

**GENERAL ABSTRACT**

Jal Jeevan Mission (JJM)-JJM CWSS to Marayoor and Kanthalloor Panchayths in Idukki  
District-Construction of well cum pump house and supply and laying of raw water pumping main  
at Kanthalloor-General Civil Work

SI No	Head Description	Amount	
1	Construction of 4.5m dia Intake well	2301480.85	
2	Construction of Pump house	1657446.07	
3	Supply and laying Raw Water Pumping Main	14397875.59	
4	Road Restoration Charges(MORD ROAD)	1703496.80	
5	Supply, erection, testing and commissioning of RAW water pump set from raw water pump house to Kanthalloor WTP - Discharge 26lps, Head 24m	1149809.48	
	<b>Total Estimation PAC</b>	21210108.79	
SI No	Description	Percentage/LS	Amount
<b>L</b>	<b>Lumsum Heading</b>		
L.001	Connection charges - KSEB		
		@LS	250000.00
	<b>Total Lumsum Amount</b>		250000.00
<b>C</b>	<b>Extra Charges</b>		
C.001	Provision for GST		
	21210108.79	18.00%	3817819.58
		<b>Grand Total</b>	25277928.37
		<b>Round off</b>	22071.63
		<b>Rounded Total(Rs)</b>	25300000.00
	Rupees Two Crore Fifty Three Lakh		

Approved By  
**Sajiv Retnakaran**  
(PEN:G13690), Chief Engineer

### DETAILED ESTIMATE

Jal Jeevan Mission (JJM)-JJM CWSS to Marayoor and Kanthalloor Panchayths in Idukki  
District-Construction of well cum pump house and supply and laying of raw water pumping main  
at Kanthalloor-General Civil Work

SI No	Specification	No	Length	Width	Depth	Cf	Quantity
1	Construction of 4.5m dia Intake well						
1.001	2.31	Clearing jungle including uprooting of rank vegetation, grass, brush wood, trees and saplings of girth up to 30 cm measured at a height of 1 m above ground level and removal of rubbish up to a distance of 50 m outside the periphery of the area cleared					
	Clearing jungle						
		1.0000 0	7.000	7.000			49.000
	<b>Total</b>						<b>49.000</b>
	<b>Total Quantity in sqm</b>						<b>49.000</b>
1.002	OD94945/2023-2024	Providing ring bund / shoring of length 20m, width 2m and height 3m using earth filled cement bags, polythene sheets and bamboo including cutting of the Earth, filling, conveying and placing in position and dismantling & removing the same after completion of works properly as per the direction of the department officers including all cost of materials, labor charges etc. complete.					
	Providing ring bund / shoring using earth filled cement bags						
		1.0000 0	20.000	2.000	3.000		120.000
	<b>Total</b>						<b>120.000</b>
	<b>Total Quantity in cum</b>						<b>120.000</b>
1.003	100.3.5.1	Earthwork in open well excavation (above water) for wells of diameter above 3.5m and up to 6.0m in all kinds of soil and conveying and depositing the spoil within initial lead of 50m and lift up to 1.5m including neat banking.					
	Earthwork in open well excavation						
		3.1400 0	7.000	7.000	1.000	0.2500 00	38.465
	<b>Total</b>						<b>38.465</b>
	<b>Total Quantity in cum</b>						<b>38.465</b>
1.004	100.4.2	Granite rock blasting in wells, measured in solids, including collecting and stacking spoil for measurement within the initial lead of 50m and lift up to 1.50m but excluding bailing out water.					

SI No	Specification	No	Length	Width	Depth	Cf	Quantity
	Granite rock blasting in wells,						
		3.1400 0	7.000	7.000	0.500	0.2500 00	19.233
	<b>Total</b>						<b>19.233</b>
	<b>Total Quantity in cum</b>						<b>19.233</b>
1.005	100.4.3						
	Granite rock blasting in wells, measured in solids, including collecting and stacking spoil for measurement within the initial lead of 50m and lift upto 3.00m (1 st depth 1.50m to 3.00m) but excluding bailing out water. (Ref. Item No. 1098 (b) of T C)						
	Granite rock blasting in wells,						
		3.1400 0	7.000	7.000	1.500	0.2500 00	57.698
	<b>Total</b>						<b>57.698</b>
	<b>Total Quantity in cum</b>						<b>57.698</b>
1.006	100.4.4						
	Granite rock blasting in wells, measured in solids, including collecting and stacking spoil for measurement within the initial lead of 50m and lift upto 4.50m (2 nd depth 3.00m to 4.50m) but excluding bailing out water. (Ref. Item No. 1098 (c) of T C)						
	Granite rock blasting in wells,						
		3.1400 0	7.000	7.000	0.600	0.2500 00	23.079
	<b>Total</b>						<b>23.079</b>
	<b>Total Quantity in cum</b>						<b>23.079</b>
1.007	100.7.1						
	Bailing out water with 5HP engine and pump set including conveyance to the site, erecting, dismantling and taking back of engine and pump, cost of fuel lubricating oil and other stores pay of staff etc., complete.						
	Bailing out water with 5HP engine and pump set						
	Bailing out water with 2 no.s 5 HP	10.000 00	90*10			0.7500 00	6750.000
	<b>Total</b>						<b>6750.000</b>
	<b>Total Quantity in Kwh</b>						<b>6750.000</b>
1.008	100.7.2						
	Bailing out water with engine and pump set above 5HP up to 10HP including conveyance to the site, erecting, dismantling and taking back of engine and pump, cost of fuel lubricating oil and other stores pay of staff etc., complete.						
	Bailing out water with engine and pump set above 5HP up to 10HP						
		10.000 00	90*10			0.7500 00	6750.000

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
	<b>Total</b>						<b>6750.000</b>
						<b>Total Quantity in Kwh</b>	<b>6750.000</b>
1.009	OD94948/2023-2024						
	DOWEL BARS_ Supplying and providing MS dowel bars of size 16 mm dia , 200 cm long including drilling holes of 20 mm dia to a depth of 100 cm in rock and filling the gap with cement grout (0.100kg/hole) etc complete						
	Dowel bars						
		45.000 00					45.000
	<b>Total</b>						<b>45.000</b>
						<b>Total Quantity in no</b>	<b>45.000</b>
1.010	4.1.3						
	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level:1:2:4 (cement : 2 coarse sand (zone-III) : 4 graded stone aggregate 20 mm nominal size)						
	Providing and laying in position cement concrete						
	Levelling bottom of well	1.0000 0	3.140	5.4*5.4	0.200	0.2500 00	4.578
	<b>Total</b>						<b>4.578</b>
						<b>Total Quantity in cum</b>	<b>4.578</b>
1.011	5.3						
	Reinforced cement concrete work in beams, suspended floors, roofs, having slope up to 15<sup>0</sup> landings, balconies, shelves, chajjas, lintels, bands, plain window sills, staircases and spiral stair cases up to floor five level excluding the cost of centering, shuttering, finishing and reinforcement, with 1:1.5:3 (1 cement : 1.5 coarse sand (Zone III) : 3 graded stone aggregate 20 mm nominal size).						
	RCC work in beams, floors, roofs						
	Base slab	3.1400 0	4.300	4.300	0.400	0.2500 00	5.806
	kerb	3.1400 0	4.800	0.600	0.600		5.426
	Cover slab	3.1400 0	5.400	5.400	0.200	0.2500 00	4.578
	Platform for supporting valve	2.0000 0	0.800	0.600	0.150		0.144
	Roof beam	1.0000 0	4.500	0.300	0.400		0.540
	<b>Total</b>						<b>16.494</b>
						<b>Total Quantity in cum</b>	<b>16.494</b>
1.012	5.7						

SI No	Specification	No	Length	Width	Depth	Cf	Quantity
	Reinforced cement concrete work in well - steining excluding the cost of centering, shuttering, finishing and reinforcement, with 1:1.5:3 (1 cement : 1.5 coarse sand (Zone - III) : 3 graded stone aggregate 20 mm nominal size)						
	RCC - well steining						
	Well steining	3.1400 0	4.800	0.300	5.000		22.608
	<b>Total</b>						<b>22.608</b>
	<b>Total Quantity in cum</b>						<b>22.608</b>
1.013	5.1.3						
	Providing and laying in position specified grade of reinforced cement concrete, excluding the cost of centering, shuttering, finishing and reinforcement - All work up to plinth level:1:2:4 ( 1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size)						
	RCC 1:2:4						
	Anchor block	1.0000 0	2.500	1.000	1.500		3.750
	<b>Total</b>						<b>3.750</b>
	<b>Total Quantity in cum</b>						<b>3.750</b>
1.014	5.9.1						
	Centering and shuttering including strutting, etc. and removal of form for:Foundations, footings, bases of columns, etc for mass concrete						
	Centering and shuttering						
	Base slab & kerb	1.0000 0	3.140	5.400	0.600		10.174
	kerb inside	1.0000 0	3.140	4.300	0.600		8.101
	anchor block for intake pipe	1.0000 0	7.000		1.500		10.500
	<b>Total</b>						<b>28.775</b>
	<b>Total Quantity in sqm</b>						<b>28.775</b>
1.015	5.9.5						
	Centering and shuttering including strutting, etc. and removal of form for:Lintels, beams, plinth beams, girders bressumers and cantilevers						
	Centering and shuttering						
	roof beam	1.0000 0	4.500	0.900			4.050
	<b>Total</b>						<b>4.050</b>
	<b>Total Quantity in sqm</b>						<b>4.050</b>
1.016	5.9.12						
	Centering and shuttering including strutting, etc. and removal of form for:Well steining						

SI No	Specification	No	Length	Width	Depth	Cf	Quantity
	Centering and shuttering						
	Well steining - inside	1.0000 0	3.140	4.500	5.000		70.650
	Well steining - out side	1.0000 0	3.140	5.100	5.000		80.070
	<b>Total</b>						<b>150.720</b>
	<b>Total Quantity in sqm</b>						<b>150.720</b>
1.017	5.9.3						
	Centering and shuttering including strutting, etc. and removal of form for:Suspended floors, roofs, landings, balconies and access platform						
	Centering and shuttering						
	Cover slab	1.0000 0	3.140	5.4*5.4	1/4		22.891
	Cover slab sides	1.0000 0	3.140	5.400	0.200		3.391
	Platform for supporting valve	2.0000 0	0.950	0.900			1.710
	<b>Total</b>						<b>27.992</b>
	<b>Total Quantity in sqm</b>						<b>27.992</b>
1.018	5.22.6						
	Steel reinforcement for R.C.C work including straightening, cutting, bending, placing in position and binding all complete upto plinth levelThermo - Mechanically Treated bars of grade Fe-500D or more						
	Steel reinforcement for R.C.C work						
		1.0000 0	16.494+2 2.608			120.00 0000	4692.240
	anchor block	1.0000 0	3.750			50.000 000	187.500
	<b>Total</b>						<b>4879.740</b>
	<b>Total Quantity in kilogram</b>						<b>4879.740</b>
1.019	13.1.1						
	12 mm cement plaster of mix:1:4 ( 1 cement : 4 fine sand)						
	12 mm cement plaster						
	well bottom	1.0000 0	3.140	4.5*4.5/4			15.896
	kerb- inside	1.0000 0	3.140	4.200	0.400		5.275
	well steining - inside	1.0000 0	3.140	4.500	5.000		70.650
	well steining - out side	1.0000 0	3.140	5.100	2.000		32.028

SI No	Specification	No	Length	Width	Depth	Cf	Quantity
	Roof slab beam	1.0000 0	4.500	0.900			4.050
	Roof slab- top & bottom	2.0000 0	3.140	5.4*5.4	1/4		45.781
	Roof slab side	1.0000 0	3.140	5.400	0.200		3.391
	<b>Total</b>						<b>177.071</b>
						<b>Total Quantity in sqm</b>	<b>177.071</b>
1.020	13.43.1						
	Applying one coat of water thinnable cement primer of approved brand and manufacture on wall surface:Water thinnable cement primer						
	Applying cement primer						
	well steining - out side	1.0000 0	3.140	5.100	2.000		32.028
	Roof slab sides	1.0000 0	3.140	5.400	0.200		3.391
	<b>Total</b>						<b>35.419</b>
						<b>Total Quantity in sqm</b>	<b>35.419</b>
1.021	13.60.1						
	Wall painting with acrylic emulsion paint of approved brand and manufacture to give an even shade:Two or more coats on new work						
	Wall painting						
	Qty same as item no. 21	1.0000 0	35.419				35.419
	<b>Total</b>						<b>35.419</b>
						<b>Total Quantity in sqm</b>	<b>35.419</b>
1.022	100.41.34						
	Supplying and fixing Rectangular C.I. manhole cover 455mm x 610mm with frame (low duty) charges including all cost, labour charges etc., complete.						
	Supplying and fixing Rectangular C.I. manhole cover						
		1.0000 0					1.000
	<b>Total</b>						<b>1.000</b>
						<b>Total Quantity in no</b>	<b>1.000</b>
1.023	10.25.2						
	Item Shifted to Sub head 14 as item 14.73 Item Shifted to head 14 as item 14.74 Steel work welded in built up sections/framed work, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer using structural steel etc. as required.In gratings, frames, guard bar, ladder, railings, brackets, gates and similar works						
	Providing steel ladder						

SI No	Specification	No	Length	Width	Depth	Cf	Quantity	
	ladder	1.0000 0				100.00 0000	100.000	
	<b>Total</b>						<b>100.000</b>	
	<b>Total Quantity in kg</b>							<b>100.000</b>
1.024	100.1.1							
	Excavating trenches of required width for pipes, cables, etc., including excavation for sockets, and dressing of sides, ramming of bottoms, depth up to 1.5m, including getting out the excavated soil, and then returning the soil as required, in layers not exceeding 20cm in depth, including consolidating each deposited layer by ramming, watering, etc., and disposing of surplus excavated soil as directed, within a lead of 50m, in all kinds of soil.							
	Earth work							
	for intake pipe	1.0000 0	7.000	2.500	1.500		26.250	
	<b>Total</b>						<b>26.250</b>	
	<b>Total Quantity in cum</b>							<b>26.250</b>
1.025	100.1.2							
	Excavating trenches of required width for pipes, cables, etc., including excavation for sockets, and dressing of sides, ramming of bottoms, depth exceeding 1.5m but not exceeding 3m, including getting out the excavated soil, and then returning the soil as required, in layers not exceeding 20cm in depth, including consolidating each deposited layer by ramming, watering, etc., and disposing of surplus excavated soil as directed, within a lead of 50m, in all kinds of soil.							
	Earth work							
	for intake pipe	1.0000 0	7.000	2.500	0.500		8.750	
	<b>Total</b>						<b>8.750</b>	
	<b>Total Quantity in cum</b>							<b>8.750</b>
1.026	18.71.5							
	Providing and laying Double Flanged (screwed / welded) Centrifugally (Spun) Cast Iron, Class B (IS : 1536):300 mm dia C.I Double Flanged Pipe							
	Providing & laying 300 mm DI double flanged pipe							
	300 mm DI	2.0000 0	6.000				12.000	
	<b>Total</b>						<b>12.000</b>	
	<b>Total Quantity in metre</b>							<b>12.000</b>
1.027	100.31.1.7							
	Conveying and fixing C.I. sluice valves (with cap) by providing bolts, nuts, rubber insertions etc., complete, but excluding the cost of the valve (tail pieces, if required, will be paid separately): 300mm diameter, Class I.							
	Conveying and fixing C.I. sluice valves							



SI No	Specification	No	Length	Width	Depth	Cf	Quantity
		2.0000 0					2.000
	<b>Total</b>						<b>2.000</b>
						<b>Total Quantity in no</b>	<b>2.000</b>
1.028	100.98.463						
	Supply of CI Double Flanged Sluice Valve Conforming to IS 14846 - 2000, Sluice Valve with Cap PN 1.6, Size 300mm.						
	Supply of CI Double Flanged Sluice Valve -300 mm dia						
		2.0000 0					2.000
	<b>Total</b>						<b>2.000</b>
						<b>Total Quantity in no</b>	<b>2.000</b>
2	Construction of Pump house						
2.001	2.8.1						
	Earth work in excavation by mechanical means (Hydraulic excavator) /manual means in foundation trenches or drains (not exceeding 1.5 m in width or 10 sqm on plan), including dressing of sides and ramming of bottoms, lift up to 1.5 m, including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m.All kinds of soil						
	Earth work in excavation						
	for ramp- beam	1.0000 0	2.000	0.450	0.600		0.540
	for ramp -column	2.0000 0	1.000	1.000	1.000		2.000
	for retaining wall	1.0000 0	15.000	1.500	0.900		20.250
	<b>Total</b>						<b>22.790</b>
						<b>Total Quantity in cum</b>	<b>22.790</b>
2.002	4.1.3						
	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level:1:2:4 (cement : 2 coarse sand (zone-III) : 4 graded stone aggregate 20 mm nominal size)						
	Providing PCC 1:2:4						
	for column footing	2.0000 0	1.000	1.000	0.100		0.200
	for retaining wall	1.0000 0	15.000	1.500	0.100		2.250
	<b>Total</b>						<b>2.450</b>
						<b>Total Quantity in cum</b>	<b>2.450</b>
2.003	5.33.1						

SI No	Specification	No	Length	Width	Depth	Cf	Quantity
	Providing and laying in position machine batched and machine mixed design mix M-25 grade cement concrete for reinforced cement concrete work, using cement content as per approved design mix, including pumping of concrete to site of laying but excluding the cost of centering, shuttering, finishing and reinforcement, including admixtures in recommended proportions as per IS: 9103 to accelerate, retard setting of concrete, improve workability without impairing strength and durability as per direction of Engineer - in-charge. Note:- Cement content considered in this item is @ 330 kg/ cum. Excess or less cement used as per design mix is payable or recoverable separately. All work upto plinth level						
	Providing mix M-25 grade cement concrete						
	ramp	1.0000 0	5.000	2.000	0.200		2.000
	column footing	2.0000 0	1.000	1.000	0.200		0.400
	column footing trapezoidal portion	2.0000 0	0.312				0.624
	beam	2.0000 0	5.000	0.300	0.300		0.900
	beam	1.0000 0	2.000	0.300	0.600		0.360
	column	2.0000 0	0.300	0.300	1.800		0.324
	retaining wall foundation	1.0000 0	15.000	1.500	0.300		6.750
	retaining wall	1.0000 0	15.000	(.5+.2)/2	2.500		13.125
	<b>Total</b>						<b>24.483</b>
						<b>Total Quantity in cum</b>	<b>24.483</b>
2.004	5.33.2						
	Providing and laying in position machine batched and machine mixed design mix M-25 grade cement concrete for reinforced cement concrete work, using cement content as per approved design mix, including pumping of concrete to site of laying but excluding the cost of centering, shuttering, finishing and reinforcement, including admixtures in recommended proportions as per IS: 9103 to accelerate, retard setting of concrete, improve workability without impairing strength and durability as per direction of Engineer - in-charge. Note:- Cement content considered in this item is @ 330 kg/ cum. Excess or less cement used as per design mix is payable or recoverable separately. All work above plinth level upto floor V level						
	Providing RCC design mix M25 grade						
	Lintel	3.1400 0	4.900	0.200	0.150		0.462
	Sunshade for windows	3.0000 0	1.800	0.600	0.100		0.324
	Sunshade for rolling shutter	1.0000 0	2.800	0.600	0.100		0.168

SI No	Specification	No	Length	Width	Depth	Cf	Quantity
	column	4.0000 0	0.300	0.450	4.550		2.457
	Roof slab of PH-	3.1400 0	5.7*5.7	0.120		0.2500 00	3.061
	Roof beam	1.0000 0	5.100	0.300	0.450		0.689
	Roof beam	3.1400 0	4.800	0.300	0.450		2.035
	Gantry beam	3.1400 0	4.500	0.300	0.400		1.696
	<b>Total</b>						<b>10.892</b>
						<b>Total Quantity in cum</b>	<b>10.892</b>
2.005	5.22.6						
	Steel reinforcement for R.C.C work including straightening, cutting, bending, placing in position and binding all complete upto plinth level Thermo - Mechanically Treated bars of grade Fe-500D or more						
	Steel reinforcement						
		1.0000 0	24.483+1 0.892			100.00 0000	3537.500
	<b>Total</b>						<b>3537.500</b>
						<b>Total Quantity in kilogram</b>	<b>3537.500</b>
2.006	5.9.1						
	Centering and shuttering including strutting, etc. and removal of form for: Foundations, footings, bases of columns, etc for mass concrete						
	Centering and shuttering						
	for column footing	2.0000 0	4.000		0.300		2.400
	for column footing	2.0000 0	2.400		0.800		3.840
	for column	2.0000 0	1.200		2.000		4.800
	for beam	1.0000 0	2.000		1.100		2.200
	for beam	2.0000 0	5.000		1.100		11.000
	for retaining wall foundation	1.0000 0	15+3		0.400		7.200
	<b>Total</b>						<b>31.440</b>
						<b>Total Quantity in sqm</b>	<b>31.440</b>
2.007	5.9.3						
	Centering and shuttering including strutting, etc. and removal of form for: Suspended floors, roofs, landings, balconies and access platform						

SI No	Specification	No	Length	Width	Depth	Cf	Quantity
	Centering and shuttering						
	roof slab	3.1400 0	5.7*5.7	1/4			25.505
	Roof slab side	3.1400 0	5.700	0.120			2.148
	sunshade window	3.0000 0	1.800	0.600			3.240
	sunshade side	3.0000 0	3.000	0.075			0.675
	sunshade RS	1.0000 0	2.800	0.600			1.680
	sunshade side	1.0000 0	4.000	0.075			0.300
	Ramp slab	1.0000 0	5.000	2.000			10.000
	Ramp slab side	2.0000 0	5.000		0.200		2.000
	<b>Total</b>						<b>45.548</b>
	<b>Total Quantity in sqm</b>						<b>45.548</b>
2.008	5.9.5						
	Centering and shuttering including strutting, etc. and removal of form for:Lintels, beams, plinth beams, girders bressumers and cantilevers						
	Centering and shuttering						
	Lintel	6.2800 0	4.900	0.150			4.616
	Roof beam	3.1400 0	4.900	0.960			14.771
	Roof beam	1.0000 0	5.100	0.960			4.896
	Gantry beam	3.1400 0	4.500	1.100			15.543
	<b>Total</b>						<b>39.826</b>
	<b>Total Quantity in sqm</b>						<b>39.826</b>
2.009	5.9.2						
	Centering and shuttering including strutting, etc. and removal of form for:Walls (any thickness) including attached pilasters, buttresses, plinth and string courses etc.						
	Centering and shuttering						
	for retaining wall	2.0000 0	15.000		2.500		75.000
	for retaining wall	2.0000 0	(.5+.2)/2		2.500		1.750
	<b>Total</b>						<b>76.750</b>

SI No	Specification	No	Length	Width	Depth	Cf	Quantity
<b>Total Quantity in sqm</b>							<b>76.750</b>
2.010	50.6.1.2	Solid block masonry using pre cast solid blocks (Factory made) of size 40x20x20cm or nearest available size confirming to IS 2185 part I of 1979 for super structure up to floor two level thickness 20cm and above in: CM 1:6 ( 1 cement: 6 coarse sand) etc complete.					
Solid block masonry							
	Pump house walls	3.1400 0	4.900	0.200	5.000		15.386
	Deduction - Rolling shutter	- 1.0000 0	2.500	0.200	2.500		-1.250
	Deduction - window	- 3.0000 0	1.500	0.200	1.400		-1.260
	Deduction - Lintel	- 3.1400 0	4.900	0.200	0.150		-0.462
	Deduction - column	- 4.0000 0	0.300	0.200	5.000		-1.200
<b>Total</b>							<b>11.214</b>
<b>Total Quantity in cum</b>							<b>11.214</b>
2.011	50.6.3.1	Solid block masonry using pre cast solid blocks ( Factory made) of size 40x20x10cm or nearest available size confirming to IS 2185 part I of 1979 for foundation and plinth for 10 cm thick wall in CM 1:6 ( 1 cement : 6 coarse sand) including cost of scaffolding etc complete					
Solid block masonry							
	Parapet wall - PH	3.1400 0	5.600	0.100	0.750		1.319
<b>Total</b>							<b>1.319</b>
<b>Total Quantity in cum</b>							<b>1.319</b>
2.012	13.1.1	12 mm cement plaster of mix:1:4 ( 1 cement : 4 fine sand)					
12 mm cement plastering							
	Pump house inside wall	1.0000 0	3.140	4.700	5.000		73.790
	Pump house outside wall	1.0000 0	3.140	5.100	5.000		80.070
	Pump house parapet wall	1.0000 0	3.140	5.600	3.000		52.752

SI No	Specification	No	Length	Width	Depth	Cf	Quantity
	sunshade - windows	6.0000 0	1.800	0.675			7.290
	sunshade -RS	2.0000 0	2.800	0.675			3.780
	Pump house roof slab top & bottom	2.0000 0	3.140	5.7*5.7	1/4		51.009
	Pump house roof slab sides	1.0000 0	3.140	5.700	0.120		2.148
	Pump house roof parapet	1.0000 0	3.140	5.600	1.600		28.134
	Deduction-rolling shutter	- 1.0000 0	2.500	2.500			-6.250
	Deduction-windows	- 3.0000 0	1.500	1.400			-6.300
	<b>Total</b>						<b>286.423</b>
						<b>Total Quantity in sqm</b>	<b>286.423</b>
2.013	13.43.1						
	Applying one coat of water thinnable cement primer of approved brand and manufacture on wall surface:Water thinnable cement primer						
	Applying cement primer						
	Qty same as plastering item	1.0000 0	286.423				286.423
	<b>Total</b>						<b>286.423</b>
						<b>Total Quantity in sqm</b>	<b>286.423</b>
2.014	13.60.1						
	Wall painting with acrylic emulsion paint of approved brand and manufacture to give an even shade:Two or more coats on new work						
	Wall painting						
	Qnty same as plastering	1.0000 0	286.423				286.423
	<b>Total</b>						<b>286.423</b>
						<b>Total Quantity in sqm</b>	<b>286.423</b>
2.015	13.71						
	Lettering with black Japan pint of approved brand and manufacture						
	Lettering						
		100.00 000				15.000 000	1500.000
	<b>Total</b>						<b>1500.000</b>
						<b>Total Quantity in per Letter per cm height</b>	<b>1500.000</b>

SI No	Specification	No	Length	Width	Depth	Cf	Quantity
2.016	50.9.1.1						
	Providing wood work in frames of doors, windows, clerestory windows and other frames, wrought framed and fixed in position with hold fast lugs or with dash fasteners of required dia & length (hold fast lugs or dash fastener shall be paid for separately), using good quality Anjili wood /jack wood						
	Providing wood work						
	Windows - horizontal	6.0000 0	1.700	0.100	0.075		0.077
	Windows - vertical	12.000 00	1.400	0.100	0.075		0.126
	<b>Total</b>						<b>0.203</b>
	<b>Total Quantity in cum</b>						<b>0.203</b>
2.017	50.9.5.1						
	Providing and fixing glazed shutters for doors, windows and clerestory windows using 4 mm thick float glass panes including ISI marked M.S pressed butt hinges bright finished of required size with necessary screws. Using Anjili wood/ jack wood 35 mm thick shutters.						
	Providing and fixing glazed shutters						
	Window	9.0000 0	0.500	1.400			6.300
	<b>Total</b>						<b>6.300</b>
	<b>Total Quantity in sqm</b>						<b>6.300</b>
2.018	13.48.2						
	Finishing with Deluxe Multi surface paint system for interiors and exteriors using primer as per manufacturers specifications:Painting wood work with Deluxe Multi Surface Paint of required shade. Two or more coat applied @ 0.90 ltr/10 sqm over an under coat of primer applied @ 0.75 ltr/10 sqm of approved brand and manufacture						
	Finishing with Deluxe Multi surface paint						
	Window	3.0000 0	1.500	1.400		1.0000 00	6.300
	<b>Total</b>						<b>6.300</b>
	<b>Total Quantity in sqm</b>						<b>6.300</b>
2.019	10.6.3						
	Supplying and fixing rolling shutters of approved make, made of required size M.S. laths, interlocked together through their entire length and jointed together at the end by end locks, mounted on specially designed pipe shaft with brackets, side guides and arrangements for inside and outside locking with push and pull operation complete, including the cost of providing and fixing necessary 27.5 cm long wire springs manufactured from high tensile steel wire of adequate strength conforming to IS: 4454 - part 1 and M.S. top cover of required thickness for rolling shutters.80x0.90 mm M.S. laths with 0.90 mm thick to cover						
	Supplying and fixing rolling shutter						

SI No	Specification	No	Length	Width	Depth	Cf	Quantity
	Rolling shutter	1.0000 0	2.500		2.500		6.250
	<b>Total</b>						<b>6.250</b>
	<b>Total Quantity in sqm</b>						<b>6.250</b>
2.020	10.7						
	Providing and fixing ball bearing for rolling shutters.						
	Providing and fixing ball bearing						
		1.0000 0					1.000
	<b>Total</b>						<b>1.000</b>
	<b>Total Quantity in no</b>						<b>1.000</b>
2.021	13.48.3						
	Finishing with Deluxe Multi surface paint system for interiors and exteriors using primer as per manufacturers specifications:Painting Steel work with Deluxe Multi Surface Paint to give an even shade. Two or more coat applied @ 0.90 ltr/10 sqm over an under coat of primer applied @ 0.80 ltr/10 sqm of approved brand and manufacture						
	Finishing with Deluxe Multi surface paint						
	Rolling shutter	1.0000 0	2.500		2.500	2.4000 00	15.000
	<b>Total</b>						<b>15.000</b>
	<b>Total Quantity in sqm</b>						<b>15.000</b>
2.022	10.26.2						
	Providing and fixing hand rail of approved size by welding etc. to steel ladder railing, balcony railing, staircase railing and similar works, including applying priming coat of approves steel primer.E.R.W. tubes						
	Providing and fixing hand rail						
		100.00 000					100.000
	<b>Total</b>						<b>100.000</b>
	<b>Total Quantity in kg</b>						<b>100.000</b>
2.023	OD94952/2023-2024						
	Electrification of pump house						
	Electrification of pump house						
		1.0000 0					1.000
	<b>Total</b>						<b>1.000</b>
	<b>Total Quantity in no</b>						<b>1.000</b>
2.024	10.2						



SI No	Specification	No	Length	Width	Depth	Cf	Quantity
	Structural steel work riveted, bolted or welded in built up sections, trusses and framed work, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer all complete.						
	I section						
		1.0000 0	10.000			36.700 000	367.000
	<b>Total</b>						<b>367.000</b>
	<b>Total Quantity in kg</b>						<b>367.000</b>
2.025	OD114325/2023-2024						
	Supply , delivery and fixing of 3 T or suitable capacity Electrically and manually working on single girder with overhead travelling trolley and clear lift as per site conditions for lifting the chemicals, Chlorine, pumps etc.. and fitting as required, supplied with one set of crane slings with GI D shackle and clamps etc. complete as per the instruction of the Engineer in charge.						
	Crane 3T						
		1.0000 0					1.000
	<b>Total</b>						<b>1.000</b>
	<b>Total Quantity in set</b>						<b>1.000</b>
3	Supply and laying Raw Water Pumping Main						
3.001	100.98.117						
	Supply of DI K9 Pipe Conforming to IS 8329/2000, 200mm Dia.						
	Supply of 200 mm DI K9						
	Raw water PM	1.0000 0	3366.000				3366.000
	for future mace	1.0000 0	66.000				66.000
	deduct for MS	- 1.0000 0	60.000				-60.000
	<b>Total</b>						<b>3372.000</b>
	<b>Total Quantity in metre</b>						<b>3372.000</b>
3.002	100.98.446						
	Supply of CI Air Valve, Conforming to IS 14848 - 2000, Double Orifice Type DS2, Size 50mm.						
	Supply of CI air valve-50mm						
		4.0000 0					4.000
	<b>Total</b>						<b>4.000</b>
	<b>Total Quantity in no</b>						<b>4.000</b>
3.003	100.98.445						

SI No	Specification	No	Length	Width	Depth	Cf	Quantity
	Supply of CI Air Valve, Conforming to IS 14848 - 2000, Double Orifice Type DS2, Size 40mm.						
	Supply of CI air valve-40mm						
		4.0000 0					4.000
	<b>Total</b>						<b>4.000</b>
	<b>Total Quantity in no</b>						<b>4.000</b>
3.004	100.98.460						
	Supply of CI Double Flanged Sluice Valve Conforming to IS 14846 - 2000, Sluice Valve with Cap PN 1.6, Size 150mm.						
	Supply of CI Double Flanged Sluice Valve						
	150mm	2.0000 0					2.000
	<b>Total</b>						<b>2.000</b>
	<b>Total Quantity in no</b>						<b>2.000</b>
3.005	OD95174/2023-2024						
	Supply of CI Non Return Valve Conforming to IS 14846 - 2000, Sluice Valve with Cap PN 1.6, Size 200 mm.						
	Supply of NRV-200mm						
		1.0000 0					1.000
	<b>Total</b>						<b>1.000</b>
	<b>Total Quantity in each</b>						<b>1.000</b>
3.006	100.1.1						
	Excavating trenches of required width for pipes, cables, etc., including excavation for sockets, and dressing of sides, ramming of bottoms, depth up to 1.5m, including getting out the excavated soil, and then returning the soil as required, in layers not exceeding 20cm in depth, including consolidating each deposited layer by ramming, watering, etc., and disposing of surplus excavated soil as directed, within a lead of 50m, in all kinds of soil.						
	EW excavation in all classes of soil						
	200mm DI pipe	1.0000 0	3306.000	0.800	1.150	0.6000 00	1824.912
	Deduct Tar surface	- 1.0000 0	1500.000	0.900	0.200		-270.000
	<b>Total</b>						<b>1554.912</b>
	<b>Total Quantity in cum</b>						<b>1554.912</b>
3.007	100.1.5						

SI No	Specification	No	Length	Width	Depth	Cf	Quantity
	Excavating trenches of required width for pipes, cables, etc., including excavation for sockets, and dressing of sides, ramming of bottoms, depth up to 1.5m, including getting out the excavated soil, and then returning the soil as required, in layers not exceeding 20cm in depth, including consolidating each deposited layer by ramming, watering, etc., and disposing of surplus excavated soil as directed, within a lead of 50 m, in Ordinary Rock.						
	EW excavation in ordinary rock						
	200mm DI pipe	1.0000 0	3306.000	0.800	1.150	0.3000 00	912.456
	<b>Total</b>						<b>912.456</b>
	<b>Total Quantity in cum</b>						<b>912.456</b>
3.008	100.2.7						
	Excavating trenches of required width for pipes, cables, etc., including excavation for sockets, and dressing of sides, ramming of bottoms, depth up to 1.5m, including getting out the excavated soil, and then returning the soil as required, in layers not exceeding 20cm in depth, including consolidating each deposited layer by ramming, watering, etc., and disposing of surplus excavated soil as directed, within a lead of 50m, in Medium Rock where Blasting is Prohibited.						
	EW excavation in Medium rock						
	200mm DI pipe	1.0000 0	3306.000	0.800	1.150	0.0500 00	152.076
	<b>Total</b>						<b>152.076</b>
	<b>Total Quantity in cum</b>						<b>152.076</b>
3.009	100.1.13						
	Excavating trenches of required width for pipes, cables, etc., including excavation for sockets, and dressing of sides, ramming of bottoms, depth up to 1.5m, including getting out the excavated soil, and then returning the soil as required, in layers not exceeding 20cm in depth, including consolidating each deposited layer by ramming, watering, etc., and disposing of surplus excavated soil as directed, within a lead of 50m, in Hard Rock where Blasting is Prohibited.						
	EW excavation in hard rock						
	200mm DI pipe	1.0000 0	1984.000	0.800	1.150	0.0500 00	91.264
	<b>Total</b>						<b>91.264</b>
	<b>Total Quantity in cum</b>						<b>91.264</b>
3.010	100.4.1						
	Excavating in hard rock for trenches by blasting for laying pipes and stacking useful materials for measurements and disposing unserviceable materials within the initial lead of 50m and lift up to 1.50m (depth from 0.0m to 1.50m) and providing protection by earth filled cement bags during blasting to avoid damages to nearby structures (200 Nos. of earth filled cement bags for 10m <sup>3</sup> of blasting)						
	EW excavation in hard rock with protection						
	200mm DI pipe	1.0000 0	1322.000	0.800	1.150	0.0500 00	60.812

SI No	Specification	No	Length	Width	Depth	Cf	Quantity
	<b>Total</b>						<b>60.812</b>
							<b>Total Quantity in cum 60.812</b>
3.011	100.8.1						
	Fencing one side of trenches, 1.50m height with two rows of 10cm plastic caution tape in vertical casuarina pole (girth 15cm to 24cm) fixed at 2m intervals.						
	Fencing						
	Fencing	1.0000 0	1450.000				1450.000
	<b>Total</b>						<b>1450.000</b>
							<b>Total Quantity in metre 1450.000</b>
3.012	100.14.3						
	Conveying and laying S&S Centrifugally Cast (Spun) / Ductile Iron Pipes conforming to IS: 8329 excluding cost of pipes and specials: 200mm diameter Ductile Iron Class K-9 Pipes.						
	Conveying and laying 200mm DI pipe						
		1.0000 0	3366.000				3366.000
	<b>Total</b>						<b>3366.000</b>
							<b>Total Quantity in metre 3366.000</b>
3.013	18.30.5						
	Providing flanged joints to double flanged C.I./ D.I pipes and specials, including testing of joints:200 mm diameter pipe						
	Providing flanged joints						
		4.0000 0					4.000
	<b>Total</b>						<b>4.000</b>
							<b>Total Quantity in no 4.000</b>
3.014	18.70.3						
	Providing push - on-joints to Centrifugally (Spun) Cast Iron Pipes or Ductile Iron Pipes including testing of joints and including the cost of rubber gasket:200 mm dia pipes						
	Providing push on joints						
		610.00 000					610.000
	<b>Total</b>						<b>610.000</b>
							<b>Total Quantity in joint 610.000</b>
3.015	100.59.1						

SI No	Specification	No	Length	Width	Depth	Cf	Quantity
	Cutting the bituminous / concrete roads with cutting machine for a minimum depth of 200mm along the sides of proposed alignment of the pipe to be laid without causing any damage to other utilities, including the charges for hire and conveyance of tools and plant, cost of consumables and charges for lighting, watching, ribbon fencing, caution boards, traffic diversion, and as per the direction of departmental officers etc. complete, before carrying out the demolition of bituminous / concrete road by mechanical means and carrying out the excavation.						
	Cutting the bituminous/concrete road						
		1.0000 0	1500.000				1500.000
	<b>Total</b>						<b>1500.000</b>
	<b>Total Quantity in metre</b>						<b>1500.000</b>
3.016	OD94954/2023-2024						
	Dismantling manually including disposal of unserviceable material within 50 metres lead as per direction of Engineer -in-Charge:Bituminous road						
	Dismantling manually and disposal of u/s materials						
	Tar surface	1.0000 0	1000.000	0.800			800.000
	<b>Total</b>						<b>800.000</b>
	<b>Total Quantity in sqm</b>						<b>800.000</b>
3.017	15.2.1						
	Demolishing cement concrete manually / by mechanical means including disposal of material within 50 metres lead as per direction of Engineer - in-Charge.Nominal concrete 1:3:6 or richer mix (i/c equivalent design mix)						
	Demolishing concrete Road						
		1.0000 0	300.000	0.800	0.150		36.000
	<b>Total</b>						<b>36.000</b>
	<b>Total Quantity in cum</b>						<b>36.000</b>
3.018	18.68.1						
	Providing and laying D.I specials of class K - 12 suitable for push - on jointing as per IS : 9523 :Upt 600 mm dia						
	Providing DI specials						
	200mm x90 DI bend	4.0000 0				0.3200 00	1.280
	200mm x45 DI bend	4.0000 0				0.2600 00	1.040
	200mm x22.5 DI bend	15.000 00				0.2300 00	3.450
	200mm x11.25 DI bend	20.000 00				0.2100 00	4.200
	200mm MJ collar	6.0000 0				0.2700 00	1.620

SI No	Specification	No	Length	Width	Depth	Cf	Quantity	
	200mm DI Tee150	2.0000 0				0.4500 00	0.900	
	200mm DI Tee80	10.000 00				0.4100 00	4.100	
	200mm DI T P	6.0000 0				0.2300 00	1.380	
	<b>Total</b>						<b>17.970</b>	
	<b>Total Quantity in quintal</b>							<b>17.970</b>
3.019	100.32.3							
	Conveying and fixing C. I. Double Acting Air Valve of approved quality with bolts, nuts, rubber insertions etc., complete, but excluding the cost of air valve (tail pieces, if required, will be paid separately): 50mm Double Acting Air Valve.							
	Conveying and fixing CI D/A air valve							
	50mm Air valve	4.0000 0					4.000	
	<b>Total</b>						<b>4.000</b>	
	<b>Total Quantity in no</b>						<b>4.000</b>	
3.020	100.32.2							
	Conveying and fixing C. I. Single Acting Air Valve of approved quality with bolts, nuts, rubber insertions etc., complete, but excluding the cost of air valve (tail pieces, if required, will be paid separately): 40mm Single Acting Air Valve.							
	Conveying and fixing CI D/A air valve							
	40mm Air valve	4.0000 0					4.000	
	<b>Total</b>						<b>4.000</b>	
	<b>Total Quantity in no</b>						<b>4.000</b>	
3.021	100.31.2.5							
	Conveying and fixing C.I. sluice valves (with cap) by providing bolts, nuts, rubber insertions etc., complete, but excluding the cost of the valve (tail pieces, if required, will be paid separately): 200mm diameter, Class II.							
	Conveying and fixing NR valves							
	200mm	1.0000 0					1.000	
	<b>Total</b>						<b>1.000</b>	
	<b>Total Quantity in no</b>						<b>1.000</b>	
3.022	100.31.2.4							
	Conveying and fixing C.I. sluice valves (with cap) by providing bolts, nuts, rubber insertions etc., complete, but excluding the cost of the valve (tail pieces, if required, will be paid separately): 150mm diameter, Class II.							
	Conveying and fixing C.I. sluice valves							
	150mm	2.0000 0					2.000	

SI No	Specification	No	Length	Width	Depth	Cf	Quantity
	<b>Total</b>						<b>2.000</b>
							<b>Total Quantity in no 2.000</b>
3.023	OD94955/2023-2024						
	Labour for cutting C I/ D I pipe with steel saw. 200mm dia. D I pipe						
	Labour for cutting C.I pipe-200 mm						
		30.000 00					30.000
	<b>Total</b>						<b>30.000</b>
							<b>Total Quantity in Each Cut 30.000</b>
3.024	100.35.3						
	Testing 200mm DI/CI pipeline with potable water to the required test pressure 200 mm dia Observed Data derived from item no.1020 of PHED DATA						
	Testing 250 mm dia DI pipe+MS pipe						
		3366.0 0000					3366.000
	<b>Total</b>						<b>3366.000</b>
							<b>Total Quantity in metre 3366.000</b>
3.025	OD94956/2023-2024						
	Supplying and erection of 200 mm electro magnetic flow meter conforming in protection level of IP -68 for flow sensor and IP -67 for transmitter and having an accuracy level of 0.5 with LED/LCD display unit .The flow meter should have the housing to be made of SS 304 carbon steel with anti corrosive protection and inside liner to be made up of hard rubber /neoprene all conforming to drinking water standers .The flow metre should coupled with HARTB for data acquisition and transfer with provision for wirless transfer through GSM .The manufacture should be have calibration standards as per ISO 17025and the product shall have warranty provisions for at least 2 years						
	Supply and erection of Magnetict flow meter-200mm						
		1.0000 0					1.000
	<b>Total</b>						<b>1.000</b>
							<b>Total Quantity in no 1.000</b>
3.026	100.37.7.1						
	In situ fabrication of M.S. pipes of size 200mm (I.D.) using 8mm thick M.S. plate including cost and conveyance charges of M.S. plate, all fabrication charges, charges of painting the steel work with two or more coat deluxe multi surface paint to give an even shade over an under-coat of primer etc., complete.						
	Fabricating M.S pipe of 200mm Dia						
		1.0000 0	60.000				60.000

SI No	Specification	No	Length	Width	Depth	Cf	Quantity
	<b>Total</b>						<b>60.000</b>
							<b>Total Quantity in metre 60.000</b>
3.027	100.37.7.2						
	Fabricating M.S. flanges of diameter 200mm using 12mm thick M.S. plate including cost and conveyance charges of M.S. plate, all fabrication charges, charges of painting the steel work with two or more coat deluxe multi surface paint to give an even shade over an under-coat of primer etc., complete: For pipes fabricated with 8mm thick M.S. plates.						
	Fabricating M.S flanges of 200mm Dia						
		2.0000 0					2.000
	<b>Total</b>						<b>2.000</b>
							<b>Total Quantity in no 2.000</b>
3.028	100.37.7.3						
	Cutting 200mm (I.D.) M.S. pipes for making bends and other specials by gas cutting including cost of gas, all labour and hire charges of tools etc., complete: For pipes fabricated with 8mm thick M.S. plates.						
	cutting M.S pipe						
		10.000 00					10.000
	<b>Total</b>						<b>10.000</b>
							<b>Total Quantity in no 10.000</b>
3.029	100.37.7.4						
	Welding 200mm (I.D.) M.S. pipes for making bends and other specials by gas/electric welding machine including cost of gas and welding rods, all labour and hire charges of tools etc., complete: For pipes fabricated with 8mm thick M.S. plates.						
	Welding MS pipe						
		10.000 00					10.000
	<b>Total</b>						<b>10.000</b>
							<b>Total Quantity in no 10.000</b>
3.030	100.37.7.5						
	Grinding cut and weld edges of 200mm (I.D.) M.S. pipes during fabrication work including all labour and hire charges of tools etc., complete: For pipes fabricated with 8mm thick M.S. plates.						
	Grinding MS pipe						
		20.000 00					20.000
	<b>Total</b>						<b>20.000</b>
							<b>Total Quantity in no 20.000</b>
3.031	2.8.1						



SI No	Specification	No	Length	Width	Depth	Cf	Quantity
	Earth work in excavation by mechanical means (Hydraulic excavator) /manual means in foundation trenches or drains (not exceeding 1.5 m in width or 10 sqm on plan), including dressing of sides and ramming of bottoms, lift up to 1.5 m, including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m.All kinds of soil						
	EW excavation in all classes of soil						
	Valve chamber	13.000 00	1.500	1.500	1.500		43.875
	<b>Total</b>						<b>43.875</b>
	<b>Total Quantity in cum</b>						<b>43.875</b>
3.032	4.1.3						
	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level:1:2:4 (cement : 2 coarse sand (zone-III) : 4 graded stone aggregate 20 mm nominal size)						
	PCC 1:2:4						
	Valve chamber PCC	13.000 00	1.500	1.500	0.100		2.925
	PCC above the trench	1.0000 0	15.000	10.000	0.200		30.000
	<b>Total</b>						<b>32.925</b>
	<b>Total Quantity in cum</b>						<b>32.925</b>
3.033	5.1.2						
	Providing and laying in position specified grade of reinforced cement concrete, excluding the cost of centering, shuttering, finishing and reinforcement - All work up to plinth level:1:1:5:3 (1 cement 1.5 coarse sand :3 graded stone aggregate 20 mm nominal size)						
	RCC 1:1.5:3						
	Valve chamber floor slab	13.000 00	1.500	1.500	0.150		4.388
	Valve chamber side wall	13.000 00	5.400	0.150	1.150		12.110
	Valve chamber cover slab	39.000 00	1.500	0.500	0.200		5.850
	<b>Total</b>						<b>22.348</b>
	<b>Total Quantity in cum</b>						<b>22.348</b>
3.034	5.1.3						
	Providing and laying in position specified grade of reinforced cement concrete, excluding the cost of centering, shuttering, finishing and reinforcement - All work up to plinth level:1:2:4 ( 1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size)						
	RCC 1:2:4						
	RCC anchor block	60.000 00	0.800	0.800	0.800		30.720

SI No	Specification	No	Length	Width	Depth	Cf	Quantity
	<b>Total</b>						<b>30.720</b>
						<b>Total Quantity in cum</b>	<b>30.720</b>
3.035	5.9.2						
	Centering and shuttering including strutting, etc. and removal of form for: Walls (any thickness) including attached pilasters, butresses, plinth and string courses etc.						
	Centering and shuttering						
	valve chamber bottom	13.000 00	4*1.5		0.250		19.500
	Side wall inside	13.000 00	4*1.2		1.150		71.760
	Side wall outside	13.000 00	4*1.5		1.150		89.700
	cover slab	39.000 00	4.000		0.250		39.000
	<b>Total</b>						<b>219.960</b>
						<b>Total Quantity in sqm</b>	<b>219.960</b>
3.036	5.9.1						
	Centering and shuttering including strutting, etc. and removal of form for: Foundations, footings, bases of columns, etc for mass concrete						
	Centering and shuttering						
	Anchor block	60.000 00	4*0.8		0.800		153.600
	<b>Total</b>						<b>153.600</b>
						<b>Total Quantity in sqm</b>	<b>153.600</b>
3.037	5.22.6						
	Steel reinforcement for R.C.C work including straightening, cutting, bending, placing in position and binding all complete upto plinth level Thermo - Mechanically Treated bars of grade Fe-500D or more						
	Steel reinforcement						
	Valve chamber	1.0000 0	22.348			80.000 000	1787.840
	Anchor block	1.0000 0	30.720			50.000 000	1536.000
	<b>Total</b>						<b>3323.840</b>
						<b>Total Quantity in kilogram</b>	<b>3323.840</b>
3.038	13.1.1						
	12 mm cement plaster of mix:1:4 ( 1 cement : 4 fine sand)						
	plastering						
		13.000 00	4*1.2		1.150		71.760
	<b>Total</b>						<b>71.760</b>

SI No	Specification	No	Length	Width	Depth	Cf	Quantity
	<b>Total Quantity in sqm</b>						<b>71.760</b>
4	Road Restoration Charges(MORD ROAD)						
4.001	3.5.3 Excavation in Soil using Hydraulic Excavator and Tippers with disposal upto 1000 m Excavation for roadwork in soil with hydraulic excavator of 0.9 cum bucket capacity including cutting and loading in tippers, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross-sections, and transporting to the embankment location with a lift upto 1.5 m and lead upto 1000 m as per Technical Specification Clause 302.3						
	Earth work for road work						
	Bituminous road	1.0000 0	1000.000	0.800	0.300		240.000
	Concrete road	1.0000 0	300.000	0.800	0.150		36.000
	Concrete block pavement	1.0000 0	200.000	0.800	0.200		32.000
	<b>Total</b>						<b>308.000</b>
	<b>Total Quantity in cum</b>						<b>308.000</b>
4.002	4.1.A.1 Granular Sub-base with Well Graded Material (Table 400.1) (A) By Mix in Place Method Construction of granular sub-base by providing well graded material, spreading in uniform layers with motor grader on prepared surface, mixing by mix in place method with rotavator at OMC, and compacting with smooth wheel roller to achieve the desired density, complete as per Technical Specification Clause 401. (i) For Grading I Material						
	Providing GSB						
		1.0000 0	1000.000	0.800	0.150		120.000
	<b>Total</b>						<b>120.000</b>
	<b>Total Quantity in cum</b>						<b>120.000</b>
4.003	4.9 Wet Mix Macadam Providing, laying, spreading and compacting graded stone aggregate to wet mix macadam specification including premixing the material with water at OMC in mechanical mixer (Pug Mill), carriage of mixed material by tipper to site, laying in uniform layers in sub-base/base course on a well prepared sub-base and compacting with smooth wheel roller of 80 to 100kN weight to achieve the desired density including lighting, barricading and maintenance of diversion, etc as per Tables 400.11 & 400.12 and Technical Specification Clause 406. By Mechanical Means with 1 km lead						
	Providing WMM						
		1.0000 0	1000.000	0.800	0.150		120.000
	<b>Total</b>						<b>120.000</b>

SI No	Specification	No	Length	Width	Depth	Cf	Quantity
<b>Total Quantity in cum</b>							<b>120.000</b>
4.004	5.1.1a	Prime Coat :- Low porosity Providing and applying primer coat with bitumen emulsion (SS-1) on prepared surface of granular base including cleaning of road surface and spraying primer at the rate of 0.70-1.0 kg/sqm using mechanical means as per Technical Specification Clause 502					
Providing and applying prime coat							
		1.0000 0	1000.000	1.000			1000.000
<b>Total</b>							<b>1000.000</b>
<b>Total Quantity in sqm</b>							<b>1000.000</b>
4.005	5.2.3a	Tack Coat Providing and applying tack coat with Bitumen emulsion (RS-1) using emulsion distributor at the rate of 0.25 to 0.30 kg per sqm on the prepared granular surfaces treated with primer & cleaned with Hydraulic broom as per Technical Specification Clause 503.					
Providing and applying tack coat							
		1.0000 0	1000.000	1.000			1000.000
<b>Total</b>							<b>1000.000</b>
<b>Total Quantity in sqm</b>							<b>1000.000</b>
4.006	5.9.1.2a	20mm thick Open-Graded Premix Carpet using Bituminous (penetration grade/modified bitumen) Binder - Bitumen S-65 Providing, laying and rolling of open-graded premix carpet of 20 mm thickness composed of 13.2 mm to 5.6 mm aggregates either using penetration grade bitumen or emulsion to required line, grade and level to serve as wearing course on a previously prepared base, including mixing in a suitable plant, laying and rolling with a three wheel 80-100 kN static roller capacity, finished to required level and grades to be followed by seal coat of either Type A or Type B or Type C as per Technical Specification Clause 508. Case - I By Manual Means (II) Bitumen (S-65)					
20mm thick Open-Graded Premix Carpet							
		1.0000 0	1000.000	1.000			1000.000
<b>Total</b>							<b>1000.000</b>
<b>Total Quantity in sqm</b>							<b>1000.000</b>
4.007	5.12.A.3.2a	Seal Coat - Manual Means - Type C - Bitumen S-65 Providing and laying seal coat sealing the voids in a bituminous surface laid to the specified levels, grade and cross fall using Type A, Type B and Type C as per Technical Specification Clause 510 A. By Manual Means :- Case - III : Type C (II) Bitumen (S-65)					
Providing and applying seal coat							

SI No	Specification	No	Length	Width	Depth	Cf	Quantity
		1.0000 0	1000.000	1.000			1000.000
	<b>Total</b>						<b>1000.000</b>
						<b>Total Quantity in sqm</b>	<b>1000.000</b>
4.008	75.8.1						
	Providing Plain cement concrete for road work CC 1:2:4 (1 cement: 2 fine aggregate: 4course aggregate) laid to required slope and camber in panels (@ 3 m c/c) as required including compaction, finishing and tamping etc .complete. Max. size of course aggregate not exceeding 25mm , mixed in concrete mixer etc complete as perspecification (i) Nominal mix (1:2:4)						
	Providing Plain cement concrete for road work CC 1:2:4						
		1.0000 0	300.000	0.800	0.150		36.000
	<b>Total</b>						<b>36.000</b>
						<b>Total Quantity in cum</b>	<b>36.000</b>
4.009	6.6						
	Rectangular Concrete Block Pavement & Manufacturing, laying of cement concrete blocks of size 0.450 m x 0.300 m x 0.15 m of Cement Concrete (C.C.) M30 garde and spreading 25 mm thick sand under neath and filling joints with sand on existing W.B.M. base as per Technical Specification Clause 1503.						
	Rectangular Concrete Block Pavement						
		1.0000 0	200.000	1.000			200.000
	<b>Total</b>						<b>200.000</b>
						<b>Total Quantity in sqm</b>	<b>200.000</b>
5	Supply, erection, testing and commissioning of RAW water pump set from raw water pump house to Kanthaloor WTP - Discharge 26lps, Head 24m						
5.001	OD98019/2023-2024						

SI No	Specification	No	Length	Width	Depth	Cf	Quantity
	<p>Supply erection, testing and commissioning of CF pumpset having a discharge of 26 lps for a head of 24 m from Raw water Pumphouse to Kanthaloor WTP. Supply and erection of CF pump set with the following specification&amp;lt;br&amp;gt;1. Pump&amp;lt;br&amp;gt;Supply, erection, testing and commissioning of KWA pre-qualified reputed make Centrifugal pump sets with Bronze/SS impeller, SS shaft and CI pump casing with suitable type base plate with coupling, coupling guard foundation bolts &amp; nuts etc. complete suitable for coupling the pump and motor above the base plate etc. complete including providing suitable concrete foundation including cost of cement sand and metal etc. complete&amp;lt;br&amp;gt;The duty condition is as follows&amp;lt;br&amp;gt;Discharge - 26 lps&amp;lt;br&amp;gt;Total head - 24 mtrs&amp;lt;br&amp;gt;&amp;lt;br&amp;gt;Size of pumping main pipe - 200 mm DI, Length-3366 m&amp;lt;br&amp;gt;Speed- Less than 1500 rpm. 2. Motor&amp;lt;br&amp;gt;Supply, erection, testing and commissioning of KWA pre qualified reputed make horizontal solid shaft foot mounted TEFC squirrel cage induction motor suitable for the above pump working 3 phase 50 Hz AC supply, working voltage 415 V/3300V (select the suitable). The motor shall confirm to EEF1/IS 325 including providing suitable concrete foundation including cost of cement sand and metal etc. complete For 3300v motors digital motor protection relay shall be included in starter as per present IE rules. Flexible coupling shall be used for coupling of pumps and motors.&amp;lt;br&amp;gt;3. Starter&amp;lt;br&amp;gt;Supply, erection, testing and commissioning of suitable rating Soft starter suitable for the above motor with over voltage and under voltage protection, single phase preventer, over load relay with motor protection relay with main contactor and bypass contactor as per IE rules and code of practice etc. complete.&amp;lt;br&amp;gt;&amp;lt;br&amp;gt;4. Panel board (suitable for operating two pump sets but one pump set at a time)&amp;lt;br&amp;gt;Supply, erection, testing and commissioning of cubical type floor mounted MS fabricated dust and vermin proof common control panel board consisting of 1 No. suitable capacity MCCB as incomer and 2 Nos of suitable capacity MCCB as out going (the two MCCBs are interlocking with each other) providing suitable size Aluminium bus bar inter connect the above MCCBs and fitted with 3 Nos of indicator lamps, 1 No. volt meter with selector switch, 1 No. Ammeter with selector switch etc. Complete and provided with a common earth bus for the entire panel and inter connect with the MCCBs as per IE rules and code of practice. The panel shall be fitted on a common base frame on suitable foundation. (Specification may be modified if there is only one)&amp;lt;br&amp;gt;pump set by changing 2 Nos of out going as one out going and the provision of interlocking may be avoided)&amp;lt;br&amp;gt;5. Cabling work&amp;lt;br&amp;gt;Supply, laying, testing and commissioning of suitable size XLPE cables for the above pump set from panel board to starter and from starter to motor. considering energy conservation.&amp;lt;br&amp;gt;6. Earthing&amp;lt;br&amp;gt;Supply of all materials and providing suitable earthing by using suitable size pipe/plate earthing GI/copper strip buried in ground and giving double earthing to motor, starter, panel board etc. as per IE standards.&amp;lt;br&amp;gt;7. Capacitor&amp;lt;br&amp;gt;Supply, erection, testing and commissioning of heavy duty APP capacitor for the motor to get a power factor above 0.95. The capacitor shall confirm to IS 2834&amp;lt;br&amp;gt;8. Valves&amp;lt;br&amp;gt;Supply of suitable size best quality heavy duty ISI marked CI double flanged sluice valve and Non return valve with suitable pressure rating. Fitting of valves shall include proper RCC support especially for Non return valves. In case of positive suction pump set sluice valve should be in suction as well as delivery sides for easy repair works.&amp;lt;br&amp;gt;9. Suction and delivery pipe connections&amp;lt;br&amp;gt;Supply and fitting of suitable size best quality GI/MS pipe of thickness not less than 8mm for a total length of 10 m. suitable for the above pump set and suitable size foot valve and connecting the suction pipe and valve with suitable flanges, nut and bolts IR sheet etc. complete and connecting the delivery side of the pump with the valves and suitable specials to connect with the pumping</p>						

SI No	Specification	No	Length	Width	Depth	Cf	Quantity
	main.&lt;br&gt;If the dia of suction pipe is above 80 mm CI pipes & special shall be provided.&lt;br&gt;.Also two year Warrantee and Supply of ELCB/RCCB to be added at panel for safety.						
	Supply erection,testing and commissioning of CF pumpset having a discharge of 26 lps for a head of 24 m from Raw water Pumphouse to Kanthloor WTP						
	15 HP	2.0000 0					2.000
	<b>Total</b>						<b>2.000</b>
	<b>Total Quantity in no</b>						<b>2.000</b>
5.002	OD94959/2023-2024						
	Earthing with G.I. earth plate 600 mm X 600 mm X 6 mm thick including accessories, and providing masonry enclosure with						
	Eathing with GI earth plate						
		2.0000 0					2.000
	<b>Total</b>						<b>2.000</b>
	<b>Total Quantity in set</b>						<b>2.000</b>
5.003	OD94960/2023-2024						
	Earthing copper conductor of size 3.15 mm ( 10 SWG).						
	earthing strip of size 3.15 mm copper conductor (10 SWG).						
	earthing GI strip	1.0000 0	2.000				2.000
	<b>Total</b>						<b>2.000</b>
	<b>Total Quantity in metre</b>						<b>2.000</b>
5.004	OD94961/2023-2024						
	Provision for Power line extension and Submitting application to KSEBL for power connection and power extension						
	Submitting application to KSEBLfor power connection and power extension						
	LS	1.0000 0	1.000				1.000
	<b>Total</b>						<b>1.000</b>
	<b>Total Quantity in L.S</b>						<b>1.000</b>