

Abstract Estimate

KIIFB Project:TRAN10: WRD025- 06 -WSS to Ayyappankovil Panchayat in Idukki District-Part II-Package-II- Supplying, laying and commissioning 350mm, 300mm& 250mm DI pumping/ gravity main and 80mm GI pumping main, improvement work of Kalthotty sump& pump house, construction of pipe line bridge, design and construction of 1.00LL capacity sump& pump house at Nariyanpara, providing wash water disposal pipe line at WTP Alady and interconnection works etc

(Dsr year: 2018)

1Appendix A- (1) - Supply and laying 350mm and 300mm DI gravity main/ pumping main pipe from Alady GLSR to Kalthotty sump (Re-arranging)- (a) Cost of materials (Cost Index:41.53 %)		
1	100.98.119 Supply of DI K9 Pipe Conforming to IS 8329/2000, 300mm Dia.	
Net Total Quantity		1870.000 metre
Say 1870.000 metre @ Rs 4520.63 / metre		Rs 8453578.10
2	100.98.120 Supply of DI K9 Pipe Conforming to IS 8329/2000, 350mm Dia.	
Net Total Quantity		5353.000 metre
Say 5353.000 metre @ Rs 5506.95 / metre		Rs 29478703.35
3	100.98.461 Supply of CI Double Flanged Sluice Valve Conforming to IS 14846 - 2000, Sluice Valve with Cap PN 1.6, Size 200mm.	
Net Total Quantity		5.000 No
Say 5.000 No @ Rs 23723.65 / No		Rs 118618.25
4	100.98.463 Supply of CI Double Flanged Sluice Valve Conforming to IS 14846 - 2000, Sluice Valve with Cap PN 1.6, Size 300mm.	
Net Total Quantity		1.000 No
Say 1.000 No @ Rs 43312.35 / No		Rs 43312.35
5	100.98.464 Supply of CI Double Flanged Sluice Valve Conforming to IS 14846 - 2000, Sluice Valve with Cap PN 1.6, Size 350mm.	
Net Total Quantity		2.000 No
Say 2.000 No @ Rs 77806.55 / No		Rs 155613.10

6	od41949/2020_2021 Supply DI specials, Tees, Bends, Collars, Tapers etc.		
		Net Total Quantity	59.982 quintal
		Say 59.982 quintal @ Rs 20384.00 / quintal	Rs 1222673.09
7	100.98.436 Supply of CI Air Valve, Conforming to IS 14848 - 2000, Kinetic Air Valve Type DK, Size 80mm.		
		Net Total Quantity	4.000 No
		Say 4.000 No @ Rs 11748.55 / No	Rs 46994.20
8	100.98.437 Supply of CI Air Valve, Conforming to IS 14848 - 2000, Kinetic Air Valve Type DK, Size 100mm.		
		Net Total Quantity	6.000 No
		Say 6.000 No @ Rs 17963.75 / No	Rs 107782.50
2Appendix A - (1) - Supply and laying 350mm and 300mm DI gravity main/ pumping main pipe from Alady GLSR to Kalthotty sump (Re-arranging)-(b) Working charges (Cost Index:41.53 %)			
1	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 1.5 m, including getting out the excavated soil, and then returning the soil as required, in layers not exceeding 20 cm 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 : All kinds of soil (Ref. Item No. 2.10.1 of DSR)		
		Net Total Quantity	7346.919 cum
		Say 7346.919 cum @ Rs 579.85 / cum	Rs 4260110.98
2	100.1.5 Excavating trenches of required width for pipes, cables, etc including excavation for sockets, and dressing of sides, ramming of bottoms, depth up to 1.5 m, including getting out the excavated soil, and then returning the soil as required, in layers not exceeding 20 cm 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 :" Ordinary Rock. (Ref. Item No. 2.13.1 of DSR)		
		Net Total Quantity	1763.261 cum
		Say 1763.261 cum @ Rs 842.10 / cum	Rs 1484842.09

3	100.2.2 Excavation work by mechanical means (Hydraulic excavator) / manual means in foundation trenches or drains (not exceeding 1.5 m in width or 10 m ² 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 soils as directed, within a lead of 50 m. Medium Rock (blasting prohibited) New Data derived from Item No.2.9.3	
Net Total Quantity		293.878 cum
Say 293.878 cum @ Rs 1106.34 / cum		Rs 325128.99
4	2.7.3 Earth work in excavation by mechanical means (Hydraulic excavator) / manual means over areas (exceeding 30 cm in depth, 1.5 m in width as well as 10 sqm on plan) including disposal of excavated earth, lead up to 50 m and lift up to 1.5 m, disposed earth to be levelled and neatly dressed. Hard rock (blasting prohibited)	
Net Total Quantity		195.918 cum
Say 195.918 cum @ Rs 1248.58 / cum		Rs 244619.30
5	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 upto 1.50m (initial depth 0 m 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 ³ blasting) (Ref. Item No. 1004 A of T C)	
Net Total Quantity		195.918 cum
Say 195.918 cum @ Rs 4093.40 / cum		Rs 801970.74
6	100.8.1 Fencing one side of trenches, 1.50 m height with two rows of 10 cm plastic caution tape in vertical casuarina pole (girth 15cm to 24cm) fixed at 2 m intervals. (Data Prepared based on PWD SDB - Item No.1009)	
Net Total Quantity		2900.000 metre
Say 2900.000 metre @ Rs 28.82 / metre		Rs 83578.00
7	100.8.2 Fencing 1.50m high with two rows of casuarina poles (girth 15cm to 24cm) tied with coir yarn on vertical casuarina pole (girth 15cm to 24cm) fixed at 1.5m intervals. NEW DATA (Prepared based on PWD SDB - Item No.1009)	
Net Total Quantity		4000.000 metre
Say 4000.000 metre @ Rs 99.36 / metre		Rs 397440.00
8	50.2.25.1 Filling with contractor's own earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20 cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 m and lift up to 1.5 m as per direction of site Engineer-in-charge	

		Net Total Quantity	350.000 cum
		Say 350.000 cum @ Rs 548.85 / cum	Rs 192097.50
9	100.14.5 Conveying and laying S&S Centrifugally Cast (Spun) / Ductile Iron Pipes conforming to IS: 8329 excluding cost of pipes and specials : 300 mm dia Ductile Iron Class K-9 Pipes Data derived from 18.72.19 in DAR		
		Net Total Quantity	1833.000 metre
		Say 1833.000 metre @ Rs 214.13 / metre	Rs 392500.29
10	100.14.6 Conveying and laying S&S Centrifugally Cast (Spun) / Ductile Iron Pipes conforming to IS: 8329 excluding cost of pipes and specials : 350 mm dia Ductile Iron Class K-9 Pipes Data derived from 18.72.20 in DAR		
		Net Total Quantity	5248.000 metre
		Say 5248.000 metre @ Rs 283.70 / metre	Rs 1488857.60
11	100.31.1.5 "Conveying and fixing C.I. sluice valves (with cap) by providing complete with bolts, nuts, rubber insertions etc. excluding the cost of valve (the tail pieces if required will be paid separately) : 200 mm diameter. Class I" Data derived from item no.18.31.4.1 of DAR		
		Net Total Quantity	5.000 Nos
		Say 5.000 Nos @ Rs 1625.90 / Nos	Rs 8129.50
12	100.31.1.7 "Conveying and fixing C.I. sluice valves (with cap) by providing complete with bolts, nuts, rubber insertions etc. excluding the cost of valve (the tail pieces if required will be paid separately) : 300 mm diameter. Class I" Data derived from item no.18.31.6.1 of DAR		
		Net Total Quantity	1.000 Nos
		Say 1.000 Nos @ Rs 2708.11 / Nos	Rs 2708.11
13	100.31.1.8 "Conveying and fixing C.I. sluice valves (with cap) by providing complete with bolts, nuts, rubber insertions etc. excluding the cost of valve (the tail pieces if required will be paid separately) : 350 mm diameter. Class I" Observed Data derived from item no.18.31.of DAR		
		Net Total Quantity	2.000 Nos
		Say 2.000 Nos @ Rs 3616.30 / Nos	Rs 7232.60

14	100.32.4 Conveying and fixing C I Single acting Air Valve of approved quality with bolts,nuts,rubber insertions etc . excluding the cost of air valve(the tail pieces if required will be paid seperately): 80 mm Double acting Air Valve Data derived from item no.18.59.2 of DAR	
Net Total Quantity		4.000 Nos
Say 4.000 Nos @ Rs 229.21 / Nos		Rs 916.84
15	100.32.5 Conveying and fixing C I Single acting Air Valve of approved quality with bolts,nuts,rubber insertions etc . excluding the cost of air valve(the tail pieces if required will be paid seperately): 100 mm Double acting Air Valve	
Net Total Quantity		6.000 Nos
Say 6.000 Nos @ Rs 351.21 / Nos		Rs 2107.26
16	18.30.7 Providing flanged joints to double flanged C.I./ D.I pipes and specials, including testing of joints:300 mm diameter pipe	
Net Total Quantity		70.000 Nos
Say 70.000 Nos @ Rs 603.77 / Nos		Rs 42263.90
17	18.30.8 Providing flanged joints to double flanged C.I./ D.I pipes and specials, including testing of joints:350 mm diameter pipe	
Net Total Quantity		100.000 Nos
Say 100.000 Nos @ Rs 811.46 / Nos		Rs 81146.00
18	18.70.5 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:300 mm dia pipe	
Net Total Quantity		300.000 joint
Say 300.000 joint @ Rs 430.68 / joint		Rs 129204.00
19	18.70.6 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:350 mm dia pipes	
Net Total Quantity		1000.000 joint
Say 1000.000 joint @ Rs 456.93 / joint		Rs 456930.00
20	18.24 Laying in position S & S or flanged C.I. special such as tees, bends, collars, tapers and caps etc. (excluding cost of specials).	
Net Total Quantity		59.982 quintal
Say 59.982 quintal @ Rs 603.91 / quintal		Rs 36223.73

21	18.67.1 Providing and laying S & S C.I. Standard specials suitable for mechanical jointing as per IS 13382:Upto 300 mm dia		
		Net Total Quantity	2.400 quintal
		Say 2.400 quintal @ Rs 14708.65 / quintal	Rs 35300.76
22	18.67.2 Providing and laying S & S C.I. Standard specials suitable for mechanical jointing as per IS 13382:Above 300 mm dia		
		Net Total Quantity	6.200 quintal
		Say 6.200 quintal @ Rs 15492.79 / quintal	Rs 96055.30
23	18.83.7 Labour for cutting C.I. pipe with steel saw.300 mm diameter C.I. pipe		
		Net Total Quantity	10.000 Each Cut
		Say 10.000 Each Cut @ Rs 671.63 / Each Cut	Rs 6716.30
24	18.83.8 Labour for cutting C.I. pipe with steel saw.350 mm diameter C.I pipe		
		Net Total Quantity	25.000 Each Cut
		Say 25.000 Each Cut @ Rs 781.10 / Each Cut	Rs 19527.50
25	100.35.5 Testing 300mm DI/CI pipeline with potable water to the required test pressure. 300 mm dia Observed Data derived from item no.1023 of PHED DATA		
		Net Total Quantity	1833.000 metre
		Say 1833.000 metre @ Rs 57.81 / metre	Rs 105965.73
26	100.35.6 Testing 350mm DI/CI pipeline with potable water to the required test pressure. 350 mm dia Observed Data derived from item no.1024 of PHED DATA		
		Net Total Quantity	5248.000 metre
		Say 5248.000 metre @ Rs 70.53 / metre	Rs 370141.44
27	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 : 4 graded stone aggregate 20 mm nominal size)		
		Net Total Quantity	10.000 cum
		Say 10.000 cum @ Rs 8340.93 / cum	Rs 83409.30

28	5.9.1 Centering and shuttering including strutting, etc. and removal of form for:Foundations, footings, bases of columns, etc for mass concrete		
		Net Total Quantity	40.000 sqm
		Say 40.000 sqm @ Rs 350.00 / sqm	Rs 14000.00
29	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		
		Net Total Quantity	65.341 cum
		Say 65.341 cum @ Rs 309.95 / cum	Rs 20252.44
30	2.9.1 Excavation work 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 soils as directed, within a lead of 50 m.Ordinary rock		
		Net Total Quantity	65.341 cum
		Say 65.341 cum @ Rs 550.62 / cum	Rs 35978.06
31	4.1.6 Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level:1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 40 mm nominal size)		
		Net Total Quantity	17.425 cum
		Say 17.425 cum @ Rs 7527.06 / cum	Rs 131159.02
32	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		
		Net Total Quantity	69.409 cum
		Say 69.409 cum @ Rs 9483.15 / cum	Rs 658215.96
33	5.22.2 Steel reinforcement for R.C.C work including straightening, cutting, bending, placing in position and binding all complete upto plinth levelHard drawn steel wire		
		Net Total Quantity	7000.000 kilogram
		Say 7000.000 kilogram @ Rs 105.23 / kilogram	Rs 736610.00
34	5.9.2 Centering and shuttering including strutting, etc. and removal of form for:Walls (any thickness) including attached pilasters, butteresses, plinth and string courses etc.		

		Net Total Quantity	202.500 sqm
		Say 202.500 sqm @ Rs 748.62 / sqm	Rs 151595.55
35	13.1.1 12 mm cement plaster of mix:1:4 (1 cement : 4 fine sand)		
		Net Total Quantity	170.100 sqm
		Say 170.100 sqm @ Rs 327.85 / sqm	Rs 55767.29
3Appendix A - (2) - Supply and laying 300 mm DI pumping main from Kalthotty sump to Nariyanpara (Re-arranging)- (a) cost of matreials (Cost Index:41.53 %)			
1	100.98.119 Supply of DI K9 Pipe Conforming to IS 8329/2000, 300mm Dia.		
		Net Total Quantity	4927.000 metre
		Say 4927.000 metre @ Rs 4520.63 / metre	Rs 22273144.01
2	100.98.461 Supply of CI Double Flanged Sluice Valve Conforming to IS 14846 - 2000, Sluice Valve with Cap PN 1.6, Size 200mm.		
		Net Total Quantity	4.000 No
		Say 4.000 No @ Rs 23723.65 / No	Rs 94894.60
3	100.98.463 Supply of CI Double Flanged Sluice Valve Conforming to IS 14846 - 2000, Sluice Valve with Cap PN 1.6, Size 300mm.		
		Net Total Quantity	2.000 No
		Say 2.000 No @ Rs 43312.35 / No	Rs 86624.70
4	100.98.440 Supply of CI Air Valve, Conforming to IS 14848 - 2000, Single Orifice, Small Orifice Type S1, Size 25mm.		
		Net Total Quantity	3.000 No
		Say 3.000 No @ Rs 5636.75 / No	Rs 16910.25
5	100.98.444 Supply of CI Air Valve, Conforming to IS 14848 - 2000, Single Orifice, Large Orifice Type S2, Size 50mm.		
		Net Total Quantity	5.000 No
		Say 5.000 No @ Rs 6110.65 / No	Rs 30553.25
6	od41949/2020_2021 Supply DI specials, Tees, Bends, Collars, Tapers etc.		
		Net Total Quantity	26.761 quintal
		Say 26.761 quintal @ Rs 20384.00 / quintal	Rs 545496.22
4Appendix A - (2) - Supply and laying 300 mm DI pumping main from Kalthotty sump to Nariyanpara (Re-arranging)- (b) Working charges (Cost Index:41.53 %)			

1	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 1.5 m, including getting out the excavated soil, and then returning the soil as required, in layers not exceeding 20 cm 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 : All kinds of soil (Ref. Item No. 2.10.1 of DSR)	
Net Total Quantity		4528.125 cum
Say 4528.125 cum @ Rs 579.85 / cum		Rs 2625633.28
2	100.1.5 Excavating trenches of required width for pipes, cables, etc including excavation for sockets, and dressing of sides, ramming of bottoms, depth up to 1.5 m, including getting out the excavated soil, and then returning the soil as required, in layers not exceeding 20 cm 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 :" Ordinary Rock. (Ref. Item No. 2.13.1 of DSR)	
Net Total Quantity		905.625 cum
Say 905.625 cum @ Rs 842.10 / cum		Rs 762626.81
3	100.2.2 Excavation work by mechanical means (Hydraulic excavator) / manual means in foundation trenches or drains (not exceeding 1.5 m in width or 10 m ² 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 soils as directed, within a lead of 50 m. Medium Rock (blasting prohibited) New Data derived from Item No.2.9.3	
Net Total Quantity		301.875 cum
Say 301.875 cum @ Rs 1106.34 / cum		Rs 333976.39
4	2.7.3 Earth work in excavation by mechanical means (Hydraulic excavator)/ manual means over areas (exceeding 30 cm in depth, 1.5 m in width as well as 10 sqm on plan) including disposal of excavated earth, lead up to 50 m and lift up to 1.5 m, disposed earth to be levelled and neatly dressed.Hard rock (blasting prohibited)	
Net Total Quantity		181.125 cum
Say 181.125 cum @ Rs 1248.58 / cum		Rs 226149.05

5	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 upto 1.50m(initial depth 0 m 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 ³ blasting) (Ref. Item No. 1004 A of T C)	
Net Total Quantity		120.750 cum
Say 120.750 cum @ Rs 4093.40 / cum		Rs 494278.05
6	50.2.25.1 Filling with contractor's own earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20 cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 m and lift up to 1.5 m as per direction of site Engineer-in-charge	
Net Total Quantity		250.000 cum
Say 250.000 cum @ Rs 548.85 / cum		Rs 137212.50
7	100.8.1 Fencing one side of trenches, 1.50 m height with two rows of 10 cm plastic caution tape in vertical casuarina pole (girth 15cm to 24cm) fixed at 2 m intervals. (Data Prepared based on PWD SDB - Item No.1009)	
Net Total Quantity		4000.000 metre
Say 4000.000 metre @ Rs 28.82 / metre		Rs 115280.00
8	100.14.5 Kerala Water Authority Conveying and laying S&S Centrifugally Cast (Spun) / Ductile Iron Pipes conforming to IS: 8329 excluding cost of pipes and specials : 300 mm dia Ductile Iron Class K-9 Pipes Data derived from 18.72.19 in DAR	
Net Total Quantity		4830.000 metre
Say 4830.000 metre @ Rs 214.13 / metre		Rs 1034247.90
9	18.70.5 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:300 mm dia pipe	
Net Total Quantity		800.000 joint
Say 800.000 joint @ Rs 430.68 / joint		Rs 344544.00
10	18.30.7 Providing flanged joints to double flanged C.I./ D.I pipes and specials, including testing of joints:300 mm diameter pipe	
Net Total Quantity		100.000 Nos
Say 100.000 Nos @ Rs 603.77 / Nos		Rs 60377.00
11	18.83.7 Labour for cutting C.I. pipe with steel saw.300 mm diameter C.I. pipe	

		Net Total Quantity	50.000 Each Cut
		Say 50.000 Each Cut @ Rs 671.63 / Each Cut	Rs 33581.50
12	100.35.5 Testing 300mm DI/CI pipeline with potable water to the required test pressure. 300 mm dia Observed Data derived from item no.1023 of PHED DATA		
		Net Total Quantity	4830.000 metre
		Say 4830.000 metre @ Rs 57.81 / metre	Rs 279222.30
13	100.31.1.5 "Conveying and fixing C.I. sluice valves (with cap) by providing complete with bolts, nuts, rubber insertions etc. excluding the cost of valve (the tail pieces if required will be paid separately) : 200 mm diameter. Class I" Data derived from item no.18.31.4.1 of DAR		
		Net Total Quantity	4.000 Nos
		Say 4.000 Nos @ Rs 1625.90 / Nos	Rs 6503.60
14	100.31.1.7 "Conveying and fixing C.I. sluice valves (with cap) by providing complete with bolts, nuts, rubber insertions etc. excluding the cost of valve (the tail pieces if required will be paid separately) : 300 mm diameter. Class I" Data derived from item no.18.31.6.1 of DAR		
		Net Total Quantity	2.000 Nos
		Say 2.000 Nos @ Rs 2708.11 / Nos	Rs 5416.22
15	100.32.1 Conveying and fixing C I Single acting Air Valve of approved quality with bolts,nuts,rubber insertions etc . excluding the cost of air valve(the tail pieces if required will be paid seperately): 25 mm Single acting Air Valve Observed Data derived from item no.18.59.of DAR		
		Net Total Quantity	3.000 Nos
		Say 3.000 Nos @ Rs 146.63 / Nos	Rs 439.89
16	100.32.3 Conveying and fixing C I Single acting Air Valve of approved quality with bolts,nuts,rubber insertions etc . excluding the cost of air valve(the tail pieces if required will be paid seperately): 50 mm Double acting Air Valve Data derived from item no.18.59.1 of DAR		
		Net Total Quantity	5.000 Nos
		Say 5.000 Nos @ Rs 229.21 / Nos	Rs 1146.05
17	18.24 Laying in position S & S or flanged C.I. special such as tees, bends, collars, tapers and caps etc. (excluding cost of specials).		

		Net Total Quantity	26.761 quintal
		Say 26.761 quintal @ Rs 603.91 / quintal	Rs 16161.24
18	18.67.1	Providing and laying S & S C.I. Standard specials suitable for mechanical jointing as per IS 13382:Upto 300 mm dia	
		Net Total Quantity	4.800 quintal
		Say 4.800 quintal @ Rs 14708.65 / quintal	Rs 70601.52
19	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	
		Net Total Quantity	10.891 cum
		Say 10.891 cum @ Rs 309.95 / cum	Rs 3375.67
20	2.9.1	Excavation work 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 soils as directed, within a lead of 50 m.Ordinary rock	
		Net Total Quantity	10.891 cum
		Say 10.891 cum @ Rs 550.62 / cum	Rs 5996.80
21	4.1.6	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level:1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 40 mm nominal size)	
		Net Total Quantity	1.453 cum
		Say 1.453 cum @ Rs 7527.06 / cum	Rs 10936.82
22	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	
		Net Total Quantity	7.832 cum
		Say 7.832 cum @ Rs 9483.15 / cum	Rs 74272.03
23	5.22.2	Steel reinforcement for R.C.C work including straightening, cutting, bending, placing in position and binding all complete upto plinth levelHard drawn steel wire	
		Net Total Quantity	783.200 kilogram
		Say 783.200 kilogram @ Rs 105.23 / kilogram	Rs 82416.14

24	5.9.2 Centering and shuttering including strutting, etc. and removal of form for:Walls (any thickness) including attached pilasters, buttersesses, plinth and string courses etc.		
		Net Total Quantity	33.750 sqm
		Say 33.750 sqm @ Rs 748.62 / sqm	Rs 25265.93
25	13.1.1 12 mm cement plaster of mix:1:4 (1 cement : 4 fine sand)		
		Net Total Quantity	28.350 sqm
		Say 28.350 sqm @ Rs 327.85 / sqm	Rs 9294.55
26	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 : 4 graded stone aggregate 20 mm nominal size)		
		Net Total Quantity	10.000 cum
		Say 10.000 cum @ Rs 8340.93 / cum	Rs 83409.30
27	5.9.1 Centering and shuttering including strutting, etc. and removal of form for:Foundations, footings, bases of columns, etc for mass concrete		
		Net Total Quantity	40.000 sqm
		Say 40.000 sqm @ Rs 350.00 / sqm	Rs 14000.00
5Appendix A - (3) - Supply and Laying 250mm DI pumping main from Nariyanpara to Idukki kavala (balance work re-arranging)- (a) Cost of materials (Cost Index:41.53 %)			
1	100.98.118 Supply of DI K9 Pipe Conforming to IS 8329/2000, 250mm Dia.		
		Net Total Quantity	1188.000 metre
		Say 1188.000 metre @ Rs 3616.52 / metre	Rs 4296425.76
2	od41949/2020_2021 Supply DI specials, Tees, Bends, Collars, Tapers etc.		
		Net Total Quantity	7.450 quintal
		Say 7.450 quintal @ Rs 20384.00 / quintal	Rs 151860.80
3	100.98.461 Supply of CI Double Flanged Sluice Valve Conforming to IS 14846 - 2000, Sluice Valve with Cap PN 1.6, Size 200mm.		
		Net Total Quantity	1.000 No
		Say 1.000 No @ Rs 23723.65 / No	Rs 23723.65

4	100.98.462 Supply of CI Double Flanged Sluice Valve Conforming to IS 14846 - 2000, Sluice Valve with Cap PN 1.6, Size 250mm.		
		Net Total Quantity	3.000 No
		Say 3.000 No @ Rs 34361.80 / No	Rs 103085.40
5	100.98.440 Supply of CI Air Valve, Conforming to IS 14848 - 2000, Single Orifice, Small Orifice Type S1, Size 25mm.		
		Net Total Quantity	3.000 No
		Say 3.000 No @ Rs 5636.75 / No	Rs 16910.25
6Appendix A - (3) - Supply and Laying 250mm DI pumping main from Nariyanpara to Idukki kavala (balance work re-arranging)- (b) Working charges (Cost Index:41.53 %)			
1	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 1.5 m, including getting out the excavated soil, and then returning the soil as required, in layers not exceeding 20 cm 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 : All kinds of soil (Ref. Item No. 2.10.1 of DSR)		
		Net Total Quantity	943.651 cum
		Say 943.651 cum @ Rs 579.85 / cum	Rs 547176.03
2	100.1.5 Excavating trenches of required width for pipes, cables, etc including excavation for sockets, and dressing of sides, ramming of bottoms, depth up to 1.5 m, including getting out the excavated soil, and then returning the soil as required, in layers not exceeding 20 cm 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 :" Ordinary Rock. (Ref. Item No. 2.13.1 of DSR)		
		Net Total Quantity	188.730 cum
		Say 188.730 cum @ Rs 842.10 / cum	Rs 158929.53
3	100.2.2 Excavation work by mechanical means (Hydraulic excavator) / manual means in foundation trenches or drains (not exceeding 1.5 m in width or 10 m ² 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 soils as directed, within a lead of 50 m. Medium Rock (blasting prohibited) New Data derived from Item No.2.9.3		
		Net Total Quantity	75.492 cum
		Say 75.492 cum @ Rs 1106.34 / cum	Rs 83519.82

4	2.7.3 Earth work in excavation by mechanical means (Hydraulic excavator)/ manual means over areas (exceeding 30 cm in depth, 1.5 m in width as well as 10 sqm on plan) including disposal of excavated earth, lead up to 50 m and lift up to 1.5 m, disposed earth to be levelled and neatly dressed.Hard rock (blasting prohibited)	
Net Total Quantity		25.164 cum
Say 25.164 cum @ Rs 1248.58 / cum		Rs 31419.27
5	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 intial lead of 50m and lift upto 1.50m(intial depth 0 m 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 10m3 blasting) (Ref. Item No. 1004 A of T C)	
Net Total Quantity		25.164 cum
Say 25.164 cum @ Rs 4093.40 / cum		Rs 103006.32
6	50.2.25.1 Filling with contractor's own earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20 cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 m and lift up to 1.5 m as per direction of site Engineer-in-charge	
Net Total Quantity		10.000 cum
Say 10.000 cum @ Rs 548.85 / cum		Rs 5488.50
7	100.8.1 Fencing one side of trenches, 1.50 m height with two rows of 10 cm plastic caution tape in vertical casuarina pole (girth 15cm to 24cm) fixed at 2 m intervals. (Data Prepared based on PWD SDB - Item No.1009)	
Net Total Quantity		800.000 metre
Say 800.000 metre @ Rs 28.82 / metre		Rs 23056.00
8	100.14.4 Conveying and laying S&S Centrifugally Cast (Spun) / Ductile Iron Pipes conforming to IS: 8329 excluding cost of pipes and specials : 250 mm dia Ductile Iron Class K-9 Pipes Data derived from 18.72.18 in DAR	
Net Total Quantity		1165.000 metre
Say 1165.000 metre @ Rs 170.19 / metre		Rs 198271.35
9	18.70.4 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:250 mm dia pipes	
Net Total Quantity		230.000 joint
Say 230.000 joint @ Rs 329.84 / joint		Rs 75863.20

10	18.30.6 Providing flanged joints to double flanged C.I./ D.I pipes and specials, including testing of joints:250 mm diameter pipe		
		Net Total Quantity	25.000 Nos
		Say 25.000 Nos @ Rs 595.56 / Nos	Rs 14889.00
11	18.83.6 Labour for cutting C.I. pipe with steel saw.250 mm diameter C.I. pipe		
		Net Total Quantity	15.000 Each Cut
		Say 15.000 Each Cut @ Rs 559.11 / Each Cut	Rs 8386.65
12	100.35.4 Testing 250mm DI/CI pipeline with potable water to the required test pressure . 250 mm dia Observed Data derived from item no.1022 of PHED DATA		
		Net Total Quantity	1165.000 metre
		Say 1165.000 metre @ Rs 52.99 / metre	Rs 61733.35
13	100.31.1.5 "Conveying and fixing C.I. sluice valves (with cap) by providing complete with bolts, nuts, rubber insertions etc. excluding the cost of valve (the tail pieces if required will be paid separately) : 200 mm diameter. Class I" Data derived from item no.18.31.4.1 of DAR		
		Net Total Quantity	1.000 Nos
		Say 1.000 Nos @ Rs 1625.90 / Nos	Rs 1625.90
14	100.31.1.6 "Conveying and fixing C.I. sluice valves (with cap) by providing complete with bolts, nuts, rubber insertions etc. excluding the cost of valve (the tail pieces if required will be paid separately) : 250 mm diameter. Class I" Data derived from item no.18.31.5.1 of DAR		
		Net Total Quantity	3.000 Nos
		Say 3.000 Nos @ Rs 2304.82 / Nos	Rs 6914.46
15	100.32.1 Conveying and fixing C I Single acting Air Valve of approved quality with bolts,nuts,rubber insertions etc . excluding the cost of air valve(the tail pieces if required will be paid seperately): 25 mm Single acting Air Valve Observed Data derived from item no.18.59.of DAR		
		Net Total Quantity	3.000 Nos
		Say 3.000 Nos @ Rs 146.63 / Nos	Rs 439.89
16	18.24 Laying in position S & S or flanged C.I. special such as tees, bends, collars, tapers and caps etc. (excluding cost of specials).		

		Net Total Quantity	7.450 quintal
		Say 7.450 quintal @ Rs 603.91 / quintal	Rs 4499.13
17	18.67.1	Providing and laying S & S C.I. Standard specials suitable for mechanical jointing as per IS 13382:Upto 300 mm dia	
		Net Total Quantity	1.440 quintal
		Say 1.440 quintal @ Rs 14708.65 / quintal	Rs 21180.46
18	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	
		Net Total Quantity	10.891 cum
		Say 10.891 cum @ Rs 309.95 / cum	Rs 3375.67
19	2.9.1	Excavation work 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 soils as directed, within a lead of 50 m.Ordinary rock	
		Net Total Quantity	10.891 cum
		Say 10.891 cum @ Rs 550.62 / cum	Rs 5996.80
20	4.1.6	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level:1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 40 mm nominal size)	
		Net Total Quantity	1.453 cum
		Say 1.453 cum @ Rs 7527.06 / cum	Rs 10936.82
21	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	
		Net Total Quantity	7.832 cum
		Say 7.832 cum @ Rs 9483.15 / cum	Rs 74272.03
22	5.9.2	Centering and shuttering including strutting, etc. and removal of form for:Walls (any thickness) including attached pilasters, butteresses, plinth and string courses etc.	
		Net Total Quantity	33.750 sqm
		Say 33.750 sqm @ Rs 748.62 / sqm	Rs 25265.93

23	5.22.2 Steel reinforcement for R.C.C work including straightening, cutting, bending, placing in position and binding all complete upto plinth level Hard drawn steel wire		
		Net Total Quantity	783.200 kilogram
		Say 783.200 kilogram @ Rs 105.23 / kilogram	Rs 82416.14
24	13.1.1 12 mm cement plaster of mix:1:4 (1 cement : 4 fine sand)		
		Net Total Quantity	28.350 sqm
		Say 28.350 sqm @ Rs 327.85 / sqm	Rs 9294.55
25	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 : 4 graded stone aggregate 20 mm nominal size)		
		Net Total Quantity	5.000 cum
		Say 5.000 cum @ Rs 8340.93 / cum	Rs 41704.65
26	5.9.1 Centering and shuttering including strutting, etc. and removal of form for:Foundations, footings, bases of columns, etc for mass concrete		
		Net Total Quantity	20.000 sqm
		Say 20.000 sqm @ Rs 350.00 / sqm	Rs 7000.00
7Appendix B - (1) - Improvements at Kalthotty sump- (a) patch work, painting and providing toilet etc. (Cost Index:41.53 %)			
1	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		
		Net Total Quantity	40.000 sqm
		Say 40.000 sqm @ Rs 15.43 / sqm	Rs 617.20
2	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		
		Net Total Quantity	41.012 cum
		Say 41.012 cum @ Rs 309.95 / cum	Rs 12711.67

3	15.7.4 Demolishing brick work manually / by mechanical means including stacking of serviceable material and disposal of unserviceable material within 50 metres lead as per direction of Engineer-in-Charge.In cement mortar	
Net Total Quantity		0.500 cum
Say 0.500 cum @ Rs 1805.99 / cum		Rs 903.00
4	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)	
Net Total Quantity		0.225 cum
Say 0.225 cum @ Rs 2134.72 / cum		Rs 480.31
5	7.1.1 Random rubble masonry with hard stone in foundation and plinth including levelling up with cement concrete 1:6:12 (1 cement : 6 coarse sand : 12 graded stone aggregate 20 mm nominal size) up to plinth level with:Cement mortar 1:6 (1 cement : 6 coarse sand)	
Net Total Quantity		5.539 cum
Say 5.539 cum @ Rs 7520.41 / cum		Rs 41655.55
6	4.1.5 Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level:1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size)	
Net Total Quantity		2.192 cum
Say 2.192 cum @ Rs 7690.32 / cum		Rs 16857.18
7	50.6.1.3 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 above floor two level up to floor V level thickness 20cm and above in: CM 1:6 (1 cement :6 coarse sand) etc complete	
Net Total Quantity		4.739 cum
Say 4.739 cum @ Rs 7784.73 / cum		Rs 36891.84
8	10.5.2 Providing and fixing 1 mm thick M.S. sheet door with frame of 40x40x6 mm angle iron and 3 mm M.S. gusset plates at the junctions and corners, all necessary fittings complete, including applying a priming coat of approved steel primer.Using flats 30x6 mm for diagonal braces and central cross piece	
Net Total Quantity		1.441 sqm
Say 1.441 sqm @ Rs 5256.35 / sqm		Rs 7574.40

9	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)		
		Net Total Quantity	0.814 cum
		Say 0.814 cum @ Rs 8964.72 / cum	Rs 7297.28
10	5.2.2 Reinforced cement concrete work in walls (any thickness), including attached pilasters, buttresses, plinth and string courses, fillets, columns, pillars, piers, abutments, posts and struts etc. up tot floor five level excluding cost of centering, shuttering, finishing and reinforcement :1:1.5:3(1 cement : 1.5 coarse sand : 3 graded stone aggregate 20 mm nominal size)		
		Net Total Quantity	4.657 cum
		Say 4.657 cum @ Rs 11433.93 / cum	Rs 53247.81
11	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		
		Net Total Quantity	601.811 kilogram
		Say 601.811 kilogram @ Rs 102.61 / kilogram	Rs 61751.83
12	5.9.1 Centering and shuttering including strutting, etc. and removal of form for:Foundations, footings, bases of columns, etc for mass concrete		
		Net Total Quantity	8,000 sqm
		Say 8.000 sqm @ Rs 350.00 / sqm	Rs 2800.00
13	5.9.3 Centering and shuttering including strutting, etc. and removal of form for:Suspended floors, roofs, landings, balconies and access platform		
		Net Total Quantity	29.311 sqm
		Say 29.311 sqm @ Rs 851.52 / sqm	Rs 24958.90
14	5.9.5 Centering and shuttering including strutting, etc. and removal of form for:Lintels, beams, plinth beams, girders bressumers and cantilevers		
		Net Total Quantity	17.740 sqm
		Say 17.740 sqm @ Rs 678.28 / sqm	Rs 12032.69
15	5.9.6 Centering and shuttering including strutting, etc. and removal of form for:Columns, Pillars, Piers, Abutments, Posts and Struts		
		Net Total Quantity	9.000 sqm
		Say 9.000 sqm @ Rs 901.48 / sqm	Rs 8113.32

16	13.7.1 12 mm cement plaster finished with a floating coat of neat cement of mix:1:3 (1 cement : 3 fine sand)		
		Net Total Quantity	14.081 sqm
		Say 14.081 sqm @ Rs 418.79 / sqm	Rs 5896.98
17	13.2.1 15 mm cement plaster on the rough side of single or half brick wall of mix:1:4 (1 cement :4 fine sand)		
		Net Total Quantity	68.840 sqm
		Say 68.840 sqm @ Rs 378.31 / sqm	Rs 26042.86
18	13.44.1 Finishing walls with water proofing cement paint of required shade:New work (Two or more coats applied @ 3.84 kg/10 sqm)		
		Net Total Quantity	328.177 sqm
		Say 328.177 sqm @ Rs 112.09 / sqm	Rs 36785.36
19	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		
		Net Total Quantity	0.641 sqm
		Say 0.641 sqm @ Rs 154.62 / sqm	Rs 99.11
20	11.21.1.1 Providing and fixing 10 mm thick acid and /or alkali resistant tiles of approved make and colour using acid and / or alkali resisting mortar bedding, and joints filled with acid and /or alkali resisting cement as per IS : 4457, complete as per the direction of Engineer-in-Charge.In flooring on a bed of 10 mm thick mortar 1:4 (1 acid proof cement : 4 coarse sand)Acid and alkali resistant tile		
		Net Total Quantity	3.750 sqm
		Say 3.750 sqm @ Rs 1836.85 / sqm	Rs 6888.19
21	11.21.2.1 Providing and fixing 10 mm thick acid and /or alkali resistant tiles of approved make and colour using acid and / or alkali resisting mortar bedding, and joints filled with acid and /or alkali resisting cement as per IS : 4457, complete as per the direction of Engineer-in-Charge.In dado/ skirting on 12 mm thick mortar 1:4 (1 acid proof cement : 4 coarse sand)Acid and alkali resistant tile		
		Net Total Quantity	18.240 sqm
		Say 18.240 sqm @ Rs 1975.33 / sqm	Rs 36030.02
22	13.71 Lettering with black Japan pint of approved brand and manufacture		
		Net Total Quantity	1500.000 Letterxcm ht
		Say 1500.000 Letterxcm ht @ Rs 5.80 / Letterxcm ht	Rs 8700.00

23	50.10.1 Steel work in built up G I tubular (round, square or rectangular hollow tubes etc.) trusses etc., including cutting, hoisting,fixing in position and applying a priming coat of approved steel primer, including welding and bolted with special shaped washers etc. complete	
Net Total Quantity		152.460 kg
Say 152.460 kg @ Rs 198.21 / kg		Rs 30219.10
24	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	
Net Total Quantity		7.968 sqm
Say 7.968 sqm @ Rs 160.00 / sqm		Rs 1274.88
25	14.75 Repair to plaster of thickness 12mm to 20 mm in patches of area 2.5 sqm and under,including cutting the patch in proper shape, raking out joints and preparing plasteringthe wall surface with white cement based polymer modified self curing mortar, includingdisposal of rubbish, all complete as per the direction of Engineer-In-Charge.	
Net Total Quantity		50.000 sqm
Say 50.000 sqm @ Rs 629.03 / sqm		Rs 31451.50
26	od41173/2020_2021 Providing sanitary facilities including 500 ltr water tank,PVC septic tank,water closet,wash basin and other plumbing works and electrical works etc.complete.	
Net Total Quantity		1,000 No
Say 1.000 No @ Rs 46398.41 / No		Rs 46398.41
8Appendix B - (1) - Improvements at Kalthotty sump- (b) Construction of retaining wall and compound wall (Cost Index:41.53 %)		
1	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	
Net Total Quantity		330.000 sqm
Say 330.000 sqm @ Rs 15.43 / sqm		Rs 5091.90
2	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	
Net Total Quantity		70.620 cum

		Say 70.620 cum @ Rs 309.95 / cum	Rs 21888.67
3	4.1.5 Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level:1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size)		
		Net Total Quantity	11.881 cum
		Say 11.881 cum @ Rs 7690.32 / cum	Rs 91368.69
4	7.1.1 Random rubble masonry with hard stone in foundation and plinth including levelling up with cement concrete 1:6:12 (1 cement : 6 coarse sand : 12 graded stone aggregate 20 mm nominal size) up to plinth level with:Cement mortar 1:6 (1 cement : 6 coarse sand)		
		Net Total Quantity	93.283 cum
		Say 93.283 cum @ Rs 7520.41 / cum	Rs 701526.41
5	5.2.2 Reinforced cement concrete work in walls (any thickness), including attached pilasters, buttresses, plinth and string courses, fillets, columns, pillars, piers, abutments, posts and struts etc. up tot floor five level excluding cost of centering, shuttering, finishing and reinforcement :1:1.5:3(1 cement : 1.5 coarse sand : 3 graded stone aggregate 20 mm nominal size)		
		Net Total Quantity	6.602 cum
		Say 6.602 cum @ Rs 11433.93 / cum	Rs 75486.81
6	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		
		Net Total Quantity	396.002 kilogram
		Say 396.002 kilogram @ Rs 102.61 / kilogram	Rs 40633.77
7	50.2.25.1 Filling with contractor's own earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20 cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 m and lift up to 1.5 m as per direction of site Engineer-in-charge		
		Net Total Quantity	66.000 cum
		Say 66.000 cum @ Rs 548.85 / cum	Rs 36224.10
8	50.6.1.3 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 above floor two level up to floor V level thickness 20cm and above in: CM 1:6 (1 cement :6 coarse sand) etc complete		
		Net Total Quantity	20.401 cum
		Say 20.401 cum @ Rs 7784.73 / cum	Rs 158816.28

9	13.7.2 12 mm cement plaster finished with a floating coat of neat cement of mix:1:4 (1 cement : 4 fine sand)		
		Net Total Quantity	206.400 sqm
		Say 206.400 sqm @ Rs 403.29 / sqm	Rs 83239.06
10	50.10.1 Steel work in built up G I tubular (round, square or rectangular hollow tubes etc.) trusses etc., including cutting, hoisting,fixing in position and applying a priming coat of approved steel primer, including welding and bolted with special shaped washers etc. complete		
		Net Total Quantity	61.621 kg
		Say 61.621 kg @ Rs 198.21 / kg	Rs 12213.90
9Appendix B - (2) - Design and Construction of Pipeline Bridge across kattappana river- (a)- RCC work (Cost Index:41.53 %)			
1	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		
		Net Total Quantity	85.000 sqm
		Say 85.000 sqm @ Rs 15.43 / sqm	Rs 1311.55
2	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		
		Net Total Quantity	23.520 cum
		Say 23.520 cum @ Rs 309.95 / cum	Rs 7290.02
3	4.1.5 Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level:1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size)		
		Net Total Quantity	3.920 cum
		Say 3.920 cum @ Rs 7690.32 / cum	Rs 30146.05
4	5.33.1 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		

		Net Total Quantity	6.032 cum
		Say 6.032 cum @ Rs 9825.93 / cum	Rs 59270.01
5	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	
		Net Total Quantity	14.280 cum
		Say 14.280 cum @ Rs 11550.40 / cum	Rs 164939.71
6	5.34.1	Extra for providing richer mixes at all floor levels. Note:- Excess/less cement over the specified cement content used is payable/ recoverable separately.Providing M-30 grade concrete instead of M-25 grade BMC/RMC. (Note:- Cement content considered in M-30 is @ 340 kg/cum).	
		Net Total Quantity	20.300 cum
		Say 20.300 cum @ Rs 85.70 / cum	Rs 1739.71
7	5.22.1	Steel reinforcement for R.C.C work including straightening, cutting, bending, placing in position and binding all complete upto plinth levelMild steel and Medium Tensile steel bars	
		Net Total Quantity	2174.000 kg
		Say 2174.000 kg @ Rs 100.91 / kg	Rs 219378.34
8	5.9.1	Centering and shuttering including strutting, etc. and removal of form for:Foundations, footings, bases of columns, etc for mass concrete	
		Net Total Quantity	21.440 sqm
		Say 21.440 sqm @ Rs 350.00 / sqm	Rs 7504.00
9	5.9.3	Centering and shuttering including strutting, etc. and removal of form for:Suspended floors, roofs, landings, balconies and access platform	
		Net Total Quantity	26.000 sqm
		Say 26.000 sqm @ Rs 851.52 / sqm	Rs 22139.52
10	5.9.5	Centering and shuttering including strutting, etc. and removal of form for:Lintels, beams, plinth beams, girders bressumers and cantilevers	
		Net Total Quantity	44.481 sqm

Say 44.481 sqm @ Rs 678.28 / sqm		Rs 30170.57
11	5.9.6 Centering and shuttering including strutting, etc. and removal of form for:Columns, Pillars, Piers, Abutments, Posts and Struts	
Net Total Quantity		62.400 sqm
Say 62.400 sqm @ Rs 901.48 / sqm		Rs 56252.35
12	13.7.1 12 mm cement plaster finished with a floating coat of neat cement of mix:1:3 (1 cement : 3 fine sand)	
Net Total Quantity		147.840 sqm
Say 147.840 sqm @ Rs 418.79 / sqm		Rs 61913.91
13	13.44.1 Finishing walls with water proofing cement paint of required shade:New work (Two or more coats applied @ 3.84 kg/10 sqm)	
Net Total Quantity		156.560 sqm
Say 156.560 sqm @ Rs 112.09 / sqm		Rs 17548.81
14	10.26.3 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 approved steel primer.G.I. pipes	
Net Total Quantity		452.600 kg
Say 452.600 kg @ Rs 194.18 / kg		Rs 87885.87
15	100.7.1 Bailing out water with 5 HP engine and pumpset including conveyance to the site, erection, dismantling and taking back of engine and pump, cost of fuel lubricating oil and other stores pay of staff etc. complete. NEW DATA (Prepared based on PHED SDB - Item No.1070)	
Net Total Quantity		894.840 Kwh
Say 894.840 Kwh @ Rs 38.57 / Kwh		Rs 34513.98
10Appendix B - (2) - Design and Construction of pipeline bridge across kattappana river- (b) Steel bridge (Cost Index:41.53 %)		
1	10.2 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.	
Net Total Quantity		4019.050 kg
Say 4019.050 kg @ Rs 125.04 / kg		Rs 502542.01
2	13.52.1 Finishing with Epoxy paint (two or more coats) at all locations prepared and applied as per manufacturer's specifications including appropriate priming coat, preparation of surface, etc. complete.On steel work	

		Net Total Quantity	81.429 sqm
		Say 81.429 sqm @ Rs 233.10 / sqm	Rs 18981.10
11 Appendix B - (2) - Design and Construction of pipeline bridge across at kattappana river- (c) Supply and laying M S pipe and connecting to the existing line (Cost Index:41.53 %)			
1	100.37.8.1 Fabricating MS pipes of size 250mm (ID) using 8 mm thick MS plate including cost and conveyance charges of MS 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 MS plates.		
		Net Total Quantity	42.000 metre
		Say 42.000 metre @ Rs 7163.54 / metre	Rs 300868.68
2	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 1.5 m, including getting out the excavated soil, and then returning the soil as required, in layers not exceeding 20 cm 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 : All kinds of soil (Ref. Item No. 2.10.1 of DSR)		
		Net Total Quantity	7.680 cum
		Say 7.680 cum @ Rs 579.85 / cum	Rs 4453.25
3	100.37.8.3 Cutting 250 mm (ID) MS 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 MS plates.		
		Net Total Quantity	36.000 No
		Say 36.000 No @ Rs 272.02 / No	Rs 9792.72
4	100.37.8.4 Welding 250mm (ID) MS 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 MS plates.		
		Net Total Quantity	50.000 No
		Say 50.000 No @ Rs 1040.81 / No	Rs 52040.50
5	100.37.8.5 Grinding cut and weld edges of 250 mm (ID) MS pipes during fabrication work including all labour and hire charges of tools etc. complete: For pipes fabricated with 8mm thick MS plates.		
		Net Total Quantity	50.000 No
		Say 50.000 No @ Rs 195.17 / No	Rs 9758.50

6	100.14.4 Conveying and laying S&S Centrifugally Cast (Spun) / Ductile Iron Pipes conforming to IS: 8329 excluding cost of pipes and specials : 250 mm dia Ductile Iron Class K-9 Pipes Data derived from 18.72.18 in DAR	
Net Total Quantity		42.000 metre
Say 42.000 metre @ Rs 170.19 / metre		Rs 7147.98
7	18.67.1 Providing and laying S & S C.I. Standard specials suitable for mechanical jointing as per IS 13382:Upto 300 mm dia	
Net Total Quantity		0.960 quintal
Say 0.960 quintal @ Rs 14708.65 / quintal		Rs 14120.30
8	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)	
Net Total Quantity		6.912 cum
Say 6.912 cum @ Rs 8964.72 / cum		Rs 61964.14
9	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	
Net Total Quantity		622.800 kilogram
Say 622.800 kilogram @ Rs 102.61 / kilogram		Rs 63905.51
10	100.32.2 Conveying and fixing C I Single acting Air Valve of approved quality with bolts,nuts,rubber insertions etc . excluding the cost of air valve(the tail pieces if required will be paid seperately): 40 mm Single acting Air Valve Observed Data derived from item no.18.59.of DAR	
Net Total Quantity		1.000 Nos
Say 1.000 Nos @ Rs 184.41 / Nos		Rs 184.41
11	100.31.1.1 "Conveying and fixing C.I. sluice valves (with cap) by providing complete with bolts, nuts, rubber insertions etc. excluding the cost of valve (the tail pieces if required will be paid separately) :80 mm diameter. Class I" Observed Data derived from item no.18.31.of DAR	
Net Total Quantity		1.000 Nos
Say 1.000 Nos @ Rs 613.74 / Nos		Rs 613.74
12	100.98.448 Supply of CI Air Valve with Flanges, Conforming to IS 14845 - 2000, Kinetic Air Valve Type DS1, Size 40mm	

		Net Total Quantity	1.000 No
		Say 1.000 No @ Rs 7646.15 / No	Rs 7646.15
13	100.98.457 Supply of CI Double Flanged Sluice Valve Conforming to IS 14846 - 2000, Sluice Valve with Cap PN 1.6, Size 80mm.		
		Net Total Quantity	1.000 No
		Say 1.000 No @ Rs 6624.05 / No	Rs 6624.05
12Appendix B - (3) - Wash water disposal arrangements at TP- (a) - Cost of materials (Cost Index:41.53 %)			
1	100.98.120 Supply of DI K9 Pipe Conforming to IS 8329/2000, 350mm Dia.		
		Net Total Quantity	408.000 metre
		Say 408.000 metre @ Rs 5506.95 / metre	Rs 2246835.60
2	18.71.6 Providing and laying Double Flanged (screwed / welded) Centrifugally (Spun) Cast Iron, Class B (IS : 1536):350 mm dia C.I Double Flanges Pipe		
		Net Total Quantity	40.000 metre
		Say 40.000 metre @ Rs 10799.16 / metre	Rs 431966.40
3	100.98.464 Supply of CI Double Flanged Sluice Valve Conforming to IS 14846 - 2000, Sluice Valve with Cap PN 1.6, Size 350mm.		
		Net Total Quantity	2.000 No
		Say 2.000 No @ Rs 77806.55 / No	Rs 155613.10
4	od81358/2020_2021 Supply DI specials, Tees, Bends, Collars, Tapers etc.		
		Net Total Quantity	18.201 quintal
		Say 18.201 quintal @ Rs 20384.00 / quintal	Rs 371009.18
13Appendix B - (3) - Wash water disposal arrangements at TP- (b) Working charges (Cost Index:41.53 %)			
1	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 1.5 m, including getting out the excavated soil, and then returning the soil as required, in layers not exceeding 20 cm 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 : All kinds of soil (Ref. Item No. 2.10.1 of DSR)		
		Net Total Quantity	572.001 cum
		Say 572.001 cum @ Rs 579.85 / cum	Rs 331674.78

2	100.14.6 Conveying and laying S&S Centrifugally Cast (Spun) / Ductile Iron Pipes conforming to IS: 8329 excluding cost of pipes and specials : 350 mm dia Ductile Iron Class K-9 Pipes Data derived from 18.72.20 in DAR	
		Net Total Quantity 400.000 metre
		Say 400.000 metre @ Rs 283.70 / metre Rs 113480.00
3	100.31.2.8 Conveying and fixing C.I. sluice valves (with cap) by providing complete with bolts, nuts, rubber insertions etc. excluding the cost of valve (the tail pieces if required will be paid separately) : 350 mm diameter. Class II" Observed Data derived from item no.18.31.of DAR	
		Net Total Quantity 2.000 Nos
		Say 2.000 Nos @ Rs 4148.10 / Nos Rs 8296.20
4	18.83.8 Labour for cutting C.I. pipe with steel saw.350 mm diameter C.I pipe	
		Net Total Quantity 15.000 Each Cut
		Say 15.000 Each Cut @ Rs 781.10 / Each Cut Rs 11716.50
5	18.70.6 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:350 mm dia pipes	
		Net Total Quantity 85.000 joint
		Say 85.000 joint @ Rs 456.93 / joint Rs 38839.05
6	18.67.2 Providing and laying S & S C.I. Standard specials suitable for mechanical jointing as per IS 13382:Above 300 mm dia	
		Net Total Quantity 1.240 quintal
		Say 1.240 quintal @ Rs 15492.79 / quintal Rs 19211.06
7	18.24 Laying in position S & S or flanged C.I. special such as tees, bends, collars, tapers and caps etc. (excluding cost of specials).	
		Net Total Quantity 18.201 quintal
		Say 18.201 quintal @ Rs 603.91 / quintal Rs 10991.77
8	100.35.6 Testing 350mm DI/CI pipeline with potable water to the required test pressure. 350 mm dia Observed Data derived from item no.1024 of PHED DATA	
		Net Total Quantity 400.000 metre

Say 400.000 metre @ Rs 70.53 / metre		Rs 28212.00
9	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)	
Net Total Quantity		61.208 cum
Say 61.208 cum @ Rs 8964.72 / cum		Rs 548712.58
10	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	
Net Total Quantity		2448.320 kilogram
Say 2448.320 kilogram @ Rs 102.61 / kilogram		Rs 251222.12
11	5.9.1 Centering and shuttering including strutting, etc. and removal of form for:Foundations, footings, bases of columns, etc for mass concrete	
Net Total Quantity		262.416 sqm
Say 262.416 sqm @ Rs 350.00 / sqm		Rs 91845.60
12	od41799/2020_2021 Construction of RCC valve chamber of size 1mx1mx1.4 m cost of excavation work,75mm thick M10 concrete base,150 mm side wall,150mm bottom and cover slab of chamber with M20 concrete with reinforcement including plastering inside and out side of wall.etc.complete.	
Net Total Quantity		2.000 No
Say 2.000 No @ Rs 42969.05 / No		Rs 85938.10
14Appendix B - (4) - supply and laying 80 mm GI pumping main from intermediate sump at Nariyanpara to GLSR at Nariyanpara top using 80 mm GI pipe- (a) Cost of materials (Cost Index:41.53 %)		
1	100.98.440 Supply of CI Air Valve, Conforming to IS 14848 - 2000, Single Orifice, Small Orifice Type S1, Size 25mm.	
Net Total Quantity		3.000 No
Say 3.000 No @ Rs 5636.75 / No		Rs 16910.25
2	100.98.457 Supply of CI Double Flanged Sluice Valve Conforming to IS 14846 - 2000, Sluice Valve with Cap PN 1.6, Size 80mm.	
Net Total Quantity		1.000 No
Say 1.000 No @ Rs 6624.05 / No		Rs 6624.05
3	od41959/2020_2021 Supply of 80mm GI pipe(m)	
Net Total Quantity		1177.000 metre

Say 1177.000 metre @ Rs 830.16 / metre		Rs 977098.32
4	od41983/2020_2021 Specials for 80mm GI pipe -10 % of value of pipe supply-(supplying and laying 80 mm GI pipes from intermediate sump at Nariyanpara to GLSR at Nariyanpara top-(a) Cost of materials)	
Net Total Quantity		1.000 set
Say 1.000 set @ Rs 81318.93 / set		Rs 81318.93
15Appendix B - (4) - supply and laying 80 mm GI pumping main from intermediate sump at Nariyanpara to GLSR at Nariyanpara top using 80 mm GI pipe-(b) Working charges (Cost Index:41.53 %)		
1	100.12.8 Conveying and fixing G.I. pipes complete with G.I. fittings including trenching and refilling etc. but excluding cost of pipes and fittings - External work. 80 mm dia nominal bore Data derived from item no.18.12.8 of DAR Data for 10 m	
Net Total Quantity		1177.000 metre
Say 1177.000 metre @ Rs 217.74 / metre		Rs 256279.98
2	100.31.2.1 "Conveying and fixing C.I. sluice valves (with cap) by providing complete with bolts, nuts, rubber insertions etc. excluding the cost of valve (the tail pieces if required will be paid separately) : 80 mm diameter. Class II" Observed Data derived from item no.18.31.of DAR	
Net Total Quantity		1.000 Nos
Say 1.000 Nos @ Rs 652.74 / Nos		Rs 652.74
3	100.32.1 Conveying and fixing C I Single acting Air Valve of approved quality with bolts,nuts,rubber insertions etc . excluding the cost of air valve(the tail pieces if required will be paid seperately): 25 mm Single acting Air Valve Observed Data derived from item no.18.59.of DAR	
Net Total Quantity		3.000 Nos
Say 3.000 Nos @ Rs 146.63 / Nos		Rs 439.89
4	5.2.2 Reinforced cement concrete work in walls (any thickness), including attached pilasters, buttresses, plinth and string courses, fillets, columns, pillars, piers, abutments, posts and struts etc. up tot floor five level excluding cost of centering, shuttering, finishing and reinforcement :1:1.5:3(1 cement : 1.5 coarse sand : 3 graded stone aggregate 20 mm nominal size)	
Net Total Quantity		3.841 cum
Say 3.841 cum @ Rs 11433.93 / cum		Rs 43917.73

5	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	
Net Total Quantity		192.050 kilogram
Say 192.050 kilogram @ Rs 102.61 / kilogram		Rs 19706.25
6	5.9.1 Centering and shuttering including strutting, etc. and removal of form for: Foundations, footings, bases of columns, etc for mass concrete	
Net Total Quantity		19.200 sqm
Say 19.200 sqm @ Rs 350.00 / sqm		Rs 6720.00
16 Appendix B - (5) - Design and construction of intermediate sump at Nariyanpara (Cost Index:41.53 %)		
1	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	
Net Total Quantity		225.000 sqm
Say 225.000 sqm @ Rs 15.43 / sqm		Rs 3471.75
2	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	
Net Total Quantity		162.000 cum
Say 162.000 cum @ Rs 309.95 / cum		Rs 50211.90
3	2.7.2 Earth work in excavation by mechanical means (Hydraulic excavator) / manual means over areas (exceeding 30 cm in depth, 1.5 m in width as well as 10 sqm on plan) including disposal of excavated earth, lead up to 50 m and lift up to 1.5 m, disposed earth to be levelled and neatly dressed. Hard rock (requiring blasting)	
Net Total Quantity		96.000 cum
Say 96.000 cum @ Rs 749.05 / cum		Rs 71908.80
4	4.1.6 Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level: 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 40 mm nominal size)	
Net Total Quantity		13.300 cum
Say 13.300 cum @ Rs 7527.06 / cum		Rs 100109.90

5	7.1.1 Random rubble masonry with hard stone in foundation and plinth including levelling up with cement concrete 1:6:12 (1 cement : 6 coarse sand : 12 graded stone aggregate 20 mm nominal size) up to plinth level with:Cement mortar 1:6 (1 cement : 6 coarse sand)	
Net Total Quantity		66.500 cum
Say 66.500 cum @ Rs 7520.41 / cum		Rs 500107.27
6	4.1.5 Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level:1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size)	
Net Total Quantity		9.729 cum
Say 9.729 cum @ Rs 7690.32 / cum		Rs 74819.12
7	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	
Net Total Quantity		46.775 cum
Say 46.775 cum @ Rs 11550.40 / cum		Rs 540269.96
8	5.34.1 Extra for providing richer mixes at all floor levels. Note:- Excess/less cement over the specified cement content used is payable/ recoverable separately.Providing M-30 grade concrete instead of M-25 grade BMC/RMC. (Note:- Cement content considered in M-30 is @ 340 kg/cum).	
Net Total Quantity		46.775 cum
Say 46.775 cum @ Rs 85.70 / cum		Rs 4008.62
9	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	
Net Total Quantity		5613.000 kilogram
Say 5613.000 kilogram @ Rs 102.61 / kilogram		Rs 575949.93
10	5.9.1 Centering and shuttering including strutting, etc. and removal of form for:Foundations, footings, bases of columns, etc for mass concrete	
Net Total Quantity		18.841 sqm
Say 18.841 sqm @ Rs 350.00 / sqm		Rs 6594.35

11	5.9.2 Centering and shuttering including strutting, etc. and removal of form for:Walls (any thickness) including attached pilasters, buttersesses, plinth and string courses etc.		
		Net Total Quantity	141.000 sqm
		Say 141.000 sqm @ Rs 748.62 / sqm	Rs 105555.42
12	5.9.3 Centering and shuttering including strutting, etc. and removal of form for:Suspended floors, roofs, landings, balconies and access platform		
		Net Total Quantity	71.450 sqm
		Say 71.450 sqm @ Rs 851.52 / sqm	Rs 60841.10
13	5.9.5 Centering and shuttering including strutting, etc. and removal of form for:Lintels, beams, plinth beams, girders bressumers and cantilevers		
		Net Total Quantity	10.320 sqm
		Say 10.320 sqm @ Rs 678.28 / sqm	Rs 6999.85
14	5.9.6 Centering and shuttering including strutting, etc. and removal of form for:Columns, Pillars, Piers, Abutments, Posts and Struts		
		Net Total Quantity	3.600 sqm
		Say 3.600 sqm @ Rs 901.48 / sqm	Rs 3245.33
15	13.7.1 12 mm cement plaster finished with a floating coat of neat cement of mix:1:3 (1 cement : 3 fine sand)		
		Net Total Quantity	125.900 sqm
		Say 125.900 sqm @ Rs 418.79 / sqm	Rs 52725.66
16	13.8.2 15 mm cement plaster on rough side of single or half brick wall finished with a floating coat of neat cement of mix:1: 4 (1 cement : 4 fine sand)		
		Net Total Quantity	235.622 sqm
		Say 235.622 sqm @ Rs 453.75 / sqm	Rs 106913.48
17	100.41.33 Supplying and fixing 500mm dia CI manhole cover with frame(medium duty) charges including all cost, labour charges etc complete.		
		Net Total Quantity	2.000 Nos
		Say 2.000 Nos @ Rs 7835.95 / Nos	Rs 15671.90
18	13.44.1 Finishing walls with water proofing cement paint of required shade:New work (Two or more coats applied @ 3.84 kg/10 sqm)		

		Net Total Quantity	235.622 sqm
		Say 235.622 sqm @ Rs 112.09 / sqm	Rs 26410.87
19	10.26.3	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 approved steel primer.G.I. pipes	
		Net Total Quantity	83.950 kg
		Say 83.950 kg @ Rs 194.18 / kg	Rs 16301.41
20	od149225/2018_2019	DOWEL BARS - Supplying and providing MS dowel bars of size 16 mm dia of 2m long (1m in rock and 1m in concrete) including drilling holes of 20mm dia to a depth of 1m in rock and filling the gap with cement grout(0.10kg/each) etc complete.	
		Net Total Quantity	50.000 No
		Say 50.000 No @ Rs 481.80 / No	Rs 24090.00
21	od148944/2018_2019	Supplying and fixing 100mm dia vent cowl incl. fitting charges etc. complete	
		Net Total Quantity	2.000 No
		Say 2.000 No @ Rs 3484.50 / No	Rs 6969.00
22	od148945/2018_2019	Supplying & fixing wall casting pipes 300mm - 2 Nos ,150mm - 3 Nos, 80mm - 1 Nos for outlet, scour and overflow including labour charges etc. Complete and interconnecting overflow units distribution line (rate as per order no : KWA/HO/SP-5160/2014-15/CI Specials dated 29.07.2015)	
		Net Total Quantity	1.000 No
		Say 1.000 No @ Rs 48175.54 / No	Rs 48175.54
17Appendix B - (6) - construction of intermediate pump house at Nariyanpara- (a) Construction of pump house (Cost Index:41.53 %)			
1	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	
		Net Total Quantity	24.307 cum
		Say 24.307 cum @ Rs 309.95 / cum	Rs 7533.95
2	50.2.25.1	Filling with contractor's own earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20 cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 m and lift up to 1.5 m as per direction of site Engineer-in-charge	
		Net Total Quantity	19.800 cum
		Say 19.800 cum @ Rs 548.85 / cum	Rs 10867.23

3	7.1.1 Random rubble masonry with hard stone in foundation and plinth including levelling up with cement concrete 1:6:12 (1 cement : 6 coarse sand : 12 graded stone aggregate 20 mm nominal size) up to plinth level with:Cement mortar 1:6 (1 cement : 6 coarse sand)	
Net Total Quantity		14.198 cum
Say 14.198 cum @ Rs 7520.41 / cum		Rs 106774.78
4	4.1.6 Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level:1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 40 mm nominal size)	
Net Total Quantity		13.099 cum
Say 13.099 cum @ Rs 7527.06 / cum		Rs 98596.96
5	50.6.1.3 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 above floor two level up to floor V level thickness 20cm and above in: CM 1:6 (1 cement :6 coarse sand) etc complete	
Net Total Quantity		33.406 cum
Say 33.406 cum @ Rs 7784.73 / cum		Rs 260056.69
6	10.6.1 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.80x1.25 mm M.S. laths with 1.25 mm thick top cover	
Net Total Quantity		9.000 sqm
Say 9.000 sqm @ Rs 3617.29 / sqm		Rs 32555.61
7	10.5.1 Providing and fixing 1 mm thick M.S. sheet door with frame of 40x40x6 mm angle iron and 3 mm M.S. gusset plates at the junctions and corners, all necessary fittings complete, including applying a priming coat of approved steel primer.Using M.S. angels 40x40x6 mm for diagonal braces	
Net Total Quantity		7.081 sqm
Say 7.081 sqm @ Rs 5440.63 / sqm		Rs 38525.10

8	9.6.1 Providing and fixing 35 mm thick factory made laminated veneer lumber door shutter conforming to IS: 14616 and TADS 15:2001 (Part B), including ISI marked M.S.pressed butt hinges bright finished of required size with necessary screws, all complete as per directions of Engineer-in-Charge and panelling with panels of:12 mm thick plain grade- 1, medium density flat pressed three layer particle board FPT- I or graded wood particle board FPT-I, IS : 3087 marked, bonded with BWP type synthetic resin adhesive as per IS: 848:	
Net Total Quantity		1.441 sqm
Say 1.441 sqm @ Rs 3239.48 / sqm		Rs 4668.09
9	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	
Net Total Quantity		4.628 cum
Say 4.628 cum @ Rs 9483.15 / cum		Rs 43888.02
10	5.2.2 Reinforced cement concrete work in walls (any thickness), including attached pilasters, buttresses, plinth and string courses, fillets, columns, pillars, piers, abutments, posts and struts etc. up tot floor five level excluding cost of centering, shuttering, finishing and reinforcement :1:1.5:3(1 cement : 1.5 coarse sand : 3 graded stone aggregate 20 mm nominal size)	
Net Total Quantity		12.898 cum
Say 12.898 cum @ Rs 11433.93 / cum		Rs 147474.83
11	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	
Net Total Quantity		2103.120 kilogram
Say 2103.120 kilogram @ Rs 102.61 / kilogram		Rs 215801.14
12	5.9.1 Centering and shuttering including strutting, etc. and removal of form for:Foundations, footings, bases of columns, etc for mass concrete	
Net Total Quantity		15.900 sqm
Say 15.900 sqm @ Rs 350.00 / sqm		Rs 5565.00
13	5.9.3 Centering and shuttering including strutting, etc. and removal of form for:Suspended floors, roofs, landings, balconies and access platform	
Net Total Quantity		80.391 sqm
Say 80.391 sqm @ Rs 851.52 / sqm		Rs 68454.54

14	5.9.5 Centering and shuttering including strutting, etc. and removal of form for:Lintels, beams, plinth beams, girders bressumers and cantilevers		
		Net Total Quantity	22.026 sqm
		Say 22.026 sqm @ Rs 678.28 / sqm	Rs 14939.80
15	5.9.6 Centering and shuttering including strutting, etc. and removal of form for:Columns, Pillars, Piers, Abutments, Posts and Struts		
		Net Total Quantity	11.520 sqm
		Say 11.520 sqm @ Rs 901.48 / sqm	Rs 10385.05
16	13.7.1 12 mm cement plaster finished with a floating coat of neat cement of mix:1:3 (1 cement : 3 fine sand)		
		Net Total Quantity	187.680 sqm
		Say 187.680 sqm @ Rs 418.79 / sqm	Rs 78598.51
17	13.8.2 15 mm cement plaster on rough side of single or half brick wall finished with a floating coat of neat cement of mix:1: 4 (1 cement : 4 fine sand)		
		Net Total Quantity	307.362 sqm
		Say 307.362 sqm @ Rs 453.75 / sqm	Rs 139465.51
18	13.44.1 Finishing walls with water proofing cement paint of required shade:New work (Two or more coats applied @ 3.84 kg/10 sqm)		
		Net Total Quantity	495.043 sqm
		Say 495.043 sqm @ Rs 112.09 / sqm	Rs 55489.37
19	13.50.1 Applying priming coat:With ready mixed pink or Grey primer of approved and manufacture on wood work (hard and soft wood)		
		Net Total Quantity	9.000 sqm
		Say 9.000 sqm @ Rs 70.13 / sqm	Rs 631.17
20	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		
		Net Total Quantity	15.601 sqm
		Say 15.601 sqm @ Rs 154.62 / sqm	Rs 2412.23

21	13.71 Lettering with black Japan pint of approved brand and manufacture		
		Net Total Quantity	1500.000 Letterxcm ht
		Say 1500.000 Letterxcm ht @ Rs 5.80 / Letterxcm ht	Rs 8700.00
22	od148939/2018_2019 Providing sanitary facilities and electrical works including water closet ,flushing cistern ,wash basin,septic tank and 100ltr water tank and other required sanitary and electrical fittings.		
		Net Total Quantity	1.000 No
		Say 1.000 No @ Rs 86206.16 / No	Rs 86206.16
23	od148926/2018_2019 Dry rubble masonry with hard stone in foundation and plinth including levelling up with cement concrete 1:6:12 (1 cement : 6 coarse sand : 12 graded stone aggregate 20 mm nominal size) up to plinth level with:		
		Net Total Quantity	6.783 cum
		Say 6.783 cum @ Rs 4957.19 / cum	Rs 33624.62
24	11.21.1.1 Providing and fixing 10 mm thick acid and /or alkali resistant tiles of approved make and colour using acid and / or alkali resisting mortar bedding, and joints filled with acid and /or alkali resisting cement as per IS : 4457, complete as per the direction of Engineer-in-Charge.In flooring on a bed of 10 mm thick mortar 1:4 (1 acid proof cement : 4 coarse sand)Acid and alkali resistant tile		
		Net Total Quantity	4.200 sqm
		Say 4.200 sqm @ Rs 1836.85 / sqm	Rs 7714.77
25	11.21.2.1 Providing and fixing 10 mm thick acid and /or alkali resistant tiles of approved make and colour using acid and / or alkali resisting mortar bedding, and joints filled with acid and /or alkali resisting cement as per IS : 4457, complete as per the direction of Engineer-in-Charge.In dado/ skirting on 12 mm thick mortar 1:4 (1 acid proof cement : 4 coarse sand)Acid and alkali resistant tile		
		Net Total Quantity	24.040 sqm
		Say 24.040 sqm @ Rs 1975.33 / sqm	Rs 47486.93
18Appendix B - (6) - construction of intermediate pump house at Nariyanpara- (b) Construction of protection wall and compound wall (Cost Index:41.53 %)			
1	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		
		Net Total Quantity	41.400 cum
		Say 41.400 cum @ Rs 309.95 / cum	Rs 12831.93

2	4.1.5 Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level:1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size)	
Net Total Quantity		5.520 cum
Say 5.520 cum @ Rs 7690.32 / cum		Rs 42450.57
3	7.1.1 Random rubble masonry with hard stone in foundation and plinth including levelling up with cement concrete 1:6:12 (1 cement : 6 coarse sand : 12 graded stone aggregate 20 mm nominal size) up to plinth level with:Cement mortar 1:6 (1 cement : 6 coarse sand)	
Net Total Quantity		33.120 cum
Say 33.120 cum @ Rs 7520.41 / cum		Rs 249075.98
4	5.2.2 Reinforced cement concrete work in walls (any thickness), including attached pilasters, buttresses, plinth and string courses, fillets, columns, pillars, piers, abutments, posts and struts etc. up tot floor five level excluding cost of centering, shuttering, finishing and reinforcement :1:1.5:3(1 cement : 1.5 coarse sand : 3 graded stone aggregate 20 mm nominal size)	
Net Total Quantity		3.795 cum
Say 3.795 cum @ Rs 11433.93 / cum		Rs 43391.76
5	50.2.25.1 Filling with contractor's own earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20 cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 m and lift up to 1.5 m as per direction of site Engineer-in-charge	
Net Total Quantity		48.600 cum
Say 48.600 cum @ Rs 548.85 / cum		Rs 26674.11
6	50.6.1.3 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 above floor two level up to floor V level thickness 20cm and above in: CM 1:6 (1 cement :6 coarse sand) etc complete	
Net Total Quantity		19.201 cum
Say 19.201 cum @ Rs 7784.73 / cum		Rs 149474.60
7	13.7.2 12 mm cement plaster finished with a floating coat of neat cement of mix:1:4 (1 cement : 4 fine sand)	
Net Total Quantity		204.800 sqm
Say 204.800 sqm @ Rs 403.29 / sqm		Rs 82593.79
8	50.10.1 Steel work in built up G I tubular (round, square or rectangular hollow tubes etc.) trusses etc., including cutting, hoisting,fixing in position and applying a priming coat of approved steel primer, including welding and bolted with special shaped washers etc. complete	

Net Total Quantity		61.621 kg
Say 61.621 kg @ Rs 198.21 / kg		Rs 12213.90
19Appendix B - (7) - Supplying and laying 80mm GI pumping main from sump at TP to Alady Kurisumala GLSR - (a) Cost of materials (Cost Index:41.53 %)		
1	od190319/2018_2019 Supply of 80mm GI pipe(m)	
Net Total Quantity		310.000 metre
Say 310.000 metre @ Rs 830.16 / metre		Rs 257349.60
2	od190323/2018_2019 Specials for 80mm GI pipe	
Net Total Quantity		1.000 set
Say 1.000 set @ Rs 21417.90 / set		Rs 21417.90
3	100.98.428 Supply of CI Non Return Valve, Conforming to IS 5312 Part I - 1984, PN 1.6, Size 80mm.	
Net Total Quantity		2.000 No
Say 2.000 No @ Rs 5943.40 / No		Rs 11886.80
4	100.98.440 Supply of CI Air Valve, Conforming to IS 14848 - 2000, Single Orifice, Small Orifice Type S1, Size 25mm.	
Net Total Quantity		2.000 No
Say 2.000 No @ Rs 5636.75 / No		Rs 11273.50
20Appendix B - (7) - Supplying and laying 80mm GI pumping main from sump at TP to Alady Kurisumala GLSR- (b) Working charges (Cost Index:41.53 %)		
1	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 intial lead of 50m and lift upto 1.50m(intial depth 0 m 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 10m3 blasting) (Ref. Item No. 1004 A of T C)	
Net Total Quantity		8.000 cum
Say 8.000 cum @ Rs 4093.40 / cum		Rs 32747.20
2	100.12.8 Conveying and fixing G.I. pipes complete with G.I. fittings including trenching and refilling etc. but excluding cost of pipes and fittings - External work. 80 mm dia nominal bore Data derived from item no.18.12.8 of DAR Data for 10 m	
Net Total Quantity		310.000 metre

Say 310.000 metre @ Rs 217.74 / metre		Rs 67499.40
3	100.31.2.1 "Conveying and fixing C.I. sluice valves (with cap) by providing complete with bolts, nuts, rubber insertions etc. excluding the cost of valve (the tail pieces if required will be paid separately) : 80 mm diameter. Class II" Observed Data derived from item no.18.31.of DAR	
Net Total Quantity		2.000 Nos
Say 2.000 Nos @ Rs 652.74 / Nos		Rs 1305.48
4	100.32.1 Conveying and fixing C I Single acting Air Valve of approved quality with bolts,nuts,rubber insertions etc . excluding the cost of air valve(the tail pieces if required will be paid seperately): 25 mm Single acting Air Valve Observed Data derived from item no.18.59.of DAR	
Net Total Quantity		2.000 Nos
Say 2.000 Nos @ Rs 146.63 / Nos		Rs 293.26
5	5.2.2 Reinforced cement concrete work in walls (any thickness), including attached pilasters, buttresses, plinth and string courses, fillets, columns, pillars, piers, abutments, posts and struts etc. up tot floor five level excluding cost of centering, shuttering, finishing and reinforcement :1:1.5:3(1 cement : 1.5 coarse sand : 3 graded stone aggregate 20 mm nominal size)	
Net Total Quantity		4.557 cum
Say 4.557 cum @ Rs 11433.93 / cum		Rs 52104.42
6	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	
Net Total Quantity		227.851 kilogram
Say 227.851 kilogram @ Rs 102.61 / kilogram		Rs 23379.79
7	5.9.1 Centering and shuttering including strutting, etc. and removal of form for:Foundations, footings, bases of columns, etc for mass concrete	
Net Total Quantity		40.500 sqm
Say 40.500 sqm @ Rs 350.00 / sqm		Rs 14175.00
8	od1153/2019_2020 DOWEL BARS - Supplying and providing MS dowel bars of size 16 mm dia of 2m long (1m in rock and 1m in concrete) including drilling holes of 20mm dia to a depth of 1m in rock and filling the gap with cement grout(0.10kg/each) etc complete.	
Net Total Quantity		200.000 No
Say 200.000 No @ Rs 481.80 / No		Rs 96360.00

9	od1154/2019_2020 80mm GI pipes by cutting and jointing by three run welding to make a water tight point, painting the welded portion, testing the line to the required pressure, including the charges hire and conveyance of tools, plant and materials to site, as per the direction of departmental officers etc. complete.		
		Net Total Quantity	45.000 No
		Say 45.000 No @ Rs 468.28 / No	Rs 21072.60
21 Appendix B - (8)- Line charging, stabilization & interconnection		(Cost Index: 41.53 %)	
No Specifications added under this Estimate			
22 Appendix B - (8)- Line charging, stabilization & interconnection - (a) Interconnection work of Distribution Zone I from T P sump using 200 mm D I K9 Pipe		(Cost Index: 41.53 %)	
1	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 1.5 m, including getting out the excavated soil, and then returning the soil as required, in layers not exceeding 20 cm 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 : All kinds of soil (Ref. Item No. 2.10.1 of DSR)		
		Net Total Quantity	67.200 cum
		Say 67.200 cum @ Rs 579.85 / cum	Rs 38965.92
2	100.1.5 Excavating trenches of required width for pipes, cables, etc including excavation for sockets, and dressing of sides, ramming of bottoms, depth up to 1.5 m, including getting out the excavated soil, and then returning the soil as required, in layers not exceeding 20 cm 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 :" Ordinary Rock. (Ref. Item No. 2.13.1 of DSR)		
		Net Total Quantity	19.201 cum
		Say 19.201 cum @ Rs 842.10 / cum	Rs 16169.16
3	100.2.1 Excavation work by mechanical means (Hydraulic excavator) / manual means in foundation trenches or drains (not exceeding 1.5 m in width or 10 m ² 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 soils as directed, within a lead of 50 m. Medium Rock (Requiring Blasting) New Data derived from Item No. 2.9.2 of DAR.		
		Net Total Quantity	6.721 cum
		Say 6.721 cum @ Rs 749.12 / cum	Rs 5034.84

4	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 1.5 m, including getting out the excavated soil, and then returning the soil as required, in layers not exceeding 20 cm 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 : Hard Rock(Blasting Prohibited) (Ref. Item No. 2.13.3 Of DSR)	
Net Total Quantity		2.880 cum
Say 2.880 cum @ Rs 1624.48 / cum		Rs 4678.50
5	100.8.1 Fencing one side of trenches, 1.50 m height with two rows of 10 cm plastic caution tape in vertical casuarina pole (girth 15cm to 24cm) fixed at 2 m intervals. (Data Prepared based on PWD SDB - Item No.1009)	
Net Total Quantity		100.000 metre
Say 100.000 metre @ Rs 28.82 / metre		Rs 2882.00
6	50.2.25.1 Filling with contractor's own earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20 cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 m and lift up to 1.5 m as per direction of site Engineer-in-charge	
Net Total Quantity		5.000 cum
Say 5.000 cum @ Rs 548.85 / cum		Rs 2744.25
7	100.14.3 Conveying and laying S&S Centrifugally Cast (Spun) / Ductile Iron Pipes conforming to IS: 8329 excluding cost of pipes and specials : 200 mm dia Ductile Iron Class K-9 Pipes Data derived from 18.72.17 in DAR	
Net Total Quantity		100.000 metre
Say 100.000 metre @ Rs 127.45 / metre		Rs 12745.00
8	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	
Net Total Quantity		20.000 joint
Say 20.000 joint @ Rs 270.11 / joint		Rs 5402.20
9	18.30.5 Providing flanged joints to double flanged C.I./ D.I pipes and specials, including testing of joints:200 mm diameter pipe	
Net Total Quantity		3.000 Nos
Say 3.000 Nos @ Rs 436.83 / Nos		Rs 1310.49

10	18.67.1 Providing and laying S & S C.I. Standard specials suitable for mechanical jointing as per IS 13382:Upto 300 mm dia		
		Net Total Quantity	0.960 quintal
		Say 0.960 quintal @ Rs 14708.65 / quintal	Rs 14120.30
11	18.25.1 Providing and laying S & S C.I standard specials such as tees, bends, collars, tapers, caps etc. (Heavy class):Upto 300 mm dia		
		Net Total Quantity	0.930 quintal
		Say 0.930 quintal @ Rs 6536.99 / quintal	Rs 6079.40
12	18.83.5 Labour for cutting C.I. pipe with steel saw.200 mm diameter C.I. pipe		
		Net Total Quantity	7.000 Each Cut
		Say 7.000 Each Cut @ Rs 449.57 / Each Cut	Rs 3146.99
13	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		
		Net Total Quantity	100.000 metre
		Say 100.000 metre @ Rs 41.56 / metre	Rs 4156.00
14	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 : 4 graded stone aggregate 20 mm nominal size)		
		Net Total Quantity	3.000 cum
		Say 3.000 cum @ Rs 8340.93 / cum	Rs 25022.79
15	5.9.1 Centering and shuttering including strutting, etc. and removal of form for:Foundations, footings, bases of columns, etc for mass concrete		
		Net Total Quantity	12.000 sqm
		Say 12.000 sqm @ Rs 350.00 / sqm	Rs 4200.00
16	100.31.1.5 "Conveying and fixing C.I. sluice valves (with cap) by providing complete with bolts, nuts, rubber insertions etc. excluding the cost of valve (the tail pieces if required will be paid separately) : 200 mm diameter. Class I" Data derived from item no.18.31.4.1 of DAR		
		Net Total Quantity	1.000 Nos
		Say 1.000 Nos @ Rs 1625.90 / Nos	Rs 1625.90

17	100.32.3 Conveying and fixing C I Single acting Air Valve of approved quality with bolts,nuts,rubber insertions etc . excluding the cost of air valve(the tail pieces if required will be paid seperately): 50 mm Double acting Air Valve Data derived from item no.18.59.1 of DAR	
		Net Total Quantity 2.000 Nos
		Say 2.000 Nos @ Rs 229.21 / Nos Rs 458.42
18	od190175/2018_2019 Construction of RCC valve chamber of size 1mx1mx1m -cost excavation work,75mm thick M10 concrete base,125mm side wall,150mm bottom and cover slab of chamber with M20 concrete with reinforcement including plastering inside and out side of wall.etc.complete.including man hole cover.	
		Net Total Quantity 1.000 No
		Say 1.000 No @ Rs 42076.66 / No Rs 42076.66
19	100.98.117 Supply of DI K9 Pipe Conforming to IS 8329/2000, 200mm Dia.	
		Net Total Quantity 100.000 metre
		Say 100.000 metre @ Rs 2589.08 / metre Rs 258908.00
20	100.98.435 Supply of CI Air Valve, Conforming to IS 14848 - 2000, Kinetic Air Valve Type DK, Size 50mm.	
		Net Total Quantity 2.000 No
		Say 2.000 No @ Rs 7951.65 / No Rs 15903.30
21	100.98.461 Supply of CI Double Flanged Sluice Valve Conforming to IS 14846 - 2000, Sluice Valve with Cap PN 1.6, Size 200mm.	
		Net Total Quantity 1.000 No
		Say 1.000 No @ Rs 23723.65 / No Rs 23723.65
23Appendix B - (8)- Line charging, stabilization& interconnection- (b) Interconnection work to Zone 1A- Marykulam using 80 mm G I pipe (Cost Index:41.53 %)		
1	100.12.8 Conveying and fixing G.I. pipes complete with G.I. fittings including trenching and refilling etc. but excluding cost of pipes and fittings - External work. 80 mm dia nominal bore Data derived from item no.18.12.8 of DAR Data for 10 m	
		Net Total Quantity 250.000 metre
		Say 250.000 metre @ Rs 217.74 / metre Rs 54435.00

2	100.31.1.1 "Conveying and fixing C.I. sluice valves (with cap) by providing complete with bolts, nuts, rubber insertions etc. excluding the cost of valve (the tail pieces if required will be paid separately) :80 mm diameter. Class I" Observed Data derived from item no.18.31.of DAR	
		Net Total Quantity 1.000 Nos
		Say 1.000 Nos @ Rs 613.74 / Nos Rs 613.74
3	od190319/2018_2019 Supply of 80mm GI pipe(m)	
		Net Total Quantity 250.000 metre
		Say 250.000 metre @ Rs 830.16 / metre Rs 207540.00
4	od3655/2019_2020 Specials for 80 mm GI(m) pipe - 10 % of value of pipe supply.	
		Net Total Quantity 1.000 set
		Say 1.000 set @ Rs 17272.50 / set Rs 17272.50
5	100.98.457 Supply of CI Double Flanged Sluice Valve Conforming to IS 14846 - 2000, Sluice Valve with Cap PN 1.6, Size 80mm.	
		Net Total Quantity 1.000 No
		Say 1.000 No @ Rs 6624.05 / No Rs 6624.05
24Appendix B - (8)- Line charging, stabilization& interconnection - (c)- Interconnection work to Labbakada Tank using 150 mm D I K9 Pipe for Pumping main (Cost Index:41.53 %)		
1	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 1.5 m, including getting out the excavated soil, and then returning the soil as required, in layers not exceeding 20 cm in depth, including consolidatingeach deposited layer by ramming, watering, etc. and disposing of surplus excavated soil as directed, within a lead of 50 m : All kinds of soil (Ref. Item No. 2.10.1 of DSR)	
		Net Total Quantity 115.920 cum
		Say 115.920 cum @ Rs 579.85 / cum Rs 67216.21

2	100.1.5 Excavating trenches of required width for pipes, cables, etc including excavation for sockets, and dressing of sides, ramming of bottoms, depth up to 1.5 m, including getting out the excavated soil, and then returning the soil as required, in layers not exceeding 20 cm 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 :" Ordinary Rock. (Ref. Item No. 2.13.1 of DSR)	
Net Total Quantity		33.120 cum
Say 33.120 cum @ Rs 842.10 / cum		Rs 27890.35
3	100.2.1 Excavation work by mechanical means (Hydraulic excavator) / manual means in foundation trenches or drains (not exceeding 1.5 m in width or 10 m ² 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 soils as directed, within a lead of 50 m. Medium Rock (Requiring Blasting) New Data derived from Item No.2.9.2 of DAR.	
Net Total Quantity		11.592 cum
Say 11.592 cum @ Rs 749.12 / cum		Rs 8683.80
4	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 1.5 m, including getting out the excavated soil, and then returning the soil as required, in layers not exceeding 20 cm 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 : Hard Rock(Blasting Prohibited) (Ref. Item No. 2.13.3 Of DSR)	
Net Total Quantity		4.968 cum
Say 4.968 cum @ Rs 1624.48 / cum		Rs 8070.42
5	100.8.1 Fencing one side of trenches, 1.50 m height with two rows of 10 cm plastic caution tape in vertical casuarina pole (girth 15cm to 24cm) fixed at 2 m intervals. (Data Prepared based on PWD SDB - Item No.1009)	
Net Total Quantity		180.000 metre
Say 180.000 metre @ Rs 28.82 / metre		Rs 5187.60
6	50.2.25.1 Filling with contractor's own earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20 cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 m and lift up to 1.5 m as per direction of site Engineer-in-charge	
Net Total Quantity		5.000 cum

Say 5.000 cum @ Rs 548.85 / cum		Rs 2744.25
7	100.14.2 Conveying and laying S&S Centrifugally Cast (Spun) / Ductile Iron Pipes conforming to IS: 8329 excluding cost of pipes and specials : 150 mm dia Ductile Iron Class K-9 Pipes Data derived from 18.72.16 in DAR	
Net Total Quantity		180.000 metre
Say 180.000 metre @ Rs 91.50 / metre		Rs 16470.00
8	18.70.2 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:150 mm dia pipes	
Net Total Quantity		28.000 joint
Say 28.000 joint @ Rs 184.13 / joint		Rs 5155.64
9	18.30.4 Providing flanged joints to double flanged C.I./ D.I pipes and specials, including testing of joints:150 mm diameter pipe	
Net Total Quantity		7.000 Nos
Say 7.000 Nos @ Rs 402.30 / Nos		Rs 2816.10
10	18.67.1 Providing and laying S & S C.I. Standard specials suitable for mechanical jointing as per IS 13382:Upto 300 mm dia	
Net Total Quantity		0.310 quintal
Say 0.310 quintal @ Rs 14708.65 / quintal		Rs 4559.68
11	18.66.1 Providing and laying S&S.C.I Standard specials such as tees, bends, collars tapers and caps etc., suitable for flanged jointing as per IS: 1538:UPto 300 mm dia	
Net Total Quantity		2.120 quintal
Say 2.120 quintal @ Rs 9150.76 / quintal		Rs 19399.61
12	18.83.4 Labour for cutting C.I. pipe with steel saw.150 mm diameter C.I. pipe	
Net Total Quantity		8.000 Each Cut
Say 8.000 Each Cut @ Rs 337.12 / Each Cut		Rs 2696.96
13	100.35.2 Testing 150mm DI/CI pipeline with potable water to the required test pressure 150 mm dia Observed Data derived from item no.1018 of PHED DATA	
Net Total Quantity		180.000 metre

Say 180.000 metre @ Rs 32.88 / metre		Rs 5918.40
14	100.98.116 Supply of DI K9 Pipe Conforming to IS 8329/2000, 150mm Dia.	
Net Total Quantity		180.000 metre
Say 180.000 metre @ Rs 1890.44 / metre		Rs 340279.20
25Appendix B - (8)- Line charging, stabilization& interconnection - (d) Interconnection work to distribution line at Labbakada using 250 mm D I k9 pipe (Cost Index:41.53 %)		
1	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 1.5 m, including getting out the excavated soil, and then returning the soil as required, in layers not exceeding 20 cm in depth, including consolidatingeach deposited layer by ramming, watering, etc. and disposing of surplus excavated soil as directed, within a lead of 50 m : All kinds of soil (Ref. Item No. 2.10.1 of DSR)	
Net Total Quantity		67.200 cum
Say 67.200 cum @ Rs 579.85 / cum		Rs 38965.92
2	100.1.5 Excavating trenches of required width for pipes, cables, etc including excavation for sockets, and dressing of sides, ramming of bottoms, depth up to 1.5 m, including getting out the excavated soil, and then returning the soil as required, in layers not exceeding 20 cm in depth, including consolidatingeach deposited layer by ramming, watering, etc. and disposing of surplus excavated soil as directed, within a lead of 50 m :" Ordinary Rock. (Ref. Item No. 2.13.1 of DSR)	
Net Total Quantity		19.201 cum
Say 19.201 cum @ Rs 842.10 / cum		Rs 16169.16
3	100.2.1 Excavation work by mechanical means (Hydraulic excavator) / manual means in foundation trenches or drains (not exceeding 1.5 m in width or 10 m2 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 soils as directed, within a lead of 50 m. Medium Rock (Requiring Blasting) New Data derived from Item No.2.9.2 of DAR.	
Net Total Quantity		6.721 cum
Say 6.721 cum @ Rs 749.12 / cum		Rs 5034.84

4	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 1.5 m, including getting out the excavated soil, and then returning the soil as required, in layers not exceeding 20 cm 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 : Hard Rock(Blasting Prohibited) (Ref. Item No. 2.13.3 Of DSR)	
Net Total Quantity		2.880 cum
Say 2.880 cum @ Rs 1624.48 / cum		Rs 4678.50
5	100.8.1 Fencing one side of trenches, 1.50 m height with two rows of 10 cm plastic caution tape in vertical casuarina pole (girth 15cm to 24cm) fixed at 2 m intervals. (Data Prepared based on PWD SDB - Item No.1009)	
Net Total Quantity		100.000 metre
Say 100.000 metre @ Rs 28.82 / metre		Rs 2882.00
6	50.2.25.1 Filling with contractor's own earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20 cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 m and lift up to 1.5 m as per direction of site Engineer-in-charge	
Net Total Quantity		5.000 cum
Say 5.000 cum @ Rs 548.85 / cum		Rs 2744.25
7	100.14.4 Conveying and laying S&S Centrifugally Cast (Spun) / Ductile Iron Pipes conforming to IS: 8329 excluding cost of pipes and specials : 250 mm dia Ductile Iron Class K-9 Pipes Data derived from 18.72.18 in DAR	
Net Total Quantity		100.000 metre
Say 100.000 metre @ Rs 170.19 / metre		Rs 17019.00
8	18.70.4 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:250 mm dia pipes	
Net Total Quantity		18.000 joint
Say 18.000 joint @ Rs 329.84 / joint		Rs 5937.12
9	18.30.6 Providing flanged joints to double flanged C.I./ D.I pipes and specials, including testing of joints:250 mm diameter pipe	
Net Total Quantity		5.000 Nos
Say 5.000 Nos @ Rs 595.56 / Nos		Rs 2977.80

10	18.67.1 Providing and laying S & S C.I. Standard specials suitable for mechanical jointing as per IS 13382:Upto 300 mm dia		
		Net Total Quantity	0.720 quintal
		Say 0.720 quintal @ Rs 14708.65 / quintal	Rs 10590.23
11	18.66.1 Providing and laying S&S.C.I Standard specials such as tees, bends, collars tapers and caps etc., suitable for flanged jointing as per IS: 1538:UPto 300 mm dia		
		Net Total Quantity	1.360 quintal
		Say 1.360 quintal @ Rs 9150.76 / quintal	Rs 12445.03
12	18.83.6 Labour for cutting C.I. pipe with steel saw.250 mm diameter C.I. pipe		
		Net Total Quantity	5.000 Each Cut
		Say 5.000 Each Cut @ Rs 559.11 / Each Cut	Rs 2795.55
13	100.35.4 Testing 250mm DI/CI pipeline with potable water to the required test pressure . 250 mm dia Observed Data derived from item no.1022 of PHED DATA		
		Net Total Quantity	100.000 metre
		Say 100.000 metre @ Rs 52.99 / metre	Rs 5299.00
14	100.31.1.6 "Conveying and fixing C.I. sluice valves (with cap) by providing complete with bolts, nuts, rubber insertions etc. excluding the cost of valve (the tail pieces if required will be paid separately) : 250 mm diameter. Class I" Data derived from item no.18.31.5.1 of DAR		
		Net Total Quantity	1.000 Nos
		Say 1.000 Nos @ Rs 2304.82 / Nos	Rs 2304.82
15	100.32.3 Conveying and fixing C I Single acting Air Valve of approved quality with bolts,nuts,rubber insertions etc . excluding the cost of air valve(the tail pieces if required will be paid seperately): 50 mm Double acting Air Valve Data derived from item no.18.59.1 of DAR		
		Net Total Quantity	1.000 Nos
		Say 1.000 Nos @ Rs 229.21 / Nos	Rs 229.21
16	100.98.118 Supply of DI K9 Pipe Conforming to IS 8329/2000, 250mm Dia.		
		Net Total Quantity	100.000 metre
		Say 100.000 metre @ Rs 3616.52 / metre	Rs 361652.00

17	100.98.462 Supply of CI Double Flanged Sluice Valve Conforming to IS 14846 - 2000, Sluice Valve with Cap PN 1.6, Size 250mm.	
Net Total Quantity		1.000 No
Say 1.000 No @ Rs 34361.80 / No		Rs 34361.80
18	100.98.444 Supply of CI Air Valve, Conforming to IS 14848 - 2000, Single Orifice, Large Orifice Type S2, Size 50mm.	
Net Total Quantity		1.000 No
Say 1.000 No @ Rs 6110.65 / No		Rs 6110.65
26Appendix B - (8)- Line charging, stabilization& interconnection - (e) Interconnection to Kochuthovala Gravity main using 125 mm G I pipe (Cost Index:41.53 %)		
1	100.12.10 "Conveying and fixing G.I. pipes complete with G.I. fittings including trenching and refilling etc. but excluding cost of pipes and fittings - External work. 125 mm dia nominal bore Observed Data derived from item no.18.12 of DAR	
Net Total Quantity		100.000 metre
Say 100.000 metre @ Rs 274.99 / metre		Rs 27499.00
2	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 : 4 graded stone aggregate 20 mm nominal size)	
Net Total Quantity		2.049 cum
Say 2.049 cum @ Rs 8340.93 / cum		Rs 17090.57
3	5.9.1 Centering and shuttering including strutting, etc. and removal of form for:Foundations, footings, bases of columns, etc for mass concrete	
Net Total Quantity		10.241 sqm
Say 10.241 sqm @ Rs 350.00 / sqm		Rs 3584.35
4	od189995/2018_2019 Supplying 125mm GI(m) pipe	
Net Total Quantity		100.000 metre
Say 100.000 metre @ Rs 1434.45 / metre		Rs 143445.00
5	od3663/2019_2020 Specials for 125 mm GI(m) pipe - 10 % of value of pipe supply.	
Net Total Quantity		1.000 set
Say 1.000 set @ Rs 14345.00 / set		Rs 14345.00

27 Appendix B - (8)- Line charging, stabilization & interconnection - (f) Interconnection work to Distribution from Kochuthovala G L tank using 200 mm D I pipe (Cost Index:41.53 %)		
1	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 1.5 m, including getting out the excavated soil, and then returning the soil as required, in layers not exceeding 20 cm 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 : All kinds of soil (Ref. Item No. 2.10.1 of DSR)	
		Net Total Quantity 67.200 cum
Say 67.200 cum @ Rs 579.85 / cum		Rs 38965.92
2	100.1.5 Excavating trenches of required width for pipes, cables, etc including excavation for sockets, and dressing of sides, ramming of bottoms, depth up to 1.5 m, including getting out the excavated soil, and then returning the soil as required, in layers not exceeding 20 cm 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 :" Ordinary Rock. (Ref. Item No. 2.13.1 of DSR)	
		Net Total Quantity 19.201 cum
Say 19.201 cum @ Rs 842.10 / cum		Rs 16169.16
3	100.2.1 Excavation work by mechanical means (Hydraulic excavator) / manual means in foundation trenches or drains (not exceeding 1.5 m in width or 10 m ² 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 soils as directed, within a lead of 50 m. Medium Rock (Requiring Blasting) New Data derived from Item No.2.9.2 of DAR.	
		Net Total Quantity 6.721 cum
Say 6.721 cum @ Rs 749.12 / cum		Rs 5034.84
4	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 1.5 m, including getting out the excavated soil, and then returning the soil as required, in layers not exceeding 20 cm 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 : Hard Rock(Blasting Prohibited) (Ref. Item No. 2.13.3 Of DSR)	
		Net Total Quantity 2.880 cum
Say 2.880 cum @ Rs 1624.48 / cum		Rs 4678.50

5	100.8.1 Fencing one side of trenches, 1.50 m height with two rows of 10 cm plastic caution tape in vertical casuarina pole (girth 15cm to 24cm) fixed at 2 m intervals. (Data Prepared based on PWD SDB - Item No.1009)	
Net Total Quantity		100.000 metre
Say 100.000 metre @ Rs 28.82 / metre		Rs 2882.00
6	50.2.25.1 Filling with contractor's own earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20 cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 m and lift up to 1.5 m as per direction of site Engineer-in-charge	
Net Total Quantity		5.000 cum
Say 5.000 cum @ Rs 548.85 / cum		Rs 2744.25
7	100.14.3 Conveying and laying S&S Centrifugally Cast (Spun) / Ductile Iron Pipes conforming to IS: 8329 excluding cost of pipes and specials : 200 mm dia Ductile Iron Class K-9 Pipes Data derived from 18.72.17 in DAR	
Net Total Quantity		100.000 metre
Say 100.000 metre @ Rs 127.45 / metre		Rs 12745.00
8	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	
Net Total Quantity		18.000 joint
Say 18.000 joint @ Rs 270.11 /joint		Rs 4861.98
9	18.30.5 Providing flanged joints to double flanged C.I./ D.I pipes and specials, including testing of joints:200 mm diameter pipe	
Net Total Quantity		4.000 Nos
Say 4.000 Nos @ Rs 436.83 / Nos		Rs 1747.32
10	18.67.1 Providing and laying S & S C.I. Standard specials suitable for mechanical jointing as per IS 13382:Upto 300 mm dia	
Net Total Quantity		0.540 quintal
Say 0.540 quintal @ Rs 14708.65 / quintal		Rs 7942.67
11	18.66.1 Providing and laying S&S.C.I Standard specials such as tees, bends, collars tapers and caps etc., suitable for flanged jointing as per IS: 1538:UPto 300 mm dia	
Net Total Quantity		1.960 quintal

Say 1.960 quintal @ Rs 9150.76 / quintal		Rs 17935.49
12	18.83.5 Labour for cutting C.I. pipe with steel saw.200 mm diameter C.I. pipe	
Net Total Quantity		5.000 Each Cut
Say 5.000 Each Cut @ Rs 449.57 / Each Cut		Rs 2247.85
13	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	
Net Total Quantity		100.000 metre
Say 100.000 metre @ Rs 41.56 / metre		Rs 4156.00
14	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 : 4 graded stone aggregate 20 mm nominal size)	
Net Total Quantity		4.000 cum
Say 4.000 cum @ Rs 8340.93 / cum		Rs 33363.72
15	5.9.1 Centering and shuttering including strutting, etc. and removal of form for:Foundations, footings, bases of columns, etc for mass concrete	
Net Total Quantity		16.000 sqm
Say 16.000 sqm @ Rs 350.00 / sqm		Rs 5600.00
16	od192891/2018_2019 Construction of RCC valve chamber of size 1mx1mx1.4 m cost of excavation work,75mm thick M10 concrete base,150 mm side wall,150mm bottom and cover slab of chamber with M20 concrete with reinforcement including plastering inside and out side of wall.etc.complete.	
Net Total Quantity		1.000 No
Say 1.000 No @ Rs 42969.05 / No		Rs 42969.05
17	100.31.1.5 "Conveying and fixing C.I. sluice valves (with cap) by providing complete with bolts, nuts, rubber insertions etc. excluding the cost of valve (the tail pieces if required will be paid separately) : 200 mm diameter. Class I" Data derived from item no.18.31.4.1 of DAR	
Net Total Quantity		1.000 Nos
Say 1.000 Nos @ Rs 1625.90 / Nos		Rs 1625.90

18	100.32.1 Conveying and fixing C I Single acting Air Valve of approved quality with bolts,nuts,rubber insertions etc . excluding the cost of air valve(the tail pieces if required will be paid seperately): 25 mm Single acting Air Valve Observed Data derived from item no.18.59.of DAR	
Net Total Quantity		1.000 Nos
Say 1.000 Nos @ Rs 146.63 / Nos		Rs 146.63
19	100.98.117 Supply of DI K9 Pipe Conforming to IS 8329/2000, 200mm Dia.	
Net Total Quantity		100.000 metre
Say 100.000 metre @ Rs 2589.08 / metre		Rs 258908.00
20	100.98.461 Supply of CI Double Flanged Sluice Valve Conforming to IS 14846 - 2000, Sluice Valve with Cap PN 1.6, Size 200mm.	
Net Total Quantity		1.000 No
Say 1.000 No @ Rs 23723.65 / No		Rs 23723.65
21	100.98.440 Supply of CI Air Valve, Conforming to IS 14848 - 2000, Single Orifice, Small Orifice Type S1, Size 25mm.	
Net Total Quantity		1.000 No
Say 1.000 No @ Rs 5636.75 / No		Rs 5636.75
28Appendix B - (8)- Line charging, stabilization& interconnection- (g) Interconnection between Idukkikavala to Market junction Kattappana (Cost Index:41.53 %)		
1	100.12.10 "Conveying and fixing G.I. pipes complete with G.I. fittings including trenching and refilling etc. but excluding cost of pipes and fittings - External work. 125 mm dia nominal bore Observed Data derived from item no.18.12 of DAR	
Net Total Quantity		950.000 metre
Say 950.000 metre @ Rs 274.99 / metre		Rs 261240.50
2	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)	
Net Total Quantity		90.000 cum
Say 90.000 cum @ Rs 2134.72 / cum		Rs 192124.80

3	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 : 4 graded stone aggregate 20 mm nominal size)	
Net Total Quantity		94.320 cum
Say 94.320 cum @ Rs 8340.93 / cum		Rs 786716.52
4	od189995/2018_2019 Supplying 125mm GI(m) pipe	
Net Total Quantity		950.000 metre
Say 950.000 metre @ Rs 1434.45 / metre		Rs 1362727.50
5	od3664/2019_2020 Specials for 125 mm GI(m) pipe - 10 % of value of pipe supply.	
Net Total Quantity		1.000 set
Say 1.000 set @ Rs 136277.50 / set		Rs 136277.50
29Appendix B - (8)- Line charging, stabilization& interconnection - (h) Gap filling works at various places of distribution system (Cost Index:41.53 %)		
1	100.12.6 Conveying and fixing G.I. pipes complete with G.I. fittings including trenching and refilling etc. but excluding cost of pipes and fittings - External work. 50 mm dia nominal bore Observed Data derived from item no.18.12.6 of DAR Data for 10 m	
Net Total Quantity		300.000 metre
Say 300.000 metre @ Rs 174.65 / metre		Rs 52395.00
2	100.12.7 Conveying and fixing G.I. pipes complete with G.I. fittings including trenching and refilling etc. but excluding cost of pipes and fittings - External work. 65 mm dia nominal bore Data derived from item no.18.12.7 of DAR Data for 10 m	
Net Total Quantity		450.000 metre
Say 450.000 metre @ Rs 217.39 / metre		Rs 97825.50
3	100.12.8 Conveying and fixing G.I. pipes complete with G.I. fittings including trenching and refilling etc. but excluding cost of pipes and fittings - External work. 80 mm dia nominal bore Data derived from item no.18.12.8 of DAR Data for 10 m	
Net Total Quantity		600.000 metre

Say 600.000 metre @ Rs 217.74 / metre		Rs 130644.00
4	100.12.9 Conveying and fixing G.I. pipes complete with G.I. fittings including trenching and refilling etc. but excluding cost of pipes and fittings - External work. 100 mm dia nominal bore Observed Data derived from item no.18.12 of DAR	
Net Total Quantity		300.000 metre
Say 300.000 metre @ Rs 245.48 / metre		Rs 73644.00
5	100.12.10 "Conveying and fixing G.I. pipes complete with G.I. fittings including trenching and refilling etc. but excluding cost of pipes and fittings - External work. 125 mm dia nominal bore Observed Data derived from item no.18.12 of DAR	
Net Total Quantity		150.000 metre
Say 150.000 metre @ Rs 274.99 / metre		Rs 41248.50
6	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)	
Net Total Quantity		5.760 cum
Say 5.760 cum @ Rs 8964.72 / cum		Rs 51636.79
7	od189999/2018_2019 Supply of 50mm GI pipe (M).	
Net Total Quantity		300.000 metre
Say 300.000 metre @ Rs 509.59 / metre		Rs 152877.00
8	od190454/2018_2019 Supply 65 mm GI pipe(m) as per direction	
Net Total Quantity		450.000 metre
Say 450.000 metre @ Rs 649.33 / metre		Rs 292198.50
9	od190319/2018_2019 Supply of 80mm GI pipe(m)	
Net Total Quantity		600.000 metre
Say 600.000 metre @ Rs 830.16 / metre		Rs 498096.00
10	od190456/2018_2019 Supply of 100 mm GI(m) pipe	
Net Total Quantity		300.000 metre
Say 300.000 metre @ Rs 1052.32 / metre		Rs 315696.00

11	od189995/2018_2019 Supplying 125mm GI(m) pipe		
		Net Total Quantity	150.000 metre
		Say 150.000 metre @ Rs 1434.45 / metre	Rs 215167.50
12	od269/2019_2020 Specials for GI (m) pipes- KIIFB Ayyappancovil Gap filling works - 50mm, 65mm, 80mm, 100mm, 125mm GI(m) pipes.		
		Net Total Quantity	1.000 set
		Say 1.000 set @ Rs 128868.00 / set	Rs 128868.00
30Appendix B - (8)- Line charging, stabilization& interconnection - (i) Leak rectification works in distribution system in Zone I, II, III, IV & VI (Cost Index:41.53 %)			
1	100.47.1.3 Leak rectification work in 50 mm PVC (Class 2 to 6) pipe line including detecting and locating leak, earth work excavation in all kinds of soil for for exposing leak portion of the pipe including tar cutting / concrete cutting, cutting the pipe diametrically perpendicular to the axis of pipe line with out causing any damages to the remaining portion, dismantling and lifting the pipe from trenches, smoothing the cut ends, conveying the new pipe to the site, cutting and lowering new pipe in to the trenches,placing in position aligning the pipe to line and level and jointing the new pipe with the existing pipe with solvent cement or or any available joint and testing the pipe line by operating the valves concerned, and rectifying the defects if noticed and without causing any damages to the existing utilities and refilling the trenches using excavated earth in layers not exceeding 20cm depth including consolidating each layers by ramming, watering, charges for removing surplus soil from work site, including hire for tools and plant, conveyance of tools and materials, bailing out water, providing caution boards,lighting,watching, ribbon fencing, traffic controlling etc.complete as per the direction of Departmental officers including the cost of pipe and PVC specials; PVC Pipes and specials shall be of good quality and conforming to relevant standards: All Socketed Jointing.		
		Net Total Quantity	20.000 Leak
		Say 20.000 Leak @ Rs 1399.52 / Leak	Rs 27990.40

2	<p>100.47.1.4</p> <p>Leak rectification work in 63 mm PVC (Class 2 to 6) pipe line including detecting and locating leak, earth work excavation in all kinds of soil for for exposing leak portion of the pipe including tar cutting / concrete cutting, cutting the pipe diametrically perpendicular to the axis of pipe line with out causing any damages to the remaining portion, dismantling and lifting the pipe from trenches, smoothening the cut ends, conveying the new pipe to the site, cutting and lowering new pipe in to the trenches,placing in position aligning the pipe to line and level and jointing the new pipe with the existing pipe with solvent cement or or any available joint and testing the pipe line by operating the valves concerned, and rectifying the defects if noticed and without causing any damages to the existing utilities and refilling the trenches using excavated earth in layers not exceeding 20cm depth including consolidating each layers by ramming, watering, charges for removing surplus soil from work site, including hire for tools and plant, conveyance of tools and materials, bailing out water, providing caution boards,lighting,watching, ribbon fencing, traffic controlling etc.complete as per the direction of Departmental officers including the cost of pipe and PVC specials; PVC Pipes and specials shall be of good quality and conforming to relevant standards: All Socketed Jointing.</p>	
Net Total Quantity		30.000 Leak
Say 30.000 Leak @ Rs 1692.18 / Leak		Rs 50765.40
3	<p>100.47.1.5</p> <p>Leak rectification work in 75 mm PVC (Class 2 to 6) pipe line including detecting and locating leak, earth work excavation in all kinds of soil for for exposing leak portion of the pipe including tar cutting / concrete cutting, cutting the pipe diametrically perpendicular to the axis of pipe line with out causing any damages to the remaining portion, dismantling and lifting the pipe from trenches, smoothening the cut ends, conveying the new pipe to the site, cutting and lowering new pipe in to the trenches,placing in position aligning the pipe to line and level and jointing the new pipe with the existing pipe with solvent cement or or any available joint and testing the pipe line by operating the valves concerned, and rectifying the defects if noticed and without causing any damages to the existing utilities and refilling the trenches using excavated earth in layers not exceeding 20cm depth including consolidating each layers by ramming, watering, charges for removing surplus soil from work site, including hire for tools and plant, conveyance of tools and materials, bailing out water, providing caution boards,lighting,watching, ribbon fencing, traffic controlling etc.complete as per the direction of Departmental officers including the cost of pipe and PVC specials; PVC Pipes and specials shall be of good quality and conforming to relevant standards; PVC Pipes and specials shall be of good quality and conforming to relevant standards: All Socketed Jointing.</p>	
Net Total Quantity		15.000 Leak
Say 15.000 Leak @ Rs 1817.26 / Leak		Rs 27258.90

4	<p>100.47.1.6 Leak rectification work in 90 mm PVC (Class 2 to 6) pipe line including detecting and locating leak, earth work excavation in all kinds of soil for for exposing leak portion of the pipe including tar cutting / concrete cutting, cutting the pipe diametrically perpendicular to the axis of pipe line with out causing any damages to the remaining portion, dismantling and lifting the pipe from trenches, smoothening the cut ends, conveying the new pipe to the site, cutting and lowering new pipe in to the trenches,placing in position aligning the pipe to line and level and jointing the new pipe with the existing pipe with solvent cement or or any available joint and testing the pipe line by operating the valves concerned, and rectifying the defects if noticed and without causing any damages to the existing utilities and refilling the trenches using excavated earth in layers not exceeding 20cm depth including consolidating each layers by ramming, watering, charges for removing surplus soil from work site, including hire for tools and plant, conveyance of tools and materials, bailing out water, providing caution boards,lighting,watching, ribbon fencing, traffic controlling etc.complete as per the direction of Departmental officers including the cost of pipe and PVC specials; PVC Pipes and specials shall be of good quality and conforming to relevant standards: All Socketed Jointing.</p>	
Net Total Quantity		15.000 Leak
Say 15.000 Leak @ Rs 2046.80 / Leak		Rs 30702.00
5	<p>100.47.2.1 Leak rectification work in 90 mm PVC (Class 2 to 6) pipe line including detecting and locating leak, earth work excavation in all kinds of soil for for exposing leak portion of the pipe including tar cutting / concrete cutting, cutting the pipe diametrically perpendicular to the axis of pipe line with out causing any damages to the balance portion, dismantling and lifting the pipe from trenches, smoothening the cut ends, conveying the new pipe, cutting and lowering new pipe in to the trenches,placing in position aligning the pipe to line and level and jointing the new pipe with the existing pipe with solvent cement or repairable joint and testing the pipe line by operating the valves concerned, and rectifying the defects if noticed and refilling the trenches in layers not exceeding 20cm depth including consolidating each layers by ramming, watering, charges for removing surplus soil from work site without causing any damages to the existing utilities, including hire for tools and plant, conveyance of tools and materials, bailing out water, providing caution boards,lighting, ribbon fencing, watching, traffic control etc.complete as per the direction of Departmental officers, including the cost of pipe & specials but excluding the cost of CIR Joints; PVC Pipes and specials shall be of good quality and conforming to relevant standards: Socket & CIR Jointing.</p>	
Net Total Quantity		7.000 Leak
Say 7.000 Leak @ Rs 2294.70 / Leak		Rs 16062.90

6	<p>100.47.2.2 Leak rectification work in 110 mm PVC (Class 2 to 6) pipe line including detecting and locating leak, earth work excavation in all kinds of soil for for exposing leak portion of the pipe including tar cutting / concrete cutting, cutting the pipe diametrically perpendicular to the axis of pipe line with out causing any damages to the balance portion, dismantling and lifting the pipe from trenches, smoothening the cut ends, conveying the new pipe, cutting and lowering new pipe in to the trenches,placing in position aligning the pipe to line and level and jointing the new pipe with the existing pipe with solvent cement or repairable joint and testing the pipe line by operating the valves concerned, and rectifying the defects if noticed and refilling the trenches in layers not exceeding 20cm depth including consolidating each layers by ramming, watering, charges for removing surplus soil from work site without causing any damages to the existing utilities, including hire for tools and plant, conveyance of tools and materials, bailing out water, providing caution boards,lighting, ribbon fencing, watching, traffic control etc.complete as per the direction of Departmental officers, including the cost of pipe & specials but excluding the cost of CIR Joints; PVC Pipes and specials shall be of good quality and conforming to relevant standards: Socket & CIR Jointing.</p>	
Net Total Quantity		10.000 Leak
Say 10.000 Leak @ Rs 2679.96 / Leak		Rs 26799.60
7	<p>100.47.2.3 Leak rectification work in 140 mm PVC (Class 2 to 6) pipe line including detecting and locating leak, earth work excavation in all kinds of soil for for exposing leak portion of the pipe including tar cutting / concrete cutting, cutting the pipe diametrically perpendicular to the axis of pipe line with out causing any damages to the balance portion, dismantling and lifting the pipe from trenches, smoothening the cut ends, conveying the new pipe, cutting and lowering new pipe in to the trenches,placing in position aligning the pipe to line and level and jointing the new pipe with the existing pipe with solvent cement or repairable joint and testing the pipe line by operating the valves concerned, and rectifying the defects if noticed and refilling the trenches in layers not exceeding 20cm depth including consolidating each layers by ramming, watering, charges for removing surplus soil from work site without causing any damages to the existing utilities, including hire for tools and plant, conveyance of tools and materials, bailing out water, providing caution boards,lighting, ribbon fencing, watching, traffic control etc.complete as per the direction of Departmental officers, including the cost of pipe & specials but excluding the cost of CIR Joints; PVC Pipes and specials shall be of good quality and conforming to relevant standards: Socket & CIR Jointing.</p>	
Net Total Quantity		10.000 Leak
Say 10.000 Leak @ Rs 3225.99 / Leak		Rs 32259.90

8	<p>100.47.2.4</p> <p>Leak rectification work in 160 mm PVC (Class 2 to 6) pipe line including detecting and locating leak, earth work excavation in all kinds of soil for for exposing leak portion of the pipe including tar cutting / concrete cutting, cutting the pipe diametrically perpendicular to the axis of pipe line with out causing any damages to the balance portion, dismantling and lifting the pipe from trenches, smoothening the cut ends, conveying the new pipe, cutting and lowering new pipe in to the trenches,placing in position aligning the pipe to line and level and jointing the new pipe with the existing pipe with solvent cement or repairable joint and testing the pipe line by operating the valves concerned, and rectifying the defects if noticed and refilling the trenches in layers not exceeding 20cm depth including consolidating each layers by ramming, watering, charges for removing surplus soil from work site without causing any damages to the existing utilities, including hire for tools and plant, conveyance of tools and materials, bailing out water, providing caution boards,lighting, ribbon fencing, watching, traffic control etc.complete as per the direction of Departmental officers, including the cost of pipe & specials but excluding the cost of CIR Joints; PVC Pipes and specials shall be of good quality and conforming to relevant standards: Socket & CIR Jointing.</p>	
Net Total Quantity		56.000 Leak
Say 56.000 Leak @ Rs 3690.21 / Leak		Rs 206651.76
9	<p>100.49.1.2</p> <p>Rectification of joint leakages in 150mm DI Pipe (cutting, removing and laying back a length of 1.0m from one side of the joint) including earth work excavation in all kinds of soil for exposing leak portion of the pipe including tar cutting / concrete cutting, by cutting and removing a portion of pipe from the damaged joint without causing any damages to the remaining portion of the line and specials and replacing the pipe with mechanical and tyton joint after cleaning the ends, centering the pipe, providing the joints, testing the line to the required test pressure, rectifying any defects noticed and refilling the trenches using excavated earth in layers not exceeding 20cm depth including consolidating each layers by ramming, watering, removing the surplus soil from the work site, without causing any damages to any other utilities, including the charges of hire and conveyance of tools, plants and materials to the leak site, bailing out water, lighting, watching, ribbon fencing, caution boards, traffic diversion but excluding cost of mechanical joint and as per the direction of departmental officers etc. complete.</p>	
Net Total Quantity		5.000 Leak
Say 5.000 Leak @ Rs 5858.48 / Leak		Rs 29292.40
10	<p>100.49.1.3</p> <p>Rectification of joint leakages in 200mm DI Pipe (cutting, removing and laying back a length of 1.0m from one side of the joint) including earth work excavation in all kinds of soil for exposing leak portion of the pipe including tar cutting / concrete cutting, by cutting and removing a portion of pipe from the damaged joint without causing any damages to the remaining portion of the line and specials and replacing the pipe with mechanical and tyton joint after cleaning the ends, centering the pipe, providing the joints, testing the line to the required test pressure, rectifying any defects noticed and refilling the trenches using excavated earth in layers not exceeding 20cm depth including consolidating each layers by ramming, watering, removing the surplus soil from the work site, without causing any damages to any other utilities, including the charges of hire and conveyance of tools, plants and materials to the leak site, bailing out water, lighting, watching, ribbon fencing, caution boards, traffic diversion but excluding cost of mechanical joint and as per the direction of departmental officers etc. complete.</p>	
Net Total Quantity		3.000 Leak

Say 3.000 Leak @ Rs 6986.86 / Leak		Rs 20960.58
11	<p>100.49.1.4</p> <p>Rectification of joint leakages in 250mm DI Pipe (cutting, removing and laying back a length of 1.0m from one side of the joint) including earth work excavation in all kinds of soil for exposing leak portion of the pipe including tar cutting / concrete cutting, by cutting and removing a portion of pipe from the damaged joint without causing any damages to the remaining portion of the line and specials and replacing the pipe with mechanical and tyton joint after cleaning the ends, centering the pipe, providing the joints, testing the line to the required test pressure, rectifying any defects noticed and refilling the trenches using excavated earth in layers not exceeding 20cm depth including consolidating each layers by ramming, watering, removing the surplus soil from the work site, without causing any damages to any other utilities, including the charges of hire and conveyance of tools, plants and materials to the leak site, bailing out water, lighting, watching, ribbon fencing, caution boards, traffic diversion but excluding cost of mechanical joint and as per the direction of departmental officers etc. complete.</p>	
Net Total Quantity		3.000 Leak
Say 3.000 Leak @ Rs 7912.50 / Leak		Rs 23737.50
12	<p>100.49.1.5</p> <p>Rectification of joint leakages in 300mm DI Pipe (cutting, removing and laying back a length of 1.0m from one side of the joint) including earth work excavation in all kinds of soil for exposing leak portion of the pipe including tar cutting / concrete cutting, by cutting and removing a portion of pipe from the damaged joint without causing any damages to the remaining portion of the line and specials and replacing the pipe with mechanical and tyton joint after cleaning the ends, centering the pipe, providing the joints, testing the line to the required test pressure, rectifying any defects noticed and refilling the trenches using excavated earth in layers not exceeding 20cm depth including consolidating each layers by ramming, watering, removing the surplus soil from the work site, without causing any damages to any other utilities, including the charges of hire and conveyance of tools, plants and materials to the leak site, bailing out water, lighting, watching, ribbon fencing, caution boards, traffic diversion but excluding cost of mechanical joint and as per the direction of departmental officers etc. complete.</p>	
Net Total Quantity		1.000 Leak
Say 1.000 Leak @ Rs 8846.13 / Leak		Rs 8846.13
13	<p>100.50.1.1</p> <p>Rectification of leakages of 32 mm, 40mm & 50mm GI Pipes by replacing lengths up to 1.0m including earth work excavation in all kindss of soil for exposing leak portion of the pipe including tar / concrete cutting, by cutting, removing and stacking the damaged portion from the existing line without causing any damages to the remaining portion and specials and conveying and replacing with GI Pipes of suitable size and jointing by thraded coupler and union of suitable size including threading, alignment, laying and jointing to make a water tight joint, testing the line to the required pressure, rectifying any defects noticed and refilling the trenches using excavated earth in layers not exceeding 20cm depth including consolidating each layers by ramming, watering, removing the surplus soil from the work site, without causing any damages to any other utilities, including the charges hire and conveyance of tools, plant and materials to the leak site, bailing out water, lighting, watching, ribbon fencing, caution boards, traffic diversion, including the cost of specials but excluding cost of pipe and as per the direction of departmental officers etc. complete.</p>	
Net Total Quantity		40.000 Leak

Say 40.000 Leak @ Rs 2279.32 / Leak		Rs 91172.80
14	<p>100.50.1.2</p> <p>Rectification of leakages of 65 mm GI Pipes by replacing lengths up to 1.0m including earth work excavation in all kindss of soil for exposing leak portion of the pipe including tar / concrete cutting, by cutting, removing and stacking the damaged portion from the existing line without causing any damages to the remaining portion and specials and conveying and replacing with GI Pipes of suitable size and jointing by thraded coupler and union of suitable size including threading, alignment, laying and jointing to make a water tight joint, testing the line to the required pressure, rectifying any defects noticed and refilling the trenches using excavated earth in layers not exceeding 20cm depth including consolidating each layers by ramming, watering, removing the surplus soil from the work site, without causing any damages to any other utilities, including the charges hire and conveyance of tools, plant and materials to the leak site, bailing out water, lighting, watching, ribbon fencing, caution boards, traffic diversion, including the cost of specials but excluding cost of pipe and as per the direction of departmental officers etc. complete.</p>	
Net Total Quantity		25.000 Leak
Say 25.000 Leak @ Rs 3251.11 / Leak		Rs 81277.75
15	<p>100.50.1.3</p> <p>Rectification of leakages of 80 mm GI Pipes by replacing lengths up to 1.0m including earth work excavation in all kindss of soil for exposing leak portion of the pipe including tar / concrete cutting, by cutting, removing and stacking the damaged portion from the existing line without causing any damages to the remaining portion and specials and conveying and replacing with GI Pipes of suitable size and jointing by thraded coupler and union of suitable size including threading, alignment, laying and jointing to make a water tight joint, testing the line to the required pressure, rectifying any defects noticed and refilling the trenches using excavated earth in layers not exceeding 20cm depth including consolidating each layers by ramming, watering, removing the surplus soil from the work site, without causing any damages to any other utilities, including the charges hire and conveyance of tools, plant and materials to the leak site, bailing out water, lighting, watching, ribbon fencing, caution boards, traffic diversion, including the cost of specials but excluding cost of pipe and as per the direction of departmental officers etc. complete.</p>	
Net Total Quantity		16.000 Leak
Say 16.000 Leak @ Rs 3630.40 / Leak		Rs 58086.40

16	100.50.1.4 Rectification of leakages of 100 mm GI Pipes by replacing lengths up to 1.0m including earth work excavation in all kindss of soil for exposing leak portion of the pipe including tar / concrete cutting, by cutting, removing and stacking the damaged portion from the existing line without causing any damages to the remaining portion and specials and conveying and replacing with GI Pipes of suitable size and jointing by thraded coupler and union of suitable size including threading, alignment, laying and jointing to make a water tight joint, testing the line to the required pressure, rectifying any defects noticed and refilling the trenches using excavated earth in layers not exceeding 20cm depth including consolidating each layers by ramming, watering, removing the surplus soil from the work site, without causing any damages to any other utilities, including the charges hire and conveyance of tools, plant and materials to the leak site, bailing out water, lighting, watching, ribbon fencing, caution boards, traffic diversion, including the cost of specials but excluding cost of pipe and as per the direction of departmental officers etc. complete.	
Net Total Quantity		5.000 Leak
Say 5.000 Leak @ Rs 3728.38 / Leak		Rs 18641.90
17	100.50.1.5 Rectification of leakages of 125 mm GI Pipes by replacing lengths up to 1.0m including earth work excavation in all kindss of soil for exposing leak portion of the pipe including tar / concrete cutting, by cutting, removing and stacking the damaged portion from the existing line without causing any damages to the remaining portion and specials and conveying and replacing with GI Pipes of suitable size and jointing by thraded coupler and union of suitable size including threading, alignment, laying and jointing to make a water tight joint, testing the line to the required pressure, rectifying any defects noticed and refilling the trenches using excavated earth in layers not exceeding 20cm depth including consolidating each layers by ramming, watering, removing the surplus soil from the work site, without causing any damages to any other utilities, including the charges hire and conveyance of tools, plant and materials to the leak site, bailing out water, lighting, watching, ribbon fencing, caution boards, traffic diversion, including the cost of specials but excluding cost of pipe and as per the direction of departmental officers etc. complete.	
Net Total Quantity		6.000 Leak
Say 6.000 Leak @ Rs 4314.97 / Leak		Rs 25889.82
18	100.50.1.6 Rectification of leakages of 150 mm GI Pipes by replacing lengths up to 1.0m including earth work excavation in all kindss of soil for exposing leak portion of the pipe including tar / concrete cutting, by cutting, removing and stacking the damaged portion from the existing line without causing any damages to the remaining portion and specials and conveying and replacing with GI Pipes of suitable size and jointing by thraded coupler and union of suitable size including threading, alignment, laying and jointing to make a water tight joint, testing the line to the required pressure, rectifying any defects noticed and refilling the trenches using excavated earth in layers not exceeding 20cm depth including consolidating each layers by ramming, watering, removing the surplus soil from the work site, without causing any damages to any other utilities, including the charges hire and conveyance of tools, plant and materials to the leak site, bailing out water, lighting, watching, ribbon fencing, caution boards, traffic diversion, including the cost of specials but excluding cost of pipe and as per the direction of departmental officers etc. complete.	

		Net Total Quantity	4.000 Leak
		Say 4.000 Leak @ Rs 4938.51 / Leak	Rs 19754.04
19	100.37.3	Welding MS sheet, pipe and special by gas or electric plant for three run welding including cost of welding rod / gas, all labour and hire charges of tools etc complete.	
		Net Total Quantity	1789.800 cm
		Say 1789.800 cm @ Rs 12.45 / cm	Rs 22283.01
20	100.58.1	Rectifying the leakages in vertical pipe of public tap connection including earth work excavation in all kinds of soil for exposing the pipeline including concrete / tar cutting, cutting and removing damaged portion of pipe, fixing new 20/25 mm GI pipe and specials in place of damaged portion of pipe and connecting with existing pipe line, testing the line to the required pressure, rectifying any defects noticed and refilling the trenches using excavated earth in layers not exceeding 20cm depth including consolidating each layers by ramming, watering, removing the surplus soil from the work site, without causing any damages to any other utilities, including the charges of hire and conveyance of tools, plants and materials to the leak site, bailing out water, lighting, watching, ribbon fencing, caution boards, traffic diversion, including cost of pipe and specials and as per the direction of departmental officers etc. complete.	
		Net Total Quantity	10.000 Leak
		Say 10.000 Leak @ Rs 824.64 / Leak	Rs 8246.40
21	100.56.1	Supplying and fixing 15 / 20 mm PVC public tap after dismantling the damaged tap including all cost of materials, labour charges, hire for tools and as per the direction of the department officers etc complete.	
		Net Total Quantity	15.000 Nos
		Say 15.000 Nos @ Rs 133.53 / Nos	Rs 2002.95
22	100.98.1008	Engaging Coolie	
		Net Total Quantity	40.000 Day
		Say 40.000 Day @ Rs 917.26 / Day	Rs 36690.40
23	13.44.1	Finishing walls with water proofing cement paint of required shade: New work (Two or more coats applied @ 3.84 kg/10 sqm)	
		Net Total Quantity	1200.000 sqm
		Say 1200.000 sqm @ Rs 112.09 / sqm	Rs 134508.00
24	100.98.48	Supply of PVC Tap	
		Net Total Quantity	15.000 No
		Say 15.000 No @ Rs 75.15 / No	Rs 1127.25

31 Appendix B - (8)- Line charging, stabilization & interconnection - (j) Interconnection work of raw water pumping main with aerator at treatment plant using 350mm DIK9 pipes and providing surge arrestor in raw water pumping main (Cost Index:41.53 %)		
1	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 1.5 m, including getting out the excavated soil, and then returning the soil as required, in layers not exceeding 20 cm 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 : All kinds of soil (Ref. Item No. 2.10.1 of DSR)	
		Net Total Quantity 85.801 cum
		Say 85.801 cum @ Rs 579.85 / cum Rs 49751.71
2	100.1.5 Excavating trenches of required width for pipes, cables, etc including excavation for sockets, and dressing of sides, ramming of bottoms, depth up to 1.5 m, including getting out the excavated soil, and then returning the soil as required, in layers not exceeding 20 cm 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 :" Ordinary Rock. (Ref. Item No. 2.13.1 of DSR)	
		Net Total Quantity 22.881 cum
		Say 22.881 cum @ Rs 842.10 / cum Rs 19268.09
3	100.2.2 Excavation work by mechanical means (Hydraulic excavator) / manual means in foundation trenches or drains (not exceeding 1.5 m in width or 10 m ² 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 soils as directed, within a lead of 50 m. Medium Rock (blasting prohibited) New Data derived from Item No.2.9.3	
		Net Total Quantity 5.721 cum
		Say 5.721 cum @ Rs 1106.34 / cum Rs 6329.37
4	50.2.25.1 Filling with contractor's own earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20 cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 m and lift up to 1.5 m as per direction of site Engineer-in-charge	
		Net Total Quantity 5.000 cum
		Say 5.000 cum @ Rs 548.85 / cum Rs 2744.25

5	100.14.6 Conveying and laying S&S Centrifugally Cast (Spun) / Ductile Iron Pipes conforming to IS: 8329 excluding cost of pipes and specials : 350 mm dia Ductile Iron Class K-9 Pipes Data derived from 18.72.20 in DAR	
		Net Total Quantity 80.000 metre
		Say 80.000 metre @ Rs 283.70 / metre Rs 22696.00
6	18.70.6 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:350 mm dia pipes	
		Net Total Quantity 16.000 joint
		Say 16.000 joint @ Rs 456.93 / joint Rs 7310.88
7	18.30.8 Providing flanged joints to double flanged C.I./ D.I pipes and specials, including testing of joints:350 mm diameter pipe	
		Net Total Quantity 2.000 Nos
		Say 2.000 Nos @ Rs 811.46 / Nos Rs 1622.92
8	18.26.2 Providing and laying flanged C.I. Standard specials such as tees, bends, collars, tapers, caps etc., suitable for flanged jointing as per IS : 1538 :Over 300 mm dia	
		Net Total Quantity 5.910 quintal
		Say 5.910 quintal @ Rs 9660.34 / quintal Rs 57092.61
9	18.83.8 Labour for cutting C.I. pipe with steel saw.350 mm diameter C.I pipe	
		Net Total Quantity 8.000 Each Cut
		Say 8.000 Each Cut @ Rs 781.10 / Each Cut Rs 6248.80
10	100.35.6 Testing 350mm DI/CI pipeline with potable water to the required test pressure. 350 mm dia Observed Data derived from item no.1024 of PHED DATA	
		Net Total Quantity 80.000 metre
		Say 80.000 metre @ Rs 70.53 / metre Rs 5642.40
11	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 : 4 graded stone aggregate 20 mm nominal size)	
		Net Total Quantity 30.000 cum
		Say 30.000 cum @ Rs 8340.93 / cum Rs 250227.90

12	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	
Net Total Quantity		1200.000 kilogram
Say 1200.000 kilogram @ Rs 102.61 / kilogram		Rs 123132.00
13	100.37.10.1 Fabricating MS pipes of size 350mm (ID) using 8 mm thick MS plate including cost and conveyance charges of MS 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 MS plates.	
Net Total Quantity		10.000 metre
Say 10.000 metre @ Rs 9145.95 / metre		Rs 91459.50
14	100.37.10.3 Cutting 350 mm (ID) MS 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 MS plates.	
Net Total Quantity		5.000 No
Say 5.000 No @ Rs 374.28 / No		Rs 1871.40
15	100.37.10.4 Welding 350 mm (ID) MS 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 MS plates.	
Net Total Quantity		5.000 No
Say 5.000 No @ Rs 1432.07 / No		Rs 7160.35
16	100.37.10.5 Grinding cut and weld edges of 350 mm (ID) MS pipes during fabrication work including all labour and hire charges of tools etc. complete: For pipes fabricated with 8mm thick MS plates.	
Net Total Quantity		5.000 No
Say 5.000 No @ Rs 268.48 / No		Rs 1342.40
17	100.37.6.1 Fabricating MS pipes of size 150mm (ID) using 8 mm thick MS plate including cost and conveyance charges of MS 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 MS plates.	
Net Total Quantity		2.000 metre
Say 2.000 metre @ Rs 5174.62 / metre		Rs 10349.24
18	100.37.6.3 Cutting 150mm (ID)MS 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 MS plates.	

		Net Total Quantity	3.000 No
		Say 3.000 No @ Rs 169.77 / No	Rs 509.31
19	100.37.6.4 Welding 150mm (ID) MS 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 MS plates.		
		Net Total Quantity	3.000 No
		Say 3.000 No @ Rs 649.48 / No	Rs 1948.44
20	100.37.6.5 Grinding cut and weld edges of 150mm (ID) MS pipes during fabrication work including all labour and hire charges of tools etc. complete: For pipes fabricated with 8mm thick MS plates.		
		Net Total Quantity	3.000 No
		Say 3.000 No @ Rs 121.79 / No	Rs 365.37
21	100.98.120 Supply of DI K9 Pipe Conforming to IS 8329/2000, 350mm Dia.		
		Net Total Quantity	80.000 metre
		Say 80.000 metre @ Rs 5506.95 / metre	Rs 440556.00
22	od83893/2020_2021 Providing 350mm surge arrestor- 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 classes of soil (Rate as per DSR Observed data)		
		Net Total Quantity	15.000 cum
		Say 15.000 cum @ Rs 425.54 / cum	Rs 6383.10
23	od83894/2020_2021 Providing 350mm surge arrestor- Providing 350mm surge arrestor having test pressure 45Kg/cm2 to the clear water pumping main including cost of specials such as 2 Nos. Tail piece, 2 Nos. Mechanical joints, cutting the existing DI pipe, inserting surge arrestor, jointing with flanged joints etc. including cost of surge arrestor.(Rate as per DSR Observed data)		
		Net Total Quantity	1.000 No
		Say 1.000 No @ Rs 600000.00 / No	Rs 600000.00
24	od83895/2020_2021 Providing 350mm surge arrestor- Cement concrete 1:2:4 using 20mm nominay size metal for anchore block including charges of form work and labour charges etc. complete.(Rate as per DSR Observed data)		
		Net Total Quantity	5.000 cum
		Say 5.000 cum @ Rs 8941.83 / cum	Rs 44709.15

25	od83896/2020_2021 Providing 350mm surge arrestor- Providing air cushion valve of diameter - 200mm & test pressure 45 Kg/cm2 with flanged ends including all cost of materials such as 200mm air cushion valve - 1 No., 200mm D/F CI sluice valve - 1 No. etc and all labour charges for fitting the same in position as directed by the departmental officers.(Rate as per DSR Observed data)	
Net Total Quantity		1.000 No
Say 1.000 No @ Rs 409500.00 / No		Rs 409500.00
26	od83897/2020_2021 Providing 350mm surge arrestor- Constructing RCC valve chamber of size 2.50m x 1.20m x 1.20m for providing the zero velocity valve including all cost of materials, labour charge, form work etc complete as directed by the departmental officers. (Rate as per DSR Observed data)	
Net Total Quantity		1.000 No
Say 1.000 No @ Rs 63841.40 / No		Rs 63841.40
32Appendix B- (9) - Road restoration works-(a) PWD road (Cost Index:41.53 %)		
1	od178589/2018_2019 Removal of unserviceable soil including excavation, loading and disposal upto 1000 metres lead but excluding replacement by suitable soil which shall be paid separately (PWD sanctioned price rate-specification code- 3.11)	
Net Total Quantity		1246.875 cum
Say 1246.875 cum @ Rs 47.61 / cum		Rs 59363.72
2	od178591/2018_2019 Maintenance of Earthen Shoulder (filling with fresh soil) Making up loss of material/ irregularities on shoulder to the design level by adding fresh approved soil and compacting it with appropriate equipment.(PWD sanctioned rate-specification code- 10.2)	
Net Total Quantity		4987.500 sqm
Say 4987.500 sqm @ Rs 41.25 / sqm		Rs 205734.38
3	od178592/2018_2019 Construction of granular sub-base by providing 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 vibratory roller to achieve the desired density, complete as per clause 401. Grading-IV - For lower sub base - Mix in Place Method (PWD sanctioned rate-specification code-4.2.A2)	
Net Total Quantity		225.000 cum
Say 225.000 cum @ Rs 3178.82 / cum		Rs 715234.50
4	od178593/2018_2019 Providing, laying, spreading and compacting graded stone aggregate to Wet Mix Macadam specification including premixing the Material with water at OMC in mechanical mix plant carriage of mixed Material by tipper to site, laying in uniform layers with paver in sub- base / base course on well prepared surface and compacting with vibratory roller to achieve the desired density.(PWD sanctioned rate-specification code-4.12)	

		Net Total Quantity	150.000 cum
		Say 150.000 cum @ Rs 3344.36 / cum	Rs 501654.00
5	od178594/2018_2019 Prime Coat- Providing and applying primer coat with bitumen emulsion on prepared surface of granular Base including clearing of road surface and spraying primer at the rate of 0.7kg/sqm using mechanical means.(PWD sanctioned rate- specification code-5.1)		
		Net Total Quantity	1500.000 sqm
		Say 1500.000 sqm @ Rs 54.39 / sqm	Rs 81585.00
6	od178595/2018_2019 Supplying and stacking 12mm hard blue granite broken stone in standard heaps for measurement(IRC 3.2.1.a)- PWD sanctioned rate-specification code- 55.2		
		Net Total Quantity	40.500 cum
		Say 40.500 cum @ Rs 2631.07 / cum	Rs 106558.34
7	od178596/2018_2019 Supplying and stacking 6mm hard blue granite broken stone in standard heaps for measurement(IRC 3.2.1.a)- PWD sanctioned rate-specification code- 55.3		
		Net Total Quantity	13.500 cum
		Say 13.500 cum @ Rs 2631.07 / cum	Rs 35519.45
8	od178597/2018_2019 Supplying and stacking 36mm size hard broken stone in standard heaps for measurement.(PWD sanctioned rate- specification code- 55.4)		
		Net Total Quantity	150.000 cum
		Say 150.000 cum @ Rs 2537.36 / cum	Rs 380604.00
9	od178598/2018_2019 Providing, laying and rolling of open graded premix carpet of 20 mm thickness with 0.27 cum of 12 mm departmental aggregates premixed with 12.96 kg of bitumen per 10 sqm using penetration grade bitumen to required line, grade and level on a previously prepared base, after priming the existing surface with 5 kg of bitumen (VG 30) 10 sqm including mixing in a suitable plant, laying and rolling with a three wheel static roller of 80-100 KN capacity, finished to required level and grades, followed by a seal coat of 0.09 cum of 6 mm departmental aggregates premixed with 8.64 kg of bitumen per 10 sqm. By Manual Means- PWD sanctioned rate-specification code-55.1.a		
		Net Total Quantity	1500.000 sqm
		Say 1500.000 sqm @ Rs 192.02 / sqm	Rs 288030.00
10	od178599/2018_2019 Plain cement concrete 1:3:6 nominal mix in foundation with crushed stone aggregate 40 mm nominal size mechanically mixed, placed in foundation and compacted by vibration including curing for 14 days.(PWD sanctioned rate- specification code- 12.4)		
		Net Total Quantity	196.875 cum

Say 196.875 cum @ Rs 7032.06 / cum		Rs 1384436.81
11	od178600/2018_2019 CPlain/Reinforced Cement Concrete in Open Foundation complete as per Drawing and Technical Specifications PCC Grade M20 (Without formwork) -PWD sanctioned rate-specification code-12.8.b	
Net Total Quantity		98.438 cum
Say 98.438 cum @ Rs 8523.47 / cum		Rs 839033.34
33Appendix B - (9) - Road restoration works- (b) Village/ Panchayat/ PMGSY roads (Cost Index:41.53 %)		
1	od178592/2018_2019 Construction of granular sub-base by providing 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 vibratory roller to achieve the desired density, complete as per clause 401. Grading-IV - For lower sub base - Mix in Place Method (PWD sanctioned rate-specification code-4.2.A2)	
Net Total Quantity		154.688 cum
Say 154.688 cum @ Rs 3178.82 / cum		Rs 491725.31
2	od178593/2018_2019 Providing, laying, spreading and compacting graded stone aggregate to Wet Mix Macadam specification including premixing the Material with water at OMC in mechanical mix plant carriage of mixed Material by tipper to site, laying in uniform layers with paver in sub- base / base course on well prepared surface and compacting with vibratory roller to achieve the desired density.(PWD sanctioned rate-specification code-4.12)	
Net Total Quantity		103.125 cum
Say 103.125 cum @ Rs 3344.36 / cum		Rs 344887.13
3	od178594/2018_2019 Prime Coat- Providing and applying primer coat with bitumen emulsion on prepared surface of granular Base including clearing of road surface and spraying primer at the rate of 0.7kg/sqm using mechanical means.(PWD sanctioned rate- specification code-5.1)	
Net Total Quantity		1031.250 sqm
Say 1031.250 sqm @ Rs 54.39 / sqm		Rs 56089.69
4	od178595/2018_2019 Supplying and stacking 12mm hard blue granite broken stone in standard heaps for measurement(IRC 3.2.1.a)- PWD sanctioned rate-specification code- 55.2	
Net Total Quantity		27.845 cum
Say 27.845 cum @ Rs 2631.07 / cum		Rs 73262.14
5	od178596/2018_2019 Supplying and stacking 6mm hard blue granite broken stone in standard heaps for measurement(IRC 3.2.1.a)- PWD sanctioned rate-specification code- 55.3	
Net Total Quantity		9.282 cum
Say 9.282 cum @ Rs 2631.07 / cum		Rs 24421.59

6	od178597/2018_2019 Supplying and stacking 36mm size hard broken stone in standard heaps for measurement.(PWD sanctioned rate- specification code- 55.4)	
Net Total Quantity		92.813 cum
Say 92.813 cum @ Rs 2537.36 / cum		Rs 235499.99
7	od178598/2018_2019 Providing, laying and rolling of open graded premix carpet of 20 mm thickness with 0.27 cum of 12 mm departmental aggregates premixed with 12.96 kg of bitumen per 10 sqm using penetration grade bitumen to required line, grade and level on a previously prepared base, after priming the existing surface with 5 kg of bitumen (VG 30) 10 sqm including mixing in a suitable plant, laying and rolling with a three wheel static roller of 80-100 KN capacity, finished to required level and grades, followed by a seal coat of 0.09 cum of 6 mm departmental aggregates premixed with 8.64 kg of bitumen per 10 sqm. By Manual Means- PWD sanctioned rate-specification code-55.1.a	
Net Total Quantity		1031.250 sqm
Say 1031.250 sqm @ Rs 192.02 / sqm		Rs 198020.63
8	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 : 4 graded stone aggregate 20 mm nominal size)	
Net Total Quantity		67.500 cum
Say 67.500 cum @ Rs 8340.93 / cum		Rs 563012.78
34Appendix B - (8)- Line charging, stabilization& interconnection - (k)- Providing Flow Meters (Cost Index:41.53 %)		
1	od90786/2020_2021 Supplying and fixing 200mm Dia Mechanical Flow meter of Woltman type conforming to ISO 4064 Class B of ARAD/ ZENNER/ REYCHEM RPG/ ITRON make and the flow meter shall be tested and certified by FCRI- Palakkad.	
Net Total Quantity		3.000 No
Say 3.000 No @ Rs 39140.29 / No		Rs 117420.87
2	od90787/2020_2021 Supplying and fixing 250mm Dia Mechanical Flow meter of Woltman type conforming to ISO 4064 Class B of ARAD/ ZENNER/ REYCHEM RPG/ ITRON make and the flow meter shall be tested and certified by FCRI- Palakkad.	
Net Total Quantity		2.000 No
Say 2.000 No @ Rs 81012.36 / No		Rs 162024.72

3	od93515/2020_2021 Supplying and fixing 300mm Dia Electromagnetic Flow meter conforming to 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, UPS and battery. This flow meter should have the housing (flow sensor) to be made of SS304/ carbon steel with anti corrosive protection and inside liner to be made of hard rubber or neoprene all conforming to drinking water standards. The flow meter should be coupled Hart for data acquisition and transfer, with provision for wireless transfer through GSM. The manufacturer should have the calibration standard as per ISO 17.0.25 and the product shall have sufficient warranty provisions.	
Net Total Quantity		1.000 No
Say 1.000 No @ Rs 198254.17 / No		Rs 198254.17
Total		121218018.94
Centage @		0.0%
Centage Amount		0.00
Provision for GST payments (in %) @		18.0%
Amount reserved for GST payments		21819243.41
Total & Centage		143037262.35
Lumpsum for round off		62737.65
GRAND TOTAL Rs		143100000.00
Rounded Grand Total Rs 14,31,00,000		
Kerala Water Authority Rupees Fourteen Crore Thirty One Lakh Only		

PRICE