

## Sewage Flow Measuring Service

BMK Consulting Engineers have recently acquired bespoke Flow Meter devices which are currently being used to undertake detailed Sewer Impact Assessments for Proposed low - cost social housing developments.

These flow meters are in stream measuring devices that are installed within the existing sewer network preferably downstream from the proposed development being analyzed. The device records the quantity of flow and the level of foul - water sewer which passes through this manhole over specific time intervals over a chosen time - period.

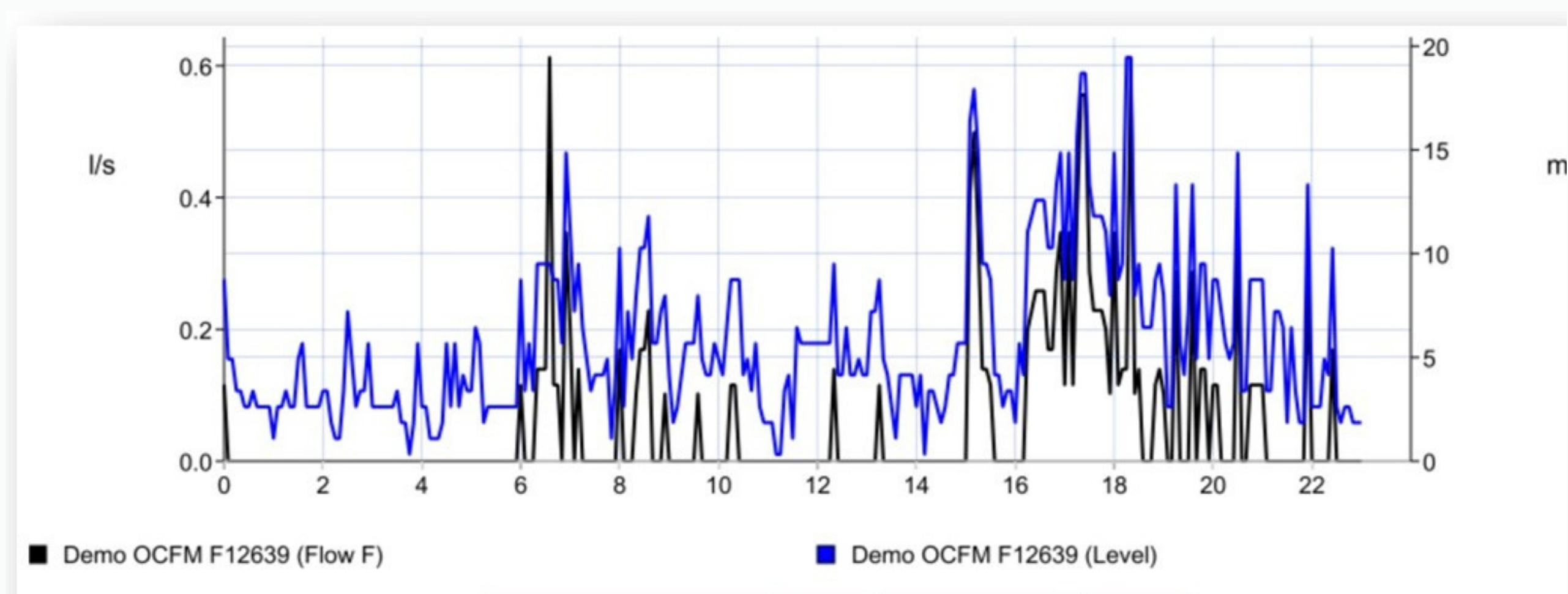
The device is designed for use with Ultrasonic Distance, Pressure and Electromagnetic Area Velocity sensors and can be used be managed remotely. Various factors within the sewer manhole are considered and recorded such as the diameter of the sewer pipe and the depth of sand within the pipe. Hand Calculations using a specific design method are completed as a check which corresponds with the measured flows.



**Flow Measurement Device**



A detailed Sewer Impact Assessment is completed to confirm whether there is available capacity within the existing sewer piped networks to accommodate and service the proposed developments with water- borne sewage.



**Results output from Flow Meter Device**

Data captured from the Flow meter device is transmitted to a server from which the results can be extracted in the form of a line graph as per above, for both the flow (l/s) and level (mm) of sewage experienced. The average and maximum flows (l/s) and levels (mm) are also recorded.

The information captured assists in determining the actual in field capacities which is then used to draw a comparison between the theoretical capacities and the actual capacities available to service the proposed development.

The results from the assessment help ascertain the existing sewer piped networks capacity and assist in master planning and maintenance studies for interconnected sewer pump stations and wastewater treatment works. This information is crucial in determining upgrades.





**Device in Manhole**



**The BMK Team onsite**

BMK Consulting Engineers thus adds to its comprehensive list of engineering services by offering these bespoke flow meters, equipped with the latest technologies currently available on the market. We are therefore adequately placed in terms of performing these analyses as part of our services on offer.



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