



Surface Water Drainage and Flood Risk

for small scale development in North Somerset

Surface Water Drainage and Flood Risk

Surface water is rainwater which runs off roofs and paved areas. When developing the design of a home extension, it is important to consider surface water drainage. This is because an extension can increase the number of impermeable, or waterproof, surfaces on the development site.

As more small developments are built in neighbourhoods across North Somerset, the amount of permeable surfaces where water can drain reduces which can increase the risk of flooding in our towns and villages. Therefore, when planning an extension, adequate provision should be made to make sure surface water runoff does not drain on to the public highway or impact on neighbouring property.

Any runoff from impermeable surfaces within the development must be captured and managed on site. This includes all runoff from roofs, access ramps, driveways and patios.

What options should I consider for surface water drainage?

You should consider the following surface water drainage options, in this order of priority:

1. Infiltration into the ground using Sustainable Drainage Systems (SuDS) such as soakaways and permeable driveways.
2. Discharge into an existing watercourse – a land drainage consent may be required from the appropriate authority (see the section on 'watercourses').
3. Discharge into an existing surface water sewer – permission from Wessex Water will be required.

What are Sustainable Drainage Systems (SuDS)?

Sustainable drainage systems (SuDS) are techniques designed to mimic natural drainage processes and control surface water runoff. They reduce the amount of pollutants being discharged from a site and make sure the development does not have an adverse affect on flood risk downstream. As a council we aim to increase the uptake of the use of SuDS in all new development as a means of reducing the impact on flood risk. **The use of infiltration and/or water reuse should be prioritised when planning a surface water drainage system for your extension.** Examples of SuDS systems that are suitable for minor developments include:

Soakaways: these are pits, usually filled with gravel or lined with brick, which surface water is piped into so that it drains slowly into the surrounding soil. They should be designed and constructed to standards detailed in:

- Building Regulations Approved Document H3, available at www.planningportal.gov.uk
- BRE Digest 365 soakaway design, available at www.eden.gov.uk

Green roofs: these are roofs that are partly or completely covered with vegetation. Visit the Royal Horticultural Society (RHS) website www.rhs.org.uk for advice on green roofs.





Permeable driveways: The Environment Agency has produced a document called 'Guidance on the Permeable Surfacing of Front Gardens', available at www.gov.uk. You can also visit www.rhs.org.uk to find out more about designing front gardens with minimal impact on flood risk, and download a handy guide entitled 'Gardening Matters – Front Gardens'.



Water butts and water recycling: these can be used to collect and store rainwater in even the smallest of gardens. As well as helping to reduce the surface water runoff (if emptied on a regular basis) they can also help gardeners during hosepipe and sprinkler bans.

Rain gardens: these are sunken areas of ground planted with vegetation chosen for its ability to cope with occasional flooding; they are not ponds, and are sometimes dry. The water held there can then slowly drain into the soil or be absorbed and returned to the air by the plants. They don't have to be very large; all you need is an area to which you can divert your downpipe or the runoff from a big paved surface. A 'Rain Garden Guide' is available at raingardens.info.

There is a watercourse on my property what are my responsibilities?

If there is a river, stream, drainage ditch, culvert or rhyne running through or adjacent to your property you can connect your surface water to these with the correct permissions.

You may also have what are known as 'riparian' responsibilities to maintain the watercourse. You can find out more in the Environment Agency leaflet 'Living on the Edge' which is available at www.gov.uk.

When do I need land drainage consent?

If you are considering constructing anything across a watercourse (whether permanent or temporary) you may have to apply for consent from the relevant risk management

authority. This depends on whether the watercourse is classified as Main River or Ordinary Watercourse. You can find out if a watercourse is Main River by visiting apps.environment-agency.gov.uk/wimby/

Which authority should I apply to?

- If you are looking to construct across a Main River you will need to apply to the Environment Agency for flood defence consent. More information is available at www.gov.uk
- For construction across an Ordinary Watercourse in the North Somerset Internal Drainage Board (IDB) area, you will need to apply to the IDB for land drainage consent. Find out more at www.nslidb.org.uk
- And for Ordinary Watercourses that are outside of the IDB area, you will need to apply to us for land drainage consent. Find out more by visiting our website www.n-somerset.gov.uk/environment/flooding

What if the only option is to connect to a public sewer?

If you need to make a new surface water connection from your new property or extension to a public sewer, you will need to apply to Wessex Water before you start any works. Visit <http://www.wessexwater.co.uk/Developers> for more information.

Council documents can be made available in large print, audio, easy read and other formats. Documents on our website can also be emailed to you as plain text files.

Help is also available for people who require council information in languages other than English.

For more information email floodrisk@n-somerset.gov.uk