

CWSS TO 295 QUALITY AFFECTED HABITATIONS AND 315 WAYSIDE HABITATIONS IN SIRKALI, KOLLIDAM, SEMBANARKOIL AND MAYILADUTHURAI UNIONS OF NAGAPATTINAM DISTRICT.

SALIENT DETAILS

Name of Scheme	Combined Water Supply Scheme to 295 Quality Affected Habitations and 315 Way Side Habitations in Sirkali, Kollidam, Sembanarkoil and Mayiladuthurai Unions in Nagapattinam District.		
Installation Cost	Rs 96.31 Crore		
A.M.Cost	Rs.3.70 Crore		
Per capita cost	Rs.3,125/-		
Cost per 1,000 litres	Rs.14.19		
POPULATION AND REQUIREMENT	Base Year (2012)	Intermediate (2027)	Ultimate (2042)
Population	3,08,168	3,39,023	3,69,805
Requirement (in litres), at 40 lpcd for Quality Affected Habitations and 20 lpcd for wayside habitations (in mld) including 10% transmission loss.	12.51	13.34	14.20
Rate of supply at 23 hrs. Pumping with minimum 10 lpm (in lpm)	9,060	9,673	10,294
Source	2 Nos. – Collector Well cum Pum house @ Kumaramanglam & Seepuliyur in River Coleroon.		
Pump Rooms	4 m x 3 m - 2 Nos.		
Pumpsets	Turbine (100% stand bye)	4,837 lpm X 24 m Head (2 Nos) 4,836 lpm x 21 m Head (2 Nos)	
Collection Sump	6.20 LL – 1 No. @ Seepuliyur		
Pump Room	11 m x 5 m - 1 No.		
HSC Pumpset	4,837 lpm x 35 m Head. (3 Nos.) - 50% standby		
Connecting mains	350 mm DI K7– 3,000 m. – 1 No. 350 mm DI K7– 1,450 m. – 1 No.		
Common Sumps	Location	HSC Pumpset	
	Thalainayar – 6.20 LL	4,598 lpm x 33 m Head – 2 Nos. 5,075 lpm x 36 m Head – 2 Nos.	
	Kappiyakudi – 1.45 LL	378 lpm x 16 m Head – 2 Nos. 1,809 lpm x 60 m Head – 2 Nos.	
	Kunnam – 0.85 LL	1,253 lpm x 44 m Head – 2 No.	
	Semmankudi – 1.05 LL	1,219 lpm x 44 m Head – 2 Nos. 358 lpm x 14 m Head – 2 Nos.	
	Vellalagaram – 1.10 LL	1,059 lpm x 31 m Head – 2 Nos. 670 lpm x 22 m Head – 2 Nos.	
	Nadukkarai – 1.55 LL	798 lpm x 16 m Head – 2 Nos. 1,547lpm x 34 m Head – 2 No.s	
	Gudalur – 0.40 LL	616 lpm x 28 m Head – 2 Nos.	

Group Sumps 88 Nos. in Different capacities	88 Nos. (0.2LL-1No, 0.3LL-1No, 0.35LL-3 Nos, 0.4LL-7 Nos, 0.45LL-1No, 0.5LL-6 Nos, 0.55LL-7Nos, 0.6LL-7Nos, 0.65LL-2 nos, 0.7LL-2Nos, 0.75LL-4Nos, 0.8LL-6Nos, 0.85LL-8Nos, 0.9LL-3Nos, 0.95LL-3Nos, 1LL-4Nos, 1.05LL-2Nos, 1.1LL-4Nos, 1.2LL-3Nos, 1.25LL-3Nos, 1.3LL-1No, 1.35LL-2Nos, 1.4LL-1No, 1.5LL-3Nos, 1.55LL-1No, 1.6LL-1No, 2.25LL-1No, 4.45LL-1No)			
Pumprooms	95 Nos. (7 + 88)	9 m x 5 m	-	1 No.
		4 m x 3 m	-	1 No
		3 m x 3 m	-	22 Nos
		1.5 m x 1.5 m	-	71 Nos.
Pumpsets	Submersible pumpset having various duty conditions for 88 Group Sumps.			
Main and Branch main from Head works to Group Sumps (23 hours pumping)	450 mm DI K7 pipe			15,000 m
	350 mm DI K7 pipe			17,650 m
	300 m DI K7 Pipe			20,900 m
	250 mm DI K7 pipe			22,450 m
	200 mm DI K7 Pipe			53,400 m
	160 mm PVC 4 KSC pipe`			24,550 m
	140 mm PVC 4 KSC Pipe			34,940 m
	110 mm PVC 4 KSC pipe			25,990 m
	90 mm PVC 4 KSC Pipe			8,850 m
	75 mm PVC 4 KSC Pipe			14,350 m
	63 mm PVC 6 KSC Pipe			200 m
	63 mm PVC 4 KSC Pipe			13,545 m
	50 mm PVC 6 KSC pipe			7,350 m
	Total			2,59,175 m
Main and Branches from Group Sump to Service Reservoirs (12 hours pumping)	200 mm DI K7 Pipe			1,105 m
	140 mm PVC 4 KSC Pipe			6,906 m
	110 mm PVC 4 KSC pipe			18,318 m
	90 mm PVC 4 KSC Pipe			33,822 m
	75 mm PVC 4 KSC Pipe			57,224 m
	63 mm PVC 4 KSC Pipe			1,20,126 m
	50 mm PVC 6 KSC pipe			1,95,001 m
	Total			4,32,502 m
Pipe carrying bridges	24 Nos. in different lengths.			
Service Reservoirs	Capacity	Existing	Proposed	Total
	2.00 LL	2	-	2
	1.00 LL	4	-	4
	0.60 LL	92	-	92
	0.30 LL	302	-	302
	0.10 LL	166	--	166
	Total	566	-	566
Distribution System	Existing	Proposed	Total	
	3,00,350 m	--	3,00,350 m	