

Detailed estimate of Water Storage Tank					
Sl.No	Description of Items	Total Quantity	Unit	Rate	Amount
1	All excavation operations manually or by mechanical means shall include excavation and disposal of the buildings foundations, trenches, basements, water tanks excavated material for sands, drains, foundations, weirs and mounds, including excavation in hard soils and under water etc. The work shall include of depositing the excavated material as specified. The disposal of the excavated material beyond five feet shall be either stated as a separate item or indicated with the terms of excavation stating level. During the excavation the natural drainage of the area shall be maintained. Excavation shall be done from top to bottom. Undermining or undermining shall not be done.	2437.93	Cu		
2	Earthwork returning, filling in, including watering and raveling in place. It shall be finished inside abutments.	186.41	Cu		
3	P1: Concrete made by using Ordinary Cement (OPC) and other basic ingredients i.e. coarse aggregate, fine aggregate and water. The concrete having volumetric proportion of 1:0.8:1.2 Cement : 4 Sand : 6 Aggregate. Nominal 28 days Cylinder Compressive Strength of such concrete is 8 MPa (1200 psi). However, it may vary depending on physical and chemical properties of aggregates. It shall be used for no structural works like floor slab/curb, lean concrete etc.	134.46	Cu		
4	The size of bricks shall be as specified. They shall be well burnt without being effloresced. They shall be of uniform color, regular in shape and size, with sharp and square corners and parallel faces. They must be homogeneous in nature and size & clear ringing sound when struck. They shall be free from flaws and cracks. They shall not absorb more than 1/10th of their weight of water after being soaked for one hour at a temperature of 24 to 26°C, and shall show no signs of efflorescence on subsequent drying. The average compressive strength shall not be less than 100-1200 pounds per square inch when tested in accordance with ASTM Designation C47-12 (70 bricks per thousand are defective or the average weight of nominal 2 inches x 4 x 12 inches x 3 inches (with tolerance of 0.2 inches any) brick is less than 2.12 Kg) brick are out of dimension, the whole lot shall be rejected and the contractor shall remove the rejected lots from the site free of cost. In addition to above, for bricks required in connection with lining of Canals, salt content in the earth shall not be more than 0.2%. perforated bricks shall be manufactured as per specified design and perforations.	307.81	Cu		
5	P2: Concrete made by using Ordinary Cement (OPC) and other basic ingredients i.e. coarse aggregate, fine aggregate and water. The concrete having volumetric proportion of 1:0.8:1.2 Cement : 3 Sand : 6 Aggregate. Nominal 28 days Cylinder Compressive Strength of Chapter 5 Item 5.8 Reinforced Concrete (S) such concrete is 10.5 MPa (1500 psi). However, it may vary depending on physical and chemical properties of aggregates. It shall be generally used for some structural members like foundations, load bearing, concrete blocks etc. and any other works where such strength is specified.	157.87	Cu		
6	P3: RCC 2:24 Concrete shall be controlled, mixed, and handled as specified in Section 5 - Plain & Reinforced Concrete unless otherwise specified herein. Concrete shall not be poured in the forms until the Engineer-in-Charge has inspected the planing of the reinforcement, conduits, anchorages, and pre-tensioning steel and has given his approval thereat. The concrete shall be vibrated internally or externally, or both as ordered by the Engineer-in-Charge. The vibrating shall be done with care in such a manner as to avoid development of voids, cracks, or spots.	135.30	Cu		
7	P4: RCC 2:24 Concrete shall be controlled, mixed, and handled as specified in Section 5 - Plain & Reinforced Concrete unless otherwise specified herein. Concrete shall not be poured in the forms until the Engineer-in-Charge has inspected the planing of the reinforcement, conduits, anchorages, and pre-tensioning steel and has given his approval thereat. The concrete shall be vibrated internally or externally, or both as ordered by the Engineer-in-Charge. The vibrating shall be done with care in such a manner as to avoid development of voids, cracks, or spots.	135.96	Cu		
8	providing and fixing of reinforcement steel drawn to drawing. Concrete shall not be placed as per Engineer-in-Charge.	445	Kg		
9	Providing and laying 1/2" thick plastering with 1:3 CM with cement sand machine mixed mortar filled corner, joints, edges etc. All work to be completed as per specifications and finished in shape.	783.416	Sq		
10	providing & finishing Painting work. After completion of insulation and testing in the satisfaction, carry out all finishing, sanding and polishing operation on the entire equipment accessories and installation matching the original finish. In an approved way, all auxiliary works carried out as the finished installation shall also be painted in the approved standard after applying anticorrosive base. When specially required, the paint used for painting of items shall be of an approved by the Engineer-in-Charge.	296.88	Sq		
11	Providing and fixing of Sumpall structure in course up to 4 parts with Rock lining as approved by the Engineer-in-Charge.	1	job		
12	Providing & installation of 80 Cook	7	job		
13	providing & installation of Solar system with complete with all related to our Engineer in Charge. Detail attached below.	1	job		
14	Accessories (Detail attached below)	1	Lot/sum		
15	Providing & fixing Main hole cover	1	job		
16	Providing & installation PPRC Pipe 2" for networking source to tank pipes and fittings shall conform to BS79 for socket and locked vertically cast pipes and BS 1312 for rigid and spun pipes. The pipes shall be perfectly, smooth and cylindrical, their cover and outer surfaces being as nearly as practicable concrete. These shall be round and of uniform casting, free from laps, pin holes or other imperfections and shall be neatly finished and carefully fitted both inside and outside. The ends of pipes shall be reasonably square to their axis. The pipes shall be procured from an approved source.	1865	Rt		
17	Draws of Cast Material	1	Lot/sum		
18	Insulation	1	Lot/sum		
19	Supply & installation of 03 Sign Boards Complete in all respect and as per drawing & sign (Drawing Attached below) High - 8 feet Width - 2 feet	1	Nos		
20	Providing & installation of 3/4" Dia. The pipe lengths shall be in each case be with socket. The pipes shall be supplied without cap unless otherwise specifically mentioned. The pipes supplied shall be factory painted with a base composition both inside and outside which shall be smooth and finished. Every pipe shall ring clearly when struck all over with a light hand hammer. When shorter pipes are cut from full lengths they shall be cut with a chisel.	34	Rt		
21	Providing & installation of 3/4" Dia. The pipe lengths shall be in each case be with socket. The pipes shall be supplied without cap unless otherwise specifically mentioned. The pipes supplied shall be factory painted with a base composition both inside and outside which shall be smooth and finished. Every pipe shall ring clearly when struck all over with a light hand hammer. When shorter pipes are cut from full lengths they shall be cut with a chisel.	30	Rt		
22	Providing & installation of Gate Valve 2" Dia	1	job		
GRAND TOTAL(Inclusive of Taxes, Transportation, Deliveries & Installation)					



Material Specification		
Sl. No.	Specification	Item
1	Ordinary Cement 50 Kg Bb	Cement
2	Locally available from Near By river beds free from sly content and organic material, well graded & clean.	Sand
3	Locally available from Near By river beds free from impurities well graded and atleast 20 mm dia	Gravel/Crash
4	A Class (Standard size 9" x 4 1/2" x 3") Compressive strength (28 days)	Brick
5	1/2" Dia	GI BH-Coil
6	Pressure Pipe white colored	FRPC pipe 2"
7	GI Pipe 2" Dia (Steel w/ 10 gauge)	GI Pipe 2"
8	GI Pipe 3" Dia	GI Pipe 3"

Scope of work	
Sl. No.	Item
1	Earthwork Excavation
2	Earthwork Filling
3	RCC (1:4:2)
4	RCC (1:3:6)
5	RCC (1:2:4)
6	RCC (1:2:4)
7	Brick masonry (1:3:6)
8	FRPC Pipe 2" Dia
9	Plaster (1:4)
10	Paint
11	Bumpwell Structure in source up to 4 yards with Brick mason
12	Frame of Gate Material
13	Shutgate
14	Iron Bolt
15	FRPC pipe 1" dia for 2 no. 6
16	Iron Hook
17	Gate system complete
18	Accessories
19	Main hole source
20	GI Pipe 2" Dia
21	GI Pipe 3" Dia
22	Steel

**Gate Detail/Control**

