

SALIENT DETAILS

Name of Scheme	Providing Water Supply Improvement Scheme to Theni Allinagaram Municipality in Theni District.		
Installation Cost	Rs.68.85 Crore.		
A.M.Cost	Rs. 1.78 Crore		
Per capita cost	Rs.6,926/-		
Cost per 1000 litres	Rs.13.44		
POPULATION AND REQUIREMENT	Base Year (2014)	Intermediate (2029)	Ultimate (2044)
Population			
Theni Allinagaram	99,414	1,28,615	1,66,395
Pro rata supply	135 lpcd	135 lpcd	135 lpcd
Requirement (in mld)	13.42	17.36	22.46
Existing supply in mld	2.18	2.18	2.18
Anticipated quantity after Rejuvenation in MLD	1.24	1.24	1.24
Total sustainable quantity in MLD	3.42	3.42	3.42
Net Requirement (in mld)	10.00	13.94	19.04
Transmission Loss at 10 %	1.00	1.39	1.90
Treatment loss at 5 %	0.55	0.77	1.05
Total requirement in mld	11.55	16.10	21.99
5 year requirement from March to May allotted by PWD	14.75 mld		
5 year requirement from June to February allotted by PWD	7.38 mld		
Source	Surface water from the pickup weir at the down stream of Vaigai Dam		
Intake well	Dia: 5.0 m	Depth : 5.5 m	
Location	65 m upstream of Andipatty Sedapatty CWSS Intake well		
Connecting Main	750 mm CI D/ F pipe 50 m		
Collection Well cum Pump House	Dia : 10.0 m Dia : 10.0 m	Depth : 10 m Height : 5.50 m	
Raw water Turbine Pumpset	3900lpm x 27 m (3+1 No) (33% stand bye) 97 HP		
Raw water Pumping Main	600 mm DI K7 – 2550 m		
Treatment Plant	Capacity : 16.10 mld		
Location	Opp. To Childrens Park at Vaigai Dam		
Aerator	9.0m dia with 4 trays		
Stilling Chamber	4.50m x2.50m		
Flash Mixer	1.8m dia x 3.15m depth		
Dividing Chamber	2.0 m dia x 3.45 m depth		
Clariflocculator			
Flocculator	9.0 m dia		
Clarifier	22.0 m dia		
Filter Beds	4.1m x 3.1m (6+1 no)		
Wash water Tank	2.0 LL 12 m staging		
Clear Water Sump at Treatment Plant	6.70 LL – 1 No.		
Clear water HSC Centritugal Pumpsets	3750 lpm x 89m - 3+1 = 4 Nos. (33 % standby (30 HP		
Clear water Transmission Main	600 mm DI K9 – 5370 m 600 mm DI K7 -10320 m Branchmain to Karuvelnaickenpatty, Samatharmapuram Municipality T.B. - 150mm DI K7 -220m, 200mm DI K7 -460m, 250mm DI K7 - 1340m		

Clear water Sump at NRT Nagar	8.90 LL – 1 No
Pump room	9m x 5m
Clear water Submersible/HSC Pumpsets	1. 6279 lpm x 19m - 1+1 - 35 HP – HSC 2. 2609 lpm x 14m - 1+1 - 12 HP -OW submersible. 3. 2056 lpm x 12m - 1+1 - 7.5 HP - O.W.submersible. 4. 510 lpm x 17m - 1+1 - 3 H.P. - O.W. submersible.
Feeder Mains and Branch Feeder Mains	
P'main I NRT Nagar to Gandhi Nagar and Branches	400mm DI K7 - 2050m, 350mm DI K7 - 1200m 300mm DI K7 - 550m 250mm DI K7 - 120m 200mm DI K7 - 220m Total - 4140m
Pumping Main II NRT Nagar 10 L.L. SR Low level	300mm DIK7 - 30m
Pumping Main III NRT Nagar 10 L.L. SR High level -	300mm DIK7 - 50m
Pumping Main IV NRT Nagar to KRR Nagar -	150mm DIK7 - 250m
Existing Service Reservoirs	9 Nos
Location	Capacity
1) Karuvelanaickenpatty	2.0 LL
2) Samadharmapuram	1.0 LL
3) NRT Nagar	10.0 LL – 2 Nos
4) K.R.R. Nagar	1.0 LL
5) Municipal Office	6.75 LL
6) Gandhi Nagar	6.0 LL
7) Bommayagoundanpatty	4.5 LL
8 Bommayagoundanpatty	5.0 LL
Proposed Service Reservoirs	4 Nos
1) Karuvelanaickenpatty	1.0 LL
2) K.R.R.Nagar	2.0 LL
3) Kakkanji Colony	3.0 LL
4) Balan Nagar	7.0 LL
Distribution System	
Existing	61.765 km
Proposed	
110mm HDPE	64.558 KM
140mm HDPE	5.778 KM
160mm HDPE	4.629KM
200mm HDPE	4.322 KM
250mm DI K7	5.319 LM
300mm DI K7	1.304 KM
350mm DI K7	0.282 KM
Total	86.202 KM
Installation Cost	Rs.68.85
Annual Maintenance Cost	Rs.1.78 Crore
Per Capita Cost	Rs. 6926/-
Cost per 1000 litres	Rs. 13.44
Funding	G.O.I, T.N. Government + Local body.
Maintenance	Local Body

WSIS TO THENI ALLINAGARAM MUNICIPALITY IN THENI DISTRICT FLOW DIAGRAM (FROM SOURCE TO SUMP IN THE TOWN)

