**SALIENT DETAILS**

**Name of scheme** : CWSS to 645 habitations in Thirumanur, Ariyalur,Sendurai,Veppur and Alathur unions in Ariyalur and Perambalur Districts.

Administrative sanction :636 Habs - G.O Ms No .46/ dt 05.06.2006 Rs 4412 lakhs.

: 9 Habs - SE,T.P.circle,Trichy Proc no. 4/F.Omitted 9 hab/ Thirumanur union/AE 2/2008/dt 01.07.2008 Rs 27.68 lakhs.

**1. Population** : Present Inter Ultimate

2006 2021 2036

: 525 Habs 332802 366100 399358

: 636 Habs 413644 455031 496368

: 645 Habs 417160 458899 500587

**2. Requirement in Litres** : 525 Habs 9072594 9896833

(9.07 mld) (9.90 mld)

: 636 Habs 11310732 12338351

(11.31 mld) (12.34 mld)

: 645 Habs 11420732 13638351

(11.42 mld) (13.64 mld)

**3. Requirement in LPM** : 525 Habs 7566 lpm 8243 lpm

: 636 Habs 9438 lpm 10276 lpm

: 645 Habs 9598 lpm 10453 lpm

**4. Hours of pumping** : 20 Hours

**5. Source** : Collector well cum Pump House at River Coleroon

Thirumalapadi

a) Collector well

i) Dia - 6 m

ii) Depth - 15 m

iii) Radial arms -300 mm dia -14 nos x 28 m

b) Pump house - 8 m

c) Foot bridge - Length 390 m-Width – 3 m

d) Chlorination room - 6 x 4 m

e) Control room – 6 x 6 m

5 a. Pumping Main : Thirumalapadi to Keelapalur

500 mm PSC CL 16 - 1300 m

500 mm PSC CL 14 - 4775 m

500 mm PSC CL 12 - 1395 m

500 mm PSC CL 10 - 5530 m

500 mm PSC CL 8 - 2805 m

500 mm MS Pipe & Specials - 720 m

**Total -16525 m**

5 b. Booster Main - I : Keelapalur sump to Kollapuram Sump

500 mm PSC CL 14 - 11700 m

500 mm PSC CL 12 - 3885 m

500 mm PSC CL 10 - 500 m

500 mm MS Pipe & Specials - 325 m

**Total -16410 m**

5 c. Booster Main - II : Kollapuram Sump to Rayampuram sump

280 mm PVC 4 KSC - 10958 m

5 d. Booster Main - III : Rayampuram sump to Sendurai sump

250 mm PVC 4 KSC - 7230 m

225 mm PVC 4 KSC - 650 m

90 mm PVC 4 KSC - 1350 m

**Total - 9230 m**

5 e. Booster Main - IV : Kollapuram Sump to Periyavenmani &

Melamathur sump

350 mm PSC Cl 16 - 3260 m

350 mm PSC Cl 14 - 3575 m

350 mm PSC Cl 8 - 9470 m

350 mm MS Pipe & Specials - 160 m

**Total - 16465 m**

5 f. Branch Feeder main from 50,63,75,90,110,140,160 & 200 mm

Various Sump : PVC Pipe **611** Kms

**6. SUMPS AND PUMPHOUSE**

a. Booster station I at Keelapalur : Sump capacity - 6.00 LL

Pump House - 9 x 5 m

b. Booster station II at Kollapuram : Sump capacity - 5.00 LL

Pump House - 9 x 5 m

c. Pumping Station at Periyavenmani : Sump capacity - 1.50 LL

Pump House - 6 x 4 m

d. Pumping Station at Melamathur : Sump capacity - 1.50 LL

Pump House - 6 x 4 m

e. Pumping Station at Rayampuram : Sump capacity - 1.50 LL

Pump House - 9 x 5 m

f. Pumping Station at Sendura EB Sub : Sump capacity - 0.30 LL

Station Pump House - 6 x 4 m

d. Pumping Station at Sendurai : Sump capacity - 0.60 LL

Taluk Office Pump House - 6 x 4 m

d. Pumping Station at Mathur- Kulumur : Sump capacity - 0.60 LL

Junction Road Pump House - 6 x 4 m

7.PUMP SETS HP Discharge in LPM &Head

a.Collector Well 50 % stand bye turbine pumpsets 3 nos 125 4719 x 70

(2 nos Parallel running)

b. Keelapalur sump to Kollapuram Sump

50 % stand bye Centrifugalpumpsets 3 nos 50 3386 x 42

(2 nos Parallel running)

c. Kollapuram sump to Rayampuram sump

100 % stand bye Centrifugalpumpsets 2 nos 20 2115 x 24

d. Kollapuram sump to Periyavenmani sump

100 % stand bye Centrifugalpumpsets 2 nos 50 3928 x 35

**INFRASTRUCTURES**

I. ARIYALUR UNION

a. From Keelapalur sump : No. of Habitations covered - 77 nos

No. of Group sumps - 7 nos

b. From Kollapuram and Rayampuram sump : No. of Habitations covered - 90 nos

No. of Group sumps - 3 nos

No. of Stand Post - 1 no

**II. SENDURAI UNION**

a. From Sendurai EB Sub Station sump (Zone II) : No. of Habitations covered - 32 nos

No. of Group sumps - 2 nos

b. From Sendurai Taluk office sump (Zone I ) : No. of Habitations covered - 66 nos

No. of Group sumps - 2 nos

No. of Stand Post - 1 no

c. From Mathur- Kulumur Jn Road sump : No. of Habitations covered - 106 nos (42+64)

(Zone III&IV) No. of Group sumps - 11 nos

No. of Stand Post - 2 nos

**III. VEPPUR UNION**

a. From Periyavenmani sump : No. of Habitations covered - 85 nos

No. of Group sumps - 10 nos

b. From Melamathur sump : No. of Habitations covered - 54 nos

No. of Group sumps - 5 nos

**IV. THIRUMANUR UNION**

a.Head works to Kollapuram

No. of Habitations covered - 69 nos

No. of Group sumps - 7 nos

**V. ALATHUR UNION**

No. of Habitations covered - 69 nos

No. of Group sumps - 7 nos

**IV. SERVICE RESERVOIRS**

a. 60000 Litres - 1 no

b. 30000 Litres - 2 nos

c. 10000 Litres - 14 nos

HDPE TANKS a. 10000 Litres - 5 nos

STAND POST a. 60000 Litres - 2 nos

b. 30000 Litres - 1 no

c. 10000 Litres - 1 no

**VII. DISTRIBUTION MAIN AND PUBLIC FOUNTAINS**

63 mm PVC 4 KSC Pipe - 15.50 Kms,

Public Fountains - 25 nos

**VIII . ADDITIONAL INLET TO EXISTING SERVICE RESERVOIRS**

a. 10,000 Litres - 28 nos

b. 15,000 Litres - 12 nos

c. 30,000 Litres - 283 nos

d. 60,000 Litres - 154 nos

e. 1,00,000 Litres - 42 nos

f. 1,50,000 Litres - 1 no

Annual Maintenance Cost - 636 habs - Rs 172.00 Lakhs

- 9 habs - Rs 1.15 Lakhs

- 645 habs - Rs 173.15 Lakhs

Per Capita Cost for Present Population - 636 habs - Rs 984.00

- 9 habs - Rs 792.00

Cost Per 1000 Li tres for intermediate stage - 636 habs - Rs 14.21

- 9 habs - Rs 9.41



**Salient Details - CWSS to 645 Habitations in Thirumanur, Ariyalur, Sendurai, Veppur and Alathur Unions in Ariyalur and Perambalur Districts**

|  |  |
| --- | --- |
| Name of Scheme | CWSS to 645 Habitations in Thirumanur, Ariyalur, Sendurai, Veppur and Alathur Unions in Ariyalur and Perambalur Districts |
| Administrative Sanction | 636 Habs-G.O MS No.46/dt 05.06.2006 Rs.4412Lakhs.9Habs-SE T.P Circle,Trichy Proc.No.4/F.Omitted 9 Thirumanur union/AE 2/2008/dt 01.07.2008 Rs.27.68 Lakhs. |
| Design Population | 645 Habs: Present-417160 (2006), Intermediate-458899 (2021), Ultimate-500587 (2036) |
| Design Quantity | 645 Habs: Intermediate(2021) – 11420732Liters (11.42MLD),Ultimate(2036) – 13638351Liters(13.64MLD) |
| Design Pumping Hours and LPM | 20 Hours; 645 Habs: Intermediate(2021) - 9598LPM,Ultimate (2036) - 10453LPM |
| Source | Collector well-6m dia x 15m depth with radial arms 300mm dia-14Nos x 28m,Pump house-8m,Foot Bridge-3m X 390m,Silver Ionization Chlorination room-6mx4m,Control room-6mx6m |
| Year of Completion & Commissioning | Scheme Execution Period – From 04.07.2007 to 19.05.2010,Contractor’s Maintenance Period – From 20.05.2010 to 31.07.2011, TWAD Takenover-20.09.2011 |
| Transmission Pipeline Details | Pumping Main:500mm dia PSC CL 16,14,12,10,8 , MS Pipe & Specials-16.525KM,Booster Main I:500mm dia PSC CL 14,12,10 & MS Pipe & Specials-16.410KM,Booster Main II:280mm PVC 4KSC-10.958Km,Booster Main III:250,225 and 90mm PVC 4KSC-9.23KM,Booster Main IV :350mm PSC CL 16,14,8 & MS Pipe & Specials-16.465KM,Branch Feeder Main from Various Sump 50,63,75,90,110,140,160&200mm PVC Pipe-611KM |
| Pumpset Details | Collector Well-3 x 125HP Vertical Turbine Pumpset(2nos Parallel Running)-4719LPM x 75M Head,Booster I- 3 x 50HP Centrifugal Pumpset(2nos Parallel Running)-3386LPM x 42M Head,Kollapuram to Rayampuram-2 x 20HP Centrifugal Pumpset(100%Standby),Kollapuram to Periyavenmani-2 x 50HP Centrifugal Pumpset(100%Standby) |
| Infrastructure Details | Headworks-1No,Booster Sump-5Nos,Group Sump-58Nos,Standpost-4Nos,HDPE Tank-5Nos |
| Distribution Main and PF | 63mm PVC 4KSC Pipe-15.50KM,Public Fountain-25Nos |
| Annual Maintenance Cost | Rs.173.15Lakhs |