## ABSTRACT ESTIMATE

## Jal Jeevan Mission (JJM)-WSS - to Santhanpara, Rajakumary (Part) and Senapathy (Part) Panchayaths in Idukki District-Package IV- Clear Water Pumping Main, Sump cum pump house, GLSR in Santhanpara GP-General Civil Work

Sl No	Specification	Quantity	Rate	Amount		
1	1 Supply and laying Clear water pumping main-Cost of materials					
1.001	100.98.118					
	Supply of DI K9 Pipe Conforming	Supply of DI K9 Pipe Conforming to IS 8329/2000, 250mm Dia.				
	Net Total	5435.000metr e	@3616.52/metre	19655786.2 0		
1.002	100.98.117					
	Supply of DI K9 Pipe Conforming	to IS 8329/2000	, 200mm Dia.			
	Net Total	4137.000metr e	@2589.09/metre	10711065.3 3		
1.003	100.98.116					
	Supply of DI K9 Pipe Conforming	to I <mark>S 832</mark> 9/2000	, 150mm Dia.			
	Net Total	2252.000metr e	@1890.46/metre	4257315.92		
1.004	OD182653/2023-2024	BLIC WORKS				
	Supply of 150mm GI medium pipe					
	Net Total	7434.000metr e	@2090.70/metre	15542263.8 0		
1.005	OD182904/2023-2024					
	Supply of 100 mm GI(m) pipe					
	Net Total	1085.000metr e	@1341.53/metre	1455560.05		
1.006	OD182905/2023-2024					
	Specials for 100 mm GI pipe exclude		f cost of pipe)			
	Net Total	1105.000L.S	@67.08/L.S	74123.40		
1.007	OD182909/2023-2024					
	Supplying 150 mm G.I Medium pir					
	Net Total	6117.000metr e	@104.54/metre	639471.18		
1.008	100.98.441					
	Supply of CI Air Valve, Conformin Orifice Type S1, Size 40mm.	g to IS 14848 -	2000, Single Orifice	, Small		
	Net Total	20.000no	@6110.65/no	122213.00		

Sl No	Specification	Quantity	Rate	Amount	
1.009	100.98.440				
	Supply of CI Air Valve, Conforming to IS 14848 - 2000, Single Orifice, Small Orifice Type S1, Size 25mm.				
	Net Total	22.000no	@5636.76/no	124008.72	
1.010	100.98.458				
	Supply of CI Double Flanged Sluice Valve with Cap PN 1.6, Size 100m		ming to IS 14846 - 2	000, Sluice	
	Net Total	1.000no	@9003.95/no	9003.95	
1.011	100.98.460				
	Supply of CI Double Flanged Sluice Valve with Cap PN 1.6, Size 150m		ming to IS 14846 - 2	000, Sluice	
	Net Total	3.000no	@13396.74/no	40190.22	
1.012	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	2.000no	@23723.64/no	47447.28	
1.013	100.98.462	- Martinet			
	Supply of CI Double Flanged Sluice Valve Conforming to IS 14846 - 2000, Sluice Valve with Cap PN 1.6, Size 250mm.				
	Net Total	1.000no	@34361.82/no	34361.82	
	Cr Pos		Heading Total(Rs)	52712810.8 7	
2	Supply and laying Clear water pu	mping main-W	Vorking charges		
2.001	100.1.1				
	Excavating trenches of required wid sockets, and dressing of sides, ramn getting out the excavated soil, and the exceeding 20cm in depth, including watering, etc., and disposing of surp 50m, in all kinds of soil.	ning of bottoms hen returning th consolidating e	, depth up to 1.5m, in the soil as required, in each deposited layer	ncluding layers not by ramming,	
	Net Total	8204.970cum	@579.88/cum	4757898.00	
2.002	100.1.5				
	Excavating trenches of required wid sockets, and dressing of sides, ramn getting out the excavated soil, and the exceeding 20cm in depth, including watering, etc., and disposing of surp m, in Ordinary Rock.	ning of bottoms hen returning th consolidating e	, depth up to 1.5m, in the soil as required, in each deposited layer	ncluding layers not by ramming,	
	Net Total	1640.994cum	@842.08/cum	1381848.23	
2.003	100.2.2				
	Excavation work by mechanical me foundation trenches or drains (not e				

Sl No	Specification	Quantity	Rate	Amount	
	including dressing of sides and ramming of bottoms, lift up to 1.5m, including getting out the excavated soil and disposal of surplus excavated soils as directed, within a lead of 50m, in Medium Rock where Blasting is Prohibited.				
	Net Total	543.569cum	@1106.31/cum	601355.82	
2.004	100.1.13				
	Excavating trenches of required width for pipes, cables, etc., including excavation for sockets, and dressing of sides, ramming of bottoms, depth up to 1.5m, including getting out the excavated soil, and then returning the soil as required, in layers not exceeding 20cm in depth, including consolidating each deposited layer by ramming, watering, etc., and disposing of surplus excavated soil as directed, within a lead of 50m, in Hard Rock where Blasting is Prohibited.				
2 005	Net Total	546.998cum	@1624.47/cum	888581.84	
2.005	100.8.1 Fencing one side of trenches, 1.50n tape in vertical casuarina pole (girth				
	Net Total	20341.000met re	@28.84/metre	586634.44	
2.006	100.59.1				
	Cutting the bituminous / concrete roads with cutting machine for a minimum depth o 200mm along the sides of proposed alignment of the pipe to be laid without causing any damage to other utilities, including the charges for hire and conveyance of tools and plant, cost of consumables and charges for lighting, watching, ribbon fencing, caution boards, traffic diversion, and as per the direction of departmental officers etc complete, before carrying out the demolition of bituminous / concrete road by mechanical means and carrying out the excavation.				
	Net Total	1850.000metr e	@31.77/metre	58774.50	
2.007	OD196216/2023-2024				
	Dismantling manually / by mechani metres lead as per direction of Engi				
	Net Total	222.000sqm	@91.73/sqm	20364.06	
2.008	15.2.1				
	Demolishing cement concrete manu material within 50 metres lead as per concrete 1:3:6 or richer mix (i/c equ	er direction of E	Ingineer - in-Charge.		
	Net Total	76.500cum	@2134.74/cum	163307.61	
2.009	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 for External work: 100mm diameter nominal bore.				
	Net Total	1105.000metr e	@245.48/metre	271255.40	
2.010	100.12.11				

Sl No	Specification	Quantity	Rate	Amount	
	Conveying and fixing G.I. pipes complete with G.I. fittings including trenching and refilling etc., but excluding cost of pipes and fittings for External work: 150mm diameter nominal bore.				
	Net Total	7434.000metr e	@304.13/metre	2260902.42	
2.011	OD196370/2023-2024				
	Testing 100mm GI/MS pipeline with	th potable water	to the required test	pressure	
	Net Total	1105.000metr e	@24.36/metre	26917.80	
2.012	OD196371/2023-2024				
	Testing 150mm GI/MS pipeline with	th potable water	to the required test	pressure	
	Net Total	7434.000metr e	@32.86/metre	244281.24	
2.013	100.14.2				
	Conveying and laying S&S Centrift to IS: 8329 excluding cost of pipes K-9 Pipes.				
	Net Total	2286.000metr e	@91.51/metre	209191.86	
2.014	18.30.4				
	Providing flanged joints to double f testing of joints:150 mm diameter p	langed C.I./ D.I	pipes and specials, i	including	
	Net Total	15.000no	@402.30/no	6034.50	
2.015	18.70.2				
	Providing push - on-joints to Centri Pipes including testing of joints and pipes				
	Net Total	425.000joint	@184.10/joint	78242.50	
2.016	OD167295/2023-2024				
	Labour for cutting Ductile Iron pipe	e with steel saw.	.150 mm diameter D	uctile Iron.	
	Net Total	40.000no	@337.10/no	13484.00	
2.017	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	2286.000metr e	@32.86/metre	75117.96	
2.018	100.14.3				
	Conveying and laying S&S Centrift to IS: 8329 excluding cost of pipes K-9 Pipes.				

Sl No	Specification	Quantity	Rate	Amount	
	Net Total	4109.000metr e	@127.49/metre	523856.41	
2.019	18.30.5				
	Providing flanged joints to double flanged C.I./ D.I pipes and specials, inclutesting of joints:200 mm diameter pipe				
	Net Total	15.000no	@436.82/no	6552.30	
2.020	18.70.3				
	Providing push - on-joints to Centri Pipes including testing of joints and pipes				
	Net Total	760.000joint	@270.11/joint	205283.60	
2.021	OD167296/2023-2024				
	Labour for cutting DI pipe with stee	el saw 200 mm o	diameter of DI Pipe		
	Net Total	26.000Each Cut	@449.61/Each Cut	11689.86	
2.022	100.35.3	-13.Q.61-11			
	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	410 <mark>9.0</mark> 00metr e	@41.66/metre	171180.94	
2.023	100.14.4				
	Conveying and laying S&S Centrift to IS: 8329 excluding cost of pipes K-9 Pipes.	ugally Cast (Spu and specials: 25	nn) / Ductile Iron Pip Omm diameter Duct	bes conforming ile Iron Class	
	Net Total	5407.000metr e	@170.23/metre	920433.61	
2.024	18.30.6			-	
	Providing flanged joints to double f testing of joints:250 mm diameter p		pipes and specials,	including	
	Net Total	7.000no	@595.56/no	4168.92	
2.025	18.70.4				
	Providing push - on-joints to Centri Pipes including testing of joints and pipes				
	Net Total	990.000joint	@329.85/joint	326551.50	
2.026	OD167297/2023-2024				
	Labour for cutting DI pipe with stee	el saw 250 mm o	diameter DI Pipe		
	Net Total	20.000Each Cut	@559.11/Each Cut	11182.20	
2.027	100.35.4				

Sl No	Specification	Quantity	Rate	Amount	
	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	5407.000metr e	@53.00/metre	286571.00	
2.028	100.37.5.1				
	In situ fabrication of M.S. pipes of a including cost and conveyance char of painting the steel work with two even shade over an under-coat of pr	ges of M.S. pla or more coat de	te, all fabrication cha	arges, charges	
	Net Total	48.000metre	@4182.35/metre	200752.80	
2.029	100.37.5.2				
	Fabricating M.S. flanges of diameter 100mm using 12mm thick M.S. plate includ cost and conveyance charges of M.S. plate, all fabrication charges, charges of painting the steel work with two or more coat deluxe multi surface paint to give an even shade over an under-coat of primer etc., complete: For pipes fabricated with 8mm thick M.S. plates.				
	Net Total	20.000no	@1161.73/no	23234.60	
2.030	100.37.5.3				
	Cutting 100mm (I.D.) M.S. pipes for making bends and other specials by gas cutting including cost of gas, all labour and hire charges of tools etc., complete: For pipes fabricated with 8mm thick M.S. plates.				
	Net Total	24.000no	@119.81/no	2875.44	
2.031	100.37.5.4				
	Welding 100mm (I.D.) M.S. pipes f welding machine including cost of of tools etc., complete: For pipes fa	gas and welding	g rods, all labour and	hire charges	
	Net Total	24.000no	@452.90/no	10869.60	
2.032	100.37.5.5				
	Grinding cut and weld edges of 100mm (I.D.) M.S. pipes during fabrication work including all labour and hire charges of tools etc., complete: For pipes fabricated with 8mm thick M.S. plates.				
	Net Total	48.000no	@85.07/no	4083.36	
2.033	100.37.6.1				
	In situ fabrication of M.S. pipes of a including cost and conveyance char of painting the steel work with two even shade over an under-coat of provide the steel work with two provides the steel work	ges of M.S. pla or more coat de	te, all fabrication cha	arges, charges	
	Net Total	80.000metre	@5174.49/metre	413959.20	
2.034	100.37.6.2				
	Fabricating M.S. flanges of diameter cost and conveyance charges of M.S. painting the steel work with two or	S. plate, all fabr	ication charges, char	ges of	

	Specification	Quantity	Rate	Amount	
	even shade over an under-coat of pr 8mm thick M.S. plates.	imer etc., comp	lete: For pipes fabric	cated with	
	Net Total	30.000no	@1544.03/no	46320.90	
2.035	100.37.6.3				
	Cutting 150mm (I.D.) M.S. pipes for making bends and other specials by gas cutting including cost of gas, all labour and hire charges of tools etc., complete: For pipes fabricated with 8mm thick M.S. plates.				
	Net Total	40.000no	@171.45/no	6858.00	
2.036	100.37.6.4				
	Welding 150mm (I.D.) M.S. pipes f welding machine including cost of g of tools etc., complete: For pipes fal	gas and welding	g rods, all labour and	hire charges	
	Net Total	40.000no	@648.09/no	25923.60	
2.037	100.37.6.5				
	Grinding cut and weld edges of 150mm (I.D.) M.S. pipes during fabrication including all labour and hire charges of tools etc., complete: For pipes fabrication 8mm thick M.S. plates.				
	Net Total	80.000no	@121.73/no	9738.40	
2.038	100.37.7.1	J _ J			
	In situ fabrication of M.S. pipes of size 200mm (I.D.) using 8mm thick M.S. plate including cost and conveyance charges of M.S. plate, all fabrication charges, charges of painting the steel work with two or more coat deluxe multi surface paint to give an even shade over an under-coat of primer etc., complete.				
	of painting the steel work with two	or more coat de	luxe multi surface pa	arges, charges aint to give an	
	of painting the steel work with two	or more coat de	luxe multi surface pa lete.	aint to give an	
2.039	of painting the steel work with two even shade over an under-coat of pr	or more coat de imer etc., comp	luxe multi surface pa lete.	aint to give an	
2.039	of painting the steel work with two even shade over an under-coat of pr Net Total	or more coat de imer etc., comp 72.000metre r 200mm using S. plate, all fabr more coat delux	eluxe multi surface pa olete. @6165.53/metre 12mm thick M.S. pl ication charges, char ke multi surface pain	aint to give an 443918.16 ate including ges of t to give an	
2.039	of painting the steel work with two even shade over an under-coat of pr Net Total 100.37.7.2 Fabricating M.S. flanges of diamete cost and conveyance charges of M.S painting the steel work with two or even shade over an under-coat of pr	or more coat de imer etc., comp 72.000metre r 200mm using S. plate, all fabr more coat delux	eluxe multi surface pa olete. @6165.53/metre 12mm thick M.S. pl ication charges, char ke multi surface pain olete: For pipes fabric	aint to give an 443918.16 late including ges of t to give an cated with	
2.039	of painting the steel work with two even shade over an under-coat of pr Net Total 100.37.7.2 Fabricating M.S. flanges of diamete cost and conveyance charges of M.S painting the steel work with two or even shade over an under-coat of pr 8mm thick M.S. plates.	or more coat de imer etc., comp 72.000metre r 200mm using S. plate, all fabr more coat delux imer etc., comp	eluxe multi surface pa olete. @6165.53/metre 12mm thick M.S. pl ication charges, char ke multi surface pain olete: For pipes fabric	aint to give an 443918.16 ate including ges of t to give an	
	of painting the steel work with two even shade over an under-coat of pr Net Total 100.37.7.2 Fabricating M.S. flanges of diameter cost and conveyance charges of M.S painting the steel work with two or even shade over an under-coat of pr 8mm thick M.S. plates. Net Total	or more coat de imer etc., comp 72.000metre r 200mm using 5. plate, all fabr more coat delux imer etc., comp <u>30.000no</u> r making bends hire charges of	eluxe multi surface paralete. @6165.53/metre 12mm thick M.S. plication charges, char we multi surface pain plete: For pipes fabric @2081.10/no	aint to give an 443918.16 ate including ges of t to give an cated with 62433.00 by gas cutting	
	of painting the steel work with two even shade over an under-coat of pr Net Total 100.37.7.2 Fabricating M.S. flanges of diameter cost and conveyance charges of M.S painting the steel work with two or even shade over an under-coat of pr 8mm thick M.S. plates. Net Total 100.37.7.3 Cutting 200mm (I.D.) M.S. pipes for including cost of gas, all labour and	or more coat de imer etc., comp 72.000metre r 200mm using 5. plate, all fabr more coat delux imer etc., comp <u>30.000no</u> r making bends hire charges of	eluxe multi surface paralete. @6165.53/metre 12mm thick M.S. plication charges, char we multi surface pain plete: For pipes fabric @2081.10/no	aint to give an 443918.16 ate including ges of t to give an cated with 62433.00 by gas cutting	
	of painting the steel work with two even shade over an under-coat of pr Net Total 100.37.7.2 Fabricating M.S. flanges of diamete cost and conveyance charges of M.S painting the steel work with two or even shade over an under-coat of pr 8mm thick M.S. plates. Net Total 100.37.7.3 Cutting 200mm (I.D.) M.S. pipes for including cost of gas, all labour and fabricated with 8mm thick M.S. pla	or more coat de imer etc., comp 72.000metre r 200mm using S. plate, all fabr more coat delux imer etc., comp <u>30.000no</u> r making bends hire charges of tes.	eluxe multi surface pa elete. @6165.53/metre 12mm thick M.S. pl ication charges, char ke multi surface pain elete: For pipes fabric @2081.10/no s and other specials b tools etc., complete	aint to give an 443918.16 ate including ges of t to give an cated with 62433.00 by gas cutting : For pipes	
2.040	of painting the steel work with two even shade over an under-coat of pr Net Total 100.37.7.2 Fabricating M.S. flanges of diamete cost and conveyance charges of M.S painting the steel work with two or even shade over an under-coat of pr 8mm thick M.S. plates. Net Total 100.37.7.3 Cutting 200mm (I.D.) M.S. pipes for including cost of gas, all labour and fabricated with 8mm thick M.S. pla Net Total	or more coat de imer etc., comp 72.000metre r 200mm using S. plate, all fabr more coat delux imer etc., comp 30.000no r making bends hire charges of tes. 36.000no	eluxe multi surface pa elete. @6165.53/metre 12mm thick M.S. pl ication charges, char ication charges, char	aint to give an 443918.16 ate including ges of t to give an cated with 62433.00 by gas cutting : For pipes 8031.96 by gas/electric hire charges	
2.040	of painting the steel work with two even shade over an under-coat of pr Net Total 100.37.7.2 Fabricating M.S. flanges of diamete cost and conveyance charges of M.S painting the steel work with two or even shade over an under-coat of pr 8mm thick M.S. plates. Net Total 100.37.7.3 Cutting 200mm (I.D.) M.S. pipes for including cost of gas, all labour and fabricated with 8mm thick M.S. pla Net Total 100.37.7.4 Welding 200mm (I.D.) M.S. pipes for welding machine including cost of g	or more coat de imer etc., comp 72.000metre r 200mm using S. plate, all fabr more coat delux imer etc., comp 30.000no r making bends hire charges of tes. 36.000no	eluxe multi surface pa elete. @6165.53/metre 12mm thick M.S. pl ication charges, char ication charges, char	aint to give an 443918.16 ate including ges of t to give an cated with 62433.00 by gas cutting : For pipes 8031.96 by gas/electric hire charges	

Sl No	Specification	Quantity	Rate	Amount	
	Grinding cut and weld edges of 200mm (I.D.) M.S. pipes during fabrication work including all labour and hire charges of tools etc., complete: For pipes fabricated with 8mm thick M.S. plates.				
	Net Total	72.000no	@158.40/no	11404.80	
2.043	100.37.8.1				
	In situ fabrication of M.S. pipes of size 250mm (I.D.) using 8mm thick M.S. plate including cost and conveyance charges of M.S. plate, all fabrication charges, charges of painting the steel work with two or more coat deluxe multi surface paint to give an even shade over an under-coat of primer etc., complete.				
	Net Total	40.000metre	@7163.12/metre	286524.80	
2.044	100.37.8.2				
	Fabricating M.S. flanges of diameter 250mm using 12mm thick M.S. plate including cost and conveyance charges of M.S. plate, all fabrication charges, charges of painting the steel work with two or more coat deluxe multi surface paint to give an even shade over an under-coat of primer etc., complete: For pipes fabricated with 8mm thick M.S. plates.				
	Net Total	14.000no	@2555.47/no	35776.58	
2.045	100.37.8.3				
	Cutting 250mm (I.D.) M.S. pipes for including cost of gas, all labour and fabricated with 8mm thick M.S. pla	l hi <mark>re cha</mark> rges of			
	Net Total	18.000no	@274.74/no	4945.32	
2.046	100.37.8.4				
	Welding 250mm (I.D.) M.S. pipes f welding machine including cost of of tools etc., complete: For pipes fa	gas and welding	grods, all labour and	hire charges	
	Net Total	18.000no	@1038.53/no	18693.54	
2.047	100.37.8.5				
	Grinding cut and weld edges of 250 including all labour and hire charge 8mm thick M.S. plates.	omm (I.D.) M.S. s of tools etc., c	pipes during fabrica complete: For pipes f	ation work abricated with	
	Net Total	36.000no	@195.07/no	7022.52	
2.048	18.68.1				
	Providing and laying D.I specials of IS : 9523 :Upt 600 mm dia	f class K - 12 su	iitable for push - on j	ointing as per	
	Net Total	53.190quintal	@21003.05/quint al	1117152.23	
2.049	18.69.1				
	Providing and laying D.I Specials o per IS : 9523 :Upto 600 mm dia	f Class K - 12 s	uitable for mechanic	al jointing as	
	Net Total	9.570quintal	@22071.58/quint al	211225.02	

	Specification	Quantity	Rate	Amount	
2.050	100.31.1.4				
	Conveying and fixing C.I. sluice va insertions etc., complete, but exclud will be paid separately): 150mm dia	ling the cost of			
	Net Total	3.000no	@1253.32/no	3759.96	
2.051	100.31.1.2			-	
	Conveying and fixing C.I. sluice va insertions etc., complete, but exclud will be paid separately): 100mm dia	ling the cost of			
	Net Total	1.000no	@925.37/no	925.37	
2.052	100.31.1.5				
	Conveying and fixing C.I. sluice va insertions etc., complete, but exclud will be paid separately): 200mm dia	ling the cost of			
	Net Total	2.000no	@1625.85/no	3251.70	
2.053	100.31.1.6	KOAD			
	Conveying and fixing C.I. sluice valves (with cap) by providing bolts, nuts, insertions etc., complete, but excluding the cost of the valve (tail pieces, if rewill be paid separately): 250mm diameter, Class I.				
	Net Total	1.000no	@2304.80/no	2304.80	
2.054	100.32.1	FORM FOR THE	MANAGEMENT		
	Conveying and fixing C. I. Single Acting Air Valve of approved quality with be nuts, rubber insertions etc., complete, but excluding the cost of air valve (tail pi if required, will be paid separately): 25mm Single Acting Air Valve.				
	Net Total	22.000no	@146.63/no	3225.86	
2.055		~		3225.86	
2.055	Net Total	22.000no acting Air Valve e, but excluding	@146.63/no e of approved quality g the cost of air valve	with bolts,	
2.055	Net Total 100.32.2 Conveying and fixing C. I. Single A nuts, rubber insertions etc., complet	22.000no acting Air Valve e, but excluding	@146.63/no e of approved quality g the cost of air valve	with bolts,	
2.055 2.056	Net Total 100.32.2 Conveying and fixing C. I. Single A nuts, rubber insertions etc., complet if required, will be paid separately):	22.000no Acting Air Valve e, but excluding 40mm Single A	@146.63/no e of approved quality g the cost of air valve Acting Air Valve.	with bolts, e (tail pieces,	
	Net Total 100.32.2 Conveying and fixing C. I. Single A nuts, rubber insertions etc., complet if required, will be paid separately): Net Total	22.000no acting Air Valve e, but excluding 40mm Single A 20.000no nical means (Hy th, 1.5 m in wid h, lead up to 50	@146.63/no e of approved quality g the cost of air valve Acting Air Valve. @184.44/no //draulic excavator)/r th as well as 10 sqm 0 m and lift up to 1.5	with bolts, e (tail pieces, <u>3688.80</u> nanual means on plan)	
	Net Total         100.32.2         Conveying and fixing C. I. Single A         nuts, rubber insertions etc., complet         if required, will be paid separately):         Net Total         2.6.1         Earth work in excavation by mecha         over areas (exceeding 30 cm in depi         including disposal of excavated earth	22.000no acting Air Valve e, but excluding 40mm Single A 20.000no nical means (Hy th, 1.5 m in wid h, lead up to 50	@146.63/no e of approved quality g the cost of air valve Acting Air Valve. @184.44/no //draulic excavator)/r th as well as 10 sqm 0 m and lift up to 1.5	with bolts, e (tail pieces, <u>3688.80</u> nanual means on plan)	
	Net Total 100.32.2 Conveying and fixing C. I. Single A nuts, rubber insertions etc., complet if required, will be paid separately): Net Total 2.6.1 Earth work in excavation by mechan over areas (exceeding 30 cm in deprincluding disposal of excavated earth earth to be levelled and neatly dress	22.000no 22.000no acting Air Valve e, but excluding 40mm Single A 20.000no nical means (Hy th, 1.5 m in wid th, lead up to 50 ed.All kinds of	@146.63/no e of approved quality g the cost of air valve Acting Air Valve. @184.44/no //draulic excavator)/r th as well as 10 sqm 0 m and lift up to 1.5 soil	with bolts, e (tail pieces, <u>3688.80</u> nanual means on plan) m, disposed	
2.056	Net Total         100.32.2         Conveying and fixing C. I. Single A         nuts, rubber insertions etc., complet         if required, will be paid separately):         Net Total         2.6.1         Earth work in excavation by mechai         over areas (exceeding 30 cm in deprincluding disposal of excavated earth         earth to be levelled and neatly dress         Net Total	22.000no acting Air Valve e, but excluding 40mm Single A 20.000no nical means (Hy th, 1.5 m in wid th, lead up to 50 ed.All kinds of 26.880cum nent concrete o ll work up to pli	@ 146.63/no e of approved quality g the cost of air valve. @ 184.44/no //draulic excavator)/r th as well as 10 sqm 0 m and lift up to 1.5 soil @ 223.41/cum f specified grade exc inth level:1:2:4 (cem	y with bolts, e (tail pieces, <u>3688.80</u> nanual means on plan) m, disposed <u>6005.26</u>	
2.056	Net Total         100.32.2         Conveying and fixing C. I. Single A         nuts, rubber insertions etc., complet         if required, will be paid separately):         Net Total         2.6.1         Earth work in excavation by mechatory         over areas (exceeding 30 cm in deprincluding disposal of excavated earth         earth to be levelled and neatly dress         Net Total         4.1.3         Providing and laying in position certors of centering and shuttering - A	22.000no acting Air Valve e, but excluding 40mm Single A 20.000no nical means (Hy th, 1.5 m in wid th, lead up to 50 ed.All kinds of 26.880cum nent concrete o ll work up to pli	@ 146.63/no e of approved quality g the cost of air valve. @ 184.44/no //draulic excavator)/r th as well as 10 sqm 0 m and lift up to 1.5 soil @ 223.41/cum f specified grade exc inth level:1:2:4 (cem	y with bolts, e (tail pieces, <u>3688.80</u> nanual means on plan) m, disposed <u>6005.26</u>	

Sl No	Specification	Quantity	Rate	Amount
	Providing and laying in position spe excluding the cost of centering, shu to plinth level:1:1:5:3 (1 cement 1.5 nominal size	ttering, finishin	g and reinforcement	- All work up
	Net Total	15.051cum	@9483.13/cum	142730.59
2.059	5.22.4			
	Steel reinforcement for R.C.C work in position and binding all complete	including strai	ghtening, cutting, ber elHot rolled deforme	nding, placing ed bars
	Net Total	1767.060kilo gram	@102.61/kilogra m	181318.03
2.060	5.9.2			
	Centering and shuttering including thickness) including attached pilaster			
	Net Total	358.000sqm	@748.62/sqm	268005.96
2.061	5.9.3	M		
	Centering and shuttering including floors, roofs, landings, balconies an			or:Suspended
	Net Total	21.000sqm	@851.49/sqm	17881.29
		マミリ	Heading Total(Rs)	18102137.7 1
3	Construction of 0.5 LL Capacity	steel storage ta	nk Near Magna Pea	ak
3.001	2.31			
	Clearing jungle including uprooting saplings of girth up to 30 cm measu removal of rubbish up to a distance	red at a height of	of 1 m above ground	level and
	Net Total	36.000sqm		554.40
3.002	2.6.1			
	Earth work in excavation by mecha over areas (exceeding 30 cm in dep including disposal of excavated eart earth to be levelled and neatly dress Net Total	th, 1.5 m in wid th, lead up to 50	th as well as 10 sqm ) m and lift up to 1.5 soil	on plan)
3.003	4.1.8			
	Providing and laying in position cer cost of centering and shuttering - A coarse sand : 8 graded stone aggreg	ll work up to pl	inth level:1:4:8 (1 ce	
	Net Total	3.701cum	@7113.43/cum	26326.80
3.004	5.2.2			
	Reinforced cement concrete work in pilasters, buttresses, plinth and strin abutments, posts and struts etc. up t shuttering, finishing and reinforcem	g courses, fillet ot floor five lev	s, columns, pillars, p el excluding cost of	iers, centering,

Sl No	Specification	Quantity	Rate	Amount	
	stone aggregate 20 mm nominal size	e)			
	Net Total	3.087cum	@11433.90/cum	35296.45	
3.005	5.9.3				
	Centering and shuttering including s floors, roofs, landings, balconies an			or:Suspended	
	Net Total	13.720sqm	@851.49/sqm	11682.44	
3.006	5.22.6				
	Steel reinforcement for R.C.C work including straightening, cutting, bending, placi in position and binding all complete upto plinth levelThermo - Mechanically Treate bars of grade Fe-500D or more				
	Net Total	370.440kilogr am	@102.61/kilogra m	38010.85	
3.007	2.25				
	Filling available excavated earth (ex foundation etc. in layers not exceed layer by ramming and watering, lea	ing 20 cm in dep	oth, consolidating ea		
	Net Total	4.568cum	@269.88/cum	1232.81	
3.008	OD167298/2023-2024				
	Supply of Sand including loading, u charges as per the direction of departmental officer			ncidental	
	Net Total	2.284cum	@1882.79/cum	4300.29	
3.009	OD167299/2023-2024				
	Supply, installation and commission manufactured steel storage Water T thickness of 0.6 mm, in multiple layers as required f multiplelayered PE sheet/membrane for the inner co & amp; amp; the Liner material shall be manufactured in a 2000 standards. The Tank shall be supplie outlets, drains and fittings, overflow and drain, hig to the tanks shall be with flanged or thread TANK ROOF :The roof of the tank shall be of cor- with heavy- duty Hot-dip Galvanized tru 5 persons	ank having a cap or the capacity a ntainment liner. facility certified ed with access p h and low water led nozzles, plac rugated Galvalu	pacity of 50000 L(1) and height of the tan The Tank Shell / B l and compliant to IS points, penetrations f r level indicators. Al ced to the KWA wat me sheet steel and s	Nos.) k and ody SO 9001 - or inlets, l connections er mains hall be domed,	

Sl No	Specification	Quantity	Rate	Amount		
	galvanized vermin proof construction. Roof ends shall be fitted with suitable vermin-proofing					
	tape or other material, to prevent ingress of dust and foreign objects. Covers shall be firmly fixed					
	to the top edge of the tank with galvanized bolts and nuts. LADDERS :Tanks shall be provided					
	with Hotdip Galvanized ladders internally or externally. External roof supports shall be of an					
	appropriately designed Hot-dip galvanized Steel construction. Tanks shall comply with relevant					
	spill level, air gap and overflow requirements relative to Effective Capacity. All nuts and bolts					
	used for the panels shall be a minimum of 12mm size and hot-dip galvanized/Case hardened.					
	The tank shall have a circular angle at the top, of minimum 2 mm thickness. Tanks					
	prior to being brought into service TANK DIMEN		2			
	4.855m in diameter and 2.9m in height DESIG					
	years. TANK CONNECTIONS: Standard			-		
		FORM FOR THE				
	ii) Overflow connection including a maximize the overflow capacity. One no. 100		-	-		
	of the tank with isolation valve. One No. 1		,			
	purposedesigned and manufactured and shall comply ANSI/NSF 61 - 2008, Section 5 Cer be furnished by the manufacturer of	rtificates of con	pliance to above sta	ndards shall		
	manufactured to onepiece construction, fabricated from multi- water,	layer PE sheet,	certified for potable	drinking		
	to (ANSI/ NSF 61) and duly UV Stabi construction	lized. ii) Be of	PE (polyethylene) in	multi-layer		
	for strength, reinforced with woven enhance		-	•		
	tensile strength. The total liner mate The tensile					
	strength shall not be less than 2266 strength of	_		-		
	2056 N v) All the liner welded lap j encapsulating tape welded over the overlap. vi) Th		-			
	exposed material at the edges of the liner joi		-	-		
	scrim. vii)					

Sl No	Specification	Quantity	Rate	Amount
Sl No	Liners shall be positively and contin circumference of the tank to prevent entry of water liners on tanks over 2m in height shall have a out of nylon (or other material)cord, around the a corresponding to the level of each ring. ix) The int secured to the steel shell at each level, to prevent s eliminate possibility of failure CORROSSION secondary corrosion protection system using s anodes, their location around the tank and the ma replacement	nuously attached r from the runof a continuous inte circumference o ermediate liner a stress on the line N PROTECTIO acrificial magne	I to the top outer edg f from the roof struct ermediate liner support f the tank, at vertical support cords shall b er welded joints, and N. The tank structure esium anodes. The nu	e of the ture. viii) All ort designed intervals e firmly thereby e shall have a umber of or anode
	<ul> <li>frequency of five years. The anodes shall be installed external to the tank and concrete apron</li> <li>with their location marked with a suitably label-Cost for Tank steel with 10years guarantee</li> <li>includes shel 1,Steel wall,steel domed roof,Zinc Alum steel&amp;amp;39;,Cost for Poly</li> <li>ethylene infinity</li> <li>liner ,Geo synthetic Fibre with food grade plastics are used for inside coating and Support Arrangements,Cost for Fabricated items,attachments and accessories like steel</li> <li>ladder,Cost of</li> <li>Fabricated nozzles,over flow nozzles and drain arrangements, Cost for HDG nut and bolts,Freight Charges,Erection Installation and commissioning of tank components.</li> </ul>			
	Net Total	50000.000Litr e	@16.65/Litre	832500.00
3.010	OD167300/2023-2024Dowel bars - Supplying and providing MS dowel bars of size 16mm dia of 2m long (1m in rock and 1m in concrete) including drilling holes of 20mm dia and filling the gap with cement grout (.5kg/each) etcNet Total38.000no@901.25/no34247.50			
			Heading Total(Rs)	991080.38
4	Construction of 2.6LL Capacity	steel storage ta	nk at Thondimala	
4.001	2.31Clearing 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 clearedNet Total121.000sqm@15.40/sqm1863.40			
4.002	2.1.1	121.00034111	© 10, TO/ BYIII	1003.40
7.002	Earth work in surface excavation no	ot exceeding 30	cm in depth but exce	eding 1.5m in

4.003       2.7.3         Earth work in excavation by mechanical means (Hydraulic excavator )/ manual mean 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)         4.004       Net Total       30.000cum       @1248.59/cum       37457.         4.004       4.1.3       Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level:1:2:4 (cement : 2 coarse sand (zone-III) : 4 graded stone aggregate 20 mm nominal size)         4.005       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)         4.006       5.9.1       Ret Total       5.557cum       @9483.13/cum       52697.         4.006       5.9.1       Ret Total       5.557cum       @9483.13/cum       52697.         4.007       5.22.6       Steel reinforcement for R.C.C work including straightening, cutting, bending, placin in position and binding all complete upto plinth levelThermo - Mechanically Treatec bars of grade Fe-500D or more       Ret Total       666.840kilogr am       68424.4         4.008       2.25       Filling available excavated earth (excluding rock) in trenches, plinth, sides	Sl No	Specification	Quantity	Rate	Amount	
4.003       2.7.3         Earth work in excavation by mechanical means (Hydraulic excavator )/ manual mean 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)         4.004       Net Total       30.000cum       @1248.59/cum       37457.3         4.004       4.1.3       Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level:1:2:4 (cement : 2 coarse sand (zone-III) : 4 graded stone aggregate 20 mm nominal size)       110550.4         4.005       5.1.2       Net Total       13.254cum       @8340.91/cum       110550.4         4.006       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       20 mm nominal size         4.006       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       24.696sqm       6350.00/sqm       8643.0         4.007       5.22.6       Steel reinforcement for R.C.C work including straightening, cutting, bending, placin in position and binding all complete upto plinth levelThermo - Mechanically Treatec bars of grade Fe-500D or more       6666.840kilogr m m 684		width as well as 10 sqm on plan inc lift up to 1.5 m, disposed soil to be	luding disposal levelled and nea	of excavated earth untily dressed:All Kind	p to 50 m and s of soil	
Earth work in excavation by mechanical means (Hydraulic excavator )/ manual meanover 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)         4.004       Net Total       30.000cum       @1248.59/cum       37457.'         4.004       4.1.3       Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level:1:2:4 (cement : 2 coarse sand (zone-III) : 4 graded stone aggregate 20 mm nominal size)       10550.4         4.005       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:1:15:3 (1 cement 1.5 coarse sand :3 graded stone aggregate 20 mm nominal size)         4.006       5.9.1       Centering and shuttering including strutting, etc. and removal of form for:Foundations, footings, bases of columns, etc for mass concrete         Velocity       Net Total       24.696sqm       @350.00/sqm       8643.0         4.007       5.22.6       Steel reinforcement for R.C.C work including straightening, cutting, bending, placin in position and binding all complete upto plinth levelThermo - Mechanically Treatec bars of grade Fe-500D or more       @102.61/kilogra       68424.2         4.008       2.25       Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundation etc. in layers not exceeding 20 c		Net Total	180.690sqm	@113.73/sqm	20549.87	
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)         4.004       4.1.3         Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level:1:2:4 (cement : 2 coarse sand (zone-III) : 4 graded stone aggregate 20 mm nominal size)         4.005       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)         4.006       5.9.1         Centering and shuttering including strutting, etc. and removal of form for:Foundations, footings, bases of columns, etc for mass concrete         7.9.1       Net Total       24.696sqm       @350.00/sqm       8643.0         4.007       5.22.6         Steel reinforcement for R.C.C work including straightening, cutting, bending, placin in position and binding all complete upto plinth level Thermo - Mechanically Treatec bars of grade Fe-500D or more         Net Total       666.840kilogr am       @102.61/kilogra m       68424.4         4.008       2.25         Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundation etc. in layers not exceeding 20 cm in depth, consolidating each deposited layer by ramming and watering,	4.003	2.7.3				
4.004       4.1.3         Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level:1:2:4 (cement : 2 coarse sand (zone-III) : 4 graded stone aggregate 20 mm nominal size)         4.005       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         4.006       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       24.696sqm         5.22.6         Steel reinforcement for R.C.C work including straightening, cutting, bending, placin in position and binding all complete upto plinth levelThermo - Mechanically Treated bars of grade Fe-500D or more         Net Total       666.840kilogr am         68424.2         4.008       2.25         Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundation 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.         Net Total       16.146cum       @269.88/cum         4.009       OD167301/2023-2024		over areas (exceeding 30 cm in dep including disposal of excavated ear	th, 1.5 m in wid th, lead up to 50	th as well as 10 sqm m and lift up to 1.5	on plan)	
Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level:1:2:4 (cement : 2 coarse sand (zone-III) : 4 graded stone aggregate 20 mm nominal size)         4.005       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         4.006       5.9.1         Centering and shuttering including strutting, etc. and removal of form for:Foundations, bases of columns, etc for mass concrete         Centering and shuttering including strutting, etc. and removal of form for:Foundations, footings, bases of columns, etc for mass concrete         4.007       5.22.6         Steel reinforcement for R.C.C work including straightening, cutting, bending, placin in position and binding all complete upto plinth levelThermo - Mechanically Treated bars of grade Fe-500D or more         4.008       2.25         Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundation 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.         4.009       OD167301/2023-2024         4.010       OD167302/2023-2024		Net Total	30.000cum	@1248.59/cum	37457.70	
cost of centering and shuttering - All work up to plinth level:1:2:4 (cement : 2 coarse sand (zone-III): 4 graded stone aggregate 20 mm nominal size)       110550.4         4.005       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         4.006       5.9.1       Centering and shuttering including strutting, etc. and removal of form for:Foundations, footings, bases of columns, etc for mass concrete         4.006       5.9.1       Centering and shuttering including strutting, etc. and removal of form for:Foundations, footings, bases of columns, etc for mass concrete         7       Centering and binding all complete upto plinth levelThermo - Mechanically Treated bars of grade Fe-500D or more       666.840kilogr @102.61/kilogra 68424.4         4.008       2.25       Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundation 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.         4.009       OD167301/2023-2024       Net Total       8.073cum @1882.79/cum       4357.4         4.010       OD167302/2023-2024       Net Total       8.073cum @1882.79/cum       15199.7	4.004	4.1.3				
4.005       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         4.006       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       24.696sqm         5.22.6         Steel reinforcement for R.C.C work including straightening, cutting, bending, placin in position and binding all complete upto plinth levelThermo - Mechanically Treatec bars of grade Fe-500D or more         4.008       2.25         Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundation 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.         4.009       OD167301/2023-2024         4.010       OD167302/2023-2024		cost of centering and shuttering - A	ll work up to pli	inth level:1:2:4 (cem	luding the ent : 2 coarse	
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         4.006       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       24.696sqm         6       5.22.6         Steel reinforcement for R.C.C work including straightening, cutting, bending, placin in position and binding all complete upto plinth levelThermo - Mechanically Treated bars of grade Fe-500D or more         Net Total       666.840kilogr am         6       9.002.61/kilogra         6       66.840kilogr am         6       66.840kilogr am         6       666.840kilogr am         7       666.840kilogr am         8       666.840kilogr am         6       666.840kilogr am         6       666.840kilogr am         6       666.840kilogr am         7       68424.4         4.008       2.25         Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundation 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.         4.009       OD167301/2023-2024 <td></td> <td>Net Total</td> <td>13.254cum</td> <td>@8340.91/cum</td> <td>110550.42</td>		Net Total	13.254cum	@8340.91/cum	110550.42	
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         4.006       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       24.696sqm         6.007       5.22.6         Steel reinforcement for R.C.C work including straightening, cutting, bending, placin in position and binding all complete upto plinth levelThermo - Mechanically Treated bars of grade Fe-500D or more         Net Total       666.840kilogr and m         4.008       2.25         Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundation 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.         Net Total       16.146cum       @269.88/cum       4357.4         4.009       OD167301/2023-2024       Supply of Sand including loading, unloading, transportation and other incidental charges as per the direction of departmental officers.1       Net Total       8.073cum       @1882.79/cum       15199.7         4.010       OD167302/2023-2024         15199.7       15199.7	4.005	5.1.2	AN			
4.006       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       24.696sqm       @350.00/sqm       8643.0         4.007       5.22.6         Steel reinforcement for R.C.C work including straightening, cutting, bending, placin in position and binding all complete upto plinth levelThermo - Mechanically Treated bars of grade Fe-500D or more         Net Total       666.840kilogr am       @102.61/kilogra mm       68424.4         4.008       2.25       Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundation 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.       4357.4         4.009       OD167301/2023-2024       Net Total       16.146cum       @269.88/cum       4357.4         4.010       OD167302/2023-2024       Net Total       8.073cum       @1882.79/cum       15199.7		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				
Centering and shuttering including strutting, etc. and removal of form         for:Foundations, footings, bases of columns, etc for mass concrete         Net Total       24.696sqm       @350.00/sqm       8643.0         4.007       5.22.6         Steel reinforcement for R.C.C work including straightening, cutting, bending, placin in position and binding all complete upto plinth levelThermo - Mechanically Treated bars of grade Fe-500D or more       @102.61/kilogra m       68424.4         4.008       2.25         Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundation 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.       4357.4         4.009       OD167301/2023-2024       Supply of Sand including loading, unloading, transportation and other incidental charges as per the direction of departmental officers.1       8.073cum       @1882.79/cum       15199.7         4.010       OD167302/2023-2024       Supply of Sand including loading, unloading, transportation and other incidental charges as per the direction of departmental officers.1       8.073cum       @1882.79/cum       15199.7		Net Total	5.557cum	@9483.13/cum	52697.75	
for:Foundations, footings, bases of columns, etc for mass concreteNet Total24.696sqm@350.00/sqm8643.04.0075.22.6Steel reinforcement for R.C.C work including straightening, cutting, bending, placin in position and binding all complete upto plinth levelThermo - Mechanically Treated bars of grade Fe-500D or more@102.61/kilogra m68424.24.0082.25Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundation 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.4.009OD167301/2023-20244.009OD167301/2023-2024Supply of Sand including loading, unloading, transportation and other incidental charges as per the direction of departmental officers.1@1882.79/cum15199.74.010OD167302/2023-2024Supply of Sand including loading, unloading, transportation and other incidental (harges 2.2024)Supply of Sand including loading, unloading, transportation and other incidental (harges 2.2024)Supply of Sand including loading, unloading, transportation and other incidental (harges 2.2024)Supply of Sand including loading, unloading, transportation and other incidental (harges 2.2024)	4.006	5.9.1	FORM FOR THE	MANAGEMENT		
4.007       5.22.6         Steel reinforcement for R.C.C work including straightening, cutting, bending, placin in position and binding all complete upto plinth levelThermo - Mechanically Treated bars of grade Fe-500D or more         Net Total       666.840kilogr am         4.008       2.25         Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundation 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.         4.009       OD167301/2023-2024         4.010       OD167302/2023-2024						
Steel reinforcement for R.C.C work including straightening, cutting, bending, placin in position and binding all complete upto plinth levelThermo - Mechanically Treated bars of grade Fe-500D or more         Net Total       666.840kilogr am       @102.61/kilogra m       68424.4         4.008       2.25         Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundation 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.       4357.4         4.009       OD167301/2023-2024       Vent Total       16.146cum       @269.88/cum       4357.4         4.010       OD167302/2023-2024       Net Total       8.073cum       @1882.79/cum       15199.7		Net Total	24.696sqm	@350.00/sqm	8643.60	
in position and binding all complete upto plinth levelThermo - Mechanically Treated bars of grade Fe-500D or moreNet Total666.840kilogr am@ 102.61/kilogra m68424.44.0082.25Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundation 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.4.0094.009OD167301/2023-2024Vert Total16.146cum 8.073cum@269.88/cum4.010OD167302/2023-20248.073cum 8.073cum@1882.79/cum15199.74.010OD167302/2023-2024Vert Total8.073cum 8.073cum@1882.79/cum15199.7	4.007	5.22.6				
Net Totalamm08424.24.0082.25Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundation 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.Net Total16.146cum0D167301/2023-20244.009OD167301/2023-2024Supply of Sand including loading, unloading, transportation and other incidental charges as per the direction of departmental officers.14.010OD167302/2023-2024		in position and binding all complete				
Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundation 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.4.009OD167301/2023-2024@269.88/cum4357.44.009OD167301/2023-2024Supply of Sand including loading, unloading, transportation and other incidental charges as per the direction of departmental officers.1@1882.79/cum15199.74.010OD167302/2023-2024Supply of Sand including loading, unloading, transportation and other incidental 001167302/2023-2024Supply of Sand including loading, unloading, transportation and other incidental 001167302/2023-2024		Net Total	Ũ	U	68424.45	
foundation 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.         Net Total       16.146cum       @269.88/cum       4357.4         4.009       OD167301/2023-2024       Supply of Sand including loading, unloading, transportation and other incidental charges as per the direction of departmental officers.1       Net Total       8.073cum       @1882.79/cum       15199.7         4.010       OD167302/2023-2024       Supply of Sand including loading, unloading, transportation and other incidental charges as per the direction of departmental officers.1       8.073cum       @1882.79/cum       15199.7	4.008	2.25				
4.009       OD167301/2023-2024         Supply of Sand including loading, unloading, transportation and other incidental charges as per the direction of departmental officers.1         Net Total       8.073cum       @1882.79/cum       15199.7         4.010       OD167302/2023-2024		Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundation etc. in layers not exceeding 20 cm in depth, consolidating each deposited				
Supply of Sand including loading, unloading, transportation and other incidental charges as per the direction of departmental officers.1         Net Total       8.073cum       @1882.79/cum       15199.7         4.010       OD167302/2023-2024		Net Total	16.146cum	@269.88/cum	4357.48	
charges as per the direction of departmental officers.1       Net Total       8.073cum       @1882.79/cum       15199.7       4.010       OD167302/2023-2024	4.009	OD167301/2023-2024				
4.010 OD167302/2023-2024		charges as per				
4.010 OD167302/2023-2024		-		@1882.79/cum	15199.76	
	4.010					
ISUPPLY, Instantion and commissioning of a DIC-Chemiceleu. DIC-Iabillaten. Iacioly			ning of a pre-en	gineered, pre-fabrica	ted, factory	

Sl No	Specification	Quantity	Rate	Amount	
	manufactured steel storage Water T	ank having a ca	pacity of 260000 L(1	1Nos.)	
	thickness of 0.6 mm, in multiple layers as required for the capacity and height of the tank and				
	mm, in multiple layers as required f multiplelayered	or the capacity	and height of the tan	k and	
	PE sheet/membrane for the inner containment liner. The Tank Shell / Body				
	the Liner				
	material shall be manufactured in a	facility certified	and compliant to IS	SO 9001 -	
	2000 standards. The Tank shall be supplied with access points, penetrations for inlets,				
	outlets, drains				
	and fittings, overflow and drain, high and low water level indicators. All connections				
	to the tanks shall be with flanged or threaded nozzles, placed to the KWA water mains				
	TANK ROOF	_			
	:The roof of the tank shall be of corwith	rugated Galvalu	ime sheet steel and sl	hall be domed,	
	heavy- duty Hot-dip Galvanized tru	ss frame for sur	port, and capable of	supporting 4-	
	5		I , , , , , , I		
	persons	ant shall have a	n aggagg hatah with s	owen on the	
	for maintenance and cleaning and ta roof, for	link shall have a	II access hatch with c	cover, on the	
	operation and Maintenance TANK	COVER :Tank	covers shall be of ap	proved	
	galvanized vermin proof construction. Roof end	da aball ba fitta	l with anitable yarmi	n proofing	
	tape or other	us shall be filled	i with suitable verifi	n-proofing	
	material, to prevent ingress of dust a	and foreign obje	ects. Covers shall be	firmly fixed	
	to the ten	BLIC WORKS			
	the top edge of the tank with galvanized bo	lts and nuts. LA	DDERS :Tanks shal	l be provided	
	with Hotdip			_	
	Galvanized ladders internally or ext				
	appropriately designed Hot-dip galv with relevant	allized Steel Co	instruction. Tanks sha	an compry	
	spill level, air gap and overflow req	uirements relati	ve to Effective Capa	city. All nuts	
	and bolts	um of 12mm si	ze and hat din calve	mized/Case	
	used for the panels shall be a minim hardened.		ze and not-dip gaiva	mzeu/Case	
	The tank shall have a circular angle	fixed around th	e total circumference	e of the tanks,	
	at the top, of minimum 2 mm thickness. Tanks	shall be proper	ly fluched out with a	lean water	
	prior to being	s shan be proper	Ty mushed out with C	lean water	
	brought into service TANK DIMEN	ISIONS: The di	mensions of the Tan	k shall be of	
	8.739m in diameter and 4.3m in height DESIG	NITEE. The to	nka ahall hava a dasi	an life of 40	
	diameter and 4.3m in height DESIG years.	IN LIFE: The ta	mks shan have a desi	Ign file of 40	
	TANK CONNECTIONS: Standard	design valve ou	tlet connection : i) S	uitable CI	
	Flanged valve	n Intornal ann	wad hall mouth share	ad bands to	
	ii) Overflow connection including a maximize	in miernai appro	oven ben-mouth shap	beu benus to	
	the overflow capacity. One no. 100	mm, iii) One (1	) scour drain outlet f	rom the floor	
	of the	Omm TANK	INEDS. Tonk linera	chall bo	
	tank with isolation valve. One No. 1 purposedesigned		LINERS: I and liners	shall be	
	(r - r				

Sl No	Specification	Quantity	Rate	Amount	
	and manufactured and shall comply to AS/NZS 4020 (Appendix A )of 2005 and ANSI/NSF 61 - 2008, Section 5 Certificates of compliance to above standards shall be furnished by the manufacturer of the tanks. Tank liners shall: i) Be factory manufactured to onepiece				
	construction, fabricated from multi-layer PE sheet, certified for potable drinking water,				
	to (ANSI/ NSF 61) and duly UV Stabilized. ii) Be of PE (polyethylene) in multi-layer construction				
	for strength, reinforced with woven scrim industrial fabric to prevent elongation and enhance tensile strength. The total liner material thickness shall be no less than 0.6 mm thick.				
	The tensile strength shall not be less than 2266 strength of	N (warp) and 24	495 N (weft) and hea	at sealing	
	2056 N v) All the liner welded lap j encapsulating tape welded over the overlap. vi) Th		C		
	exposed material at the edges of the liner join scrim. vii)			-	
	Liners shall be positively and contin circumference				
	of the tank to prevent entry of water liners on tanks over 2m in height shall have a				
	out of nylon (or other material)cord, around the or corresponding	BLIC WORKS			
	to the level of each ring. ix) The inte secured to the steel shell at each level, to prevent s			-	
	eliminate possibility of failure CORROSSION		0	-	
	secondary corrosion protection system using sa anodes, their	acrificial magne	esium anodes. The nu	umber of	
	location around the tank and the ma replacement frequency of five years. The anodes		U		
	concrete apron				
	with their location marked with a suitably label-Cost for Tank steel with 10years guarantee includes shel l,Steel wall,steel domed roof,Zinc Alum steel&39;,Cost for				
	Poly ethylene infinity liner ,Geo synthetic Fibre with food grade plastics are used for inside coating and Support Arrangements,Cost for Fabricated items,attachments and accessories like steel				
	ladder,Cost of Fabricated nozzles,over flow nozzle bolts,Freight Charges,Erection Insta				
	Net Total	260000.000Li tre	@7.06/Litre	1835600.00	

Sl No	Specification	Quantity	Rate	Amount	
4.011	OD167303/2023-2024				
	Dowel bars - Supplying and provide (1m in rock and 1m in concrete) inc gap with cement grout (.5kg/each) e	luding drilling	bars of size 16mm dia holes of 20mm dia a	a of 2m long nd filling the	
	Net Total	60.000no	@901.25/no	54075.00	
			Heading Total(Rs)	2209419.43	
5	Construction of 2.9LL Steel storage tank at Puthadi Top				
5.001	2.1.1				
	Earth work in surface excavation no width as well as 10 sqm on plan inc lift up to 1.5 m, disposed soil to be	luding disposal	of excavated earth u	p to $50$ m and	
	Net Total	271.220sqm	@113.73/sqm	30845.85	
5.002	4.1.3				
	Providing and laying in position cer cost of centering and shuttering - A sand (zone-III) : 4 graded stone agg	ll work up to pl	inth level:1:2:4 (cem		
	Net Total	17.245cum	@8340.91/cum	143838.99	
5.003	5.1.2				
	Providing and laying in position spe excluding the cost of centering, shu to plinth level:1:1:5:3 (1 cement 1.5 nominal size	ttering, finishin	g and reinforcement	- All work up	
	Net Total	7.409cum	@9483.13/cum	70260.51	
5.004	5.9.1				
	Centering and shuttering including for:Foundations, footings, bases of	strutting, etc. ar columns, etc for	nd removal of form r mass concrete		
	Net Total	32.928sqm	@350.00/sqm	11524.80	
5.005	5.22.6				
	Steel reinforcement for R.C.C work in position and binding all complete bars of grade Fe-500D or more				
	Net Total	889.080kilogr am	@102.61/kilogra m	91228.50	
5.006	2.25				
	Filling available excavated earth (ex foundation etc. in layers not exceed layer by ramming and watering, lea	ing 20 cm in de	pth, consolidating ea	des of ach deposited	
	Net Total	29.552cum	@269.88/cum	7975.49	
5.007	OD167304/2023-2024				
	Supply of Sand including loading, u charges as per the direction of departmental office		portation and other i	ncidental	

Sl No	Specification	Quantity	Rate	Amount	
	Net Total	14.776cum	@1882.79/cum	27820.11	
5.008	OD167305/2023-2024				
	Supply, installation and commissioning of a pre-engineered, pre-fabricated, factory manufactured steel storage Water Tank having a capacity of 2.9 LL(1Nos.) thickness of 0.6 mm, in multiple layers as required for the capacity and height of the tank and				
	multiplelayered PE sheet/membrane for the inner containment liner. The Tank Shell / Body & the Liner material shall be manufactured in a facility certified and compliant to ISO 9 2000				
	standards. The Tank shall be supplied outlets, drains and fittings, overflow and drain, hig				
	to the tanks shall be with flanged or thread TANK ROOF				
	:The roof of the tank shall be of corrwith	NOAD			
	heavy- duty Hot-dip Galvanized truss frame for support, and capable of supporting 4- 5				
	persons for maintenance and cleaning and tank shall have an access hatch with cover, on the roof, for				
	operation and Maintenance TANK COVER : Tank covers shall be of approved galvanized				
	vermin proof construction. Roof ends shall be fitted with suitable vermin-proofing tape or other				
	material, to prevent ingress of dust and foreign objects. Covers shall be firmly fixed to				
	the top edge of the tank with galvanized bolts and nuts. LADDERS :Tanks shall be provided with Hot dip				
	Galvanized ladders internally or externally. External roof supports shall be of an appropriately designed Hot-dip galvanized Steel construction. Tanks shall comply				
	with relevant spill level, air gap and overflow requirements relative to Effective Capacity. All nuts and bolts				
	used for the panels shall be a minim hardened.		10		
	The tank shall have a circular angle at the top,				
	of minimum 2 mm thickness. Tanks shall be properly flushed out with clean water prior to being brought into service TANK DIMENSIONS: The dimensions of the Tank shall be of 11 652m in diameter and 2 0m in height DESIGN LIFE. The tanks shall have a				
	11.652m in diameter and 2.9m in height DESIGN LIFE: The tanks shall have a design life of 40 years.				
	TANK CONNECTIONS: Standard Flanged valve	C			
	ii) Overflow connection including a maximize	n Internal appro	oved bell-mouth shap	bed bends to	

Sl No	Specification	Quantity	Rate	Amount	
	the overflow capacity. One no. 100	mm, iii) One (1	) scour drain outlet f	from the floor	
	of the tank with isolation valve. One No. 100mm.TANK LINERS:Tank liners shall be				
	purposedesigned				
	and manufactured and shall comply to AS/NZS 4020 (Appendix A )of 2005 and				
	ANSI/NSF 61 - 2008, Section 5 Ce be furnished by the manufacturer of				
	manufactured to one piece	the tunks. Tun	k inters shan. If De R	letory	
	construction, fabricated from multi-layer PE sheet, certified for potable drinking				
	water, to				
	(ANSI/ NSF 61) and duly UV Stabi	ilized. ii) Be of	PE (polyethylene) in	multi-laver	
	construction	,		•	
	for strength, reinforced with woven	scrim industria	l fabric to prevent el	ongation and	
	enhance tensile strength. The total liner mate	erial thickness s	hall be no less than (	) 6 mm thick	
	The tensile				
	strength shall not be less than 2266	N (warp) and 2	495 N (weft) and hea	at sealing	
	strength of 2056 N v) All the liner welded lap j	oints shall be st	renothened with Me	tallocene	
	encapsulating	onno shan oe si	renguiened with with	unocene	
	tape welded over the overlap. vi) Th	ne Metallocene	tape shall cover and	protect the	
	exposed material at the edges of the liner joi	nts to further pr	event the ingress of	water into the	
	scrim. vii)	nts to further pr	event the highess of	water into the	
	Liners shall be positively and contin	nuously attached	d to the top outer edg	ge of the	
	circumference of the tank to prevent entry of water	r from the runof	f from the roof strue	tura viji) All	
	liners on		I from the root struc	ture. VIII) All	
	tanks over 2m in height shall have a	a continuous int	ermediate liner supp	ort designed	
	out of nylon (or other material)cord, around the	oiroumforonco c	of the tenk of vertice	lintorvola	
	corresponding		of the talk, at vertica	i intervais	
	to the level of each ring. ix) The int	ermediate liner	support cords shall b	e firmly	
	secured to the	stragg on the line	an waldad jointa and	thoroby	
	steel shell at each level, to prevent s eliminate	stress on the find	er welded joints, and	uneredy	
	possibility of failure CORROSSIO	N PROTECTIO	N. The tank structure	e shall have a	
	secondary		and a The m	weber of	
	corrosion protection system using s anodes, their	acrificial magne	estum anodes. The nu	umber of	
	location around the tank and the ma	uss of each anod	le shall be designed f	or anode	
	replacement	1 11 1 • 4 11	1 / 1/ /1 /	1 1	
	frequency of five years. The anodes concrete	s shall be install	ed external to the tan	k and	
	apron				
	with their location marked with a su	itably label-Co	st for Tank steel with	n 10years	
	guarantee includes shel l,Steel wall,steel domo	ed roof $7inc \Delta h$	um steel&amn.amn.a	39. Cost for	
	Poly		ann sucreannp,annp,.	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
	ethylene infinity				
	liner, Geo synthetic Fibre with food				
	Support Arrangements, Cost for Fab	nicated nems, at	nachiments and acces	somes like	

Sl No	Specification	Quantity	Rate	Amount	
	steel ladder,Cost of Fabricated nozzles,over flow nozzles and drain arrangements, Cost for HDG nut and bolts,Freight Charges,Erection Installation and commissioning of tank components.				
	Net Total	290000.000Li tre	@6.57/Litre	1905300.00	
5.009	OD167306/2023-2024				
	Dowel bars - Supplying and provide (1m in rock and 1m in concrete) inc gap with cement grout (.5kg/each) e	luding drilling			
	Net Total	90.000no	@901.25/no	81112.50	
			Heading Total(Rs)	2369906.75	
6	Construction of 4LL Sump cum	Pump house at	Pooppara		
6.001	2.31				
	Clearing jungle including uprooting saplings of girth up to 30 cm measu removal of rubbish up to a distance	red at a height of	of 1 m above ground	level and	
	Net Total	160.000sqm	@15.40/sqm	2464.00	
6.002	2.8.1				
	Earth work in excavation by mecha in foundation trenches or drains (no including dressing of sides and ram getting out the excavated soil and d within a lead of 50 m.All kinds of s	t exceeding 1.5 ming of bottom isposal of surplu oil	m in width or 10 squ s, lift up to 1.5 m, ind us excavated soil as c	n on plan), cluding lirected,	
6.002	Net Total	14.844cum	@309.99/cum	4601.49	
6.003	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)				
6 00 4	Net Total	44.531cum	@1248.59/cum	55600.96	
	OD167312/2023-2024 :DOWEL BARS_Supplying and providing MS dowel bars of size 16 mm dia , 200 cm long including drilling holes of 20 mm dia to a depth of 100 cm in rock and filling the gap with cement grout (0.100kg/hole) etc complete				
6.004	:DOWEL BARS_ Supplying and pr cm long including drilling holes of 20 mm d	C			
0.004	:DOWEL BARS_ Supplying and pr cm long including drilling holes of 20 mm d with cement grout (0.100kg/hole)	C			
6.005	:DOWEL BARS_ Supplying and pr cm long including drilling holes of 20 mm d with cement grout (0.100kg/hole) etc complete	ia to a depth of	100 cm in rock and f	illing the gap	
	:DOWEL BARS_ Supplying and pr cm long including drilling holes of 20 mm d with cement grout (0.100kg/hole) etc complete Net Total	ia to a depth of 200.000no ment concrete o ll work up to pl	100 cm in rock and f @424.58/no f specified grade exc inth level:1:2:4 (cem	illing the gap 84916.00 luding the	

Sl No	Specification	Quantity	Rate	Amount	
6.006	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	46.167cum	@9825.93/cum	453633.71	
6.007	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	86.938cum	@11550.42/cum	1004170.41	
6.008	5.34.1 Extra for providing richer mixes at a specified cement content used is pay grade concrete instead of M-25 grad in M-30 is @ 340 kg/cum).	yable/ recoveral	ble separately.Provid	ing M-30	
	Net Total	131.575cum	@85.68/cum	11273.35	
6.009	22.23.1				
	Providing and applying integral crystalline slurry of hydrophilic in nature for waterproofing treatment to the RCC structures like retaining walls of the basement, water tanks, roof slabs, podiums, reservior, sewage & amp; water treatment plant, tunnels / subway and bridge deck etc., prepared by mixing in the ratio of 5 : 2 (5 parts integral crystalline slurry : 2 parts water) for vertical surfaces and 3 : 1 (3 parts integral crystalline slurry : 1 part water) for horizontal surfaces and applying the same from negative (internal) side with the help of synthetic fiber brush. The material shall meet the requirements as specified in ACI-212-3R-2010 i.e by reducing permeability of concrete by more than 90% compared with control concrete as per DIN 1048 and resistant to 16 bar hydrostatic pressure on negative side. The crystalline slurry shall be capable of self-healing of cracks up to a width of 0.50mm. The work shall be carried out all complete as per specification and the direction of the engineerin- charge. The product performance shall carry guarantee for 10 years against any leakage.For vertical surface two coats @0.70 kg per sqm				
	Net Total	218.400sqm	@595.25/sqm	130002.60	

Sl No	Specification	Quantity	Rate	Amount	
6.010	22.23.2				
	Providing and applying integral crystalline slurry of hydrophilic in nature for waterproofing treatment to the RCC structures like retaining walls of the basement, water tanks, roof slabs, podiums, reservior, sewage & amp; water treatment plant, tunnels / subway and bridge deck etc., prepared by mixing in the ratio of 5 : 2 (5 parts integral crystalline slurry : 2 parts water) for vertical surfaces and 3 : 1 (3 parts integral crystalline slurry : 1 part water) for horizontal surfaces and applying the same from negative (internal) side with the help of synthetic fiber brush. The material shall meet the requirements as specified in ACI-212-3R-2010 i.e by reducing permeability of concrete by more than 90% compared with control concrete as per DIN 1048 and resistant to 16 bar hydrostatic pressure on negative side. The crystalline slurry shall be capable of self-healing of cracks up to a width of 0.50mm. The work shall be carried out all complete as per specification and the direction of the				
	engineerin- charge. The product performance sh leakage.For horizontal surface one of	all carry guaran coat @1.10 kg p	ntee for 10 years aga ber sqm.	inst any	
	Net Total	123.250sqm		56547.10	
6.011	5.9.1	ACTOR BY			
	Centering and shuttering including strutting, etc. and removal of form for:Foundations, footings, bases of columns, etc for mass concrete				
	Net Total	57.580sqm		20153.00	
6.012	5.9.2	FORM FOR THE I BLIC WORKS	MANAGEMENT		
	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	394.110sqm	@748.62/sqm	295038.63	
6.013	5.9.3				
	Centering and shuttering including floors, roofs, landings, balconies an			or:Suspended	
	Net Total	339.794sqm	@851.49/sqm	289331.19	
6.014	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	15877.200kil ogram	@102.61/kilogra m	1629159.49	
6.015	50.6.1.2				
	Solid block masonry using pre cast solid blocks (Factory made) of size 40x20x20cm or nearest available size confirming to IS 2185 part I of 1979 for super structure up to floor two level thickness 20cm and above in: CM 1:6 (1 cement: 6 coarse sand) etc complete.				
	Net Total	5.418cum	@6748.20/cum	36561.75	
6.016	50.6.1.8				

Sl No	Specification	Quantity	Rate	Amount	
	Solid block masonry using pre cast solid blocks (Factory made) of size 40x20x15cm or nearest available size confirming to IS 2185 part I of 1979 for super structure up to floor two level with thickness 15cm in: CM 1:6 ( 1 cement : 6 coarse sand etc complete				
	Net Total	16.500cum	@7136.86/cum	117758.19	
6.017	13.7.1				
	12 mm cement plaster finished with cement : 3 fine sand)	a floating coat	of neat cement of m	ix:1:3 ( 1	
	Net Total	848.474sqm	@418.80/sqm	355340.91	
6.018	13.16.1				
	6 mm cement plaster of mix:1:3 (1	cement : 3 fine	sand)		
	Net Total	244.030sqm	@279.31/sqm	68160.02	
6.019	13.47.1				
	Finishing walls with Premium Acry of required shade:New work (Two including priming coat of exterior p	or more coats ap	oplied @ 1.43 ltr/ 10		
	Net Total	472.774sqm	@198.01/sqm	93613.98	
6.020	13.44.1				
	Finishing walls with water proofing or more coats applied @ 3.84 kg/10		f required shade:Nev	w work (Two	
	Net Total	285.720sqm	@112.08/sqm	32023.50	
6.021	13.71				
	Lettering with black Japan pint of a	pproved brand a	and manufacture		
	Net Total	100.000per Letter per cm height	@5.82/per Letter per cm height	582.00	
6.022	10.25.2				
	Item Shifted to Sub head 14 as item 14.73 Item Shifted to head 14 as item 14.74 Steel work welded in built up sections/framed work, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer using structural steel etc. as required.In gratings, frames, guard bar, ladder, railings, brackets, gates and similar works			using ilings,	
	Net Total	950.000kg	@160.93/kg	152883.50	
6.023	100.41.34				
	Supplying and fixing Rectangular C (low duty) charges including all cos			with frame	
	Net Total	8.000no	@2920.75/no	23366.00	
6.024	9.48.2				
	Providing and fixing M.S. Grills of M.S. flats, square or round bars etc. primer all complete.Fixed to openin	including prim	ing coat with approv	ed steel	

Sl No	Specification	Quantity	Rate	Amount	
	Net Total	150.000kg	@225.44/kg	33816.00	
6.025	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	6.480sqm	@3617.31/sqm	23440.17	
6.026	OD167313/2023-2024				
	Providing suitable size ventilating a per the direction of departmental officers Net Total	arrangements by 2.000no	y using 100 mm CI v @2735.10/no	vent cowls as 5470.20	
6.027	21.1.1.2	2.000110	@2755.10/110	5470.20	
	<ul> <li>Providing and fixing aluminium work for doors, windows, ventilators and partitions with extruded built up standard tubular sections/ appropriate Z sections and other sections of approved make conforming to IS : 733 and IS: 1285, fixing with dash fasteners of required dia and size, including necessary filling up the gaps at junctions, i.e. at top, bottom and sides with required EPDM rubber/ neoprene gasket etc. Aluminium sections shall be smooth, rust free, straight, mitred and jointed mechanically wherever required including cleat angle, Aluminnium snap beading for glazing /paneling, C.P. brass/ stainless steel screws, all complete as per architectural drawings and the directions of Engineer-in-charge.(Glazing, paneling and dash fasteners to be paid for separately):</li> <li>For fixed portionPowder coated aluminium (minimum thickness of powder coating 50 micron)</li> </ul>				
	Net Total	12.000kg	@560.61/kg	6727.32	
6.028	21.1.2.2         For shutters of doors, windows & ventilators including providing and fixing hinges / pivots and making provision for fixing of fittings wherever required including the cost of EPDM rubber/ neoprene gasket required (Fittings shall be paid for separately)Powder coated aluminium (minimum thickness of powder coating 50 micron)         Net Total       12.000kg       @671.29/kg       8055.48			luding the	
6.029	21.3.1				
	Providing and fixing glazing in aluminium door, window, ventilator shutters and partitions etc. with EPDM rubber / neoprene gasket etc. complete as per the architectural drawings and the directions of Engineer - in -Charge. (Cost of aluminium snap beading shall be paid in basic item):With float glass panes of 4.0 mr thickness			r the st of	
	Net Total	6.750sqm	@1228.18/sqm	8290.22	
6.030	21.15.2				

Sl No	Specification	Quantity	Rate	Amount	
	Providing and fixing aluminium cas aluminium windows with necessary minimum thickness 50 micron alum	necessary scre			
	Net Total	10.000no	@87.92/no	879.20	
6.031	18.26.1				
	Providing and laying flanged C.I. Standard specials such as tees, bends, collars, tapers, caps etc., suitable for flanged jointing as per IS : 1538 :Upto 300 mm dia				
	Net Total	1.340quintal	@9660.34/quinta l	12944.86	
6.032	100.36.1				
	Filling water with 5000 litre tankers fited in lorry and conveying water from a distance of 5 km (average) to the reservoir site and pumping the water into the reservoir of height not less than 3 m using 5 HP diesel engine pump set , hire for tanker lorry, tools and other appliences and cost of water etc. complete.				
	Net Total	400.000Kilo litre	@190.05/Kilo litre	76020.00	
6.033	OD167314/2023-2024	HERATE			
	Supplying and providing water level indicator to the tank using scale fabricated out of 2mm thick MS plate with in the frame work of suitable size MS square tube, 160mm PVC pipe for guiding the float, necessary pullies, suitable nylon thread for connecting float and level indicator, painting the entire structure,				
	Net Total	1.000each	@10453.50/each	10453.50	
			Heading Total(Rs)	5281824.25	
7	Construction of 0.4LL Sump cur	n Pump house a	nt Erachilpara		
7.001	2.31				
	Clearing jungle including uprooting saplings of girth up to 30 cm measu removal of rubbish up to a distance	ired at a height of	of 1 m above ground	level and	
	Net Total	80.000sqm	@15.40/sqm	1232.00	
7.002	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	41.624cum	@309.99/cum	12903.02	
7.003	2.7.3				
	Earth work in excavation by mecha over areas (exceeding 30 cm in dep including disposal of excavated ear earth to be levelled and neatly dress	th, 1.5 m in wid th, lead up to 50	th as well as 10 sqm ) m and lift up to 1.5	on plan)	
	Net Total	13.606cum	@1248.59/cum	16988.32	
7.004	OD167307/2023-2024				

Sl No	Specification	Quantity	Rate	Amount	
	:DOWEL BARS_ Supplying and providing MS dowel bars of size 16 mm dia , 200 cm long including drilling holes of 20 mm dia to a depth of 100 cm in rock and filling the gap with cement grout (0.100kg/hole) etc complete				
	Net Total	80.000no	@424.58/no	33966.40	
7.005	4.1.3	00.000110		22700110	
	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level:1:2:4 (cement : 2 coarse sand (zone-III) : 4 graded stone aggregate 20 mm nominal size)				
	Net Total	6.632cum	@8340.91/cum	55316.92	
7.006	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	25.835cum	@7520.38/cum	194289.02	
7.007	5.33.1	A CARLEY			
	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	9.178cum	@9825.93/cum	90182.39	
7.008	5.33.2Providing 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 levelNet Total25.906cum@11550.42/cum299225.18				
7.009	5.34.1				
	Extra for providing richer mixes at a specified cement content used is pay grade concrete instead of M-25 grad in M-30 is @ 340 kg/cum).	able/ recoveral	ble separately.Provid	ling M-30	
	Net Total	31.756cum	@85.68/cum	2720.85	

Sl No	Specification	Quantity	Rate	Amount
7.010	22.23.1			
	Providing and applying integral crystalline slurry of hydrophilic in nature for waterproofing treatment to the RCC structures like retaining walls of the basement, water tanks, roof slabs, podiums, reservior, sewage & amp; water treatment plant, tunnels / subway and bridge deck etc., prepared by mixing in the ratio of 5 : 2 (5 parts integral crystalline slurry : 2 parts water) for vertical surfaces and 3 : 1 (3 parts integral crystalline slurry : 1 part water) for horizontal surfaces and applying the same from negative (internal) side with the help of synthetic fiber brush. The material shall meet the requirements as specified in ACI-212-3R-2010 i.e by reducing permeability of concrete by more than 90% compared with control concrete as per DIN 1048 and resistant to 16 bar hydrostatic pressure on negative side. The crystalline slurry shall be capable of self-healing of cracks up to a width of 0.50mm. The work			
	shall be carried out all complete as pendineerin-	per specification	n and the direction of	f the
	charge. The product performance sh leakage.For vertical surface two coa			inst any
	Net Total	55.140sqm	@595.25/sqm	32822.09
7.011	22.23.2	ACCESS BY		
	Providing and applying integral crystalline slurry of hydrophilic in nature for waterproofing treatment to the RCC structures like retaining walls of the basement, water tanks, roof slabs, podiums, reservior, sewage & amp; water treatment plant, tunnels / subway and bridge deck etc., prepared by mixing in the ratio of 5 : 2 (5 parts integral crystalline slurry : 2 parts water) for vertical surfaces and 3 : 1 (3 parts integral crystalline slurry : 1 part water) for horizontal surfaces and applying the same from negative (internal) side with the help of synthetic fiber brush. The material shall meet the requirements as specified in ACI-212-3R-2010 i.e by reducing permeability of concrete by more than 90% compared with control concrete as per DIN 1048 and resistant to 16 bar hydrostatic pressure on negative side. The crystalline slurry shall be capable of self-healing of cracks up to a width of 0.50mm. The work shall be carried out all complete as per specification and the direction of the engineerin-charge. The product performance shall carry guarantee for 10 years against any leakage.For horizontal surface one coat @1.10 kg per sqm.			
<b>5</b> .01 <b>0</b>	Net Total	5.850sqm	@458.80/sqm	2683.98
7.012	50.6.1.2 Solid block masonry using pre cast solid blocks (Factory made) of size 40x20x20cm or nearest available size confirming to IS 2185 part I of 1979 for super structure up to floor two level thickness 20cm and above in: CM 1:6 (1 cement: 6 coarse sand) etc complete.			
<b>–</b> 010	Net Total	5.881cum	@6748.20/cum	39686.16
7.013	50.6.1.8 Solid block masonry using pre cast or nearest available size confirming floor two level with thickness 15cm	to IS 2185 part	I of 1979 for super	structure up to

Sl No	Specification	Quantity	Rate	Amount	
	complete				
	Net Total	10.755cum	@7136.86/cum	76756.93	
7.014	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	25.960sqm	@350.00/sqm	9086.00	
7.015	5.9.2				
	Centering and shuttering including thickness) including attached pilaster				
	Net Total	107.640sqm	@748.62/sqm	80581.46	
7.016	5.9.3				
	Centering and shuttering including floors, roofs, landings, balconies an			or:Suspended	
	Net Total	76.198sqm	@851.49/sqm	64881.84	
7.017	5.22.6	KO/L			
	Steel reinforcement for R.C.C work in position and binding all complete bars of grade Fe-500D or more				
	Net Total	4 <mark>210.0</mark> 80kilo gram	@102.61/kilogra m	431996.31	
7.018	13.7.1 OF PUI	BLIC WORKS			
	12 mm cement plaster finished with cement : 3 fine sand)	a floating coat	of neat cement of m	ix:1:3 ( 1	
	Net Total	468.832sqm	@418.80/sqm	196346.84	
7.019	13.47.1				
	Finishing walls with Premium Acrylic Smooth exterior paint with Silicone additives of required shade:New work (Two or more coats applied @ 1.43 ltr/ 10 sqm over and including priming coat of exterior primer applied @ 2.20 kg/ 10 sqm)				
	Net Total	397.408sqm	@198.01/sqm	78690.76	
7.020	13.71				
	Lettering with black Japan pint of approved brand and manufacture				
	Net Total	80.000per Letter per cm height	@5.82/per Letter per cm height	465.60	
7.021	10.25.2				
	Item Shifted to Sub head 14 as item 14.73 Item Shifted to head 14 as item 14.74 Steel work welded in built up sections/framed work, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer using structural steel etc. as required.In gratings, frames, guard bar, ladder, railings, brackets, gates and similar works				

Sl No	Specification	Quantity	Rate	Amount
	Net Total	600.000kg	@160.93/kg	96558.00
7.022	100.41.34			
	Supplying and fixing Rectangular C (low duty) charges including all cos			n with frame
	Net Total	4.000no	@2920.75/no	11683.00
7.023	9.48.2			
	Providing and fixing M.S. Grills of M.S. flats, square or round bars etc. primer all complete.Fixed to openin	including prim	ing coat with approv	ved steel
	Net Total	70.000kg	@225.44/kg	15780.80
7.024	10.6.1			
	Supplying and fixing rolling shutter laths, interlocked together through t by end locks, mounted on specially arrangements for inside and outside including the cost of providing and manufactured from high tensile stee 4454 - part 1 and M.S. top cover of mm M.S. laths with 1.25 mm thick	heir entire lengt designed pipe s locking with pu fixing necessary l wire of adequa required thickno	h and jointed togeth haft with brackets, s ish and pull operation v 27.5 cm long wire ate strength conform	er at the end ide guides and on complete, springs ing to IS:
	Net Total	7.200sqm	@3617.31/sqm	26044.63
7.025	21.1.1.2			
	Providing and fixing aluminium work for doors, windows, ventilators and partitions with extruded built up standard tubular sections/ appropriate Z sections and other sections of approved make conforming to IS : 733 and IS: 1285, fixing with dash fasteners of required dia and size, including necessary filling up the gaps at junctions, i.e. at top, bottom and sides with required EPDM rubber/ neoprene gasket etc. Aluminium sections shall be smooth, rust free, straight, mitred and jointed mechanically wherever required including cleat angle, Aluminnium snap beading for glazing /paneling, C.P. brass/ stainless steel screws, all complete as per architectural drawings and the directions of Engineer-in-charge.(Glazing, paneling and dash fasteners to be paid for separately): For fixed portionPowder coated aluminium (minimum thickness of powder coating 50 micron)			
	Net Total	12.000kg	@560.61/kg	6727.32
7.026	21.1.2.2 For shutters of doors, windows & ventilators including providing and fixing hinges / pivots and making provision for fixing of fittings wherever required including the cost of EPDM rubber/ neoprene gasket required (Fittings shall be paid for separately)Powder coated aluminium (minimum thickness of powder coating 50 micron)			
7.027	Net Total	10.000kg	@671.29/kg	6712.90
7.027	21.3.1		· · · · · · ·	
	Providing and fixing glazing in alum partitions etc. with EPDM rubber / n architectural drawings and the direc	neoprene gasket	etc. complete as per	r the

Sl No	Specification	Quantity	Rate	Amount
	aluminium snap beading shall be pa thickness	id in basic item	):With float glass pa	nes of 4.0 mm
	Net Total	8.438sqm	@1228.18/sqm	10363.38
7.028	OD167308/2023-2024			
	Supply conveyance ,installation testing and commissioning of 36/40 W LED street/Yard light out put greater than105 lumen/watts 4000-6000K with IP66 protection with LED chip make cree/Lumilled/Nichea with powerfactor greater than 0.95 at full load ,internal surge protection up to 8 kv and alluminium preasure die cast powder coated housing acryliccover complete with THD less than 10% power factor greater than 0.98 R0HS compliant duly wired up for use on 230v AC supply.Driver compartment should be separately accessible for maintanance(LM 79&80 Certificate from NABL acredited third party lab produced mentioning chip manufacturer)			
	Net Total	4.000no	@4297.55/no	17190.20
7.029	OD167309/2023-2024			
	Taking new electrical connection fr	om KSEBL		
	Net Total	1.0001 nos	@23230.00/1 nos	23230.00
7.030	OD167310/2023-2024	A COLOR		
	Charges for Supply, Installation, Trial run and commissioning of CCTV cameras in Raw water pump houses which includes providing 2Nos 5 MP camera with motion sensor and 30m vision, 5 MP or Higher HD out DVR,1TB HDD,4G Router, Cable 10m,Rack, 500VA UPS, etc complete			
	Net Total	1.0001 nos	@36521.88/1 nos	36521.88
7.031	18.26.1			
	Providing and laying flanged C.I. S tapers, caps etc., suitable for flanged	tandard specials	s such as tees, bends, IS : 1538 :Upto 300	collars, ) mm dia
	Net Total	1.340quintal	@9660.34/quinta l	12944.86
7.032	100.36.1			
	Filling water with 5000 litre tankers fited in lorry and conveying water from a distance of 5 km (average) to the reservoir site and pumping the water into the reservoir of height not less than 3 m using 5 HP diesel engine pump set , hire for tanker lorry, tools and other appliences and cost of water etc. complete.			nto the
	Net Total	40.000Kilo litre	@190.05/Kilo litre	7602.00
7.033	OD167311/2023-2024			
	Supplying and providing water level indicator to the tank using scale fabricated out of 2mm thick MS plate with in the frame work of suitable size MS square tube, 160mm PVC pipe for guiding the float, necessary pullies, suitable nylon thread for connecting float and level indicator, painting the entire structure,			
	Net Total	1.000each	@10453.50/each	10453.50
			Heading Total(Rs)	2002634.54
8	Construction of 3LL Sump cum	Pump house at	James padi	

Sl No	Specification	Quantity	Rate	Amount	
8.001	2.31			2	
	Clearing jungle including uprooting saplings of girth up to 30 cm measu removal of rubbish up to a distance	red at a height of	of 1 m above ground	level and	
	Net Total	120.000sqm	@15.40/sqm	1848.00	
8.002	2.8.1			2	
	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	33.000cum	@309.99/cum	10229.67	
8.003	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	36.528cum	@749.05/cum	27361.30	
8.004	OD167331/2023-2024				
	Dowel bars - Supplying and providing MS dowel bars of size 16mm dia of 2m long (1m in rock and 1m in concrete) including drilling holes of 20mm dia and filling the gap with cement grout (.5kg/each) etc				
	Net Total	150.000no	@901.25/no	135187.50	
8.005	4.1.3				
	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level:1:2:4 (cement : 2 coarse sand (zone-III) : 4 graded stone aggregate 20 mm nominal size)				
	Net Total	14.554cum		121393.60	
8.006	5.33.1				
	Providing and laying in position machine batched and machine mixed design mix 1 25 grade cement concrete for reinforced cement concrete work, using cement contra 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 settin 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 recoverab separately.All work upto plinth level				
	Net Total	19.146cum	@9825.93/cum	188127.26	
8.007	5.33.2	1,1110000111	2702070700	10012,120	
0.007	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				

Sl No	Specification	Quantity	Rate	Amount	
	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	67.727cum	@11550.42/cum	782275.30	
8.008	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	85.577cum	@85.68/cum	7332.24	
8.009	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	8.310cum	@7784.73/cum	64691.11	
8.010	50.6.1.9				
	Solid block masonry using pre cast solid blocks(Factory made) of size 40x20x15 cm or nearest available size confirming to IS 2185 part I of 1979 for super structure above floor two level upto floor five level with thickness 15cm in: CM 1:6 (1 cement : 6 coarse sand) etc complete				
	Net Total	11.311cum	@8173.38/cum	92449.10	
8.011	21.1.1.2				
	Providing and fixing aluminium work for doors, windows, ventilators and partitions with extruded built up standard tubular sections/ appropriate Z sections and other sections of approved make conforming to IS : 733 and IS: 1285, fixing with dash fasteners of required dia and size, including necessary filling up the gaps at junctions, i.e. at top, bottom and sides with required EPDM rubber/ neoprene gasket etc. Aluminium sections shall be smooth, rust free, straight, mitred and jointed mechanically wherever required including cleat angle, Aluminnium snap beading for glazing /paneling, C.P. brass/ stainless steel screws, all complete as per architectural drawings and the directions of Engineer-in-charge.(Glazing, paneling and dash fasteners to be paid for separately): For fixed portionPowder coated aluminium (minimum thickness of powder coating 50 micron)				
	Net Total	12.000kg	@560.61/kg	6727.32	
8.012	21.1.2.2 For shutters of doors, windows & ventilators including providing and fixing hinges / pivots and making provision for fixing of fittings wherever required including the cost of EPDM rubber/ neoprene gasket required (Fittings shall be paid for separately)Powder coated aluminium (minimum thickness of powder coating 50 micron)				
	Net Total	9.000kg	@671.29/kg	6041.61	

	Sl No	Specification	Quantity	Rate	Amount		
8	3.013	21.3.1					
		Providing and fixing glazing in alur partitions etc. with EPDM rubber / r architectural drawings and the direc aluminium snap beading shall be pa thickness	neoprene gasket tions of Engine	t etc. complete as per er - in -Charge. ( Cos	the st of		
		Net Total	8.438sqm	@1228.18/sqm	10363.38		
8	3.014	5.9.1					
		Centering and shuttering including for:Foundations, footings, bases of					
		Net Total	14.400sqm	@350.00/sqm	5040.00		
8	3.015	5.9.3					
		Centering and shuttering including floors, roofs, landings, balconies an			or:Suspended		
		Net Total	482.674sqm	@851.49/sqm	410992.08		
8	3.016	5.22.6	KOAD				
		Steel reinforcement for R.C.C work including straightening, cutting, bending, pla in position and binding all complete upto plinth levelThermo - Mechanically Treat bars of grade Fe-500D or more					
		Net Total	1 <mark>0424</mark> .760kil ogram	@102.61/kilogra m	1069684.62		
8	8.017						
		12 mm cement plaster finished with a floating coat of neat cement of mix:1:3 cement : 3 fine sand)					
		Net Total	842.041sqm	@418.80/sqm	352646.77		
8	3.018	22.23.1					
	Providing and applying integral crystalline slurry of hydrophilic in nature for waterproofing treatment to the RCC structures like retaining walls of the basemed water tanks, roof slabs, podiums, reservior, sewage & amp; water treatment plant tunnels / subway and bridge deck etc., prepared by mixing in the ratio of 5 : 2 (5 parts integral crystalline slurry : 2 parts water) for vertical surfaces and 3 : 1 (3 parts integral crystalline slurry : 1 part water) for horizontal surfaces and applying the same from negative (internal) side with the help of synthetic fiber brush. The mashall meet the requirements as specified in ACI-212-3R-2010 i.e by reducing permeability of concrete by more than 90% compared with control concrete as p DIN 1048 and resistant to 16 bar hydrostatic pressure on negative side. The crystalline slurry shall be capable of self-healing of cracks up to a width of 0.50mm. The w shall be carried out all complete as per specification and the direction of the engineerin-			e basement, ent plant, 5 parts 3 parts ying the . The material ucing rrete as per The h. The work the			
		charge. The product performance sh leakage.For vertical surface two coa	ats @0.70 kg pe	r sqm			
	3.019	Net Total	162.040sqm	@595.25/sqm	96454.31		
		22.23.2 Providing and applying integral crystalline slurry of hydrophilic in nature for waterproofing treatment to the RCC structures like retaining walls of the basement, water tanks, roof slabs, podiums, reservior, sewage & amp; water treatment plant, tinhetels 29.139 33 / subway and bridge deck etc., prepared by mixing in the ratio of 5 : 2 (5 parts					
		integral crystalline slurry : 2 parts w	vater) for vertica	al surfaces and 3 : 1 (	3 parts		

Sl No	Specification	Quantity	Rate	Amount	
	Net Total	89.250sqm	@458.80/sqm	40947.90	
8.020	13.47.1				
	Finishing walls with Premium Acry of required shade:New work (Two of including priming coat of exterior p	or more coats ap	oplied @ 1.43 ltr/ 10		
	Net Total	492.931sqm	@198.01/sqm	97605.27	
8.021	13.71				
	Lettering with black Japan pint of a	pproved brand a	and manufacture		
	Net Total	80.000per Letter per cm height	@5.82/per Letter per cm height	465.60	
8.022	10.25.2				
	Item Shifted to Sub head 14 as item 14.73 Item Shifted to head 14 as item 14.74 Steel work welded in built up sections/framed work, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer using structural steel etc. as required.In gratings, frames, guard bar, ladder, railings, brackets, gates and similar works				
	Net Total	850.000kg	@160.93/kg	136790.50	
8.023	100.41.34	<b>~ II</b>			
	Supplying and fixing Rectangular C.I. manhole cover 455mm x 610mm v (low duty) charges including all cost, labour charges etc., complete.				
	Net Total	6.000no	@2920.75/no	17524.50	
8.024	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 endby end locks, mounted on specially designed pipe shaft with brackets, side guides andarrangements for inside and outside locking with push and pull operation complete,including the cost of providing and fixing necessary 27.5 cm long wire springsmanufactured 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.80x1.25mm M.S. laths with 1.25 mm thick top coverNet Total8.100sqm@3617.31/sqm29300.21				
8.025	9.48.2				
0.023	9.48.2 Providing and fixing M.S. Grills of required pattern in frames of windows etc. with M.S. flats, square or round bars etc. including priming coat with approved steel primer all complete.Fixed to openings/ wooden frames with rawl plugs screws etc				
	Net Total	80.000kg	@225.44/kg	18035.20	
8.026	18.26.1				
	Providing and laying flanged C.I. S tapers, caps etc., suitable for flanged				
	Net Total	1.340quintal	@9660.34/quinta l	12944.86	

Sl No	Specification	Quantity	Rate	Amount	
8.027	OD167332/2023-2024				
	Supplying and providing water level indicator to the tank using scale fabricated out of 2mm thick MS plate with in the frame work of suitable size MS square tube, 160mm PVC pipe for guiding the float, necessary pullies, suitable nylon thread for connecting float and level indicator, painting the entire structure,				
	Net Total	1.000each	@10453.50/each	10453.50	
8.028	100.36.1				
	Filling water with 5000 litre tankers fited in lorry and conveying water from a distance of 5 km (average) to the reservoir site and pumping the water into the reservoir of height not less than 3 m using 5 HP diesel engine pump set , hire for tanker lorry, tools and other appliences and cost of water etc. complete.				
	Net Total	300.000Kilo litre		57015.00	
			Heading Total(Rs)	3809927.71	
9	Road restoration charges PWD/S	H/NH			
9.001	3.6	KOAD-			
	Excavation for roadwork in soil with hydraulic excavator of 0.9 cum bucket capacity including cutting and loading in tippers, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections, and transporting to the embankment location within all lifts and lead upto 1000m				
	Net Total	136 <mark>8.4</mark> 50cum	@48.79/cum	66766.68	
9.002	4.2.A.1	BLIC WORKS	ALMAN AND AND AND AND AND AND AND AND AND A		
	Construction of granular sub-base b layers with a motor grader on a prep rotavator at OMC, and compacting density, complete as per clause 401. Method	pared surface, n with a vibratory	nixing by mix in-place roller to achieve the	ce method with e desired	
	Net Total	699.975cum	@3283.03/cum	2298038.92	
9.003	4.12				
	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.				
	Net Total	36.000cum	@3375.91/cum	121532.76	
9.004	5.1.a				
	Providing and applying primer coat of granular Base including clearing 0.70 - 1.0 kg/sqm using mechanical	of road surface	emulsion ( SS) on pre and spraying primer	epared surface at the rate of	
	Net Total	510.000sqm	@61.55/sqm	31390.50	
9.005	5.2.b				
	Providing and applying tack coat was pressure distributor at the rate of 0.2				

Sl No	Specification	Quantity	Rate	Amount	
	Surface cleaned with mechanical br	oom.			
	Net Total	510.000sqm	@14.05/sqm	7165.50	
9.006	5.3.2.a				
	Providing and laying bituminous macadam with 80-100 TPH hot mix plant producing an average output of 75 tonnes per hour using crushed aggregates of specified grading premixed with a bituminous binder (VG 30), transported to the site, laid over a previously prepared surface with paver finisher to the required grade, level, and alignment and rolled as per clauses 501.6 and 501.7 to achieve the desired compaction For Grading II - (19 mm nominal size)				
	Net Total	18.750cum	@8465.71/cum	158732.06	
9.007	5.2.a				
	Providing and applying tack coat we pressure distributor at the rate of 0.2 surface cleaned with mechanical bro	20 - 0.30 kg per bom.	sqm on the prepared	bituminous	
	Net Total	375.000sqm	@11.60/sqm	4350.00	
9.008	5.6.2.a	Kain-			
	Providing and laying bituminous concrete with 80-100 TPH hot mix plant producin an average output of 75 tonnes per hour using crushed aggregates of specified grading, premixed with a bituminous binder(NRMB) @ 5.4 percent of mix and fill transporting the hot mix to work site, laying with a hydrostatic paver finisher with sensor control to the required grade, level, and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MORTH specification clause No. 507 complete in all respects For Grading - II (13. mm Nominal Size)				
	Net Total	11.250cum	@12886.67/cum	144975.04	
9.009	5.7.1				
	Providing, laying and rolling of close-graded premix surfacing material of 20 mm thickness composed of 11.2 mm to 0.09 mm (Type-A) aggregates using viscosity grade bitumen (VG - 30) to the required line, grade, and level to serve as wearing course on a previously prepared base, including mixing in a suitable HMP of appropriate capacity not less than 75 tonnes/hour., laying and rolling with a Smooth wheeled roller 8-10 tonne capacity, and finishing to the required level and grade. Net Total 135.000sqm @203.29/sqm 27444.15				
9.010	5.8.a				
	Providing and laying surface dressing as wearing course in single coat using crushed stone aggregates of specified size on a layer of bituminous binder (VG 30) laid on the prepared surface and rolling with 8-10 tonne smooth wheeled steel roller. Grading I - 19 mm nominal chipping size				
	Net Total	135.000sqm	@109.04/sqm	14720.40	
9.011	12.4				
	Plain cement concrete 1:3:6 nomina 40 mm nominal size mechanically r vibration including curing for 14 da	nixed, placed in			
	Net Total	421.650cum	@6718.30/cum	2832771.20	

Sl No	Specification	Quantity	Rate	Amount	
9.012	12.8.B.1				
	Plain/Reinforced Cement Concrete in Open Foundation complete as per Drawing and Technical Specifications PCC Grade M20				
	Net Total	316.238cum	@8377.76/cum	2649366.07	
			Heading Total(Rs)	8357253.28	
10	Road restoration charges -LSGD				
10.001	3.5.3				
	Excavation in Soil using Hydraulic Excavation for roadwork in soil wit including cutting and loading in tipp accordance with requirements of lin the embankment location with a lift Specification Clause 302.3	h hydraulic exc pers, trimming b les, grades and o	avator of 0.9 cum bu bottom and side slop cross-sections, and tr	cket capacity es, in ansporting to	
	Net Total	127.500cum	@37.83/cum	4823.33	
10.002	4.1.A.1	AA.			
	Granular Sub-base with Well Grade Method Construction of granular s spreading in uniform layers with mo place method with rotavator at OM achieve the desired density, comple For Grading I Material	ub-base by pro- otor grader on p C, and compact te as per Techni	viding well graded m repared surface, mix ing with smooth whe ical Specification Cla	naterial, ing by mix in eel roller to ause 401. (i)	
	Net Total	63.750cum	@3094.44/cum	197270.55	
10.003	4.9 Wet Mix Macadam Providing, lay aggregate to wet mix macadam spec water at OMC in mechanical mixer site, laying in uniform layers in sub compacting with smooth wheel roll density including lighting, barricadi Tables 400.11 & 400.12 and Techni Means with 1 km lead	cification includ (Pug Mill), carr -base/base cour er of 80 to 100k ng and mainten	ling premixing the m riage of mixed mater se on a well prepared N weight to achieve ance of diversion, et	aterial with ial by tipper to d sub-base and the desired c as per	
	Net Total	22.500cum	@3459.12/cum	77830.20	
10.004	5.1.1a				
	Prime Coat :- Low porosity Providing and applying primer coat with bitumen emulsion (SS-1) on prepared surface of granular base including cleaning of road surface and spraying primer at the rate of 0.70-1.0 kg/sqm using mechanical means as per Technical Specification Clause 502				
	Net Total	250.000sqm	@74.09/sqm	18522.50	
10.005	5.2.3a				
	Tack Coat Providing and applying emulsion distributor at the rate of 0. surfaces treated with primer & clear Specification Clause 503.	25 to 0.30 kg p	er sqm on the prepar	ed granular	
	Net Total	250.000sqm	@15.63/sqm	3907.50	

Sl No	Specification	Quantity	Rate	Amount	
10.006	5.9.1.2a				
	20mm thick Open-Graded Premix Carpet using Bituminous (penetration grade/modified bitumen) Binder - Bitumen S-65 Providing, laying and rolling of open-graded premix carpet of 20 mm thickness composed of 13.2 mm to 5.6 mm aggregates either using penetration grade bitumen or emulsion to required line, grade and level to serve as wearing course on a previously prepared base, including mixing in a suitable plant, laying and rolling with a three wheel 80-100 kN static roller capacity, finished to required level and grades to be followed by seal coat of either Type A or Type B or Type C as per Technical Specification Clause 508. Case - I By Manual Means (II) Bitumen (S-65)				
	Net Total	337.500sqm	@200.97/sqm	67827.38	
10.007	5.12.A.3.2a				
	Seal Coat - Manual Means - Type C sealing the voids in a bituminous su fall using Type A, Type B and Type By Manual Means :- Case - III : Type	rface laid to the C as per Techi	e specified levels, gra nical Specification C	ide and cross	
	Net Total	337.500sqm	@85.09/sqm	28717.88	
10.008	11.4.3.1	12201-11			
	Providing concrete for plain/reinfor drawings and technical specification M 20 (i) Nominal mix (1:2:4)	ns Clause 802, 8	303, 1202 & 1203 III	. P.C.C. grade	
	Net Total	74.250cum	@8633.95/cum	641070.79	
	OF PUI	BLIC WORKS	Heading Total(Rs)	1039970.13	
11	Electrification works and Supply sets at Erachilpara	erection testing	g and commissionin	ng of pump	
11.001					
	Supply, erection & amp; commissioning of best quality KWA approved make ISI marked centrifugal pumpset having a 15 LPS discharge against 130 M head at its maximum efficiency working at 230/415V at 50 Hz, 1450 rpm with bronze impeller, stainless steel shaft, CI/SS pump casing with suitable type base plate, including suitable fully Automatic starter with dry run, under voltage, over voltage & amp; over current protection relay, MS panel board with MCCB, ELCB, Capacitor, Indicator lamps, voltmeter, ammeter, change over switch etc suitable for the above motor pump set including necessary copper cable for wiring, earthing, suitable size GM/CI non return & amp; sluice valves, suction & amp; delivery connections etc as per ISI and IE regulations & amp; KSEB standard and erected & amp; trial run conducted for 7days as per the direction of dept. officers and 2 years of free maintenance. If any documentation is required, that should be arranged by the supplier.A). PUMP:-Supply , erection , testing and commissioning of Kirloskar reputed make centrifugal pumpsets with Bronze/SS impeller , SS shaft and CI pump casing with suitable type of base plate with coupling ,coupling guard foundation bolts and nuts etc. complete suitable for coupling the pump and motor above the base plate etc complete including providing suitable concrete foundation including cost of cement , sand and metal etc complete the duty condition is as follows discharge -15 lps, total head - 130m,Speed -1460 rpm, & lt;br>(B). MOTOR:- supply , erection , testing and commissioning of Kirloskar reputed make horizontal solid shaft foot mounted TEFC squaral cage induction motor suitable for the above pump working 3 phase 50HZ AC				

supply, working voltage 415 V / 3300 V. The motor shall confirm to IE2/IE3 as per IS 12615-2018 including providing suitable concrete foundation including cost of cement, sand and metal etc complete. Flexible coupling shall be used for coupling of pumps and motors (C).STARTER:- Supply, recretion, testing and commissioning of dry type copper wound auto transformer having 40,60.80% taping mounded with powder coated 2 mm thick steel sheath dust and vermin proof floor mounted control cubical panel associated with in/out cable entry boxes for accommodating the following parameters for controlling functions of the the fully automatic auto transformer starter. suitable for above motor - L&T or equivalent Co make MNX 25 contactor unit - 1 No L&T or equivalent AYF digital meter 1 No and selector switch - 1 set ON/Off ,trip & amp; 3 phase indication lamps, Digital or numerical motor protection relay Power Circuit wring with 25 x 4mm PVC sleeve insulated copper har and 2.5 sq.mm control wring <dr> (D).PANNEL BOARD :- Supply, erection,testing and commissioning of cubical type floor mounted MS fabricated dust and vermin proof common control panel board consisting of 1 No. suitable rating of 3 pole MCCB as incomer providing suitable size Aluminium bus bar inter connect the above MCCB and fitted with 3 Nos of indicator lamps, 1 No. volt meter with selector switch, 1 No. Ammeter with selector switch, 2, CABLING WORK:- Supply, laving, testing and commissioning of suitable size Aluminium conductor ammoured cables for the above pump set from panel board to starter and suitable size able through PVC pipe. flexible hose and accessories from starter to motor-considering energy conservation &lt;:Dr&gt; (F). CABLING:         Supply of all material and providing duplicate earth point as per Et astadards &lt;:Dr&gt; (G).CAPACITOR:</dr>
11.002 OD167334/2023-2024

Sl No	Specification	Quantity	Rate	Amount	
	Supply & amp; installation of light fittings on TW round block Supply, conveyance installation testing and commissioning the light fittings of following types made of CRCA with 0.5mm thickness complete with all accessories and lamps etc. directly on wall or ceiling with PVC round block neatly painted to suit the fitting and giving connection with required length of 16/0.20mm 3 core copper conductor flex wire conforming to relevant ISS and giving connections as required. 1x28wT5 fitting with APF electronic ballast suitable for continuous operation with THD less than 10%, power factor greater than 0.98, RoHS compliant, high lumen tube .				
	Net Total	6.000no	@1055.99/no	6335.94	
11.003	OD167335/2023-2024				
	Providing and fixing 25 mm X 5 mm connections etc. as required. As per			s for	
	Net Total	8.000metre	@1251.12/metre	10008.96	
11.004	OD167336/2023-2024	0.0			
	25mm PVC Conduit- Supplying and conduit along with accessories in su making good the same in case of ree Databook DAR Electrical-1.21.2.	irface/ recessinc	cluding cutting the w	all and	
	Net Total	6.000metre	@111.80/metre	670.80	
11.005	OD167337/2023-2024	$\sim$ 11			
	Wiring with 3x 4 sq mm FRLS PVC drawing following sizes of FRLS P in the existingsurface / recessed stee databook DAR Electrical-1.17.21.	VC insulated co	pper conductor, sing	gle core cable	
	Net Total	6.000metre	@144.35/metre	866.10	
11.006	OD167338/2023-2024				
	12 Way MCB DB 240V -Supplyin neutral, sheet steel, MCB distribution tinned copper bus bar, neutral bus b painted including earthing etc. as re way, Double door. As per Databook	on board, 240 V ar, earth bar, di quired. (But wi	, on surface/recess, c n bar, interconnectio thout MCBIRCCB/Is	complete with ns, powder	
	Net Total	1.000no	@2060.67/no	2060.67	
11.007	OD167339/2023-2024				
	SPN 5-32A MCB-Supplying and fix "C" curve, miniature cir following poles in the existing MCI commissioning etc. asrequired. Sing Electrical-2.10.2.	cuit breaker sui B DB complete	itable forinductive lo with connections, test	ad of sting and	
	Net Total	2.000no	@675.08/no	1350.16	
11.008	OD167340/2023-2024				
	DP Isolator 40A -Supplying and fix isolator in the existing MCB DB co commissioning etc. as required. 40	mplete withcon	nections, testing and		

Sl No	Specification	Quantity	Rate	Amount		
	Net Total	1.000no	@420.34/no	420.34		
11.009	OD167341/2023-2024	OD167341/2023-2024				
	RCCB DP 40A - Supplying and fixing following rating, double pole, (single phase and neutral), 240 volts, residual current circuitbreaker (RCCB), having a sensitivity current upto 300 milliamperes in the existing MCB DB complete with connections, testing and commissioning etc. as required. 40 amps . As per Databook DAR Electrical 2.14.2.					
	Net Total	1.000no	@2599.90/no	2599.90		
11.010	OD167342/2023-2024					
	Wiring for light point/ fan point/ ex FRLS PVC insulated copperconductor single co conduit, with modular switch, modular plate sq.mm. FRLS PVC insulated copper conductor sir Databook DAR Electrical 1.10.2.	ore cable in surfa	ace / recessed mediu	m class PVC int with 1.5		
	Net Total	14.000point	@970.89/point	13592.46		
11.011	OD167343/2023-2024					
	Earthing with copper earth plate 600 accessories, and providing masonry arrangement and watering pipe of 2 required. As per Data book Electric	enclosure with .7 metre long et	cover plate having l	ocking		
	Net Total	2.000set	@14635.61/set	29271.22		
11.012	OD167344/2023-2024					
	Expenses of getting electrical conne service charges, energization charg		EB including docume	entation fee,		
	Net Total	1.000job	@19977.80/job	19977.80		
11.013	OD167345/2023-2024					
	Supply, conveyance, installation and 300/305mm sweep in metal frame w making good the damages etc as rec	vorking on 230V	V A/C 300 sweep ind	cluding		
	Net Total	2.000no	@2633.90/no	5267.80		
11.014	OD167346/2023-2024					
	Supply conveyance ,installation test street/Yard light out put greater than protection with LED chip make crea 0.95 at full load ,internal surge prote powder coated housing acryliccover greater than 0.98 R0HS compliant of compartment should be separately a Certificate from NABL acredited th manufacturer)	1105 lumen/wat e/Lumilled/Nich ection up to 8 ky r complete with luly wired up fo accessible for ma	ts 4000-6000K with hea with powerfactor v and alluminium pr THD less than 10% r use on 230v AC su aintanance(LM 79&	IP66 c greater than easure die cast power factor upply.Driver amp;80		

Sl No	Specification	Quantity	Rate	Amount		
	Net Total	4.000no	@4546.00/no	18184.00		
11.015	15 OD167347/2023-2024					
	Supply, delivery and fixing of 3 T or suitable capacity Electrically and manually working on single girder with overhead travelling trolley and clear lift as per site conditions for lifting the chemicals, Chlorine, pumps etc and fitting as required, supplied with one set of crane slings with GI D shackle and clamps etc. complete as per the instruction of the Engineer in charge. 					
	Net Total         1.000no         @284722.27/no         284722.					
			Heading Total(Rs)	3096990.42		
12	Electrification works and Supply sets at Poopara	erection testing	g and commissionin	g of pump		
12.001	OD167315/2023-2024					
	<ul> <li>I OD16/315/2023-2024</li> <li>Supply, erection &amp; amp; commissioning of best quality KWA approved make ISI marked centrifugal pumpset having a 15 LPS discharge against 145 M head at its maximum efficiency working at 230/415V at 50 Hz, 1450 rpm with bronze impeller, stainless steel shaft, CI/SS pump casing with suitable type base plate, including suitable fully Automatic starter with dry run, under voltage, over voltage &amp; amp; over current protection relay, MS panel board with MCCB, ELCB, Capacitor, Indicator lamps, voltmeter, ammeter, change over switch et suitable for the above motor pump set including necessary copper cable for wiring, earthing, suitable size GM/CI non return &amp; amp; sluice valves, suction &amp; amp; delivery connections et as per ISI and IE regulations &amp; amp; KSEB standard and erected &amp; amp; trial run conducted for 7days as per the direction of dept. officers and 2 years of free maintenance. If any documentation is required, that should be arranged by the supplier.A). PUMP:-Supply, erection , testing and commissioning of Kirloskar reputed make centrifugal pumpsets with Bronze/SS impeller , SS shaft and CI pump casing with suitable type of base plate with coupling ,coupling guard foundation bolts and nuts etc. complete suitable for coupling the pump and motor above the base&lt;br&gt;plate etc complete including providing suitable concrete foundation including cost of cement , sand and metal etc complete the duty condition is as follows discharge - 15 lps, total head - 145m,Speed - 1460 rpm, &lt;br&gt;</li> <li>(B). MOTOR:- supply , erection , testing and commissioning of Kirloskar reputed make horizontal solid shaft foot mounted TEFC squaral cage induction motor suitable for the above pump working 3 phase 50HZ AC supply , working voltage&lt;br&gt;415 V / 3300 V . The motor shall confirm to IE2/IE3 as per IS 12615-2018 including providing suitable concrete foundation including cost of cement, sand and metal etc complete. Flexible coupling shall be used for coupling of pumps and</li></ul>					

Sl No	Specification	Quantity	Rate	Amount
	control wiring  (D).PANNEL BOARD :- Supply, e floor mounted MS fabricated dust a consisting of 1 No. suitable rating o size Aluminium bus bar inter conne indicator lamps, 1 No. volt meter w switch etc. complete and provided v and code of practice. the panel shall foundation (E).CABLING commissioning of suitable size Alu pump set from panel board to starte flexible hose and accessories from s   (F). EARTHING:- Supply of all material and providing wall /column/floor/buried (Appx. 20 mtr motor,starter,panel board etc. and co   (G).CAPACITOR:- Supply,erection,testing and commiss capacitor for the above motor to get confirm to IS 2834  (H).VALVE:- Supply of suitable siz fanged sluice valve and Non return valves shall include proper RCC sup positive suction pump set sluice val for easy repair works. Pressure gaug    (I).SUCTION AND DELIVERY PI suitable size best quality MS pipe o 8 m (approx). suitable for the above connecting the suction pipe of size 2 and bolts IR sheet etc. complete and 150mm MS pipe of thickness not le vales and suitable specials to conne	nd vermin proo f 3 pole MCCH ct the above MG ith selector switt with duplicate end be fitted on a c G WORK:- Sup minium conduct r and suitable s starter to motor. g duplicate earth s) in ground and onnect with exist sioning suitable unity <br&g ze best quality h valve with suita pport especially ve should be in ge on both sucti IPE CONNECT f thickness not pump set and s 200mm MS and connecting the ss than 8 mm for</br&g 	f common control pa B as incomer providin CCB and fitted with tch, 1 No. Ammeter y arth point as per CEA common base frame of oply, laying, testing a ctor armoured cables ize cable through P considering energy of hing by 25 x 3mm co d giving double earth sting earthbus. As per e rating of of heavy d t;power factor . The base of the pressure rating. for Non return valve suction as well as de on and delivery side IONS:- Supply and falses than 8 mm for a suitable size foot valve to a total length of 8 for 8 for 8 mm of 8 for 8 mm	anel board ng suitable 3 Nos of with selector A regulation on suitable and for the above VC pipe, conservation opper strip on hing to or IE standards huty APP capacitor shall ed CI double itting of es. In case of elivery sides fitting of total length of ve and flanges, nut pump with
	Net Total	2.000no	@1486803.50/no	2973607.00
12.002	OD167316/2023-2024			
	Supply, erection & amp; commission marked centrifugal pumpset having maximum efficiency working at 230 stainless steel shaft, CI/SS pump ca suitable fully Automatic starter with current protection relay, MS panel b lamps, voltmeter, ammeter, change set including necessary copper cable return & amp; sluice valves, suction regulations & amp; KSEB standard as per the direction of dept. officers documentation is required, that show	a 3 LPS discha 0/415V at 50 H sing with suitab order run, under board with MCC over switch etc e for wiring, ear & amp; delivery and erected & ar and 2 years of	rge against 180 M he z, 1450 rpm with bro ole type base plate, in voltage, over voltag CB, ELCB, Capacitor suitable for the abov rthing, suitable size C y connections etc as mp; trial run conduct free maintenance. If	ead at its onze impeller, acluding ge & amp; over r, Indicator ze motor pump GM/CI non per ISI and IE ed for 7days

Sl No	Specification	Quantity	Rate	Amount	
	Supply, erection, testing and commissioning of Kirloskar reputed make centrifugal pumpsets with Bronze/SS impeller, SS shaft and CI pump casing with suitable type of base plate with coupling ,coupling guard foundation bolts and nuts etc. complete suitable for coupling the pump and motor above the base plate etc complete including providing suitable concrete foundation including cost of cement, sand and metal etc complete the duty condition is as follows discharge - 3 lps, total head - 180m,Speed -1460 rpm, 				
	<ul> <li>(B). MOTOR:- supply, erection, tec make horizontal solid shaft foot mo for the above pump working 3 phas voltage&lt;br&gt;415 V / 3300 V.</li> <li>12615-2018 including providing sur- cement, sand and metal etc complet pumps and motors&lt;br&gt;</li> <li>(C).STARTER:- Supply, erection, t</li> </ul>	unted TEFC squ e 50HZ AC sup The motor shall itable concrete f e. Flexible coup	uaral cage induction ply, working confirm to IE2/IE3 foundation including bling shall be used fo	motor suitable as per IS cost of or coupling of	
	wound auto transformer having 40, mm thick steel sheath dust and vern associated with in/out cable entry b for controlling functions of the the for above motor - L&T or equi -1 No L&T or equivalent Co n	50,80% taping r nin proof floor r oxes for accom fully automatic valent reputed on nake MNX 95 c	nounded with powde mounted control cubinodating the followi auto transformer star co. make MNX 225 contactor unit- 2 Nos	er coated 2 ical panel ng parameters ter. suitable contactor unit Timer and	
	<ul> <li>supervisory trip relay 1 No OV/UV control relays Minilac or equivalent Co make single phasing preventer AVF digital meter 1 No and selector switch - 1 set ON/Off , trip &amp; amp; 3 phase indication lamps, Digital or numerical motor protection relay Power Circuit wiring with 25 x 4mm PVC sleeve insulated copper bar and 2.5 sq.mm control wiring &lt;br&gt;</li> <li>(D).PANNEL BOARD :- Supply, erection,testing and commissioning of cubical type</li> </ul>				
	floor mounted MS fabricated dust and vermin proof common control panel board consisting of 1 No. suitable rating of 3 pole MCCB as incomer providing suitable size Aluminium bus bar inter connect the above MCCB and fitted with 3 Nos of indicator lamps, 1 No. volt meter with selector switch, 1 No. Ammeter with selector switch etc. complete and provided with duplicate earth point as per CEA regulation and code of practice. the panel shall be fitted on a common base frame on suitable foundation (E).CABLING WORK:- Supply, laying, testing and commissioning of suitable size Aluminium conductor armoured cables for the above pump set from panel board to starter and suitable size cable through PVC pipe, flexible hose and accessories from starter to motor.considering energy conservation				
	  (F). EARTHING:- Supply of all material and providing wall /column/floor/buried (Appx. 20 mtr motor,starter,panel board etc. and co  	rs) in ground and	d giving double earth	ning to	
	(G).CAPACITOR:- Supply,erection,testing and commis capacitor for the above motor to get confirm to IS 2834  (H).VALVE:- Supply of suitable siz fanged sluice valve and Non return	t unity <br&g ze best quality h</br&g 	t;power factor . The meavy duty ISI Market	capacitor shall ed CI double	
	valves shall include proper RCC suppositive suction pump set sluice val for easy repair works. Pressure gaug	pport especially ve should be in	for Non return valve suction as well as de	es. In case of	

	Specification	Quantity	Rate	Amount	
	   (I).SUCTION AND DELIVERY PIPE CONNECTIONS:- Supply and fitting of suitable size best quality MS pipe of thickness not less than 8 mm for a total length of 8 m (approx). suitable for the above pump set and suitable size foot valve and connecting the suction pipe of size 200mm MS and valve with suitable flanges, nut and bolts IR sheet etc. complete and connecting the delivery side of the pump with 150mm MS pipe of thickness not less than 8 mm for a total length of 8 m (approx), vales and suitable specials to connect with the pumping main (15% RATE)				
	Net Total	2.000no	@409347.62/no	818695.24	
12.003	OD167317/2023-2024				
	Supply & amp; installation of light fittings on TW round block Supply, conveyance installation testing and commissioning the light fittings of following types made of CRCA with 0.5mm thickness complete with all accessories and lamps etc. directly on wall or ceiling with PVC round block neatly painted to suit the fitting and giving connection with required length of 16/0.20mm 3 core copper conductor flex wire conforming to relevant ISS and giving connections as required. 1x28wT5 fitting with APF electronic ballast suitable for continuous operation with THD less than 10%, power factor greater than 0.98, RoHS compliant, high lumen tube .				
	Net Total	6.000no	@1055.99/no	6335.94	
12.004	OD167318/2023-2024				
	Providing and fixing 25 mm X 5 mr connections etc. as required. As per			s for	
	Net Total	8.000metre	@1251.12/metre	10008.96	
12.005	OD167319/2023-2024				
	25mm PVC Conduit- Supplying and conduit along with accessories in su making good the same in case of rec Databook DAR Electrical-1.21.2.	rface/ recessinc	luding cutting the w	all and	
	Net Total	6.000metre	@111.80/metre	670.80	
12.006	OD167320/2023-2024				
	Wiring with 3x 4 sq mm FRLS PVC insulated copper conductor-Supplying and drawing following sizes of FRLS PVC insulated copper conductor, single core cable in the existing surface / recessed steel/ PVC conduit as required. 3 x 4 sq. mm As per databook DAR Electrical-1.17.21.				
	Net Total	6.000metre	@144.35/metre	866.10	
12.007	OD167321/2023-2024				
	12 Way MCB DB 240V -Supplying and fixing following way, single pole and neutral, sheet steel, MCB distribution board, 240 V, on surface/recess, complete with tinned copper bus bar, neutral bus bar, earth bar, din bar, interconnections, powder painted including earthing etc. as required. (But without MCBIRCCB/Isolator 12 way, Double door. As per Databook DAR Electrical-2.3.3.				
	Net Total	1.000no	@2060.67/no	2060.67	
12,009	OD167322/2023-2024				

Sl No	Specification	Quantity	Rate	Amount		
	SPN 5-32A MCB-Supplying and fixing 5 amps to 32 amps rating, 240/415 volts, "C" curve, miniature circuit breaker suitable forinductive load of following poles in the existing MCB DB complete with connections, testing and commissioning etc. asrequired. Single pole and netural .As per Databook DAR Electrical-2.10.2.					
	Net Total	2.000no	@675.08/no	1350.16		
12.009	OD167323/2023-2024					
	DP Isolator 40A -Supplying and fix isolator in the existing MCB DB co commissioning etc. as required. 40	mplete withcon	nections, testing and			
	Net Total	1.000no	@420.34/no	420.34		
12.010	OD167324/2023-2024					
	RCCB DP 40A - Supplying and fixiand neutral), 240 volts, residual current circuitbreaker (RCCB), have the existing MCB DB complete with required. 40 amps . As per Databook DAR Electrical 2.	ing a sensitivity h connections, t	current upto 300 mi esting and commissi	lliamperes in oning etc. as		
	Net Total	1.000no	@2599.90/no	2599.90		
12.011	OD167325/2023-2024		_			
	Wiring for light point/ fan point/ exhaust fan point/ call bell point with 1.5 sq.mm FRLS PVC insulated copperconductor single core cable in surface / recessed medium class PVC conduit, with modular switch, modular plate, suitableGI box and earthing the point with 1.5 sq.mm. FRLS PVC insulated copper conductor single core cable etc as required.Group B. As per					
	insulated copperconductor single co conduit, with modular switch, modular plate sq.mm. FRLS PVC insulated copper conductor sin	ore cable in surface	ace / recessed mediu	m class PVC int with 1.5		
	insulated copperconductor single co conduit, with modular switch, modular plate sq.mm. FRLS PVC insulated copper conductor sin Databook DAR Electrical 1.10.2.	re cable in surfa , suitableGI box agle core cable e	ace / recessed mediu and earthing the po etc as required.Group	m class PVC int with 1.5 p B. As per		
12.012	insulated copperconductor single co conduit, with modular switch, modular plate sq.mm. FRLS PVC insulated copper conductor sin Databook DAR Electrical 1.10.2. Net Total	ore cable in surface	ace / recessed mediu	m class PVC int with 1.5		
12.012	insulated copperconductor single co conduit, with modular switch, modular plate sq.mm. FRLS PVC insulated copper conductor sin Databook DAR Electrical 1.10.2.	ore cable in surfa , suitableGI box agle core cable e <u>14.000point</u> 0 mm X 600 mr enclosure with .7 metre long et	ace / recessed mediu a and earthing the po etc as required.Group @970.89/point n X 3 mm thick inclu- cover plate having h	m class PVC int with 1.5 o B. As per <u>13592.46</u> uding ocking		
12.012	insulated copperconductor single co conduit, with modular switch, modular plate sq.mm. FRLS PVC insulated copper conductor sin Databook DAR Electrical 1.10.2. Net Total OD167326/2023-2024 Earthing with copper earth plate 600 accessories, and providing masonry arrangement and watering pipe of 2	ore cable in surfa , suitableGI box agle core cable e <u>14.000point</u> 0 mm X 600 mr enclosure with .7 metre long et	ace / recessed mediu a and earthing the po etc as required.Group @970.89/point n X 3 mm thick inclu- cover plate having h	m class PVC int with 1.5 o B. As per <u>13592.46</u> uding ocking		
12.012	insulated copperconductor single co conduit, with modular switch, modular plate sq.mm. FRLS PVC insulated copper conductor sin Databook DAR Electrical 1.10.2. Net Total OD167326/2023-2024 Earthing with copper earth plate 600 accessories, and providing masonry arrangement and watering pipe of 2 required. As per Data book Electric Net Total	ore cable in surfa , suitableGI box agle core cable e <u>14.000point</u> 0 mm X 600 mr enclosure with .7 metre long et al 5.6	ace / recessed mediu ace / recessed mediu ace and earthing the po- etc as required.Group @970.89/point m X 3 mm thick inclu- cover plate having lo- c. with charcoal/ col-	m class PVC int with 1.5 o B. As per <u>13592.46</u> uding ocking ke and salt as		
	insulated copperconductor single co conduit, with modular switch, modular plate sq.mm. FRLS PVC insulated copper conductor sin Databook DAR Electrical 1.10.2. Net Total OD167326/2023-2024 Earthing with copper earth plate 600 accessories, and providing masonry arrangement and watering pipe of 2 required. As per Data book Electric Net Total	ore cable in surface , suitableGI box agle core cable e 14.000point 0 mm X 600 mr enclosure with .7 metre long et al 5.6 1.000set	ace / recessed mediu a and earthing the po etc as required.Group @970.89/point n X 3 mm thick inclu- cover plate having le c. with charcoal/ col- @14635.61/set	m class PVC int with 1.5 p B. As per <u>13592.46</u> uding ocking ke and salt as <u>14635.61</u>		
	insulated copperconductor single co conduit, with modular switch, modular plate sq.mm. FRLS PVC insulated copper conductor sin Databook DAR Electrical 1.10.2. Net Total OD167326/2023-2024 Earthing with copper earth plate 600 accessories, and providing masonry arrangement and watering pipe of 2 required. As per Data book Electric Net Total OD167327/2023-2024 Expenses of getting electrical conner	ore cable in surface , suitableGI box agle core cable e 14.000point 0 mm X 600 mr enclosure with .7 metre long et al 5.6 1.000set	ace / recessed mediu a and earthing the po etc as required.Group @970.89/point n X 3 mm thick inclu- cover plate having le c. with charcoal/ col- @14635.61/set EB including docume	m class PVC int with 1.5 p B. As per <u>13592.46</u> uding ocking ke and salt as <u>14635.61</u>		
	insulated copperconductor single co conduit, with modular switch, modular plate sq.mm. FRLS PVC insulated copper conductor sin Databook DAR Electrical 1.10.2. Net Total OD167326/2023-2024 Earthing with copper earth plate 600 accessories, and providing masonry arrangement and watering pipe of 2 required. As per Data book Electric Net Total OD167327/2023-2024 Expenses of getting electrical connec service charges, energization charg	ore cable in surfa , suitableGI box agle core cable e <u>14.000point</u> 0 mm X 600 mr enclosure with .7 metre long et al 5.6 <u>1.000set</u> ection from KSF es etc	ace / recessed mediu a and earthing the po etc as required.Group @970.89/point n X 3 mm thick inclu- cover plate having le c. with charcoal/ col- @14635.61/set EB including docume	m class PVC int with 1.5 p B. As per <u>13592.46</u> uding ocking ke and salt as <u>14635.61</u> entation fee,		
12.013	insulated copperconductor single co conduit, with modular switch, modular plate sq.mm. FRLS PVC insulated copper conductor sin Databook DAR Electrical 1.10.2. Net Total OD167326/2023-2024 Earthing with copper earth plate 600 accessories, and providing masonry arrangement and watering pipe of 2 required. As per Data book Electric Net Total OD167327/2023-2024 Expenses of getting electrical conner service charges, energization charg Net Total	ore cable in surfa- ore cable in surfa- suitableGI box agle core cable e <u>14.000point</u> 0 mm X 600 mr enclosure with .7 metre long et al 5.6 <u>1.000set</u> ection from KSF es etc <u>1.000job</u> d commissionin vorking on 230	ace / recessed mediu ace / recessed mediu a and earthing the po etc as required.Group @970.89/point m X 3 mm thick inclu- cover plate having le c. with charcoal/ col- @14635.61/set EB including docume @19977.80/job	m class PVC int with 1.5 p B. As per <u>13592.46</u> uding ocking ce and salt as <u>14635.61</u> entation fee, <u>19977.80</u> ust fan of cluding		

Sl No	Specification	Quantity	Rate	Amount		
12.015	OD167329/2023-2024					
	Supply conveyance ,installation testing and commissioning of 36/40 W LED street/Yard light out put greater than 105 lumen/watts 4000-6000K with IP66 protection with LED chip make cree/Lumilled/Nichea with powerfactor greater than 0.95 at full load ,internal surge protection up to 8 kv and alluminium preasure die cast powder coated housing acryliccover complete with THD less than 10% power factor greater than 0.98 R0HS compliant duly wired up for use on 230v AC supply.Driver compartment should be separately accessible for maintanance(LM 79&80 Certificate from NABL acredited third party lab produced mentioning chip manufacturer)					
	Net Total	4.000no	@4546.00/no	18184.00		
12.016	OD167330/2023-2024					
	Supply, delivery and fixing of 3 T working on single girder with overh conditions for lifting the chemicals, supplied with one set of crane sling per the instruction of the Engineer i	head travelling t Chlorine, pump s with GI D sha n charge. <br< th=""><th>rolley and clear lift a ps etc and fitting as ckle and clamps etc. &gt;</th><th>as per site required, complete as</th></br<>	rolley and clear lift a ps etc and fitting as ckle and clamps etc. >	as per site required, complete as		
	Net Total	A CONTRACT OF		284722.27		
			Heading Total(Rs)			
13	Electrification works and Supply sets at Jamespadi	erection testin	g and commissionir	ng of pump		
13.001	OD167348/2023-2024					
	OD167348/2023-2024 Supply, erection & amp; commissioning of best quality KWA approved make ISI marked centrifugal pumpset having a 17 LPS discharge against 140 M head at its maximum efficiency working at 230/415V at 50 Hz, 1450 rpm with bronze impeller, stainless steel shaft, Cl/SS pump casing with suitable type base plate, including suitable fully Automatic starter with dry run, under voltage, over voltage & amp; over current protection relay, MS panel board with MCCB, ELCB, Capacitor, Indicator lamps, voltmeter, ammeter, change over switch etc suitable for the above motor pump set including necessary copper cable for wiring, earthing, suitable size GM/CI non return & amp; sluice valves, suction & amp; delivery connections etc as per ISI and IE regulations & amp; KSEB standard and erected & amp; trial run conducted for 7days as per the direction of dept. officers and 2 years of free maintenance. If any documentation is required, that should be arranged by the supplier. A). PUMP:-Supply, erection , testing and commissioning of Kirloskar reputed make centrifugal pumpsets with Bronze/SS impeller , SS shaft and CI pump casing with suitable type of base plate with coupling ,coupling guard foundation bolts and nuts etc. complete suitable for coupling the pump and motor above the base plate etc complete including providing suitable concrete foundation including cost of cement , sand and metal etc complete the duty condition is as follows discharge - 17 lps, total head - 1400,Speed - 1460 rpm, & lt;br> (B). MOTOR:- supply , erection , testing and commissioning of Kirloskar reputed make horizontal solid shaft foot mounted TEFC squaral cage induction motor suitable for the above pump working 3 phase 50HZ AC supply , working voltage 415 V / 3300 V . The motor shall confirm to IE2/IE3 as per IS 12615-2018 including providing suitable concrete foundation including cost of cement, sand and metal etc complete. Flexible coupling shall be used for coupling of pumps and motors& lt;br>					

Sl No	Specification	Quantity	Rate	Amount		
	(C).STARTER:- Supply ,erection, testing and commissioning of dry type copper wound auto transformer having 40,60,80% taping mounded with powder coated 2 mm thick steel sheath dust and vermin proof floor mounted control cubical panel associated with in/out cable entry boxes for accommodating the following parameters for controlling functions of the the fully automatic auto transformer starter. suitable for above motor - L&T or equivalent reputed co. make MNX 225 contactor unit -1 No L&T or equivalent Co make MNX 95 contactor unit- 2 Nos Timer and supervisory trip relay 1 No OV/UV control relays Minilac or equivalent Co make single phasing preventer AVF digital meter 1 No and selector switch - 1 set ON/Off ,trip & 3 phase indication lamps, Digital or numerical motor protection relay Power Circuit wiring with 25 x 4mm PVC sleeve insulated copper bar and 2.5 sq.mm					
	control wiring  (D).PANNEL BOARD :- Supply, erection,testing and commissioning of cubical type floor mounted MS fabricated dust and vermin proof common control panel board consisting of 1 No. suitable rating of 3 pole MCCB as incomer providing suitable size Aluminium bus bar inter connect the above MCCB and fitted with 3 Nos of indicator lamps, 1 No. volt meter with selector switch, 1 No. Ammeter with selector switch etc. complete and provided with duplicate earth point as per CEA regulation and code of practice. the panel shall be fitted on a common base frame on suitable foundation (E).CABLING WORK:- Supply, laying, testing and commissioning of suitable size Aluminium conductor armoured cables for the above pump set from panel board to starter and suitable size cable through PVC pipe, flexible hose and accessories from starter to motor.considering energy conservation   (F). EARTHING:-					
	<ul> <li>Supply of all material and providing duplicate earthing by 25 x 3mm copper strip on wall</li> <li>/column/floor/buried (Appx. 20 mtrs) in ground and giving double earthing to motor, starter, panel board etc. and connect with existing earthbus. As per IE standards &lt;br&gt;</li> <li>(G).CAPACITOR:-</li> <li>Supply, erection, testing and commissioning suitable rating of of heavy duty APP capacitor for the above motor to get unity&lt;br&gt;power factor . The capacitor shall confirm to IS 2834 &lt;br&gt;</li> <li>(H).VALVE:- Supply of suitable size best quality heavy duty ISI Marked CI double fanged sluice valve and Non return valve with suitable pressure rating.fitting of valves shall include proper RCC support especially for Non return valves. In case of positive suction pump set sluice valve should be in suction as well as delivery sides</li> </ul>					
	for easy repair works. Pressure gauge on both suction and delivery side   (I).SUCTION AND DELIVERY PIPE CONNECTIONS:- Supply and fitting of suitable size best quality MS pipe of thickness not less than 8 mm for a total length of 8 m (approx). suitable for the above pump set and suitable size foot valve and connecting the suction pipe of size 200mm MS and valve with suitable flanges, nut and bolts IR sheet etc. complete and connecting the delivery side of the pump with 150mm MS pipe of thickness not less than 8 mm for a total length of 8 m (approx) , vales and suitable specials to connect with the pumping mainNet Total2.000no@1596737.15/no3193474.30					
13.002	OD167349/2023-2024					
	Supply & amp; installation of light f Supply, conveyance installation test			ings of		

Sl No	Specification	Quantity	Rate	Amount	
	following types made of CRCA with 0.5mm thickness complete with all accessories and lamps etc. directly on wall or ceiling with PVC round block neatly painted to suit the fitting and giving connection with required length of 16/0.20mm 3 core copper conductor flex wire conforming to relevant ISS and giving connections as required. 1x28wT5 fitting with APF electronic ballast suitable for continuous operation with THD less than 10%, power factor greater than 0.98, RoHS compliant, high lumen tube .				
	Net Total	6.000no	@1055.99/no	6335.94	
13.003	OD167350/2023-2024				
	Providing and fixing 25 mm X 5 mm connections etc. as required. As per	m copper strip o Databook DAF	on surface or in reces R Electrical-5.14.	s for	
	Net Total	8.000metre	@1251.12/metre	10008.96	
13.004	OD167351/2023-2024				
	25mm PVC Conduit- Supplying and conduit along with accessories in su making good the same in case of re- Databook DAR Electrical-1.21.2.	irface/ recessinc	luding cutting the w	all and	
	Net Total	6.000metre	@111.80/metre	670.80	
13.005	OD167352/2023-2024				
	Wiring with 3x 4 sq mm FRLS PVC drawing following sizes of FRLS P in the existing surface / recessed stee databook DAR Electrical-1.17.21.	VC insulated co	pper conductor, sing	gle core cable	
	Net Total	6.000metre	@144.35/metre	866.10	
13.006	OD167353/2023-2024				
	12 Way MCB DB 240V -Supplying and fixing following way, single pole and neutral, sheet steel, MCB distribution board, 240 V, on surface/recess, complete with tinned copper bus bar, neutral bus bar, earth bar, din bar, interconnections, powder painted including earthing etc. as required. (But without MCBIRCCB/Isolator 12 way, Double door. As per Databook DAR Electrical-2.3.3.				
	Net Total	1.000no	@2060.67/no	2060.67	
13.007	OD167354/2023-2024				
	SPN 5-32A MCB-Supplying and fixing 5 amps to 32 amps rating, 240/415 volts, "C" curve, miniature circuit breaker suitable forinductive load of following poles in the existing MCB DB complete with connections, testing and commissioning etc. asrequired. Single pole and netural .As per Databook DAR Electrical-2.10.2.				
	Net Total	2.000no	@675.08/no	1350.16	
13.008	OD167355/2023-2024				
	DP Isolator 40A -Supplying and fixing following rating, double pole, 240 volts, isolator in the existing MCB DB complete withconnections, testing and commissioning etc. as required. 40 amps .As per Databook DAR Electrical-2.12.1.				
	Net Total	1.000no	@420.34/no	420.34	
13.009	OD167356/2023-2024				

Sl No	Specification	Quantity	Rate	Amount	
	RCCB DP 40A - Supplying and fixing following rating, double pole, (single phase and neutral), 240 volts, residual current circuitbreaker (RCCB), having a sensitivity current upto 300 milliamperes in the existing MCB DB complete with connections, testing and commissioning etc. as required. 40 amps .				
	As per Databook DAR Electrical 2.				
	Net Total	1.000no	@2599.90/no	2599.90	
13.010	OD167357/2023-2024 Wiring for light point/ fan point/ exhaust fan point/ call bell point with 1.5 sq.mm FRLS PVC insulated copperconductor single core cable in surface / recessed medium class PVC conduit, with modular switch, modular plate, suitableGI box and earthing the point with 1.5 sq.mm. FRLS PVC insulated copper conductor single core cable etc as required.Group B. As per Databook DAR Electrical 1.10.2.				
	Net Total	14.000point	@970.89/point	13592.46	
13.011	OD167358/2023-2024			10092.10	
	Earthing with copper earth plate 600 mm X 600 mm X 3 mm thick including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe of 2.7 metre long etc. with charcoal/ coke and salt required. As per Data book Electrical 5.6				
13.012	OF PU	1.000500	e 1 1055.01/5et	14635.61	
13.012	Expenses of getting electrical connection service charges, energization charge		EB including docume	entation fee,	
	Net Total	1.000job	@19977.80/job	19977.80	
13.013	OD167360/2023-2024				
	Supply, conveyance, installation and commissioning of light duty Exhaust fan of 300/305mm sweep in metal frame working on 230V A/C 300 sweep including making good the damages etc as required as directed by the departmental officersNet Total2.000no@2633.90/no5267.80				
13.014					
13.014	Supply conveyance ,installation testing and commissioning of 36/40 W LED street/Yard light out put greater than 105 lumen/watts 4000-6000K with IP66 protection with LED chip make cree/Lumilled/Nichea with powerfactor greater than 0.95 at full load ,internal surge protection up to 8 kv and alluminium preasure die cast powder coated housing acryliccover complete with THD less than 10% power factor greater than 0.98 R0HS compliant duly wired up for use on 230v AC supply.Driver compartment should be separately accessible for maintanance(LM 79&80 Certificate from NABL acredited third party lab produced mentioning chip manufacturer)				
	Net Total	4.000no	@4546.00/no	18184.00	
13.015	OD167362/2023-2024				
15.015	0D107302/2023 2024				

Sl No	Specification	Quantity	Rate	Amount		
	working on single girder with overhead travelling trolley and clear lift as per site conditions for lifting the chemicals, Chlorine, pumps etc and fitting as required, supplied with one set of crane slings with GI D shackle and clamps etc. complete as per the instruction of the Engineer in charge. 					
	Net Total 1.000no @284722.27/no 2					
			Heading Total(Rs)	3574167.11		
14	Supply erection testing and comm magnapeak	nissioning of p	ump sets at Poopara	a for		
14.001	OD167977/2023-2024					
<ul> <li>14.001 OD167977/2023-2024</li> <li>Supply, erection &amp; amp; amp; commissioning of best quality KWA approved mak marked centrifugal pumpset having a 3 LPS discharge against 176 M head at its maximul efficiency working at 230/415V at 50 Hz, 1450 rpm with bronze impeller, stainless steel sha CI/SS pump casing with suitable type base plate, including suitable fully Automatic stat with dry run, under voltage, over voltage &amp; amp; amp; over current protection relay, MS pa board with MCCB, ELCB, Capacitor, Indicator lamps, voltmeter, ammeter, change over swi etc suitable</li> <li>for the above motor pump set including necessary copper cable for wiring, earthi suitable</li> <li>size GM/CI non return &amp; amp; amp; sluice valves, suction &amp; amp; amp; delivery connections etc as per ISI and IE regulations &amp; amp; amp; KSEB standard and erected &amp; amp; amp; trial run conducted for 7days as per the direction of dept. officers and 2 years of free maintenance. If any documentation is required, that should be arranged by the supplier. A). PUMP:-Supply, erection, testing and commissioning of Kirloskar reputed make centrifugal pumpsets with Bronze/SS impeller, SS shaft and CI pump casing with suitable type of base plate with coupling ,coupling guard foundation bolts and nuts etc. complete suitable for coupling the pump and motor above the base&amp; t; plate etc complete including providing suitable concrete foundation including cost of cement , sand and metal etc complete the duty condition is as follows discharge - 3 lps, total head - 176m, Speed -1460 rpm, &amp; amp; 1; br&amp; amp; gt;</li> <li>(B). MOTOR:- supply , erection , testing and commissioning of Kirloskar reputed</li> </ul>			a maximum s steel shaft, matic starter ay, MS panel e over switch ng, earthing, elivery trial run y PUMP:- ronze/SS ,coupling and motor e concrete llows			
	the above pump working 3 phase 50HZ AC supply, working voltage 415 V / 3300 V. The motor shall confirm to IE2/IE3 as per IS 12615-2018 including providing suitable					
	concrete foundation including cost of cement, sand and metal etc complete. Flexible coupling					

## EST No. :WRD/KWA-CE(CR)/EST/6970/2022\_5\_3\_2/RC 1 (Edit Id : 6) (Dsor year : 2018,Cost Index (Place : Idukki,Value : 141.53),GST : 18%

Sl No	Specification	Quantity	Rate	Amount		
	shall be used for coupling of pumps and motors  (C).STARTER:- Supply ,erection, testing and commissioning of dry type copper					
	wound auto transformer having 40,60,80% taping mounded with powder coated 2 mm thick steel sheath					
	dust and vermin proof floor mounte cable entry	d control cubica	al panel associated w	ith in/out		
	boxes for accommodating the following parameters for controlling functions of the the fully					
	automatic auto transformer starter.	suitable for above	ve motor - L&ar	mp;T or		
	co. make MNX 225 contactor unit - 95 contactor					
	unit- 2 Nos Timer and supervisory t equivalent		•			
	Co make single phasing preventer A ON/Off	0.0				
	,trip & amp; amp; 3 phase indication relay Power Circuit	A O A L	1			
	wiring with 25 x 4mm PVC sleeve :  	N Dan S. C.	-	-		
	(D).PANNEL BOARD :- Supply, e floor			• •		
	mounted MS fabricated dust and ve consisting of 1 No.	FORM FOR THE	MANAGEMENT			
	suitable rating of 3 pole MCCB as i bar inter	-	-			
	connect the above MCCB and fitted with					
	selector switch, 1 No. Ammeter wit duplicate		1 1	-		
	earth point as per CEA regulation a common	•	Ĩ			
	base frame on suitable foundation & amp;lt;br>(E).CABLING WORK:- Supply, laying, testing					
	and commissioning of suitable size above pump					
	set from panel board to starter and suitable size cable through PVC pipe, flexible hose and					
	accessories from starter to motor.considering energy conservation   (F). EARTHING:-					
	Supply of all material and providing duplicate earthing by 25 x 3mm copper strip on wall					
	/column/floor/buried (Appx. 20 mtrs) in ground and giving double earthing to motor, starter, panel board etc. and connect with existing earthbus. As per IE standards & amp;lt;br>					
	(G).CAPACITOR:- Supply, erection, testing and commis capacitor for	sioning suitable	e rating of of heavy d	uty APP		
	the above motor to get unity& confirm to IS 2834	t;br>pc	ower factor . The capa	acitor shall		

Sl No	Specification	Quantity	Rate	Amount
Sl No	  (H).VALVE:- Supply of suitable siz fanged sluice valve and Non return valve w include proper RCC support especially for 1 pump set sluice valve should be in suction as Pressure gauge on both suction and delivery side & (I).SUCTION AND DELIVERY PI suitable size best quality MS pipe of thickness ne (approx). suitable for the above pump set and suitable size 200mm MS and valve with suit	ze best quality h vith suitable pre- Non return valve well as delivery amp;lt;br& IPE CONNECT ot less than 8 m size foot valve	eavy duty ISI Marke ssure rating.fitting of es. In case of positive v sides for easy repai ;gt; <br&amp IONS:- Supply and f m for a total length o and connecting the s</br&amp 	ed CI double E valves shall e suction r works. ;gt; Fitting of of 8 m uction pipe of
	and connecting the delivery side of the pump with 1	150mm MS pipe	e of thickness not les	s than 8 mm
	for a total length of 8 m (approx), vales and s	uitable specials	to connect with the t	umning main
	Net Total		@482962.88/set	1931851.52
14.002				
	Approval from Electrical Inspectorate including preparation of drawings, obtaining approval for the drawings, arranging inspection of the installations and obtaining safety certificate et; after completion of the works. The necessary statutory fees, if any, payable to the Electrical Inspectorate / KSEB will be paid by KWA. (Note : Scheme approval from the Electrical Inspectorate has to be obtained before supplying the equipments. Payment for the supply of materials will be released only on production of scheme approval) including Energization approval from inspectorate and approvals from KSEBL Actual rate = 10000.00/L.S For avoiding CPOH 16% = 0.84*10000=8400/L.S@9756.60/L.S9756.60			
		1.000L.S	Heading Total(Rs)	9756.60 1941608.12
15	Construction of pipe line bridge			1711000.12
	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			
4 5 0 0 0	Net Total	85.000sqm	@15.40/sqm	1309.00
15.002	2.8.1 Earth work in excavation by mecha in foundation trenches or drains (no			

Sl No	Specification	Quantity	Rate	Amount	
	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	5.292cum	@309.99/cum	1640.47	
15.003	2.9.3				
	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.Hard rock (blasting prohibited)				
	Net Total	5.292cum	@1327.61/cum	7025.71	
15.004	4.1.5				
	Providing and laying in position cer cost of centering and shuttering - Al coarse sand : 6 graded stone aggreg	ll work up to pli	inth level:1:3:6 (1 ce		
	Net Total	4.410cum	@7690.32/cum	33914.31	
15.005	OD182803/2023-2024	12861-11			
	and 0.5m in concrete) including dril cement grout (100kg/hole) etc.	FORM FOR THE	MANAGEMENT		
	Net Total	48.000no	@72.50/no	3480.00	
15.006	Providing and laying in position spe excluding the cost of centering, shu to plinth level:1:1:5:3 (1 cement 1.5 nominal size	ttering, finishin	g and reinforcement	- All work up	
	Net Total	6.786cum	@9483.13/cum	64352.52	
15.007	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	14.205cum	@11433.90/cum	162418.55	
15.008	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	2099.100kg	@100.88/kg	211757.21	
15.009	5.9.1				
	Centering and shuttering including	strutting, etc. an	nd removal of form		

Sl No	Specification	Quantity	Rate	Amount	
	for:Foundations, footings, bases of columns, etc for mass concrete				
	Net Total	15.120sqm	@350.00/sqm	5292.00	
15.010	5.9.3				
	Centering and shuttering including floors, roofs, landings, balconies an	strutting, etc. an d access platfor	nd removal of form f m	or:Suspended	
	Net Total	114.000sqm	@851.49/sqm	97069.86	
15.011	13.7.1				
	12 mm cement plaster finished with cement : 3 fine sand)	a floating coat	of neat cement of m	ix:1:3 ( 1	
	Net Total	157.160sqm	@418.80/sqm	65818.61	
15.012	10.26.3				
	Providing and fixing hand rail of ap balcony railing, staircase railing and of approves steel primer.G.I. pipes				
	Net Total	467.200kg	@194.15/kg	90706.88	
15.013	100.52.S.1	ATP SOLUTION			
	Sub Data for providing Earth filled conveying and placing in position.	cement bags inc	cluding cutting of the	e Earth, filling,	
	Net Total	4800.000each	@97.50/each	468000.00	
15.014	100.52.S.3				
	Sub Data for Supplying, conveying and covering using best quality polythene sheet on bund to protect bund from seasonal changes.				
	Net Total	120.000sqm	@26.30/sqm	3156.00	
15.015	100.52.S.5				
	Sub Data for Dismantling the sand / earth filled cement bag from the foundation site of bund, apron on both sides, counter wall and removing the sand/earth from the bag and disposing the damaged cement bags properly as per the direction of the department officers including all cost of labour charges etc complete.				
15.016	Net Total	120.000cum	@458.64/cum	55036.80	
15.016	Bailing out water with 5HP engine and pump set including conveyance to the site, erecting, dismantling and taking back of engine and pump, cost of fuel lubricating oil and other stores pay of staff etc., complete.				
	Net Total	10742.000Kw h	@38.55/Kwh	414104.10	
15.017	13.48.3				
	Finishing with Deluxe Multi surface primer as per manufacturers specific Surface Paint to give an even shade over an under coat of primer applied manufacture	cations:Painting . Two or more c	Steel work with De coat applied @ 0.90	luxe Multi ltr/10 sqm	

EST No. :WRD/KWA-CE(CR)/EST/6970/2022\_5\_3\_2/RC 1 (Edit Id : 6) (Dsor year : 2018,Cost Index (Place : Idukki,Value : 141.53),GST : 18%

Sl No	Specification	Quantity	Rate	Amount
	Net Total	160.760sqm	@154.59/sqm	24851.89
			Heading Total(Rs)	1709933.91
		Tot	al Estimation PAC	111372659.6
17	Extra Charges			
	Provision for GST			
16.001		111372659.66	18.00%	20047078.7 4
			Grand Total	131419738 40
			Round off	80261.60
	Rounded Total(Rs)			131500000.0 0
	Rupees Thirteen Crore Fifteen Lakl	h O A D		

