

**BOQ FOR RAIN WATER HARVESTING WORK AT ORC BHANGAGARH (MANDATORY REQUIREMENT)**

Sl No	Description	Unit	Rate	Qty	Amount
1	Earthwork in excavation for foundation trenches of walls, retaining walls, footings of column, steps, septic tank etc. including refilling (return filling) the quantity as necessary after completion of work, breaking clods in return filling, dressing, watering and ramming etc. and removal of surplus earth with all lead and lifts as directed and specified in the following classification of soils including bailing out water where necessary as directed and specified.				
	(A) Up to a depth of 2.00m below the existing ground level.				
	(c) In soft or laminated rock or medium shale	Cum			
	(B) Extra over item no.1.1 (A) above for each 1m depth or part thereof beyond the initial depth of 2m	Cum			
2	Earth/ sand filling in plinth in layers not more than 150mm thick including necessary carriage, watering, ramming etc. complete as directed and specified including payment of land compensation, forest royalty, sales tax and other duties and taxes as may be necessary.				
	(a) With earth or silt or sand obtained by head load with lead upto 90m and lift upto 2m	Cum			
3	Supplying and filling sand gravel in foundation trenches of column footings over slushy soil including local carriage of materials within 8 km pumping out of water, ramming etc. complete for strengthening the bearing capacity of the soil as directed and specified including payment of Forest Royalty and Sales Tax and other duties and taxes as may be necessary.	Cum			
4	Plain cement concrete works with coarse aggregate of sizes 13mm to 32mm in foundation bed for footing steps, walls, brick works etc. as directed and specified including dewatering if necessary, and curing complete (shuttering where necessary shall be measured and paid separately).				
	(a) In prop 1 cement: 3 sand :6 coarse aggregate by volume	cum			
5	<b>230mm thick brick wall</b> in cement mortar with 1st class brick including racking out joints and curing complete as directed in structure	CUM			
	<b>(I) In Sub-structure</b> upto plinth level including dewatering if necessary				
	(a). In proportion 1:3.				
6	<b>15 mm thick Cement plaster in single coat on</b> single or half brick wall for interior plastering up to 1st floor level including arises, internal rounded angles, not exceeding 80mm girth and finished even and smooth including curing complete as directed.				
	<b>A) On both side</b>				
	a) In cement mortar 1:3	Sqm			
7	Supplying, fitting and fixing PVC pipes of 6kg/cm <sup>2</sup> (Supreme/Prince) or other ISI approved including joining, fitting and fixing with clamps etc as necessary complete at all levels including below G.L as directed as specified	rm			
	a) In exposed surfaces or trenches 110 mm dia				
8	Repairing of existing PVC pipes of 6kg/m <sup>2</sup> (rain water pipes) after cutting/fixing with necessary clamps/bend/reducer/nipple/plug/screws etc and support wherein required as per site condition. The rate shall also includes cost of scaffolding .	rm			

9	Supplying fitting and fixing approved uPVC pipes of different sizes,with all necessary"R" brand or similar aproved uPVC fittings such as bend,tee,elbow,reducer,nipple,plug,long screw fitting,clamps etc. complete at all levels including below G.L as directed and specified  a) Exposed or in trenches SUPREME/PRINCE brand or other equivalent approved brand(High pressure pipe SCH-40 of 50mm 25 mm dia	rm			
10	Supplying and placing plastic cylindrical vertical cloused top(CPVC) tank sintex/polycon/patton make over the surface with manhole cover with locking and cleaning arrangement including providing pipe for inlet and outlet pipes complete as directed. 2000 litres capacity(3 layer)	nos			
11	5HP three phase Centrifugal monoblock pump set(Crompton Greaves/Aquatic/CRI/V-guard/Calma make 2900 rpm A class insulation with DOL starter(Crompton Greaves/Aquatic/CRI/V-guard/Calma make) .The rate also includes necessary supply and installation of wires from main source complete in all respect.	nos			
12	Filling of recharge tank(Filter) (size 1m x 4m x 1.5m)				
	With coarse sand of size 1.5mm - 2mm upto depth 200 mm	cum			
	With gravel of size 100mm - 200mm upto depth 200 mm along with wood charcoal of 200 mm depth	cum			
13	PVC net for filter purpose	sqm			
<b>TOTAL COST</b>					
<b>Rates are exclusive of GST</b>					