

Vacuflow® Vacuum Sewer system



Sakuta-oka, Kujukuri Town, - Japan

Introduction

Vacuflow system was taken from 2 main reasons.

- This area is quite close to coast-line, soil type is sandy. Therefore the water-table is high, approx. 1.0m from the ground level.
- The terrain is flat. Also sewer crosses many irrigation-creeks.



Interface unit and wireless alarm unit.



Relay unit on the pole

Specification

In this area, Both of 63mm and 90mm interface-unit are taken. Basically a 90mm-unit is connected to maximum 11 dwellings. However in the case of apart dwelling, or obstacle between dwelling and vacuum-sewer, 63mm-unit is installed for each dwelling.

Each interface-unit equips wireless alarm unit for easy maintenance. The alarm unit is connected to open/close sensor and water-level sensor, and detect count of operation, unusual valve-opening duration, and unusual high water-level in the unit.

The alarm unit, automatically, make signal of,

- Emergent call, immediately after unusual operation, to host computer and maintenance person.
 - Daily call, in each 24h each unit makes call to host computer.
- The host-computer is installed in the Vacuum-Station, and connected to public telephone line.



Vacuum- Station with water purification plant



Inside of Vacuum- Station

Technical information

- Classification: (Public) Rural Sewage
- Operation started: 2001
- Residents: 1,300
- Total sewer length: 11.7km(PE-pipe)
- Interface unit: 207 (Each interface unit equips wireless-alarm)