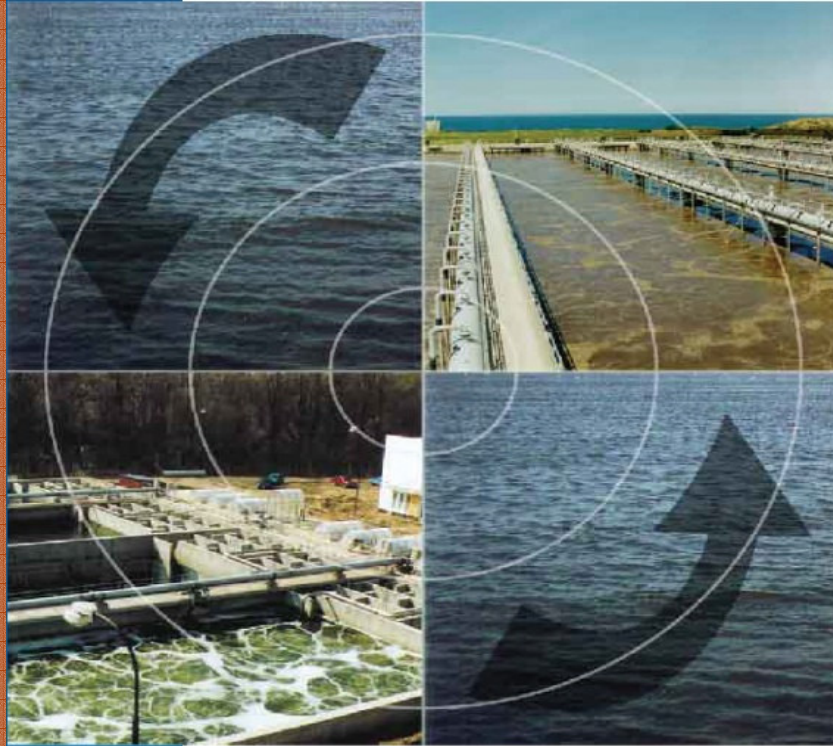


UNDERGROUND DRAINAGE SCHEME



DETAILED PROJECT REPORT FOR

WASHIM MUNICIPAL COUNCIL, WASHIM; DIST;-WASHIM

REVISED AS PER DSR 2010-2011

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

EXECUTIVE SUMMARY

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

2.0 The survey of the Washim 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 Maharashtra Suvarnajayanti Nagarotthan Abhiyan.

3.0 Washim city has a 'B' class Municipal Council. The Washim town is situated at a distance of 83 km from Akola. It is district head quarter. Washim town is connected with many classical deities. As per manuscript called "Watsa Gulma Puran "it was a place of gathering of Watsa and the place was called as "Watsa – Gulma –Kshetra." It was a part of the Dandakaranya and the Rishi 'Watsa' had his ashram. There are many old temples in the town. Washim town is connected by the South-Central Railway. It is a railway station on Khandwa-Hingoli Meter Gauge Railway line.

It is also well connected with important towns such as Risod by state highway No. 67. Mangrulpir by state highway No. 71 and Hingoli by state highway No. 68. The area covered within the Municipal limits is 4781.46 ha. The shape of the town is like 'Oval' laying on East – West direction. There is a nala passing through the middle of the town. The population of Washim town as per 2001 census is 62957 souls. This town is a business center for large surrounding track, which grow jowar and cotton. The civil affairs of the town are managed by the Municipal Council.

4.0 The details of the proposed underground drainage scheme are as follows:
The shape of town is like "Oval" laying on East West direction. There is a nala passing through the middle of town. The Washim town falls in flat country, having gentle slope towards west and then to the south.

The collection system is proposed in the developed areas viz. civil line area, IUDP area, old gaothan area etc. The flow of the proposed collection system shall be taken to the proposed pumping station in survey no.300, from where it would be

lifted using submersible pumps through proposed 400mm dia DI K9 pumping main (50m long), to the proposed Sewage treatment plant of 8 mld capacity.

The water supply to the town is from Ekburji dam and the present water supply rate is 70 lpcd. The water supply scheme is being augmented by the Municipal Council under UIDSSMT with rate of water supply 135 lpcd. The population projected for Washim for 2039 yr. is 132137 souls.

5.0 Environmental Impact Assessment: 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 STP's 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)
2009	79470	4.23
2024	107607	6.84
2039	143137	11.22

2) Collection System

Total length = 63 Km
 Diameter = 150mm to 800 mm
 Pipe material = RCC NP2, NP3 and NP4 pipes

3) Rising Main For P.S.

Sr.No.	Description	P.S.1
a)	Diameter	400 mm
b)	Length	5 m
c)	Material	D.I k9 pipe

4) Pumping Machinery

Description	P.S.1
a) Pumps	Submersible pumps
b) (1DWF)	
Discharge (lps)	113 lps
Head	12.50 m
Nos	3
H.P	30.00
c) (½DWF)	Submersible pumps
Discharge (lps)	53 lps
Head	12.50 m
Nos	2
H.P	15.00

5) Sewage Treatment Plant

Description	STP 1
Capacity	8 mld
Type	SBR Technology

Current Status

Tenders are finalized by the Municipal Council.

WASHIM UNDERGROUND SEWERAGE SCHEME

SUMMARY OF COST

Sr. No.	Name of Subwork	Amount
1	Working Survey	500000.00
2	Sewage Collection System	227152161.00
3	Sewage Pumping Station No.-1	
3A	Civil Works	2296064.00
3B	Mechanical & Electrical Works	7158217.00
4	Rising Main For PS-1	411561.00
5	Sewage Treatment Plant (STP-8.00 mld)	78982400.00
6	Miscellaneous Works	2021770.00
	Total	318522173.00
	Add 5% Escalation	15926108.65
	Total	334448281.65
	Add 0.75% for Project Preparation	2388916.30
	Total	336837197.95
	Add 0.1% for Scrutiny Charges for cost diff.	175244.00
	Total	337012441.95
	Add 3.5% for P.M.C.	11148276.06
	Gross Cost of the Scheme	348160718.01
	Say	348160800.00

