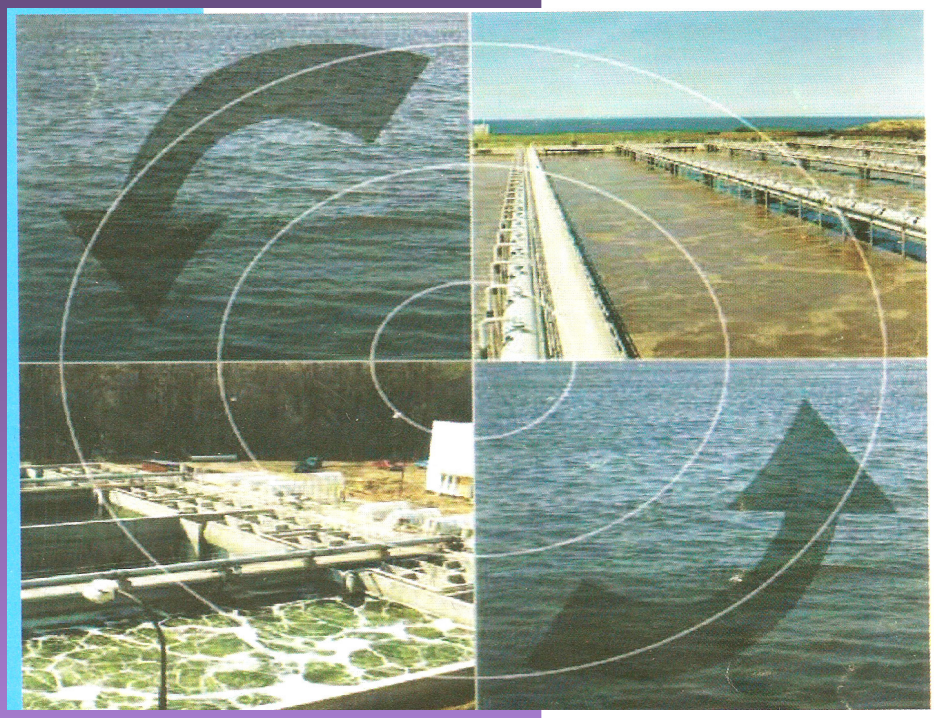
U I D S S M T

UNDERGROUND SEWERAGE SCHEME



DETAIL PROJECT REPORT
FOR
VITA MUNICIPAL COUNCIL,VITA

FEBRUARY- 2009

PREPARED BY

KIKALE ASSOCIATES

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

EXECUTIVE SUMMARY

1.0 The Vita Municipal Council has awarded the work of preparation of Detailed Project Report, Detailed Engineering and Design of the sewerage scheme for Vita Town and Detailed Estimation of the Project to M/S. Kikale Associates, Consulting Engineers, Baramati, Pune.

2.0 The survey of the Vita 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 Vita town is head quarter to Taluka Khanapur in Sangli district. It is an important town in Sangli district of Maharashtra State. It is situated on the junction of two main roads viz. Road from Chiplun Vijapur via Karad and the road from Sangli to Phaltan. The population of Vita town is 41804 as per 2001 census and the population Projected for the year 2040 is 82480 souls

4.0 The details of the proposed underground drainage scheme are as follows:
The topography of Vita town is such that the general slope of the town is towards Southwest. The total area is divided in to two drainage zones and the total flow is ultimately collected at terminal pumping station no PS 1 which pumps the flow to the proposed STP of 7.5 mld capacity with Cyclic activated sludge process. The gross cost of the proposed sewerage system is **Rs. 2143.44 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 station and S.T.P 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	48564	5.77
2025	63065	7.49
2040	82480	9.80

2) Collection System

Total length = 67 Km

Diameter = 150 mm to 700 mm

Pipe material = RCC NP2, NP3 and NP4 pipes

3) Rising Main

Sr. No.	Description	P.S.1
a)	Diameter	400 mm
b)	Length	50 m
c)	Material	D.I k9 pipe

4) Pumping Machinery

Description	P.S.1
Pumps (1DWF) Discharge (lps) Head H.P. Nos	 Submersible pumps 93 11 20 2W+1S
(½DWF) Discharge (lps) Head H.P Nos	Submersible pumps 46 10 10 1W+1S

5) Sewage Treatment Plant

Description	STP 1
Capacity	7.5 mld (Phase – 1)
Type	SBR Technology

Current Status

The project is submitted to the Municipal Council.

VITA UNDERGROUND SEWERAGE SCHEME

SUMMARY OF COST

Sr. No.	Name of Subwork	Amount in Rs.
1	**Working Survey**	300000.00
2	**Sewage Collection System**	143467000.00
3	**Sewage Pumping Station No.-1**	
3A	Civil Works	1471400.00
3B	Mechanical & Electrical Works	6901400.00
3C	Rising Main For PS-1	618000.00
4	**Sewage Treatment Plant(STP1-5mld)**	46627700.00
5	**Miscellaneous Works**	936300.00
	Total	**200321800.00**
	Add Escalation Charges (7%)	14022526.00
	Cost of the Scheme	**214344326.00**