SALIENT DETAILS

CWSS TO MARAIMALAI NAGAR IN KANCHEEPURAM DISTRICT

1. Scheme cost : Rs 388.13 Lakhs

2. Beneficiaries : Municipality 1 No

3. Population : 60000

4. Designed quantity : 3.701 mld

5.Head Works with source details : As detailed below

S.No	source	size in m	Depth in m	Yield in lpm
1.	Borewell well – 10 nos.	200 to 300mm	20 to 30m	250 to 750 lpm from each B.W.
6. 2 7.	Infiltration wells – 2 nos. (under Improvements)	4.50	11.50m & 12.00m	750 lpm from each I.W.

6a.

6.Pumpset from Borewells to Sump at Ayappakkam –

Type : Submersible

Duty : 5 HP to 15 HP – 10 nos.250 lpm x 50m head to 750 lpm x 50m head – 10 Nos (At present 2 nos of B.W are Working

b. Pumpset at Ayappakkam sump

Type : HSC centrifugal

Duty : 70 HP 11000 lpm x 20m head

c. Pumpset from Infiltration wells to Sump at Nerumbur

Type	:	Submersible
Duty	:	10 HP 700 lpm x 28 m head

d. Sump Capacity	:	3.30 LL at Ayappakkam
Hours of Pumping	:	20 hours

7. Treatment Plant with unit details: Iron Removal Plant

a. at FORD INDIA Ltd.	:	Auto Back wash system with cascade Aerator, settling tanks, auto backwash unit, sludge drying beds
b. at Maraimalainagar pumping station	:	Slow sand filtration method with Capsules

8. Transmission main

Pumping main

From H.W to Last Booster at MM Nagar

Ayyapakkam to Nerumbur:

525mm CI -5046m

Nerumbur to Keerapakkam:

525mm CI – 3230

600mm AC cl10 – 15940m.

Keerapakkam to MM nagar

500mm CI - 9849m,

500mm AC - 11000m

600 mm CI L.A. pipe - 750 m

Gravity main : ---

9. Booster Station

A. Nerumbur

a. Sump with Capacity	:	6.00 LL
b. Pumpset		
Type	:	HSC centrifugal
Duty	:	125 HP 5500 lpm x 63m head
B. Keerapakkam		
a. Sump with Capacity	:	3.30 LL
b. Pumpset		
Type	:	HSC centrifugal
Duty	:	150 HP 5500 lpm x 75m head
C. FORD PUMP HOUSE		
a. Sump with Capacity	:	2.00 LL
b. Pumpset		
Type	:	HSC centrifugal
Duty	:	25 HP 1600 lpm x 40 m head
D. MARAIMALAINAGAR		
a. Sump with Capacity	:	5.00 LL
b. Pumpset		
Type	:	HSC centrifugal
Duty	:	40HP 4000 lpm x 32m head
		25HP 3000 lpm x 18 m head

10. Feeder main

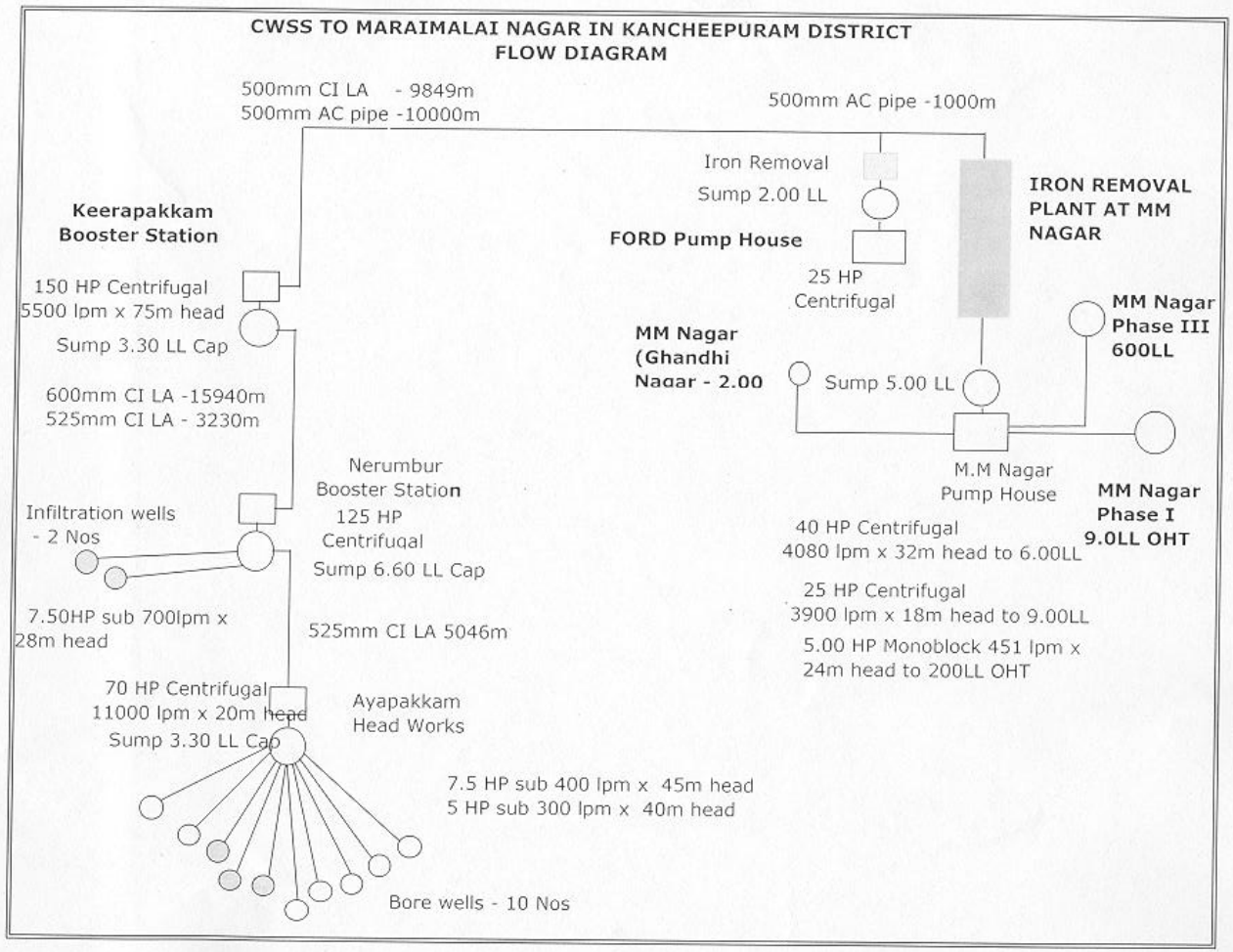
MM Nagar to NH3

250mm AC cl10 2460m,
300mm AC cl 10- 1600m,
140mm OD PVC 4 ksc pipe -1868m
110mm OD PVC 4 ksc pipe - 108m
50mm OD PVC 6 ksc pipe - 129m

11. Service reservoir with capacity.

At Maraimalainagar-	9.00 LL – 1 no
	6.00 LL 1 no
	2.00LL – 1 no

.


CWSS TO MARAIMALAI NAGAR IN KANCHEEPURAM DISTRICT
FLOW DIAGRAM
500mm CI LA - 9849m
500mm AC pipe -10000m
500mm AC pipe -1000m
Iron Removal
Sump 2.00 LL
IRON REMOVAL PLANT AT MM NAGAR
Keerapakkam Booster Station
FORD Pump House
25 HP Centrifugal
150 HP Centrifugal
5500 lpm x 75m head
Sump 3.30 LL Cap
MM Nagar Phase III 600LL
MM Nagar (Ghandhi Nagar - 2.00
Sump 5.00 LL
600mm CI LA -15940m
525mm CI LA - 3230m
M.M Nagar Pump House
MM Nagar Phase I 9.0LL OHT
Nerumbur Booster Station
125 HP Centrifugal
Sump 6.60 LL Cap
Infiltration wells - 2 Nos
40 HP Centrifugal
4080 lpm x 32m head to 6.00LL
25 HP Centrifugal
3900 lpm x 18m head to 9.00LL
5.00 HP Monoblock 451 lpm x 24m head to 200LL OHT
7.50HP sub 700lpm x 28m head
525mm CI LA 5046m
70 HP Centrifugal
11000 lpm x 20m head
Sump 3.30 LL Cap
Ayapakkam Head Works
7.5 HP sub 400 lpm x 45m head
5 HP sub 300 lpm x 40m head
Bore wells - 10 Nos