

6

SDCC Surface Water Drainage Pre Planning Guidance

The guiding documents are the Greater Dublin Strategic Drainage Study (GSDSDS) and the Greater Dublin Regional Code of Practice for Drainage Works (C of P), available at <http://www.sdcc.ie/sites/default/files/publications/greater-dublin-regional-code-of-practice-for-drainage-works.pdf>

The SDCC Sustainable Drainage (SuDS) Explanatory, Design and Evaluation Guide is available to download at: <https://www.sdcc.ie/en/services/planning/planning-applications/water-and-drainage-considerations/>

Maps of the mains foul and surface water drainage networks may be obtained, if available, for required locations in South Dublin County Council by emailing: servicemaps@sdublincoco.ie

1. Foul and surface water systems to be designed to discharge to separate pipe networks.
2. Fully detailed drawings showing plan and longitudinal views of surface and foul networks shall be submitted. Standard cross section details of all drainage components shall also be submitted. SuDS details shall also be submitted including details of inlet and outlets.
3. The surface water run-off from the site shall be limited to greenfield runoff and details shall be provided on how surface water up to and including the 1:100 (1%) year critical storm with climate change allowance will be dealt with on site in accordance with the GSDSDS. The applicant shall also demonstrate that there will be no reduction in the quality of the surface water.

Plans shall show flow routes including exceedance flow routes, subcatchment boundaries, flow control locations, storage locations, contributing impermeable areas and phasing where appropriate.

The following details shall be submitted as part of surface water drainage attenuation and discharge rate calculations:

- Overall Site Area
- Standard Average Annual Rainfall (SAAR)
- Standard Percentage Run off value (SPR)
- Climate Change Allowance (Min 20%)
- Urban Creep Allowance (See SDCC SuDS Guide Section 8.4.7)
- A breakdown of surface types, surface areas and surface run off coefficients for **each** surface water drainage sub-catchment of proposed development. (See example of table below)

Structure Type	Area Ha (Hectares)	Runoff Coefficients
Buildings		
Green Roofs (if any)		
Roads		
Pathways		
Permeable Paving		
Grass		
Total		

4. A clear distance of 3m separation required between public sewers and all proposed structures. This clear distance will be increased if the sewer is greater than 3m deep or greater than 375mm in diameter (C of P section 6). Cross-section drawings shall be submitted where the proposed development is in close proximity to a public sewer or any drain with the potential to be taken in charge.
5. The recommended minimum depth of cover over a mains pipeline is 1.2m (C of P 11.8.2). Any utility crossing a sewer is to have a minimum clear distance of 300mm (C of P 3.13).
6. Manholes shall be located in public pavements, roads or public open spaces (C of P 9.9).
7. Developments must comply with the Building Regulations 2010 Part H.
8. Sustainable Drainage Systems (SuDS) are a mandatory requirement for all new developments including domestic extensions and side garden developments. Drainage designs shall incorporate SuDS features into drainage designs such as but not limited to the following: Green Roofs, Infiltration systems, Filter Drains/Strips, Tree pits, Swales, Ponds/Wetlands, Detention basins, Bio Retention systems, Pervious pavement, Rain Gardens, Channel Rills, Rainwater harvesting systems. Applicants must refer to and comply with the SDCC SuDS Explanatory, Design and Evaluation Guide which is available to download at: <https://www.sdcc.ie/en/services/planning/planning-applications/water-and-drainage-considerations/>

SuDS features shall be designed and constructed to a Taking in Charge Standard where applicable. SDCC SuDS Taking in Charge Details are also available on the Council's website

The following breakdown of proposed SuDS features shall be provided with the planning application

Proposed SuDS Measure	Plan Area (m²)	Storage Volume (m³)
Green roof		
Blue roof		
Filter strip		
Filter Drain		
Permeable Paving		
Bio Retention Area/Tree pits		
Swales		
Basins/Ponds		
Rainwater Harvesting		
Underground Attenuation Storage <i>(Not a natural SuDS measure)</i>		
Total		

A strong justification will need to be submitted where SuDS systems are not proposed. Traditional underground attenuation systems are not an acceptable SuDS measure and should only be considered as a last resort. In this instance, South Dublin County Council will only accept **Arch Type** attenuation systems where they are to be taken in charge.

9. Surface Water Attenuation areas/systems generally must satisfy the following requirements:
 - (i) Must be at least 5m from any buildings, public sewers, road boundary or structures
 - (ii) Must generally not be within 3m of the boundary of the adjoining site
 - (iii) Must not in such a position that the ground below foundations is likely to be adversely affected.
 - (iv) Must be at least 10m from any sewage treatment percolation area and from any watercourse / flood plain.

10. Soakaways may be used for the disposal of surface water, and must comply with the BRE Digest 365. Submitted soakaway design details shall include infiltration test results. The design shall be certified to BRE Digest 365 standard by a suitably qualified person. Only clean, uncontaminated surface water shall be discharged to soakaways. The soakaway shall be located fully within the curtilage of the property and shall be:
 - (i) at least 5m from any buildings, public sewers, road boundary or structures
 - (ii) generally, not within 3m of the boundary of the adjoining site
 - (iii) not in such a position that the ground below foundations is likely to be adversely affected.
 - (iv) 10m from any sewage treatment percolation area and from any watercourse / flood plain.
 - (v) Soakaways to include an overflow connection to a public surface water sewer where possible.

11. Planning applicants and/or developers must enter into Surface Water connection agreement(s) with South Dublin County Council prior to connection to a public surface water network or watercourse. Application forms for Surface Water connections to the public drainage network are available at:
<https://www.sdcc.ie/en/services/environment/environmental-health/water-services/drainage/>

12. Where sites are located within the 1 in 1000 (0.1%) year flood extent of the OPW's CFRAM maps, the applicant shall submit details of the measures and design features to prevent/mitigate the risk of flooding to the proposed development and to adjoining lands. Compensation storage shall be provided where development is on the flood plain. Finished floor levels shall be at least 0.5m above the highest flood level occurrence at that location.

13. Buildings and below ground structures and attenuation systems must be set back at least 10 metres from the top bank edge of any watercourse.

Flood Risk

1. Where sites are located within the 1 in 1000 (0.1%) year flood extent of the OPW's CFRAM maps, the applicant shall submit details of the measures and design features to prevent/mitigate the risk of flooding to the proposed development and to adjoining lands. Compensation storage shall be provided where development is on the flood plain. Finished floor levels shall be at least 0.5m above the highest flood level occurrence at that location.

2. Flood risk must be assessed and commented on for all sites. Submissions must comply with OPW Guidelines for Planning Authorities, available at:
<https://www.opw.ie/media/Planning%20System%20and%20Flood%20Risk%20Management%20Guidelines.pdf>

Water Supply

1. Pre connection enquiries must be submitted to Irish Water for all proposed connection to a public watermain. The confirmation of feasibility letter from Irish Water must be submitted with the applicant's planning application.
2. Drawings showing existing and proposed water supply layouts for the proposed development must be submitted with the planning application. Submissions must comply with Irish Water's Standard Details and Code of Practice requirements available at: <https://www.water.ie/connections/developer-services/>

Foul Water

1. Pre connection enquiries must be submitted to Irish Water for all proposed connection to a public wastewater sewer. The confirmation of feasibility letter from Irish Water must be submitted with the applicant's planning application.
2. Drawings showing existing and proposed wastewater drainage layouts for the proposed development must be submitted with the planning application. Submissions must comply with Irish Water's Standard Details and Code of Practice requirements available at: <https://www.water.ie/connections/developer-services/>

Anyone seeking pre-planning information on drainage prior to the submission of a planning application can e-mail a query to the following address: **servicemaps@sdublincoco.ie**.