

Methlick WwTW

providing new WwTW with minimum disruption

Although improving wastewater facilities to a small village could be considered a small project - cost £2.2m - the new WwTW presented a number of challenges in terms of both construction and the resultant effects on the 450 residents of Methlick, a small village in rural Aberdeenshire. The task presented to Scottish Water Solutions was to meet these challenges and overcome them within the 12 months timescale required and without significant, economic, social and environmental upheaval.



Methlick WwTW: Transferring flows from far side of River Ythan

Construction challenges

- * removal of 6 existing septic tanks;
- * laying 2km of new pipeline through residential and recreational areas;
- * transferring flows from settlements on far side of the River Ythan;
- * drilling & excavating in hard bedrock indigenous to the area at 3 metres;
- * removal & disposal of some 3200 tonnes excavated waste;
- * risk of dilapidation of surrounding buildings & property through vibration damage.

Community challenges

- * increased risk to local residents, including noise and atmospheric pollution;
- * excavation entry holes and disruption of utility supplies;
- * economic implications - including reduced custom for local shops & businesses as a result of excavations, especially on or near to the High Street;
- * transport challenges - planned road closure of Methlick High Street, excavation will obstruct traffic to this artery road;

- * damage to newly renovated cricket ground and Ythan Bridge.

Meeting the challenges

As with all 2500 projects in our current capital investment programme, construction challenges can only be met after extensive interaction, communication and involvement with local community stakeholders. Before Scottish Water Solutions begin any project, a pro-active Bespoke Communication Plan, specifically tailored to accommodate customer and stakeholder requirements is drawn up to ensure that all relevant parties are kept informed and that communication channels remain open. The key stakeholders in this project included:

Scottish Water Solutions - work on behalf of their parent organisation and in this case working on behalf of Scottish Water and Gleeson's.

Landowners - Lord Aberdeen owns the land on which this project was to take place and his assistance was sought very early on in the project (see below - 'Beginning the Process').

Aberdeenshire Council - As the maintainers of Methlick and its surrounding areas Aberdeenshire Council required extensive involvement if planning permission was to be granted.



Methlick WwTW

photo courtesy Scottish Water Solutions

Local Business Owners-the closure of Methlick High Street and the potential disruption of trade requires communication and involvement of local business owners.

Local School - The Site manager arranged meeting with the local school head teacher. This was necessary for the pupils and teachers to understand the inherent disruption and danger which could be caused and how to avoid it.

Local Residents - to encourage acceptance of the project and its eventual benefits, it was essential to both inform and involve local residents.

Scottish Environmental Protection Agency - SEPA ensure that all work carried out does not permanently damage the environment. Air pollution, local soils, wildlife and water quality is monitored throughout construction work,

Methlick Cricket Club - pipe route passed under the newly laid cricket pitch. Consultation and compromise were used to overcome this challenge, leading to some additional benefits for the club.

Solutions' Policy - 'Communicate early - Communicate often'
Prior to commencement of the project an open public meeting took place and thereafter, fortnightly interface meetings were held with the Community Council. At these meetings, key stakeholders were informed of both the potential disruption and the key benefits which would arise from the project.

Delivery -Methlick WwtW

Prior to the start of construction in September 1994, discussions took place between Solutions and Lord Aberdeen, landowner and co-developer of the existing wastewater system in Methlick. The advantage of this early interaction meant:

Pipeline routes were secured early, meaning in turn that

information could be relayed to the relevant stakeholders at an early stage.

Existing infrastructure (i.e. existing catch pit chamber would become Pumping station No.1) and could be incorporated into the new designs, meaning that only work which was absolutely necessary would be undertaken.

The challenge of laying a pipeline from settlements on the far side of the river Ythan needed to be addressed.

After consultation with Aberdeenshire County Council, the option to use the newly renovated bridge was deemed untenable in terms of cost and potential damage. An alternative route was proposed, but this was also problematical since the pipeline would not run beneath the newly laid Methlick Cricket Pitch.

The Cricket Club worked with Solutions to identify the least damaging route and they in turn employed special directional drilling to limit disruption and provide an exit point out-with the cricket ground in an area earmarked for new car parking facilities. Following this, and after negotiations had taken place with SEPA, it was agreed that the excavated earth from the pipeline drilling would be recycled to level off and prepare the car park for completion.

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Results

Construction work was completed 3 months early with an impressive saving of £300,000. Now other projects can be brought forward and the savings made passed on to ensure their efficient completion.

This project, is an example of how Solutions continually strives to offer 'more for less' in terms of value to customers. ■