

BILL OF QUANTITY- CUM - PRICE SCHEDULE

Name of Project : 420kV Pothead Yard for Rampur H.E. Project
 Name of Work : Civil Works of Switchyard

S.No.	Description of Item	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
1	Carriage & disposal of surplus excavated earth/rock beyond initial lead by mechanical means not necessarily all the times on pucca roads, including loading,unloading,dressing of excavated material etc., complete as per specifications				
(a)	Lead upto 1 km	cum	1000	82.78	82780.00
(b)	Lead upto 3 km	cum	300	104.98	31494.00
(c)	Lead upto 5 km	cum	300	125.92	37776.00
2	Earthwork in excavation by mechanical means(Hydraulic excavator)/manual means over areas (exceeding 30cm in depth 1.5m in width as well as 10sqm on plan) including dewatering as necessary of rain water/subsoil seepage water and disposal of excavated earth upto 100m and lift upto 3.5m, disposed earth to be levelled and neatly dressed.				
(a)	All kinds of soil	cum	1000	129.35	129350.00
(b)	Ordinary rock	cum	400	197.75	79100.00
(c)	Hard rock (blasting prohibited)	cum	1000	490.10	490100.00
3	Earthwork in excavation by mechanical means (Hydraulic excavator)/manual means in foundation trenches or drains (not exceeding 1.5m in width as well as 10sqm on plan) including dewatering as necessary of rain water/subsoil seepage water and dressing of sides and ramming of bottoms, lift upto 3.5m, including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 100m.				
(a)	All kinds of soil	cum	350	130.80	45780.00
(b)	Ordinary rock	cum	150	212.00	31800.00
(c)	Hard rock (blasting prohibited)	cum	300	491.95	147585.00
4	Filling available excavated earth (including rock) in trenches, plinth, sides of foundations etc in layers not exceeding 20cm in depth : consolidating each deposited layer by ramming and watering, for all lifts and all leads upto 100m and lift upto 3.5m	cum	1750	83.80	146650.00

S.No.	Description of Item	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
5	Supplying & filling in plinth with local sand underfloors including watering, ramming, consolidating & dressing complete.	cum	10	749.30	7493.00
6	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering all work upto plinth level.				
(a)	1:4:8 (1 cement : 4 coarse sand : 8 graded stone aggregate 40mm nominal size)	cum	20	3593.30	71866.00
(b)	1:5:10 (1 cement : 5 coarse sand : 10 graded stone aggregate 40mm nominal size)	cum	300	3357.40	1007220.00
7	Providing and laying in position specified grade of reinforced cement concrete excluding the cost of centring, shuttering, finishing and reinforcement-All works upto plinth level				
(a)	1:2 :4(1 cement : 2 coarse sand : 4 graded stone aggregate 20mm nominal size)	cum	700	4703.9	3292730.00
8	Centering and shuttering including strutting, propping etc and removal of form work for :				
(a)	Foundations, footings, bases of columns etc for mass concrete	sqm	750	166.90	125175.00
(b)	RCC walls (any thickness) at all levels	sqm	25	285.15	7128.75
9	Steel reinforcement -Cold twisted bars /TMT- Fe 500 (To be procured from SAIL, TISCO, IISCO and RINL only)				
(a)	Including supply and straightening, cutting, bending, binding, (i/c cost of binding wire), placing in position, etc., all labour & material, complete.	Kg	95000	62.25	5913750.00
10	Brick work with F.P.S bricks of class designation 75 in foundation and plinth:				
(a)	cement mortar 1:4 (1 cement:4 coarse sand)	cum	400	3508.25	1403300.00

S.No.	Description of Item	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
11	Structural steelwork welded in built up sections like edge protection angles, insert plates with lugs & framed work including providing, cutting, hoisting, fixing in position/ embedding in concrete and applying a priming coat of approved steel primer all complete.	kg	2500	66.50	166250.00
12	Providing and fixing (all dia & length) foundation bolts in position with help of proper templates including supply of templates ,nuts and washers all complete as per specs, drawings & directions of Engr-in-Charge	kg	5200	86.55	450060.00
13	Extra over item above for providing galvanised bolts, nuts and washer (Mass of zinc coating = 610gms/sqm)	kg	5200	8.00	41600.00
14	Fixing (all dia & length) foundation bolts in position with help of proper templates(template to be supplied by contractor) all complete as per specs, drawings & directions of Engr-in-Charge.Bolts to be provided by BHEL free of cost.	kg	100	7.00	700.00
15	Steelwork welded in built up sections/framed work including providing ,cutting, hoisting, fixing in position and applying a priming coat of approved steel primer using structural steel etc., as required.				
(a)	In covering of floors/trenches with chequered plates, stringers, treads, landings etc of staircases involving use of chequered plates, wherever required, all complete.	kg	4000	67.20	268800.00
16	12mm cement plaster of mix:				
(a)	1:4 (1 cement: 4 coarse sand)	sqm	2050	132.10	270805.00
17	Providing and laying non-pressure NP2 class (light duty) RCC pipes with collars jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 cement: 2 fine sand) including testing of joints etc., complete.				
(a)	150mm dia. RCC pipe	RM	20	254.50	5090.00
(b)	250mm dia. RCC pipe	RM	20	342.45	6849.00

S.No.	Description of Item	Unit	Quantity	Unit Rate (Rs)	Amount (Rs)
18	Providing & fixing in position precast cement concrete trench covers or perforated covers wherever necessary at various elevations in all kinds of work including moulding, formwork, mixing, laying out, compacting and curing, storing, transportation, erection without damage, setting in position with cement and sand mortar, grouting etc all as per specs, drawings and directions of Engr-in-Charge but excluding the cost of reinforcement, inserts, edge angles, etc.				
(a)	1:2 :4(1 cement : 2 coarse sand : 4 graded stone aggregate 20mm nominal size)	cum	20	6000.00	120000.00
19	Grouting of block outs, pockets, foundations, bolts holes and underside of base plates with ready mixed grout or grout consisting of 2 parts by weight of sand, 1 part by weight of cement including approved plasticizer, non-shrink admixture, in the required proportion as recommended by manufacturer/Engineer, including placing, curing, cleaning, surface preparation, testing, etc. complete with labour, materials, equipment, handling, testing, etc. all complete as per specifications, drawings and instructions of the Engineer.	cum	2	10000.00	20000.00
20	Supplying and laying 80mm thick crushed stone (25mm size) in the switchyard including dressing, levelling & compaction of switchyard area. Before laying the stone aggregates , the yard surface shall be treated with antiweed treatment all complete as per direction of Engineer in Charge. (The rate shall be inclusive of all materials ,labour,loading,unloading and surface preparation etc. required for aggregate laying and antiweed treatment)	sqm	4750	104.00	494000.00
Total =					14895231.75