

# Internal Flooding Investigations

Client: Scottish Water



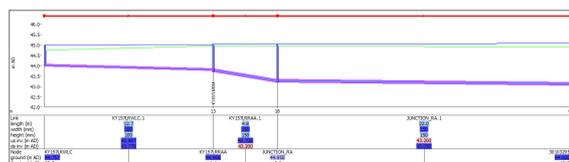
Caley Water has supported Scottish Water in investigating issues of internal flooding at properties. This is a key target for Scottish water to reduce the number of customers impacted by flooding and improve the level of drainage network performance.

We have been involved in investigations at a number of sites across Scotland. The work involved gathering information on site and from customers to determine the cause of flooding and future risk of flooding. The later stages of the projects included developing solutions to mitigate flood risk and complete a concept design.



## Services Provided

- Collection and review of information to determine the cause of flooding, including historical information, survey data, site visits, customer interviews and hydraulic modelling data.
- Updating of hydraulic models to identify the risk of flooding at properties from the public sewers.



- Develop solutions using hydraulic models to reduce flood risk within Scottish Water performance standards.
- Undertake site visits to identify constraints, review buildability of solutions and complete design risk assessments.

- Complete utility service checks to identify any clashes or diversions required.
- Undertake a 3rd party screening exercise to identify any land or environment issues.
- Identify a preferred option for each flood cluster to be taken forward to the next stage in the investment process.

### **Solutions and Added Value**

Caley Water has extensive experience in flood investigations and assessing flood risk. We have undertaken customer surveys, managed site asset and topographical surveys, maintained hydraulic models, assessed flood mechanisms, investigated potential options for flood alleviation. An assessment of buildability issues has been undertaken by review of existing utility services and desktop study.

Our approach has allowed the client to review the risk of flooding at properties and compare this against the costs associated with mitigation measures. This has allowed the client to assess the cost benefit of schemes and prioritise capital investment in the drainage network.

