

## Sur1 – Management of Surface Water Run-off from developments

CSH Credits: Mandatory Elements + Max. 2 credits

### Aim:

To design surface water drainage for housing developments which avoid, reduce and delay the discharge of rainfall to watercourses and public sewers using SuDS techniques. This will protect receiving waters from pollution and minimise the risk of flooding and other environmental damage in watercourses.

### Assessment Criteria -

#### Hydraulic Control Criteria:

Mandatory Elements must be achieved i.e. showing that the peak rate of run-off and volume are not increased following development or controlling any increase.

#### Water Quality Criteria:

1. One credit can be awarded by ensuring there is no discharge from the developed site for rainfall depths up to 5 mm.
2. One credit can be awarded by ensuring that:
  - The run-off from all hard surfaces shall receive an appropriate level of treatment in accordance with The SuDS Manual to minimise the risk of pollution.

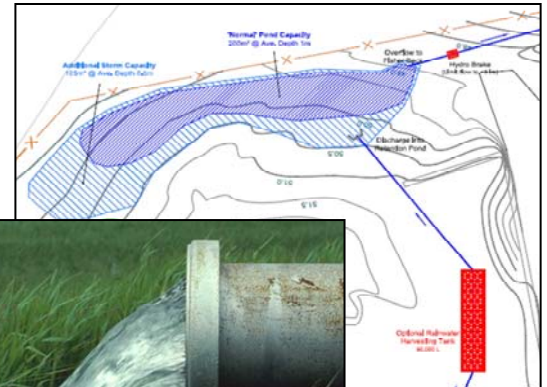
### About us:

Waterco's dedicated team of drainage engineers has many years of experience in all major areas of drainage design. We work with architects, developers, individuals and consulting engineers to design new schemes, solve problems and obtain statutory consents and approvals for foul, surface water and highway drainage.

Our in-house expertise enables us provide you with all the recommendations, calculations and drawings required to attain the maximum possible credits for the developments in question.



For more information please contact us or visit our website – <http://www.waterco.co.uk>



### Our Surface Water Run-off Services:

Whether you simply need to meet the mandatory elements or wish to attain additional credits, we offer a range of services to meet your requirements:

#### Surface Water Run-off Appraisal (Mandatory)

- Peak Rate of Run-off - Assessment before and after proposed development.
- Volume of Run-off – Calculations of rainwater volume to be discharged to a soakaway or watercourse.
- Percolation Test Analysis.
- Recommendations on how to achieve the mandatory elements (including rainwater harvesting, soakaways and attenuation).
- Completion of the Sur1 Summary Template.

#### SUDS Design (Max 2 Credits)

- Complete design service producing all design specifications, calculations and drawings to fulfil the CSH credit requirements for soakaway or attenuation.
- Advice on the most appropriate attenuation methods and technologies for your development e.g. permeable paving, rainwater recycling, swales, attenuation tanks.
- Liaison with the Local Authorities, Environment Agency and sewerage operator to agree the best solution and its adoption.

#### Flood Risk Assessment (FRA) (Mandatory)

- This is mandatory evidence for Sur1 and often the planning process. We have vast experience in producing such FRA documents for all flood zones at competitive rates. (See Sur2 – Flood Risk)

### Fast-Track Service:

We offer a 2 day service for an additional 25% fee on all of our CSH reports.

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