of 300 x 300 mm size (inside), the weight of cover to be not less than 4.5 kgs and frame to be not less than 2.70 kg as per specification. 100X100 MM P TYPE	NO.	2.00		
56	S22	Construction <b>soak pit</b> of 2.5Mtr dia and 3 Mtr depth filled with brick bats including S.W. drain pipe 100 mm dia and 1.2 meter long complete as per standard design.	NO.	1.00		
57	S23	Providing and laying soil, waste and vent pipes, centrifugally cast (spun) iron S&S pipes				
	a)	100mm	RM	20.00		
	b)	125 mm	RM	10.00		
58	S24	Supplying and installation of HDPE cylindrical and vertical <b>water tank</b> with closed top of SINTEX or approved equivalent of undermentioned capacity with all necessary fittings including supplying and fixing input and out putlines including support of brick pillars of height of 3 Mtrs each complete.				
	a)	1000 Ltr. Capacity tank	per litre	1000.00		
59	S25	Providing and Laying of non-Pressure NP2 class ( light duty ) RCC Pipe with collar of 250 mm dia jointed with stiff mixture of cement mortar in proportion of 1:2 ( 1 cement :2 fine sand)including testing of joints etc complete	RM	10.00		
60	S26	Construction of brick masonry road gully chamber 50 cm x 45 cm x 60 cm with MPS Brick of class 75 kg in cement mortar ( 1 cement : 6 fine sand) including 500 , 450 mm RCC precast horizontal with frame completed as per standard specification	EACH	2.00		
61	F3	Cement concrete 1:2:4 (1 cement: 2 coarse sand: 4 graded stone aggregate 40 mm nominal size) in pavements, laid to required slope and camber in panels as required including minimum reinforcement, consolidation finishing and tamping complete including laying in position bitumen hot sealing compound for expansion joints	cum	13.00		
		<b>HORTICULTURE</b>				
62	H1	Renovating lawns by grassing 'doob' including weeding, cheeling the grass, forking the ground, top dressing with sludge or manure, mixing the same with forked soil, watering and maintaining the lawn for 30 days or more till the grass forms a thick lawn free from weeds and fit for mowing and disposal of rubbish as directed, including supplying good earth if needed but excluding the cost of sludge or manure (the good earth shall be paid for separately).	sqm	100.00		
63	H2	Preparation of beds for hedging and shrubbery and platation of hedges by excavating 60cm deep and trenching the excavated base to a further depth of 30cm, refilling the excavated earth after breaking clods and mixing with sludge or manure in the ratio of 8:1 (8 parts of stacked volume of earth after reduction by 20% : one part of stacked volume of sludge or manure after reduction by 8%), flooding with water, filling with earth if necessary, watering and finally fine dressing, levelling etc. including stacking and disposal of materials declared unserviceable and surplus earth by spreading and levelling as directed, within a lead of 50m lift upto 1.5 m complete including cost of sludge, manure or extra earth	cum	10.00		
64	H3	Edging with bricks laid dry length- wise including excavation, refill-ing, consolidating with hand packing and spreading neatly surplus earth within a lead of 50 m : 75 class designation FPS bricks	RM	50.00		
		<b>(B) ELECTRICAL WORKS</b>				
65	E1	Providing and fixing 1 x 40 Watt Batten type <b>fluorescent tube fitting</b> (Crompton / Philips / Bajaj make),fabricated from CRCA sheet steel and finished with stove enamel paint complete with Accessories like fluorescent lamp,copper wound polyster choke, starter, seat, rotor holder and terminal block duly pre-wired with copper conductor, including connections, fixing on wall, false ceiling or under roof tusties with clamps as required	Nos.	20.00		
66	E2	Providing and fixing 2 x 40 Decorative type <b>fluorescent tube fitting</b> (Crompton / Philips / Bajaj make),fabricated from CRCA sheet steel and finished with stove enamel paint complete with Accessories like fluorescent lamp,copper wound polyster choke, starter, seat, rotor holder and terminal block duly pre-wired with copper conductor, including connections, fixing on wall, false ceiling or under roof tusties with clamps as required	Nos.	4.00		
67	E4	Providing and fixing 1 x 250 W HPSV out door type fittings (Crompton / Philips/BajaJ , complete with lamp, ballast control gear box, fixing clamp etc.	Nos.	2.00		
68	E5	Providing and fixing of following sweep <b>exhaust fan/ceiling fan/wall mounted fan</b> (Khaitan / Crompton make) single phase alongwith gravity louvers, frame / tripod for holding the motor including making necessary opening in wall, supply & fixing of assembly with grouting bolts, making connections, loop earthing etc.				

SI No	CODE	DESCRIPTION OF ITEM	UNIT	TOTAL QTY	RATE	AMOUNT
	a)	230 mm sweep	Nos.	2.00		
	b)	300 mm sweep	Nos.	1.00		
69	E8	Providing & fixing of 240 V, 5 / 15 Amp <b>6 Pin Power socket</b> outlet point (with 15 A switch ). Switch / socket to be fitted in suitable size 20 SWG metal type box with 3mm sunmica sheet	Nos.	10.00		
70	E9	Providing & fixing of 240 V, 5A <b>3 Pin Power socket</b> outlet point (with switch ). Switch / socket to be fitted in suitable size 20 SWG metal type box with 3mm sunmica sheet along with the piano switches and fan regulator	Nos.	15.00		
71	E10	Providing & fixing 5A piano type switch for Light / Fan Control (Anchor make)	Nos.	50.00		
72	E11	Providing and Fixing of 20/25 mm PVC Conduit ( including fittings ) for telephone / LAN Connection / Call bell System	mtr	100.00		
73	E12	Providing Wires and wiring for Telephone / Call Bell System	mtr	10.00		
74	E13	Providing and Fixing of suitable box for telephone / LAN/Call Bell points	Nos.	10.00		
75	E14	Providing & fixing of 240 V, 20 Amp <b>INDUSTRIAL Power socket</b> outlet point (with 20 A MCB ). Switch / socket to be fitted in suitable size 20 SWG metal type box .	Nos.	5.00		
76	E15	<b>Wiring</b> of above <b>power sockets</b> with 4 Sq. mm PVC insulated Copper Conductor wires as per IS, 650 / 1100 V grade including 20 SWG GI earthing wire in PVC medium grade conduit including supply of items.				
	a)	Length per point upto 20 m	Points	1.00		
	b)	Length per point upto 30 m	Points	1.00		
	c)	Length per point upto 40 m	Points	3.00		
77	E20	<b>Wiring</b> of the following points (including supply of Wires, conduits, clamps, boards, other misc. items) with 2.5 sq.mm colour coated PVC insulated copper conductor wires as per IS- 650/1100 volts grade in surface PVC conduits (medium grade) including laying of 20 SWG GI wire, conduit fitting. ( Fixing of piano type control switches (Anchor make) in suitable sized 20 SWG metal box with 3 mm sunmica sheet having provision for fan regulator, 5 Amp switch socket ( supplied above ) included in scope )				
	a)	Long Point ( Panel to Switch Box)	Points	10.00		
	b)	Medium Point ( Switch Box - first Point / Socket)	Points	10.00		
	c)	Short Point ( among points )	Points	10.00		
	d)	Wiring for exhaust fan.	Points	3.00		
	e)	1 x 250 W HPSV out door type fitting. One number 10 A DP switch to be used for controlling 2 fittings. D.P Switches to be fixed on outside of the store shed wall	Points	2.00		
78	E21	Providing and fixing of <b>32 Amp TPN with HRC fuses</b> along with earth wire. The TPN to be provided on one side of the central shed with rain protection cover.	Nos.	1.00		
79	E22	Supply and burying of <b>earths electrods</b> 40mm dia 3 mtrs. Long including earthing upto switch board with 8 SWG GI wire.	Nos.	1.00		
80	E23	Providing , Installation and commissioning of 24 W Lighting Panel with 10 no 20 A MCB and 14 nos 16 A MCB with 125 A SFU incomer in Sheet metal housing with double door arrangement , including all earthing and statutory requirements .	Nos.	1.00		
81	E24	<b>Supply and laying</b> of following type of PVC Insulated, PVC armoured standard <b>aluminium conductor cable</b> confirming to IS:1554-1976 (part 1), glanding with single compression gland, termination of both end in DB & SFU. The cable has to be laid underground on sand cushion including backfilling, suitable clamp, clamping on surface including all materials etc. complete.This includes road crossing for which suitable GI Pipe to be provided by the contractor.				
	a)	3 1/2 Core x 50 / 95 Sq.mm armoured cable	RM	20.00		
	b)	2c/3c/4c upto 16 sq.mm armoured cable	RM	20.00		
82	E26	Earthing Flat 30 x 6 for Earthing	RM	15.00		
<b>GROSS TOTAL OF ALL THE ABOVE WORKS A+B</b>						

NOTES:	
1	In case of omission in quoting any rate, the evaluation will be done considering the highest quoted rate obtained against that item but the work, if awarded, will be on the lowest quoted rate obtained against that item.
2	The rate shall be entered in figures as well as in words. In case of difference in rates between words and figures, the lesser of the two will be treated as valid rate.
3	The bidders shall enter both 'Unit Rate' & 'Amount'. In case of any mismatch between 'Total Amount based on Unit Rate' & 'Total Amount as quoted', the higher of the two shall be considered for evaluation and the lower of the two shall be considered for award.
4	The quantities indicated against each item above are tentative and are liable to vary depending upon the site requirement. The contractor has to supply/ install actual quantities as per advice of BHEL Engineer and accordingly the final contract price shall be worked out.
5	Evaluation of the bids shall be done based on total price against this BOQ.

Signature with Seal