

**SALIENT DETAILS
(TEHNICALLY SANCTIONED)**

| | | | |
|---|--|--------------------------------|----------------------------|
| Name of Scheme | Providing CWSS to 54 Quality affected & 67 wayside habitations in Kumaratchi, Parangipettai Unions and to Killai Town Panchyat in Cuddalore District | | |
| Installation Cost | Rs.1400.00 Lakhs | | |
| Annual Maintenance | Rs.21.26 Lakhs | | |
| Percapita Cost | Rs. 2260/- | | |
| Cost per 1000 litres | Rs.14.71 | | |
| Population: | Base year (2010) | Intermediate (2025) | Ultimate (2040) |
| 54 Quality affected Habs. | 24554 | 27012 | 29465 |
| 67 Wayside Habs. | 32031 | 35233 | 38437 |
| Killai Town Panchayat | 10500 | 11500 | 12500 |
| Total Population | 67085 | 73745 | 80402 |
| Requirement at the rate of 40 lpcd for QA habitations and 30 lpcd for wayside habitations and 70 lpcd for Killai TP, including 10% transmission loss. | | | |
| 54 Quality affected Habs. | 1.08 mld | 1.19 mld | 1.30 mld |
| 67 Wayside Habs. | 1.10 mld | 1.20 mld | 1.29 mld |
| Killai Town Panchayat | 0.81 mld | 0.88 mld | 0.96 mld |
| Total Demand | 2.99 mld | 3.27 mld | 3.55 mld |
| Rate of supply for 12 hours pumping to the rural Habitations & 16 hours pumping to TP | 3875 lpm | 4235 lpm | 4592 lpm |
| Supply rate at 16 hours pumping | 3117 lpm | 3408 lpm | 3695 lpm |
| Sustainability of existing source i) for wayside habitations – 10 lpcd ii) for Quality affected Habs & Killai TP – 0 lpcd | | | |
| Head works | <p>Infiltration Well - 3 Nos – 4.50m dia x 8 m depth in River Coleroon near Puliyankudi village.</p> <p>Expected Yield - 1500 lpm / Infiltration well</p> <p>IW Pump sets - 12.50HP x sub 1136 lpm x 24m – 3 Nos. (Stand bye – 3 Nos)</p> <p>Connecting Main - 200mm CI D/F pipes - 360m } 4500 m 200mm HDPE PN6 pipes - 4140m }</p> <p>Collection sump - 2.00 LL capacity</p> <p>Pump room - 8.00 m x 6.00 m</p> <p>Pump sets - OW sub. pump sets - 60HP x 3170 lpm x 53m (with standby) 5HP x 317 lpm x 40m (with standby)</p> | | |

| | | | | | |
|--|--------|---|--|---|---|
| Pumping Main from 2.00LL collection sump | | Pumping main from Collection Sump to Feeder sumps (8 Nos) 355mm HDPE PN 6 pipes - 12,730 m 315mm HDPE PN 6 pipes - 15,770 m 250mm HDPE PN 6 pipes - 3,180 m 200mm HDPE PN 6 pipes - <u>3,800 m</u> Total - 35,480m | | Branch Pumping main 140mm PVC 4ksc - 4,200 m 110mm PVC 4ksc - 400 m 90mm PVC 6ksc - 280 m 90mm PVC 4ksc - 180 m 75mm PVC 4ksc - 42 m 63mm PVC 6ksc - <u>600 m</u> Total - 5,702m | |
| Feeder Pumping Main to Melaparithikudi OHT from 2.00LL collection sump | | Feeder Pumping main from Collection Sump to OHT 140mm PVC 4ksc - 940 m 110mm PVC 4ksc - 1,160 m 90mm PVC 4ksc - 690 m 75mm PVC 4ksc - 1,290 m 63mm PVC 4ksc - <u>2,990 m</u> Total - 7,070m | | Branch feeder main to OHTs' 63mm PVC 6ksc - <u>1,804 m</u> Total - 1,804m | |
| Sumps Proposed 7 Nos. & Existing- 1No. | | Habs. / OHTs | Submersible pumpsets (with stand-bye) | Feeder Pumping main from existing/proposed sumps to OHT | Branch Feeder main to OHT's |
| Kumaratchi | 1.00LL | 6/7 | 1HPx173 lpmx16m | 90mm PVC 4ksc- 12m 75mm PVC 4ksc- 200m 63mm PVC 4ksc- <u>300m</u> Total -512m | 63mm PVC 4ksc- <u>4,047m</u> Total -4,047m |
| | | 11/10 | 4HPx316 lpmx30m | 140mm PVC 4ksc- 1,965m 110mm PVC 4ksc- 2,090m 90mm PVC 4ksc- 1,680m 75mm PVC 4ksc- 1,980m 63mm PVC 4ksc- <u>60m</u> Total - 7,775m | 63mm PVC 4ksc- <u>1,793m</u> Total -1,793m |
| Mandapam Colony | 0.35LL | 7/7 | 2HPx160 lpmx28m | 90mm PVC 4ksc- 60m 63mm PVC 4ksc- <u>2,360m</u> Total -2,420m | 63mm PVC 4ksc- <u>3,142m</u> Total -3,142m |
| Pazhayanallur | 1.00LL | 9/9 | 3HPx272 lpmx24m | 110mm PVC 4ksc- 1,335m 90mm PVC 4ksc - 1,970m 63mm PVC 4ksc- <u>2,790m</u> Total -6,095m | 63mm PVC 4ksc- <u>2,742m</u> Total -2,742m |
| | | 8/8 | 2HPx179 lpmx25m | 75mm PVC 4ksc- 1,560m 63mm PVC 4ksc- <u>300m</u> Total -1,860m | 75mm PVC 4ksc- 520m 63mm PVC 4ksc- <u>2,443m</u> Total -2,963m |
| Pitchamuthu Nagar | 1.00LL | 11/9 | 3HPx207 lpmx27m | 110mm PVC 4ksc- 456m 90mm PVC 4ksc- 150m 63mm PVC 4ksc- <u>2,640m</u> Total -3,246m | 63mm PVC 4ksc- <u>1,992m</u> Total -1,992m |
| | | 9/8 | 3HPx308 lpmx23m | 90mm PVC 4ksc- 1,700m 75mm PVC 4ksc- 930m 63mm PVC 4ksc- <u>265m</u> Total - 2,895m | 75mm PVC 4ksc- 940m 63mm PVC 4ksc- <u>2,010m</u> Total -2,950m |
| Mariappa Nagar | 1.50LL | 7/7 | 2HPx153 lpmx34m | 90mm PVC 4ksc- 4,055m 75mm PVC 4ksc- 3,395m 63mm PVC 4ksc- <u>115m</u> Total -7,565m | 63mm PVC 4ksc- <u>1,028m</u> Total -1,028m |
| | | 14/12 | 4HPx307 lpmx31m | 110mm PVC 4ksc- 3,050m 75mm PVC 4ksc- 150m 63mm PVC 4ksc- <u>362m</u> Total - 3,562m | 75mm PVC 4ksc- 310m 63mm PVC 4ksc- <u>2,046m</u> Total -2,356m |
| | | 3/3 | 2HPx229 lpmx16m | 90mm PVC 4ksc- 12m 63mm PVC 4ksc- <u>462m</u> Total - 474m | 63mm PVC 4ksc- <u>494m</u> Total - 494m |

| Sumps Proposed 7 Nos. & Existing- 1No. | | Habs./ OHTs | Submersible pumpsets (with stand-bye) | Feeder Pumping main from existing/proposed sumps | Branch Feeder main to OHT's |
|--|---------------|---------------------------|---------------------------------------|--|---|
| Muthaiah Nagar | 0.60LL | 6/7 | 4HPx263 lpmx33m | 90mm PVC 4ksc- 768m 75mm PVC 4ksc- 100m 63mm PVC 4ksc- 1,850m Total -2,718m | 63mm PVC 4ksc- 2,126m Total -2,126m |
| Keelanuvampattu (existing) | 0.60LL | 6/7 | 3HPx 240 lpmx33m | 110mm PVC 4ksc- 80m 90mm PVC 4ksc- 650m 75mm PVC 4ksc- 1,550m 63mm PVC 4ksc- 1,540m Total -3,820m | 63mm PVC 4ksc- 761m Total - 761m |
| Punja mugathu vazhkai | 0.50LL | 5/5 | 2HPx114 lpmx28m | 75mm PVC 4ksc- 1,890m 63mm PVC 4ksc- 876m Total -2,766m | 63mm PVC 4ksc- 222m Total - 222m |
| | | 4/4 | 1HPx77 lpmx20m | 63mmPVC 4ksc - 1,946m Total -1,946m | 63mm PVC 4ksc- 2,360m Total -2360m |
| | | Killai TP | 12.50HPx923 lpm x33m | 160mm HDPE/PN6- 5240m 140mm PVC 4ksc - 3420m Total -8,660m | 140mm PVC4ksc - 3420m Total -3,420m |
| Total | 8 Nos. | 121/115 & 1 TP | 15 Nos with stand-bye | Total - 85,290m | Total - 32,396m |

Service Reservoirs: In Rural Habs. Existing - 115 Nos. : Proposed - Nil
In Killai TP Existing - 9 Nos. : Proposed - Nil

| Exist. OHTs served from Sump at | 0.10 LL Capacity | 0.15 LL Capacity | 0.30 LL Capacity | 0.60 LL Capacity | 1.00 LL Capacity | Total |
|---------------------------------|------------------|------------------|------------------|------------------|------------------|------------|
| Puliyankudi | 3 | - | 7 | 2 | - | 12 |
| Kumaratchi | 2 | 3 | 9 | 2 | 1 | 17 |
| Mandapam Colony | 2 | - | 4 | 1 | - | 7 |
| Pazhayanallur | 5 | 1 | 9 | 1 | 1 | 17 |
| Mariyappa Nagar | 4 | - | 13 | 3 | 2 | 22 |
| Muthaiah Nagar | 1 | - | 3 | 2 | 1 | 7 |
| Keelanuvampattu | - | - | 6 | 1 | - | 7 |
| Punjamugathu vazhkai | 4 | - | 3 | 2 | - | 9 |
| Pitchamuthu Nagar | 2 | - | 8 | 2 | 5 | 17 |
| Total (OHTs in Habs) | 23 | 4 | 62 | 16 | 10 | 115 |

In Killai TP 0.10LL -1No., 0.30LL-3Nos., 0.60LL-2Nos., 1.00LL-2Nos. & 4.00LL - 1No. **9**

D' System Existing - Rural Habs-184.48 km Killai TP - 17.20 km **Proposed - Nil**

| Beneficiaries | Funding Pattern (Rupees in Lakhs) | | | | Total (Rs.in Lakhs) |
|--|-----------------------------------|---------------|--------------|-------------------------|---------------------|
| | ARWSP | | MNP | Public/Local Body Share | |
| | GoI | GoTN | | | |
| | 75% | 25% | 80% | | |
| 54 Quality Affected Habitations & 67 Wayside Habitations | 756.92 | 393.41 | - | - | 1150.33 |
| Killai TP | - | - | 292.64 | 73.03 | 365.67 |
| Total | 756.92 | 686.05 | 73.03 | 1516.00 | |