

BILL OF QUANTITY					
Name of Project : 400/110kV Substation Thappagundu					
Name of work :			Construction of RCC Cable duct, Retaining wall, Drain, Fire wall etc.		
Sl. No.	Quantity	Unit	DESCRIPTION	Unit Rate (Rs)	Total Amount (Rs)
1 a	2,850	m3	Earth work excavation for foundation in hard gravelly soil with initial lead and lift of etc., complete.		
b	3,380	m3	Earthwork excavation for foundation in soft disintegrated rock not requiring blasting with lead and lift etc complete.		
c	285	m3	Earthwork excavation for foundation in medium rock and dense medium rock not requiring blasting including all lead and lift etc complete.		
d	385	m3	Earthwork excavation for foundation in hard rock measured in solid including blasting / hammer drilling with jack hammer using compressor and stacking all lead and lift etc. complete.		
2	1,905	m3	Plain cement concrete M 10 using 12 to 20mm (machine crushed) hard broken stone without form work including cost of all materials, labour, lead lift etc complete."		
3			RCC 1:1.5:3 using 20mm to 12mm down graded HBG metal with form work including cost of all materials, labour, lead, lift, etc., but excluding cost of steel reinforcement for rafts		
a)	475	m3	Raft		
b)	1,080	m3	side walls		
c)	50	m3	Column		
d)	5	m3	RCC Grade beam		
e	47	m3	Cast in situ slab		
f	214	m3	Pre cast slab		
4 (a)	50	MT	Providing RTS/MS reinforcement including cost of steel, binding wire, labour for cutting, bending, tying and fixing, all lead, lift, etc., complete. Reinforcement steel to be procured from SAIL, TISCO, IISCO, RINL, Jindal Steel only.		

(b)	175	MT	Fabricating and placing RTS/MS reinforcement including cost of binding wire, labour for cutting, bending, tying and fixing, all lead, lift, etc., complete. Reinforcement steel shall be supplied by BHEL free of cost as per norms indicated in conditions of contract. The rate quoted against this shall be deemed to be inclusive of cost against all activities required including transportation of material from (SAIL, TISCO, IISCO, RINL, Jindal Steel or rerollers approved by main producers) stockyard.		
5	41	MT	Supplying, fabricating and fixing in position of G.I angles for cable duct including cost of steel labour lead and lift and hot tip of galvanizing charges etc complete		
6	7,900	Nos	Drilling suitable holes using power drilling machine to the required depth to fix the angle without disturbing the strength of the concrete including hire charges for drilling machine cable lead lift etc complete		
7	200	m3	Fly ash Brick work in CM 1:6 for wall 23 cm thick including cost of all materials leads lift and curing etc complete.		
8	11,400	m2	Plastering with CM 1:3 12 mm thick for wall sides including cost of all materials labour etc complete		
9	11,400	m2	Painting with 2 coats of approved colour cement paint over priming coat of white cement including cost including cost of all materials, labour, lead, lift etc complete for exterior faces of walls.		
10	500	m3	Refilling with excavated soil complying with standard specification for filling sides of cable duct including cost of labour, lead, lift, watering consolidation etc. complete.		
11	420	m3	Removal of surplus earth away from site to lift and spreading wherever necessary with std specification etc. complete		
12	400	Nos.	Providing weep holes using PVC pipes including cost of all materials, PVC pipes, fixing charges etc., complete		
13			Providing opening for cable, Exhaust fan AC duct, water pipe line etc in brick work/RCC in building and retaining wall & cable duct including cost of machineries labour etc complete		
a)	25	Nos	Brick wall		
b)	25	Nos	RCC work		

14			Supplying and fixing PVC pipes for the cable entry for inside the cable duct including cost of PVC pipes fixing charges etc complete		
a)	344	RM	75mm PVC pipe		
b)	44	RM	110mm PVC pipe		
15	20	Nos	Providing recharge pits for rain water harvesting including cost of excavation 1m to 2.m wide 2m depth back filled with boulders / gravel /coarse sand / etc as directed by department officials		
16			Supplying and laying fo PVC pipe line reputed make and approved quality including cost of all materials,labour for fixing with all leads and lifts etc.,compelte		
a)	800	RM	40mm dia Pipe line 10kg/cm 2		
b)	800	RM	32mm dia Pipe line 10kg/cm 2		
C)	1,000	RM	25mm dia Pipe line 10kg/cm 2		
d)	700	RM	20mm dia Pipe line 10kg/cm 2		
e)	200	Nos	15 mm 1.00 m length with cap for dripping arrangements		
17			Supplying and fixing in position of various sizes of quality and approved variety of gun metal gate/ wheel value of the following sizes with ISI mark,cost of shellac, thread etc. including labour for cutting, therading, jointing, clamps, screws, lead, lift etc. complete complying with standard specification for both internal and external water supply arrangements.		
a)	5	Nos	40 mm dia GM Gate/Wheel valve		
b)	7	Nos.	32mm dia GM gate / Wheel valve		
c)	7	Nos.	25mm dia GM gate / Wheel valve		
d)	7	Nos.	20mm dia GM gate / Wheel valve		
18	1	No.	Fixing of borewell point		
19	200	RM	Drilling of 150 mm Dia bore well up to 200 M depth in all soils using power drilling machine		
20	50	RM	Drilling of 150 mm Dia bore well above 200 M depth in all soils using power drilling machine including transporting of drilling machine , fixing in position all labour, lead, lift etc Complete.		
21	12	RM	Supplying and providing Heavy duty 180 mm PVC casing pipe with ISI make to suitable 150mm Dia borewell 6KG/cm2 pressure including cost of all materials labour lead lift etc, Complete.		

22	180	RM	Supplying and fixing 40 mm Dia HDPE suction pipe (Pressure 10 KG/ cm2) of approved best quality of ISI make for delivery pipe including cost of all materials labour,lead, lift, fixing charges Etc Complete.		
23	180	RM	Supplying and fixing 20 mm Dia HDPE Air pipe (Pressure 10 KG/ cm2) of approved best quality of ISI make inside the borewell including cost of all materials labour,lead, lift, fixing charges Etc Complete.		
24	40	RM	Supplying providing and fixing of 15 mm Dia GI pipe "B" class of approved ISI make drain pipe to bore well including cost of all materials, labour, lead, lift Etc Complete.		
25	1	No	Supplying and fixing of 160 mm dia PVC End cap approved best quality with ISI make including cost of all materials, labour, lead, lift Etc Complete.		
26	1	No	Supplying and erection of 5 HP capacity reputed make compressor with reputed make motor 5 HP starter with cutler and hammer make including cost of al materials C.W board, fixing of starter, Indicator bulb, Switch, Holders, Earth plate IC Aerial fuse carrier, Copper wire reputed make wiring labour, lead , lift, Etc, Complete.		
27	60	RM	Supplying and fixing of 25 mm dia ' B' class service connection pipe approved best quality with necessary clamp for service connection cost including cost of all materials, labour, lead , lift, Etc, Complete.		
28	30	RM	Providing Three phase service connection using PVC unsheathed 7/20 copper cable of reputed make from EB post to meter board including cost of labour, lead, lift, Etc, Complete.		
29	1	No	Supplying and fixing of ISI make 4 way triple pole and natural MCB Distribution Board with 1 No 32 Amps DPIC switch of 500V as in coming 6 Nos 32 Amps SPMCB out going necessary hug with wall and making good of concealed portion with earthy etc., complete as per standard specification		
30	1	No	Supplying and fixing of 32 A , Ariel fuse connection with clamp including cost of all materials labour, lead, lift, Etc, Complete.		

31	1	No	Supplying and fixing of 40 mm dia M S collar for outer hose connection including cost of all materials labour, lead, lift, Etc, Complete.		
32	1	No	Supplying and fixing of 20 mm dia M S collar for Air hose connection including cost of all materials labour, lead, lift, Etc, Complete.		
33	3	No	Supplying and fixing of 53 mm dia G I Elbow for water connection above ground level including cost of all materials labour, lead, lift, Etc, Complete.		
34	1	No	Supplying and fixing of GI cover box to required size of accommodate for temporary supply including meter board IC carrier etc with necessary clamp, bolts & Nuts , Etc, Complete.		
35	2	No	Supplying and fixing of 53 mm dia G I Union for water connection above ground level including cost of all materials labour, lead, lift, Etc, Complete.		
36	1	No	Providing platform in RR 1:5 for compressor motor Fixing with necessary bed bolt required Masonry including cost of base concrete PCC. 1:4: 8, cement and all Materials lead, lift, curing etc., complete, as per standard specification.		
37	1	No	Water divining charges for fixing of bore point including cost of transporting of instrument lead, lift, etc, complete.		
			Total Value		