Digital monitoring and onsite expertise saves local authority over £61,000

Meter Readers (AMRs) and Business Stream's expertise we were able to discover and fix a large undetected leak. As a result of the repair work carried out, we saved a significant amount of money and water.

Craig DooganEnergy Team Leader
Renfrewshire Council





Renfrewshire Council is the ninth largest local authority in Scotland, it delivers essential services to a population of over 170,000 people and has been a valued Business Stream customer since April 2020.

The challenge

The Council has automatic meter readers (AMRs) installed at several sites across its portfolio of premises. During routine AMR data monitoring, high baseline consumption readings were identified at the local authority's Underwood Road Depot, based in Paisley.

This is a complex site, housing multiple buildings, including storage for street cleaning vehicles, vehicle washing amenities, grounds maintenance facilities and offices.

Council staff initially visited the site and conducted a thorough walk-through, however no visible issues could be found. To investigate the issue further, the Council worked with Business Stream's contractors to undertake a detailed leak investigation to see if any causes of the strong baseline readings could be identified.

The solution

Following a water meter check onsite it became clear that there was a leak that needed to be repaired. To help identify the location, all pipe fittings were sounded using specialist, highly-tuned monitoring equipment and the strongest feedback was recorded on the pipe feeding water to a transport garage.

Investigations in this area were subsequently carried out, which found that the predicted location of the leak was under a 4oft container on hard standing. This meant the area of concern could not easily be reached.

Further searches unearthed a manhole chamber, located 25m away from the suspected leak location, which had water pouring in through the brickwork, providing further evidence that there was an issue. Excavation work was subsequently carried out and a leaking water main was identified. To fix the issue, a heavy-duty repair clamp was fitted around the damaged pipe.

The remedial work was successful and resulted in the baseline consumption dropping from $4.74m_3$ per hour to $0.4m_3/hr$ - which equates to an annualised saving of £61,500.

Due to the savings achieved, Renfrewshire Council has invested in more AMRs to maximise coverage of their estate so they can continue to track and identify any unnecessary water use, helping to save both money and water.

