

**ISLAMPUR MUNICIPAL COUNCIL,  
ISLAMPUR; DIST; - SANGLI**



**DETAIL PROJECT REPORT FOR  
UNDERGROUND SEWERAGE SCHEME**

**March – 2012**

**PREPARED BY -**

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## EXECUTIVE SUMMARY

- 1.0** The Islampur Municipal Council has awarded the work of preparation of Detailed Project Report, Detailed Engineering and Design of the sewerage scheme for Islampur Town and Detailed Estimation of the Project to M/S. Kikale Associates, Consulting Engineers, Baramati, Pune.
- 2.0** The survey of the Islampur 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 MSNMA.
- 3.0** Islampur is an important town in Sangli district of Maharashtra State. It is situated at 3 Km to the east of Peth Naka situated on the Mumbai Bangalore National Highway (NH-4). The district head quarter Sangli is about 40 Kms away to East of Islampur town and is connected by the Peth-Sangli State Highway (SH-138) The nearest railway station is Takari 15 kms away to North-East and then Karad railway station which is 40 kms away to North West both on the south central Railway, Islampur town itself lies in the North longitude of 10-3 and East latitude of 74-4.. The area covered by Islampur Municipal Council area is 2224.7 Ha. The population of Islampur town is 58330 as per 2001 census and the population Projected for the year 2042 is 147711 souls. At present Islampur town gets water from Krishna river .The water is supplied at a rate of 135 lpcd.
- 4.0** The details of the proposed underground drainage scheme are as follows:  
The Islampur town is divided into four main drainage zones with ridge running in south east direction almost from middle of the town. It is proposed to provide two major **STP's STP-1 of 6.7mld** capacity for North West area and **STP-2 of 4.1mld** for south east area. The gross cost of the proposed sewerage system is **Rs. 6516.791 Lakhs.**
- 5.0** Environmental Impact Assessment: Project Component consists of collection system, Pumping station, pumping main and sewage treatment plants. 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 S.T.Ps 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) |
|------|------------|-----------------------|
| 2014 | 71668      | 7.74                  |
| 2029 | 94512      | 10.207                |
| 2044 | 124344     | 13.429                |

### 2) Collection System

Total length = 98 Km

Diameter = 150 mm to 800 mm

Pipe material = RCC NP2, NP3 and NP4 pipes

### 3) Rising Main

| SR No. | Description | P.S.1       | P.S.2       | P.S.3       | P.S.4       |
|--------|-------------|-------------|-------------|-------------|-------------|
| a)     | Diameter    | 400 mm      | 150mm       | 350mm       | 150mm       |
| b)     | Length      | 50 m        | 540 m       | 50 m        | 1650 m      |
| c)     | Material    | D.I k9 pipe | D.I k9 pipe | D.I k9 pipe | D.I k9 pipe |

### 4) Pumping Machinery

| Description     | P.S.1             | P.S.2             |
|-----------------|-------------------|-------------------|
| a) Pumps (1DWF) | Submersible pumps | Submersible pumps |
| Discharge (lps) | 76.56             | 47.3              |
| Head in m       | 10                | 16                |
| H. P            | 20                | 20                |
| Nos             | 2W+1S             | 2W+1S             |

|                 |                   |                   |
|-----------------|-------------------|-------------------|
| b) (½DWF)       | Submersible pumps | Submersible pumps |
| Discharge (lps) | 38.28             | 23.65             |
| Head in m       | 10                | 13                |
| H.P             | 10                | 10                |
| Nos             | 1W+1S             | 1W+1S             |

### 5) Sewage Treatment Plants

| Description | STP 1                  | STP 2                  |
|-------------|------------------------|------------------------|
| Capacity    | 6.7 mld<br>(Phase – 1) | 4.1 mld<br>(Phase – 1) |
| Type        | SBR Technology         | SBR Technology         |

### Current Status

The project is submitted to Government of Maharashtra. Technical scrutiny is completed.

## ISLAMPUR UNDERGROUND SEWERAGE SCHEME

### SUMMARY OF COST

| Sr. No. | Name of Subwork                             | Amount in Rs.       |
|---------|---|---------------------|
| 1       | <b>Working Survey</b>                       | 100000.00           |
| 2       | <b>Sewage Collection System</b>             | 396342707.00        |
| 3       | <b>Sewage Pumping Station No.-1</b>         |                     |
| 3A      | Civil Works                                 | 2409226.00          |
| 3B      | Mechanical & Electrical Works               | 8825609.00          |
| 3C      | Rising Main For PS-1                        | 630818.00           |
| 4       | <b>Sewage Pumping Station No.-2</b>         |                     |
| 4A      | Civil Works                                 | 503620.00           |
| 4B      | Mechanical & Electrical Works               | 6166836.00          |
| 4C      | Rising Main For PS-2                        | 1403137.00          |
| 5       | <b>Sewage Pumping Station No.-3</b>         |                     |
| 5A      | Civil Works                                 | 2737140.00          |
| 5B      | Mechanical & Electrical Works               | 8250278.00          |
| 5C      | Rising Main For PS-3                        | 520335.00           |
| 6       | <b>Sewage Pumping Station No.-4</b>         |                     |
| 6A      | Civil Works                                 | 505870.00           |
| 6B      | Mechanical & Electrical Works               | 6194266.00          |
| 6C      | Rising Main For PS-4                        | 3949240.00          |
| 7A      | <b>Sewage Treatment Plant( STP1-6.7mld)</b> | 69517597.00         |
| 7B      | <b>Sewage Treatment Plant( STP2-4.1mld)</b> | 53537766.00         |
| 8       | <b>Miscellaneous Works</b>                  | 1411290.00          |
|         | <b>Total</b>                                | <b>563005735.00</b> |
|         | Add cess for labour welfare (1%)            | 5630057.35          |
|         | Add Escalation Charges (10%)                | 56300574.00         |
|         | Add Preparation Charges (1%)                | 5630057.35          |
|         | Add Technical Sanction Charges (0.25%)      | 1407514.34          |
|         | Add P.M.C. Charges (3.50%)                  | 19705200.73         |
|         | <b>Cost of the Scheme</b>                   | <b>651679139.00</b> |