



# Leakage Investigation Survey

**Client: Chipping Norton, OX7**

## Mains water meter information

Size (mm)	15-28	✓	32-50		75-100		125-200		Above 200mm
Serial number	Not visible								
Readings (1)	11079.431				Time:	09.25 12 <sup>th</sup> November 2018			
Readings (2)	11079.452				Time:	09.30 12 <sup>th</sup> November 2018			
Location	LHS of delivery road in bushes opp plant room door								

## Leakage Activities

Acoustic sounding	✓	Correlation		Ground microphone	✓	Environmental Inspection	
Other	Isolation of rising main						
Pipe traced	✓	CAT & Genny			Distance	40mtrs	
Pipe correlated	Accelerometer			Hydrophones	Distance		

## Background Information

Suspected on site water leak, excessively high bills identified by water bill validation. A water audit report was issued to the client for approval to proceed with the leak detection survey and report.

## Activity Summary

### Pipework & Metering

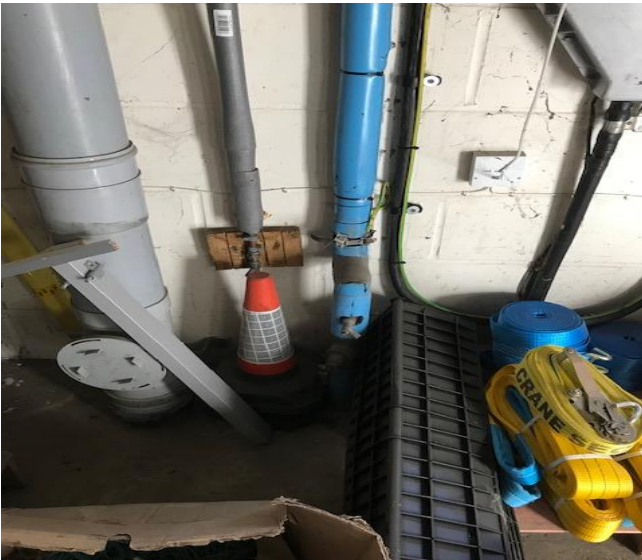
The water meter is located on LHS of delivery road in bushes opp plant room door



Pic 1



Pic 2



Pic 3



Pic 4



Pic 5



Pic 6

### **Leakage Survey Activities**

After first checking the meter (pic 1&2), a continuous flow rate of 4 litres per minute was being recorded. The main controlling stop tap was located in the plant room (pic 3) some 8 mtrs from the meter, the stop tap was then closed and the meter re checked. The flow rate was zero, confirming that the usage or leak was controlled by the main stop tap.

A grey pipe was located behind support beams, this was followed through the building and into the main timber warehouse where a controlling valve (pic 4) was found and the pipe continued after the tap and back below ground. On further investigations it was found that the new found stop tap controlled pipe-work supplying an outside tap and a jet at the bottom of the builders yard area, on entering the jet wash building it was noted that leak noise was evident.

The tap was then closed and the area of leak noise re-checked, the leak noise had stopped confirming the tap controlled the leak. On restoring the supply to the jet wash compound, leak detection was then carried out to locate and pinpoint the leak. The leak was located somewhere below ground on the feed to the jet wash. An excavation will have to be taken out inside the jet-wash storeroom and possibly externally as well, it has been confirmed that the pipe-work below ground at this location is of iron construction. Site materials (pic 6) will have to be moved from both inside the small building and outside to make the areas safe to work in.

### **Summary & Recommendations**

Summary: Water leak confirmed at 2,080 cubic metres per year at a cost of £7,200 per year.

External leak located on supply below concrete flooring in jet-wash store room

Recommendations:

Excavate and repair, pressure test for further water leaks £1,545 + VAT

### **Survey carried out by**

Engineer	H2O Building Services	Date	January 2020
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