



Non-Standard Connections

Some planning applications we receive include basement development or specialist features that have public network connections which require extra care and attention.

Basements

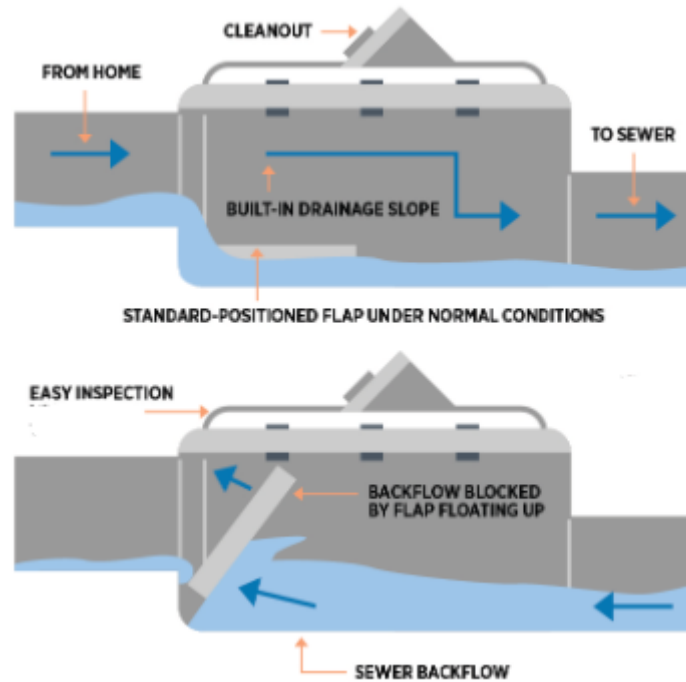
Where basement or below ground-floor development is proposed which will have a sanitary connection, extra care should be taken to make sure the property is not at a higher risk of flooding as set out in *Part H of The Building Regulations 2010*. If a basement has a direct connection to a sewer, and extra precautions are not taken, it is likely to be the first place to be internally flooded if the sewer system becomes overwhelmed. This is because the basement is the closest open space to the sewer and consequently the easiest place for the flows to escape to.

We recommend applicants contact Northumbrian Water for advice when adding sanitary ware to a basement e.g. washing machines, or sanitary appliances including sinks, toilets or showers which require the disposal of foul flows to the public sewerage network. Firstly, we will need to assess the capacity within the public sewer in order to identify the level of risk for internal flooding. Once the level of risk has been identified we can advise the applicant on how to design the

drainage system to prevent the risk of internal flooding. The following two options are set out within *Part H1 of the Building Regulations 2010*:

- 1- Where there is a high risk of internal flooding and known instances of surcharging sewers, the drainage from the basement should be pumped to ground floor level before discharging to the public sewer via a gravity connection.
- 2- Where there is a lower risk of internal flooding or pumping the flows to the ground floor level is not a viable option, then a non-return valve should be installed on the drainage system from the basement prior to the connection to the public sewerage network, see diagram.

For further advice please contact our planning team: Planning@nwl.co.uk



Swimming pools

Where a swimming pool is proposed which requires a connection to the public sewerage network, you should consider the following:

- Does the proposed swimming pool have a backwash facility?
- If yes, how much water is extracted through the backwash facility and how frequently will these flows discharge to the public sewer? *Depending on the potential backwashing of the swimming pool, this may need to be detailed/approved separately as a trade effluent under section 106 of the Water Industry Act 1991.*
- How often, if at all, does the pool need to be drained down completely?



This information is necessary for Northumbrian Water to be able to advise the applicant on whether the sewerage network has the capacity to accept the additional flows, as well as identifying whether a trade effluent agreement is needed alongside the formal sewer connection agreement. If a proposed connection is located in a basement or at a lower ground level then the applicant should also check our advice on [basement](#) development.