



TO BE READ IN CONJUNCTION
WITH FORD AIRFIELD MARKET
FRA AND DRAINAGE STRATEGIES
REPORT BY JNP GROUP, REF
C85228 / R002 E , DATED 14.02.2020



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.

Checklist

Winter groundwater monitoring results included	Y/N YES - FRA APPENDIX F
Winter infiltration test results included	X/MY TESTS AUGUST 2018 APPENDIX F
Period of winter groundwater monitoring	AUG 2018 TO JAN 2020
Maximum recorded groundwater level (AOD)	1.757 AOD BHS 19.12.19
Date of infiltration testing	20.08.2019 TO 21.08.2019
Depth of infiltration testing	2.10m BGL
Minimum infiltration rate recorded (At location of infiltrating structure)	4.76 x 10 ⁻⁶ m/s - LOCATION SS
Plan showing the location of winter groundwater monitoring and infiltration testing included	Y/N YES - FRA APPENDIX A & F
Method of surface water disposal proposed (Delete as appropriate)	Infiltration / Attenuation with discharge to watercourse / Attenuation with discharge to surface water sewer / Attenuation with discharge to foul sewer
If infiltration is <u>not</u> to be used: Justification supplied	Y/N NA.
If infiltration is proposed: half drain time for 10 year event + climate change allowance (hours)	10 YR + 40 % CC 930 min = 15.5 hours

If infiltration is proposed: half drain time for 100 year event + climate change allowance (hours)	100 YR + 40 % CC 1436 minutes = 23.9 Hours.		
If infiltration is proposed: lowest base level of infiltrating structure	BASE OF SOAKAWAY 4.0 m AOD		
If attenuation is proposed: calculations of pre-development runoff rates included *	Y/N	Rate	l/s
	NA		
If attenuation is proposed: is proposed discharge rate less than or equal to pre-development rate?*	Y/N	Rate	l/s
	NA		
Calculations included demonstrating that the 1 in 100 year plus climate change event can be accommodated on site**	Y/N	YES - FRA APPENDIX D.	
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	Y/N/Not applicable NA.		
If alterations or discharge to an ordinary watercourse is proposed: has Ordinary Watercourse Land Drainage Consent been sought?	Y/N NA		
Drainage layout plans included***	Y/N YES - APPENDIX D FRA		
Construction detail plans included****	Y/N - CAN BE PROVIDED		
Exceedance flow route plans included (Not required for <5 properties)	Y/N/Not applicable YES - FRA APPENDIX E.		

*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 Drained	Consequences of failure					
	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