



Surface Water Drainage Proposal Checklist

Foreword

Before completing this checklist you are advised to read "Arun/Chichester District Council Supplementary Requirements for Surface Water Drainage Proposals".

The Surface Water Drainage Proposals Checklist is designed to clearly outline Arun/Chichester District Council's expectations and requirements for Surface Water Drainage Proposals and to expedite their review. This document should be used when completing Discharge of Conditions Applications or if the applicant wishes to avoid pre-commencement conditions relating to surface water drainage.

The Town and Country Planning Regulations now require pre-commencement conditions to have the prior agreement of the applicant regarding their wording and use. If an applicant wishes to avoid surface water drainage pre-commencement conditions they will need to submit detailed surface water drainage proposals in line with the Surface Water Drainage Proposal Checklist.

The below details are required to enable Arun/Chichester District Council to examine if proposals follow the hierarchy for sustainable drainage and if the design will adequately drain the site.

N.B. It will be difficult for Arun/Chichester District Council to undertake an appropriate and therefore timely assessment of your application if you answer "no" to any of the questions below, or if you fail to provide any of the information requested.

ODYSSEY RESPONSES IN RED

Checklist

Winter groundwater monitoring results included	Groundwater recordings were undertaken in November & December 2015. Please see attachment BRD2484-OR2-A
Winter infiltration test results included	Soakage Tests were undertaken in November 2015. Please see attachment BRD2484-OR2-A
Period of winter groundwater monitoring	Nov & December 2015. Please see attachment BRD2484-OR2-A
Maximum recorded groundwater level (AOD)	1.64m bgl. Please see attachment BRD2484-OR2-A
Date of infiltration testing	Nov & December 2015
Depth of infiltration testing	Circa 2m. Please see attachment BRD2484-OR2-A
Minimum infiltration rate recorded (At location of infiltrating structure)	Please see attachment BRD2484-OR2-A
Plan showing the location of winter groundwater monitoring and infiltration testing included	Please see attachment BRD2484-OR2-A
Method of surface water disposal proposed	Attenuation with discharge to

(Delete as appropriate)	watercourse
If infiltration is <u>not</u> to be used: Justification supplied	High groundwater table and poor infiltration rates; geotechnical report advises against the use of infiltration. Outline planning drainage approved on basis of attenuation.
If infiltration is proposed: half drain time for 10 year event + climate change allowance (hours)	N/A

If infiltration is proposed: half drain time for 100 year event + climate change allowance (hours)	N/A		
If infiltration is proposed: lowest base level of infiltrating structure			
If attenuation is proposed: calculations of pre-development runoff rates included *	Yes	Rate	
	Please see allowable discharge rates att.		
If attenuation is proposed: is proposed discharge rate less than or equal to pre-development rate?*	Yes	Rate	14l/s
	Qbar rate is 14l/s		
Calculations included demonstrating that the 1 in 100 year plus climate change event can be accommodated on site**	Yes, please see 18-070-02A drainage strategy technical note.		
If proposing an impermeable lined attenuation feature/s, calculations included demonstrating that resistance to floatation (due to groundwater levels) is achieved and catered for in the design	Yes, we are proposing impermeable lined attenuation features. As the recorded groundwater levels are below the depth of attenuation. There will be no risk of floatation.		
If alterations or discharge to an ordinary watercourse is proposed: has Ordinary Watercourse Land Drainage Consent been sought?	Ordinary watercourse consent required where proposal will impede the existing watercourse flow. This is not applicable for our proposals and not required.		
Drainage layout plans included***	Yes, preliminary DWG 18-070-103A		
Construction detail plans included****	We can prepare typical detail drawings.		
Exceedance flow route plans included (Not required for <5 properties)	Yes, Preliminary DWG 18-070-105A		

*If developing brownfield sites, please provide fully detailed plans of the existing surface water drainage arrangements on site, including impermeable areas, gullies, outfalls, pipes & diameters, manholes, etc.

**If infiltration is proposed the following factor of safety should be applied to calculations (in accordance with CIRIA R156/ CIRIA C609)

Size of Area to be	Consequences of failure
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Drained	No damage or inconvenience		Minor inconvenience, e.g. surface water on car park		Damage to buildings or structures or roads.	
	Cv=1.0	Cv=0.75	Cv=1.0	Cv=0.75	Cv=1.0	Cv=0.75
<100 m ²	1.5	2	2	3	10	13
100m ² to 1000m ²	1.5	2	3	4	10	13
>1000m ²	1.5	2	5	6.5	10	13



***Please note that drainage layout plans should include:

- All surface water drainage pipes labelled with; diameters, pipe materials, falls and invert levels.
- All infiltrating and attenuating structures (including permeable paving) labelled with; dimensions, invert and cover levels.
- All manholes labelled with; cover levels, invert levels, cover types detailed.
- All silt traps clearly labelled with sump depths.
- Control structures with outflow rates and invert levels.
- Proposed/existing levels of any areas subject to ground raising, together with suitable measures/detailed drawings for the associated managing of surface water runoff. Please note that ground raising should be avoided unless there are exceptional circumstances.

****If your proposed drainage scheme includes any of the following elements site specific construction detail plans should be supplied: pipe bed and surround; infiltrating structures; attenuating structures; manholes; catchpits/silt traps; control devices; permeable paving; headwalls.