

BOQ CUM PRICE SCHEDULE
FOR CONSTRUCTION OF CIVIL WORKS OF 400/220/132 KV (GIS) SUB STATION AT RASRA DISTT.BALLIA,UP

(A) Construction of 220 kV & 132 kV GIS building at 400/220/132 KV (GIS) Sub Station , Rasara Distt. Ballia.

No.	Description	Unit	Qty	Unit Rate	Amount (RS)
1	Excavation in foundation in ordinary soil (Loam Clay or Sand) including lift upto 1.5m and lead upto 30m and including filling, watering and ramming of excavated earth into the trenches or into the space between the building and sides of the foundation work.	CuM	3700.00	127.20	470640.00
2	Earth work in cutting or in embankment in ordinary soil, excavation to be in the form of regular pits, not exceeding 0.5M in depth and earthwork in embankment to be in 20cm layers, including ramming & dressing the surface to reqd. levels and slopes.	CuM	10.00	108.00	1080.00
3	Add to Earth work item (SI No. 1.0 & 2.0) above but for every additional 30m lead or part thereof or for every additional 1.5M lift or part thereof.	CuM	6100.00	19.20	117120.00
4	Local sand filling in plinth including supply of necessary quantity of local sand from outside the UPPTCL premises including watering, dressing etc. Rate to include cost of all materials, labour and T&P etc. required for proper completion of work.	CuM	300.00	884.00	265200.00
5	Clearing jungle including uprooting of rank vegetations, grass, bush, wood, trees and saplings of girth upto 30cm measured at a height of 1.0m above ground level and removal of rubbish upto a distance of 50m outside the periphery of UPPCL area cleared.	SqM	1500.00	5.60	8400.00
6	Earth filling under floors and/or sub station area including cost of earth when obtained from outside UPPCL area including its roylty and carriage including watering, ramming in 20 cm layers and dressing of earth etc. all complete.	CuM	1200.00	322.40	386880.00
7	Levelling and dressing and making proper slopes including cutting and filling of earth upto a depth 100mm if so required including all labour T&P etc. required for proper completion of the work .	SqM	1000.00	2.40	2400.00
8	Concrete with 4cm gauge I class brick ballast (class 150) , coarse sand (F.M. 1.8 to 2.5) and cement in proportion of 12:6:1 in foundations and under floors including supply of all materials, labour and tools and plants etc. required for proper completion.	CuM	10.00	4309.60	43096.00
9	Concrete with 4cm gauge stone ballast , coarse sand (F.M. 1.8 to 2.5) & cement in proportion of 12:6:1 in foundations & under floors including supply of all materials, labour and tools and plants etc. required for proper completion.	CuM	10.00	5560.80	55608.00
10	Concrete with 4 cm gauge stone ballast (class 150mm) coarse sand (F.M. 1.8 to 2.5) and cement in proportion of 8:4:1 in foundation & under floors including supply of all materials, labour & T&P etc. complete.	CuM	190.00	5876.80	1116592.00

(A) Construction of 220 kV & 132 kV GIS building at 400/220/132 KV (GIS) Sub Station , Rasara Distt. Ballia.

No.	Description	Unit	Qty	Unit Rate	Amount (RS)
11	RCC work with cement approved coarse sand (F.M. 1.8 to 2.5) and 2 cm gauge graded approved hard stone ballast like grainite, quartzite etc from Dalla, Jhansi or other quarries in proportion 1:1.5:3 in lintels of doors and windows , excluding supply of reinforcement & its bending but including its fixing and binding the same with binding wire, including cost of all other materials labour and T&P.	CuM	50.00	8116.00	405800.00
12	RCC work with cement approved coarse sand (F.M. 1.8 to 2.5) and 2 cm gauge graded approved hard stone ballast like grainite, quartzite etc from Dalla, Jhansi or other quarries in proportion 1:1.5:3 in slab , excluding supply of reinforcement & its bending but including its fixing and binding the same with binding wire, including cost of all other materials labour and T&P .	CuM	330.00	9379.20	3095136.00
13	RCC work with cement approved coarse sand (F.M. 1.8 to 2.5) and 2 cm gauge graded approved hard stone ballast like grainite, quartzite etc from Dalla, Jhansi or other quarries in proportion 1:1.5:3 in lighter beams i.e. having span upto 6m , excluding supply of reinforcement & its bending but including its fixing and binding the same with binding wire, including cost of all other materials labour and T&P .	CuM	310.00	10160.00	3149600.00
14	RCC work with cement approved coarse sand (F.M. 1.8 to 2.5) and 2 cm gauge graded approved hard stone ballast like grainite, quartzite etc from Dalla, Jhansi or other quarries in proportion 1:1.5:3 in heavier beams i.e. having span above 6m , excluding supply of reinforcement & its bending but including its fixing and binding the same with binding wire, including cost of all other materials labour and T&P .	CuM	110.00	11028.80	1213168.00
15	RCC work with cement approved coarse sand (F.M. 1.8 to 2.5) and 2 cm gauge graded approved hard stone ballast like grainite, quartzite etc from Dalla, Jhansi or other quarries in proportion 1:1.5:3 in raft foundation and footings , excluding supply of reinforcement & its bending but including its fixing and binding the same with binding wire, including cost of all other materials labour and T&P.	CuM	1800.00	7784.00	14011200.00
16	RCC work with cement approved coarse sand (F.M. 1.8 to 2.5) and 2 cm gauge graded approved hard stone ballast like grainite, quartzite etc from Dalla, Jhansi or other quarries in proportion 1:1.5:3 in RCC pile caping, gantry walls/column foundations & RCC pedestals , excluding supply of reinforcement & its bending but including its fixing and binding the same with binding wire, including cost of all other materials labour and T&P.	CuM	10.00	8034.40	80344.00

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No.	Description	Unit	Qty	Unit Rate	Amount (RS)
17	RCC work with cement approved coarse sand (F.M. 1.8 to 2.5) and 2 cm gauge graded approved hard stone ballast like grainite, quartzite etc from Dalla, Jhansi or other quarries in proportion 1:1.5:3 in RCC T beam-slab and column , excluding supply of reinforcement & its bending but including its fixing and binding the same with binding wire, including cost of all other materials labour and T&P .	CuM	800.00	10327.20	8261760.00
18	Cement concrete with 2cm gauge approved hard stone ballast , coarse sand (F.M. 1.8 to 2.5) and cement in proportion of 3:1.5:1 including supply of all materials, labour,side shuttering if required and T&P etc. required for proper completion of work	CuM	10.00	7060.80	70608.00
19	First class brick (class-150) work in 1:6 cement and coarse sand (F.M.1.8 to 2.5) mortar in foundation and plinth including supply of all materials, labour & T&P etc. required for proper completion of work.	Cum	10.00	4612.00	46120.00
20	First class brick (class-150) work in 1:6 cement and coarse sand (F.M.1.8 to 2.5) mortar in in super structure including necessary cutting and moulding of bricks as required and also including honeycomb brick work, thickness of wall not to be less than 1.5 brick.	Cum	10.00	4880.80	48808.00
21	First class brick (class-150) work in 1:6 cement and coarse sand (F.M.1.8 to 2.5) mortar in in super structure including necessary cutting and moulding of bricks as required and also including honeycomb brick work, thickness of wall not to be less than one brick.	Cum	10.00	5109.60	51096.00
22	First class brick (class-150) work in 1:4 cement and coarse sand (F.M.1.8 to 2.5)mortar in foundation and plinth including supply of all materials, labour & T&P etc. required for proper completion of work	Cum	220.00	4739.20	1042624.00
23	First class brick work in 1:4 cement and coarse sand (F.M.1.8 to 2.5) mortar in one brick thick in super structure including supply of all materials, labour & T&P etc. required for proper completion of work.	Cu.M	1200.00	5236.80	6284160.00
24	First class brick (class-150) work in 1:4 cement and coarse sand (F.M. 1.8 to 2.5) mortar in superstructure including necessary cutting & moulding of bricks as required for half brick (115mm) thickness wall including supply of all materials, labour & T&P etc. required for proper completion of work	Cum	10.00	5351.20	53512.00
25	Reinforced brick work for walls in 1:3 cement and coarse sand mortar of (F.M.1.8 to 2.5)in foundation and plinth including supply of all labour, materials, T&P etc required for proper completion of work. The reinforced steel work shall be measured separately.	Cum	10.00	5921.60	59216.00
26	As in item 25.0 above but reinforced brick work in super structure of Wall.	Cum	50.00	6304.80	315240.00

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No.	Description	Unit	Qty	Unit Rate	Amount (RS)
27	Supply and fixing of 32 mm. thick Shishum wood fully glazed. door and window shutter including supply and fixing of wooden cleats, stoppers and including fixing and adjustment of hinges, bolts, locks, handles, springs and/or other fittings but excluding there supply and including supply & fixing the glass panes with putty and necessary Screws (Glass panes to be 4 mm thick).	Sqm	10.00	2512.00	25120.00
28	Supply and fixing of 4.0 cm thick Shishum wood door and window Jali shutters with panels of heavy quality galvanized iron wire mesh of size 14 x 24 with necessary beading including supply and fixing of wooden cleats and stops and including fixing and adjustment of hinges. but excluding supply of fixtures .	Sqm	10.00	2523.20	25232.00
29	Supply and fixing Anodized Aluminium Door fittings like 2 no 150 mm handles, 2 no 250 mm tower bolt, 1 no stopper and 1 no 12 mm belan including all materials, labour & T&P etc. required for proper completion of work.	Sqm	100.00	312.80	31280.00
30	Providing and fixing aluminium work for doors, windows, ventilators and partitions with extruded built up standard tubular sections/ appropriate Z sections and other sections of approved make conforming to IS: 733 and IS: 1285, fixing with dash fasteners of required dia and size, including necessary filling up the gaps at junctions, i.e. at top, bottom and sides with required EPDM rubber/ neoprene gasket etc. Aluminium sections shall be smooth, rust free, straight, mitred and jointed mechanically wherever required including cleat angle, Aluminium snap beading for glazing / paneling, C.P. brass / stainless steel screws, all complete as per architectural drawings and the directions of Engineer-in-charge. (Glazing, paneling and dash fasteners to be paid for separately) : For fixed portion Powder coated aluminium (minimum thickness of powder coating 50 micron) :	Kg	1000.00	283.52	283520.00
31	Providing and fixing aluminium work for doors, windows, ventilators and partitions with extruded built up standard tubular sections/ appropriate Z sections and other sections of approved make conforming to IS: 733 and IS: 1285, fixing with dash fasteners of required dia and size, including necessary filling up the gaps at junctions, i.e. at top, bottom and sides with required EPDM rubber/ neoprene gasket etc. Aluminium sections shall be smooth, rust free, straight, mitred and jointed mechanically wherever required including cleat angle, Aluminium snap beading for glazing / paneling, C.P. brass / stainless steel screws, all complete as per architectural drawings and the directions of Engineer-in-charge. (Glazing, paneling and dash fasteners to be paid for separately) : For shutters of doors, windows & ventilators including providing and fixing hinges/ pivots and making provision for fixing of fittings wherever required including the cost of EPDM rubber / neoprene gasket required (Fittings shall be paid for separately) Powder coated aluminium (minimum thickness of powder coating 50 micron)	Kg	1500.00	328.72	493080.00

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No.	Description	Unit	Qty	Unit Rate	Amount (RS)
32	Providing and fixing glazing in aluminium door, window, ventilator shutters and partitions etc. with EPDM rubber / neoprene gasket etc. complete as per the architectural drawings and the directions of engineer-in-charge . (Cost of aluminium snap beading shall be paid in basic item): With float glass panes of 5.50 mm thickness:	Sqm	200.00	850.68	170136.00
33	Providing and laying integral cement based water proofing treatment including preparation of surface as required for treatment of roofs, balconies, terraces etc consisting of following operations: (a) Applying a slurry coat of neat cement using 2.75 kg/sqm of cement admixed with water proofing compound conforming to IS. 2645 and approved by Engineer-in-charge over the RCC slab including adjoining walls upto 300 mm height including cleaning the surface before treatment. (b) Laying brick bats with mortar using broken bricks/brick bats 25 mm to 115 mm size with 50% of cement mortar 1:5 (1 cement : 5 coarse sand) admixed with water proofing compound conforming to IS : 2645 and approved by Engineerin- charge over 20 mm thick layer of cement mortar of mix 1:5 (1 cement :5 coarse sand) admixed with water proofing compound conforming to IS : 2645 and approved by Engineer-in-charge to required slope and treating similarly the adjoining walls upto 300 mm height including rounding of junctions of walls and slabs. (c) After two days of proper curing applying a second coat of cement slurry using 2.75 kg/ sqm of cement admixed with water proofing compound nforming to IS : 2645 and approved by Engineer-in-charge. (d) Finishing the surface with 20 mm thick jointless cement mortar of mix 1:4 (1 cement :4 coarse sand) admixed with water proofing compound conforming to IS : 2645 and approved by Engineer-in-charge including laying glass fibre cloth of approved quality in top layer of plaster and finally finishing the surface with trowel with neat cement slurry and making pattern of 300x300 mm square 3 mm deep. (e) The whole terrace so finished shall be flooded with water for a minimum period of two weeks for curing and for final test.“All above operations to be done in order and as directed and specified by the Engineer-in-Charge : With average thickness of 120 mm and minimum thickness at khurra as 65 mm.	Sqm	1350.00	738.17	996526.80
34	S/Fixing of double action floor springs including cutting in floors / RCC slabs and grouting the same with C.C. & finishing the surface properly as and where required under aluminium doors as per direction of Engineer-in-charge. including cost of all other material, labour, tools & plants etc. complete.	Each	20.00	2311.20	46224.00
35	Supply and fixing brass polished hydraulic door closure of approved make & quality its fixing and adjustment with the help of screws, nuts and bolts including supply of all labour, T & P etc. required for proper completion of the work.	No.	20.00	1242.40	24848.00

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No.	Description	Unit	Qty	Unit Rate	Amount (RS)
36	Supplying & fixing 24 gauge annodized aluminium sheet of approved quality including cutting, wastage and fixing the same over the wooden door shutters with nails with all material, labour and T&P.	Sqm	10.00	319.20	3192.00
37	Supply and fixing of 40 mm thick single leaf flush door shutter (boiled water resistance, phenol maldehyde resin bonded, hot pressed factory made) commercial quality to I.S.2202 part-1 (1983) ISI marked including fixing of wooden cleats and stoppers and including fixing and adjustment of hinges,bolts.locks,handles, springs and other fittings including all materials, labour & T&P etc. required for proper completion of work.	SqM	10.00	1838.40	18384.00
38	Supply and fixing of 40 mm thick double leaf door shutter (boiled water resistance, phenol maldehyde resin bonded, hot pressed factory made) commercial quality to I.S.2202 part-1 (1983) ISI marked including fixing of wooden cleats and stoppers and including fixing and adjustment of hinges,bolts.locks,handles, springs and other fittings including all materials, labour & T&P etc. required for proper completion of work.	SqM	10.00	1998.40	19984.00
39	Mild Steel or Iron work in heavy sizes such as trusses built up gates, door frames, record racks roof work gates , steel embedments in concrete ,fence posts,etc. wrought to required form including holes rivetting or welding where necessary and also fixing in proper position and alignment including cost of all materials supplied by contractor.	MT	10.00	61240.80	612408.00
40	TMT/Tor steel in plain work such as reinforced concrete or reinforced brick work (when not included in an over all rates) wrought to required shape as necessary including bending for proper completion of the work and including supply of steel its wastage, bend, hooks and authorized overlapping shall be measured. (Steel shall be arranged by the contractor)	MT	10.00	54353.60	543536.00
41	As in item sl no 40.0 above but when steel is provided by the department (BHEL) .	MT	330.00	15698.40	5180472.00
42	Supplying and fixing rolling shutters of approved make made of 80x1.25 mm. Gauge cold rolled M.S. lathes inter locked through out their inner length and joined together at the end by end lock guides & arrangements for inside and outside locking with push &pull operation complete but excluding the cost of top cover and springs.	Sqm	20.00	1720.00	34400.00
43	P/F 27.5cm. long wire spring grades 2 for rolling shutters.	No	2.00	404.80	809.60
44	Providing and fixing top cover rolling shutters.	Rmt	2.00	402.40	804.80
45	Providing & fixing ball bearing for rolling shutters.	No	2.00	448.80	897.60

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No.	Description	Unit	Qty	Unit Rate	Amount (RS)
46	Supply of 28 mm. dia M.S Galvanised Anchor bolts (conforming to IS 266) 800 mm. long with base plate (75x75x6mm) welded with anchor bolts including its threading upto a length of 10cm. and also supply of a pair of galvanized standard nuts with threading including supply of 5 mm thick washer and cost of labour, material & T&P for proper completion of work.	No	20.00	305.45	6108.97
47	Fixing and grouting 40/28 mm M.S Galvanised Anchor bolts in proper alignment level and setout with help of a template complete including supply of all labour & T&P etc. required for proper completion of the work.(labour rates only) .	No	50.00	44.80	2240.00
48	Supply of 24 mm dia.M.S Galvanised Anchor bolts (conforming to IS-226) 600 mm long with base plate(50x50x6 mm)welded with anchor bolts,including its threading upto a length of 10cm. and galvanizing upto 15cm from top, also supply of a pair of galvanized standard nuts with threading including supply of 5mm thick washer and cost of labour material and T&P etc. required for proper completion of the work.	No	50.00	199.27	9963.28
49	Fixing and grouting 24 mm dia M.S Galvanised Anchor bolt in proper alignment level and setout with the help of a template including supply of all labour T&P etc. reqd. for proper completion of the work. (labour rates only) .	No	50.00	34.40	1720.00
50	Supply and fixing galvanised mosquito proof jali (16x24 gauge) with M.S. flat of 20 x 3 mm. size, on both sides screwed or welded to window or door frame.	Sqm	10.00	480.00	4800.00
51	Grouting of 90/105 lbs M.S. rail including cost of all materials, labour & T&P for fixing of rail in proper alignment, level and position in transformer plinth foundation etc. as per direction of Eng I/C. (labour rates only) .	Rmt	50.00	396.00	19800.00
52	Fixing of template in position level and alignment for grouting of Anchor bolt in auxiliary structure . (labour rate only).	No	50.00	115.20	5760.00
53	Fabrication of template for auxiliary foundation including cost of all labour, and T&P etc. required for proper completion of the work. Steel shall be arranged by contractor free of cost for fabrication of templete. This template shall be property of contractor after completion of work.	No.	50.00	340.00	17000.00
54	S/F in position 90 lbs M.S. Rail for transformer plinth including cost of all labour, material and T&P etc. required for proper completion of the work.	Rmt	50.00	2796.00	139800.00
55	Supply and laying water proof craft paper in double layer with grease. including supply of all materials, labour and T&P etc. required for proper completion of the work.	Sqm	10.00	118.40	1184.00

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No.	Description	Unit	Qty	Unit Rate	Amount (RS)
56	Supply and fixing 50 mm dia 150 mm long G.I. pipe in chhajja as spout including supply of all materials, labour and T&P etc. required for proper completion of the work.	No.	10.00	67.20	672.00
57	12 mm thick plaster with cement mortar consisting of one part of cement & four part of coarse sand (1:4) minimum thickness not to be less then 10 mm including supply of all material, labour and T&P etc for proper completion of work.	Sqm	4600.00	167.20	769120.00
58	12 mm thick plaster with cement mortar consisting of one part of cement & six part of coarse sand(1:6),minimum thickness not to be less then 10 mm including supply of all material, labour and T&P etc for proper completion of work.	Sqm	100.00	160.80	16080.00
59	Add for extra labour and materials for plaster over rough face of one brick thick wall.	Sqm	4900.00	18.40	90160.00
60	2 cm. thick cement plaster in dado or skirting in 1:2 consisting of one part of cement and two parts of approved coarse sand laid in panels finished with 3mm.floating coat of neat cement or cement and marble dust in ratio of 5:1 including supply of all materials, labour & T&P etc. required for proper completion of the work.	Sqm	60.00	236.80	14208.00
61	S/mixing approved water proofing compound (CICO,DR FIXIT etc) in cement mortar in plaster or concrete work in the proportion as recommended by the manufacturer.	Kg	150.00	37.60	5640.00
62	Providing (12x15) mm section groove in plaster including all material, labour and T&P etc. required for proper completion of the work.	Rmt	1000.00	9.60	9600.00
63	6 mm. thick plaster with 1:3 cement & coarse sand including labour, materials & T&P etc. required for proper completion of the work.	Sqm	1100.00	137.60	151360.00
64	Champering the edge of concrete in auxiliary structure, of size 25 mm wide in triangular section including all materials, labour & T&P etc complete.	Rmt	2000.00	6.40	12800.00
65	Making drip course (25x12) mm in 1:2 cement and coarse sand including supply of all materials, labour and T&P etc required for proper completion of work.	Rmt	50.00	8.80	440.00
66	2.5 cm thick 1:2:4 plain cement concrete floor with cement, approved coarse sand & 2cm graded approved stone ballast laid in panels finished with 3mm floating coat of neat cement or cement and marble dust in ratio of 5:1 as specified and including 7.5 cm thick base concrete consisting of cement, coarse sand and 4cm gauge brick ballast in the proportion of 1:6:12 and removing any overlapping mortar at the joints of the panels if any and giving them a uniform finish including supply of all materials, labour and T&P etc, required for proper completion of the work.	SqM	10.00	588.00	5880.00
67	4.0 cm thick 1:2:4 plain cement concrete floor with cement, approved coarse sand & 2cm graded approved stone ballast laid in panels finished with 3mm floating coat of neat cement or cement and marble dust in ratio of 5:1 as specified and removing any overlapping mortar at the joints of the panels if any and giving them a uniform finish including supply of all materials, labour and T&P etc, required for proper completion of the work (without base CC)	SqM	2400.00	378.40	908160.00

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No.	Description	Unit	Qty	Unit Rate	Amount (RS)
68	First class bricks on edge floor laid dry, joints sand filled, including preparation of base to proper slope and its ramming including supply of all material labour & T&P etc. required for proper completion of the work.	SqM	50.00	441.60	22080.00
69	Supply and Laying 6 mm thick glazed tiles of size 200x300 mm in skirting / dado laid with 1:3 cement and approved coarse sand mortar finished with white cement slurry, jointing and polishing complete, including supply of all materials, labour and T&P etc. completion required for proper completion of the work.	SqM	10.00	752.80	7528.00
70	Supply and Laying 8 mm thick glazed floor tiles of Somany, Johnson or equivalent make, of size 300x300 mm, laid with 1:3 cement and approved coarse sand mortar finished with white cement slurry, jointing and polishing complete, including supply of all materials, labour and T&P etc. completion required for proper completion of the work.	SqM	10.00	937.60	9376.00
71	Providing and fixing glass strips of 3.15 mm thickness & 25mm depth in joints of floor and skirting at the time of laying floors, flush with floor level including supply of all materials, labour & T&P etc. completion required for proper completion of work.	RM	10.00	21.60	216.00
72	Providing and fixing glass strips of 3.15 mm thickness & 40mm depth in joints of floor and skirting at the time of laying floors, flush with floor level including supply of all materials, labour & T&P etc. completion required for proper completion of work.	RM	900.00	24.00	21600.00
73	Providing and laying floor of 10 mm thick vitrified tiles in flooring or skirting of approved brand (Bell, Johnson or equi. make) size of 600x600 mm of approved shade, colour and pattern , laid over base cement mortar 1:4 mix including finishing the joints with white cement mixed with pigment to match the shade of tile including cost of all material, labour and T&P required for proper completion of the work.	SqM	400.00	1177.60	471040.00
74	Providing and laying of 20 mm thick granite (black/ brown) in flooring or skirting ,of approved shade, colour,size and pattern , laid over base cement mortar 1:4 mix including finishing the joints with white cement mixed with pigment to match the shade of granite floor including cost of all material, labour and T&P required for proper completion of the work, as per direction of Engineer incharge.	SqM	10.00	2381.60	23816.00
75	Painting or varnishing new iron work in small areas or new wood work with one coat of ready mixed priming paint and two coats of approved superior quality ready mix paint "Luxol" or equivalent brand or varnish including supply of all materials, labour and T&P etc. required for proper completion of the work. Paint to be used should conform to the I.S. 103-1950.	Sqm	10.00	82.40	824.00

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No.	Description	Unit	Qty	Unit Rate	Amount (RS)
76	Painting two coat with Acrylic emulsion paint of Berger/ Asian/ ICI or equivalent paint (Paint and water in the ratio 1:1 by volume) over prepared and primed surface of cement concrete, cement plaster and bricks including all labour, material and T&P etc required for proper completion of the work, (preparation of base with Birla putty etc. and a coating of primer shall be paid extra) .	Sqm	4600.00	97.60	448960.00
77	Applying Birla or equivalent putty on new interior or exterior surface over one coat of water based cement primer of ICI or equivalent brand for smoothening and levelling of the surface as per requirement and direction of Engineer I/C including cost of all material, labour, T & P etc required for proper completion of work.	Sqm	2300.00	67.20	154560.00
78	Painting two coat with APEX or equivalent brand weather coat paint on new wall surfaces (well prepared with Birla putty and one coat of primer ICI or equivalent which shall be paid separately) including thorough washing with water including cost of all materials, labour, T&P required for proper completion of work.	Sqm	4900.00	111.20	544880.00
79	Pre-Construction anti-termite treatment, by creating a barrier under and around the columns pits, foundation trenches, under floors, junctions of Walls & floors, around the external perimetre of building, expansion joints, surrounding of pipes and conduits etc. (Plinth area of the building at ground floor only shall be measured as per I.S. 6313 (Part II 1981))with Aldrine emulsifiable 0.2% concentration or any other approved material such as Heptachlore or chlordance will be used. The consumption of emulsion shall be (i) Foundation and masonry @ 5 Ltrs/Sqm, (ii) Back fills in immediate contact of foundation@ 7.5 Ltrs. / Sqm, (iii) Top surface of Plinth filling @ 5 Ltrs / Sqm, (iv) Junction of walls & floors @ 7.5 Ltrs / Sqm, (v) Soil along external perimetre of building @ 7.5 Ltrs / Sqm (vi) under apron of the building @ 5 Ltrs. /Sqm. The rates includes cost of all materials, labour, equipments, T&P complete.	Sqm	50.00	66.40	3320.00
80	3 mm thick floating coat of neat cement finish including supply of all materials,labour and T&P etc. required for proper completion of the work.(cement consumption 0.044 bag/Sq.m.)	SqM	2000.00	14.40	28800.00
81	Providing and fixing of 110 mm dia PVC pipe 6 Kg/ Sq.cm for with special such as Tee, bend, socket, elbow etc including supply of all labour,material,T & P etc complete required for proper completion of work.	RM	50.00	204.00	10200.00
82	Finishing walls with water proof cement paint of approved made like “Super Snowcem” or equivalent quality on new work with three coats to give an even shade including supply of all materials, labour etc. required for proper completion of work.	Sqm	4500.00	64.00	288000.00
83	Dismantling brick work or stone work in lime or cement mortar and including stacking of materials as directed by the Engineer-in-charge within a distance of 60 meters.	Cum	10.00	372.80	3728.00
84	Dismantling reinforced cement concrete or reinforced brick work, including stacking of dismantled materials as directed by the Engineer-in-charge within a distance of 60 meters.	Cum	10.00	834.40	8344.00

(A) Construction of 220 kV & 132 kV GIS building at 400/220/132 KV (GIS) Sub Station , Rasara Distt. Ballia.

No.	Description	Unit	Qty	Unit Rate	Amount (RS)
85	First class brick work in foundation & plinth with old dismantled bricks (supplied by department free of cost) and coarse sand of FM 1.5 to 2.0 mortar in 1:6 including supply of all labour, materials, T&P etc complete.	Cum	10.00	2529.60	25296.00
86	Concrete work with 40 mm gauge brick ballast obtained from breaking brick bats (brick bats supplied by the department free of cost) in proportion of 12:6:1 with 40mm gauge brick ballast, coares sand (FM 1.8 to 2.5) and cement including cost of all labour, materials, T&P etc required for proper completion of work.	Cum	10.00	3460.80	34608.00
87	Extra for additional height in centering, shuttering where ever required with adequate bracing, propping etc, including cost of de-shuttering and decentering at all levels, over a height of 3.5m, for every additional height of 1 metre or part there of (plan area to be measured)	Sqm	10000.00	169.97	1699700.00
88	Providing edge moulding to 18 mm thick marble /Granite stone counters, Vanities etc., including machine polishing to edge to give high gloss finish etc. complete as per design approved by Engineer-in-Charge.	Metre	10.00	165.22	1652.16
89	Providing and fixing aluminium casement windows fastener of required length for aluminium windows with necessary screws etc. complete. Powder coated minimum thickness 50 micron aluminium.	each	10.00	47.60	476.00
90	Providing and fixing of 110 mm dia PVC pipe 4 Kg/ Sq.cm for with special such as Tee, bend, socket, elbow etc including supply of all labour,material,T & P etc complete required for proper completion of work.	RM	10.00	146.40	1464.00
91	Providing and fixing 18mm thick granite stone gang saw cut mirror polished premoulded and prepolished) machine cut for kitchen platforms, vanity counters, window sills , facias and similar locations of required size of approved shade, colour and texture laid over 20mm thick base cement mortar 1:4 (1 cement : 4 coarse sand) with joints treated with white cement, mixed with matching pigment, epoxy touch ups, including rubbing, curing, moulding and polishing to edge to give high gloss finish etc. complete at all levels. Area of slab over 0.50 Sqm area.	Sqm	5.00	1326.56	6632.80
92	Filling the gap in between aluminium frame & adjacent RCC/ Brick/ Stone work by providing weather silicon sealant over backer rod of approved quality as per architectural drawings and direction of Engineer-in-charge complete. Upto 5mm depth and 5 mm width .	Rmt	10.00	60.10	601.00

(A) Construction of 220 kV & 132 kV GIS building at 400/220/132 KV (GIS) Sub Station , Rasara Distt. Ballia.

No.	Description	Unit	Qty	Unit Rate	Amount (RS)
93	Providing and fixing stainless steel (Grade 304) railing made of Hollow tubes, channels, plates etc., including welding, grinding, buffing, polishing and making curvature (wherever required) and fitting the same with necessary stainless steel nuts and bolts complete, i/c fixing the railing with necessary accessories & stainless steel dash fasteners , stainless steel bolts etc., of required size, on the top of the floor or the side of waist slab with suitable arrangement as per approval of Engineer-in-charge, (for payment purpose only weight of stainless steel members shall be considered excluding fixing accessories such as nuts, bolts, fasteners etc.	Kg	10.00	348.69	3486.88
94	P/F of Structure glazing with Use of hermetically sealed double glazed unit. ("SGG PLANITHERM" SATIN BLUE 6mm thick PLT TB LOW E high performance offline coated toughend glass) The inner glass being Clear Glass 6mm thick (Toughened) and the outer glass being 6mm reflective (Toughened). Both the glasses are separated by a Aluminum spacer and 12mm airgap . Desiccants to be used to avoid moisture between glasses. (double glass Light Factors-transmission(%)>=49 %, Reflection % external= 8%, internal=10%, solar factor/sf=0.35, shading co-efficient/sc=0.40, Uvalue =1.8 W/sqmK), used with help of heavy aluminium section. Glass pasting with section by recommended adhesive both side 2.0 mm tape complete with MS bracket & Hold fastner. (Aluminium work & Hold fastner paid by separately) as approved by E/I.	Sqm	1.00	2741.55	2741.55

(A) Construction of 220 kV & 132 kV GIS building at 400/220/132 KV (GIS) Sub Station , Rasara Distt. Ballia.

No.	Description	Unit	Qty	Unit Rate	Amount (RS)
95	Providing & Fixing of Armstrong Soft Fibre Acoustical Suspended Ceiling System with Optra pebble /pearl TEG/BEW/TEG(Microlook) EDGE TILES WITH ARMSTRONG Silhouette Exposed GRID. The tiles should have Humidity Resistance (RH) of 95%, NRC 0.9 - 1.0, Light Reflectance $\geq 85\%$, Colour White, Fire Performance UK Class 0 / Class 1 (BS 476 pt - 6 & 7) in module size of 600 x 600 x 15mm ,and 600x1200x15mm suitable for Green Building application, with Recycled content of 66% GW.The tile shall be laid on Armstrong Silhouette profile grid system with 15mm white flanges incorporating a 6mm central reveal in white/black colour and with a web height of 38mm. Silhouette, Main Runners & Cross Tees to have mitred ends & “birdsmouth” notches to provide mitred cruciform junctions. The T Sections have a Galvanizing of 90 grams per M2 and a load carrying capacity of 10 Kgs/M2.The Tile & Grid system used together should carry a 15 year warranty. INSTALLATION: To comprise main runner spaced at 1200mm centres securely fixed to the structural soffit using Armstrong suspe on system (specifications below) at 1200mm maximum centre. The First/Last Armstrong suspe on system at the end of each main runner should not be greater than 450mm from the adjacent wall.Flush fitting 1200mm long cross tees to be interlocked between main runners at 300mm centre to form 1200 x 600 mm module. Cut cross tees longer than 600mm require independent support. Perimeter trim to be Armstrong wall angles of size 3000x19x19mm, secured to walls at 450 mm maximum centres all complete as per drawing, specification and direction of engineer incharge.	Sqm	400.00	1761.15	704460.00
96	Providing & fixing full height toughned glass partition with 12mm Modi float glass fixed edge to edge as per design and drawing and polished where required along with neccesary hardware all complete as per drawing, specification and direction of engineer incharge.	Sqm	1.00	4608.85	4608.85
	Total Rs				55891758

NOTE:

1. Mode of measurement for civil works shall be as per customer technical specifications .
2. The Rate of RCC/CC items includes the cost of form work (Centering,Shuttering & Scafflodng) and no additional payment shall be made for form work.
3. For excavation ,nothing extra shall be payable for slope,shoring,strutting etc. irrespective of whatever is provided .However the contractor shall maintain the required slope and working space as per the safety /statutory requirement and its cost is deemed to be included in the quoted rate. The Overlaped portion in the case of adjacent foundation shall be paid once.

ANNEXURE-II

**TRANSMISSION BUSINESS GROUP
(SUB- CONTRACTS MANAGEMENT)
TBG - NOIDA**

PRICE SCHEDULE FORMAT

**SUB: TENDER FOR “EXECUTION AND HANDING OVER OF CIVIL WORKS FOR
CONSTRUCTION OF 220KV & 132KV GIS BUILDING AT 400 KV GIS SUBSTATION
AT RASRA, BALLIA”.**

TENDER NO.:- TBSM/RASRA- BALLIA/CIVIL- BUILDING/PKG-III/TENDER DATE: 18.09.2019

(a) I/ We hereby agree to execute the above work at ----- % (in figure).....
----- (in words) Above / Below/ At Par the rates of items given in BOQ
(Annexure-I) of subject tender.

NOTE:

1. In this annexure the tenderer shall quote a percentage above/ below/At Par the rates shown in the Bill of Quantities (Annexure-I) of subject tender. The percentage quoted shall be clearly written both in words and figures In case of discrepancy in rates in figure and words, the minimum will be taken into account by BHEL.
2. The quoted percentage will apply to the individual items uniformly.

Date:

Place

Signature of tenderer
Name & Designation of authorized person(s) with seal

ANNEXURE-III
(Summary Of Prices)

**EXECUTION AND HANDING OVER OF CIVIL WORKS FOR CONSTRUCTION OF 220KV & 132KV GIS BUILDING AT
400 KV GIS SUBSTATION AT RASRA, BALLIA**

SI No.	Description	Amount (Rs.)
1	Total amount as per the rates in BOQ for " Execution and handing over of civil works for construction of 220kV & 132kV GIS building at 400 kV GIS substation at Rasra, Ballia " (Annexure-I)	5,58,91,758
2	Value of percentage above/below/at par (As indicated in Price Schedule Format, Annexure-II) applicable to the total amount of civil work (Sl. no. 1 above)% above/below/ at par
3	Total amount after consideration of percentage above/below/ at par.	