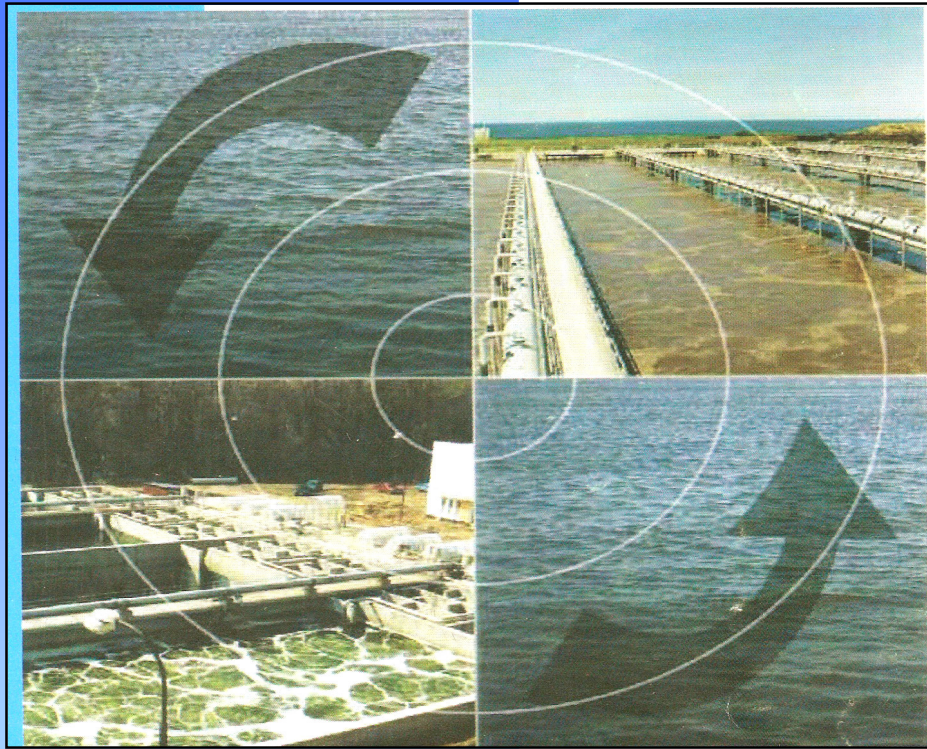


U I D S S M T

UNDERGROUND DRAINAGE SCHEME



DETAIL PROJECT REPORT FOR RAVER MUNICIPAL COUNCIL, RAVER DIST.-JALGAON

JUNE- 2007

PREPARED BY

KIKALE ASSOCIATES

CONSULTING ENGINEERS,
230, Ramchand Malukchandnagar
Near New Jain Mandir
Baramati, Dist. Pune
PH; 98230 25340

EXECUTIVE SUMMARY

- 1.0** The Raver Municipal Council has awarded the work of preparation of Detailed Project Report, Detailed Engineering and Design of the sewerage scheme for Raver Town and Detailed Estimation of the Project to M/S. Kikale Associates, Consulting Engineers, Baramati, Pune.
- 2.0** The survey of the Raver town is carried out and accordingly sewerage system has been designed based on the Manual on sewerage and sewage treatment published by CPHEEO and also as per the guidelines of UIDSSMT.
- 3.0** Raver is a important town in Jalgaon district of Maharashtra State. It is situated at 85 Km from Jalgaon. There area covered by Raver Municipal Council area is 220 Ha . The population of Raver town is 25993 as per 2001 census and the population Projected for the year 2040 is 43186 souls. At present Raver town gets water from the tube wells and Tapi river.The water is supplied at a rate of water supply is 135 lpcd.
- 4.0** The details of the proposed underground drainage scheme are as follows:
The topography of Raver town is such that the general slope of the town is towards North. The total area is divided in to three drainage zones and the total flow is ultimately collected at pumping station no PS 3 which pumps the flow to the proposed STP of 4.5 mld capacity with Cyclic activated sludge process. The gross cost of the proposed sewerage system is **Rs. 1110.78 Lakhs.**
- 5.0** Project Component consists of collection system, Pumping station, pumping main and sewage treatment plant. As the pipes are to be laid in Municipal or Highway Roads, no land acquisition is required.
All the proposed locations of pumping stations and STPs are decided in co-ordination with Municipal Council officials and it is understood that there would be no problem in undertaking of land.

Implementing agency should carry out the works in co-ordination with other related organizations (viz) Traffic Police, Public Works Department and other Local Body Authorities and in accordance with code of conduct.

6.0 The details of the proposed underground sewerage scheme are as follows:

1) Population

Year	Population	Wastewater flow (mld)
2010	29345	3.49
2025	35690	4.24
2040	43186	5.13

2) Collection System

Total length = 23 Km
Diameter = 150 mm to 600 mm
Pipe material = RCC NP2, NP3 and NP4 pipes

3) Rising Main For P.S.1

SR. No.	Description	P.S.1	P.S.2	P.S.3
a)	Diameter	350 mm	200mm	350 mm
b)	Length	480 m	500 m	100 m
c)	Material	D.I k9 pipe	D.I k9 pipe	D.I k9 pipe

4) Pumping Machinery

Description	P.S.1	P.S.2	P.S.3
a) Pumps	Submersible pumps	Submersible pumps	Submersible Pumps
b) (1DWF)			
Discharge (lps)	51	21	58
Head	15	13.5	14
H. P	15	7.5	20
Nos	2W+1S	1W+1S	2W+1S
c) (½DWF)	Submersible pumps	Submersible pumps	Submersible pumps
Discharge (lps)	25	-	29
Head	14	-	14
H.P	7.5	-	10
Nos	1W+1S	-	1W+1S

5) Sewage Treatment Plant

Description	STP 1
Capacity	4.5 mld (Phase – 1)
Type	SBR Technology

Current Status

The project is submitted to the Municipal Council.

RAVER UNDERGROUND SEWERAGE SCHEME

SUMMARY OF COST

Sr. No.	Name of Subwork	Amount in Rs.
1	Working Survey	300000.00
2	Sewage Collection System	48881084.63
3	Sewage Pumping Station No.-1	
3A	Civil Works	1110307.30
3B	Mechanical & Electrical Works	4108031.92
3C	Rising Main For PS-1	1457876.49
4	Sewage Pumping Station No.-2	
4A	Civil Works	479594.43
4B	Mechanical & Electrical Works	2399530.30
4C	Rising Main For PS-2	843901.32
5	Sewage Pumping Station No.-3	
5A	Civil Works	1099667.31
5B	Mechanical & Electrical Works	4725995.67
5C	Rising Main For PS-3	400575.07
6	Sewage Treatment Plant(STP-4.5 mld)	34786820.06
7	Miscellaneous Works	1182309.03
	Total	101775693.53
	Add Escalation Charges	9302930.00
	Cost of the Scheme	111078624.00