

Lancashire County Council

Sustainable Drainage Systems (SuDS)

Pro-Forma

This Pro-forma is endorsed by the North West Regional Flood and Coastal Committee (RFCC), including representatives from Lancashire County Council, as the Lead Local Flood Authority and Highway Authority, and by United Utilities and the Environment Agency

Planning Application Document RVBC–P&R-APP-RP-006

When to use this pro-forma

The pro-forma may be a requirement of Local Planning Policy or the planning validation checklist for any planning application for major development.

The Lead Local Flood Authority expect the pro-forma to be submitted with all planning applications for major development with surface water drainage.

It supports applicants in summarising and confirming how surface water from a development will be managed sustainably under current and future conditions.

Your Local Planning Authority may have their own version of the pro-forma within policy, supplementary planning documents or validation checklists. Where such lists include alternative or additional requirements, both sets should be adhered to.

Your sustainable drainage system should be designed in accordance with [CIRIA The SuDS Manual C753](#) and any necessary adoption standards.

How to complete the pro-forma

Blue Box	Instructs or asks you to provide information
Grey Box	States the evidence required which you will need to submit
White Box	These are the boxes the applicant needs to complete in full

1. Complete ALL white boxes

2. Submit this pro-forma to the Local Planning Authority, along with:

- Sustainable Drainage Strategy
- Site Specific Flood Risk Assessment (if required)
- Minimum supporting evidence, as indicated in grey boxes of this pro-forma.

Guidance to support you

The pro-forma should be completed in conjunction with 'Completing your SuDS Pro Forma Guide', found on our website.

The pro-forma can be completed using freely available tools such as [Tools for Sustainable Drainage Systems](#) or appropriate industry standard surface water management design software.



Section 1. Your Application and Development Details

a) Planning Application

Planning Application Reference <i>(if available)</i>	Click or tap here to enter text.
Select the type of planning application you will be submitting	Pre-application ☐ Outline ☐ Full ☒ Hybrid ☐ Reserved matters ☐

b) Development Site

Developer(s) Name	United Utilities Water Limited	
Consultant(s) Name	Jacobs Ltd	
Development Address <i>(including postcode)</i>	Clitheroe - BB7 1QW	
Development Grid Reference <i>(Eastings/Northings)</i>	376048, 442483	
Total Development Site Area (Ha)	3.78	
Contributing Area (Ha) of Development <i>Note: Consideration should be given to manage surface water from both impermeable and permeable surfaces (including gardens and verges) likely to enter the drainage system.</i>	1.2	

Development Type		State Proposed Number of Units
Greenfield Site <i>Site is wholly undeveloped, and a new drainage system will be installed</i>	☒	1.2
Previously Developed / Brownfield Site <i>Site is already developed, and the <u>entirety</u> of the existing surface water drainage system will be used to serve the new development (evidence must be provided to prove existing surface water drainage system is reusable)</i>	☐	Click or tap here to enter text.

c) Details about Flood Risk and Sustainable Drainage Design

Please indicate the flood zone that your development is in. Select all that apply. <i>Based on the Flood Map for Planning and the relevant Local Authority Strategic Flood Risk Assessment (to identify Flood Zones 3a/3b).</i>	Flood Zone 1 ☒ Flood Zone 2 ☒ Flood Zone 3a ☒ Flood Zone 3b ☐
What is the surface water risk of the site? Select all that apply. <i>Based on the Risk of Surface Water Flooding Map.</i>	High ☒ Medium ☒ Low ☒ Very Low ☒



Have you submitted a Site-Specific Flood Risk Assessment (FRA)? <i>See separate guidance notes for clarification on when a FRA is required</i>	Yes ☒ No ☐
Have you submitted a Sustainable Drainage Strategy?	Yes ☒ No ☐
Select the minimum expected lifetime of development (years) <i>Refer to Planning Practice Guidance 'Flood Risk and Coastal Change' Paragraph 006</i>	100 years ☐ 75 years ☐ Other ☒

d) Multi-functional Benefits and Natural Flood Management

Select the benefits your sustainable drainage proposal will provide	Water quantity ☒ Water quality ☒ Amenity ☐ Biodiversity ☐
Summarise how your sustainable drainage system will provide the above benefits	SuDS will manage the volume and flow rate of surface water runoff, reducing the risk of flooding. The proposed project will include collection via filter trenches or surface strips, conveyance to treatment by oil interceptor (remove oils and some sediments) prior to a Site Drainage Attenuation Area (that will remove sediments) and to a restricted discharge rate of control before outfalling to Worston Brook.

Does your sustainable drainage proposal provide multi-functional benefits via SuDS? <i>Refer to Paragraphs 055 and 059 of the Planning Practice Guidance</i>	Yes ☒ No ☐
Does your sustainable drainage proposal include measures to reduce the causes and impacts of flooding? <i>Refer to Paragraphs 059 and 063 of the Planning Practice Guidance</i>	Yes ☒ No ☐
Has the proposed sustainable drainage system been integrated with other aspects of the development such as open space or green infrastructure?	Yes ☐ No ☒

Do you propose to use natural flood management opportunities on your development? Select all that apply. <i>Refer to Paragraph 067 of the Planning Practice Guidance</i>	On-site ☐ Off-site ☐ No ☒
Have you assessed the impact of the proposed natural flood management within the site-specific flood risk assessment?	Yes ☐ No ☒ N/A ☐



Section 2: Impermeable Area and Existing Drainage

	Existing (E)	Proposed (P)	Change (P – E)
State Impermeable Area (Ha)	0	1.2	1.2
Evidence Required: Plans showing development layout, with existing and proposed impermeable areas.			☒

Are there existing sewers, watercourses, water bodies, flow paths, highway drains, soakaways, filter drains and/or other drainage features on the site?	Yes ☒ No ☐ Don't know ☐
Evidence Required: Plan(s) showing the existing site layout, to include all: - Natural catchments - Watercourses, both open and culverted - Water bodies – e.g. ponds, swales, wetlands etc. - Overland flow routes - Areas at risk of flooding from any source - Infiltration features – e.g. soakaways, filter drains, areas of sand/gravel etc. - Sewers, manholes and outfall locations (where known) - Highway drains, manholes and gullies (where known) Plans should be appropriately labelled with pipe sizes, dimensions and design levels	There is evidence of an existing off-site sewer infrastructure 

Drainage Design <i>Outline planning applications should be able to demonstrate that a suitable drainage system is achievable.</i> <i>All other type of planning application should provide full details or reference to previous planning application where drainage details have been submitted or approved.</i>	
Select which design approach you are taking to manage water quantity (refer to Section 3.3 of The SuDS Manual C753) Approach 1 – Volume control / Long Term Storage (Technical Standards S2/3, S4/5) - The attenuated runoff volume for the 1 in 100 year 6 hour event (plus climate change allowance) is limited to the greenfield runoff volume for the 1 in 100 year 6 hour event, with any additional runoff volume utilising long term storage and either infiltrated or released at 2 l/s/ha or less - The discharge rate for the critical duration 1 in 1 year event is restricted to the 1 in 1 year greenfield runoff rate - The discharge rate for the critical duration 1 in 100 year event (plus climate change allowance) is restricted to the 1 in 100 year greenfield runoff rate	☐
Approach 2 – Qbar (Technical Standards S6) Justification has been provided that the provision of volume control/long term storage is not appropriate and an attenuation only approach is proposed. All events up to the critical duration 1 in 100 year event (plus climate change allowance) are limited to Qbar (1 in 2 year greenfield rate) or 2 l/s/ha, whichever is the greater.	☒



Select the hydraulic method used in your calculations
Refer to Table 24.1 of The SuDS Manual

FEH ReFH2 ☐
 FEH Statistical Method ☒
 Other (please state) ☐
[Click or tap here to enter text.](#)

Evidence Required:

Plan(s) showing:

- Existing flow routes, catchments, and flood risks
- Modified flow routes, catchments, and flood risks
- Contributing and impermeable areas
- Current (if any) and proposed 'source control' and 'management train' locations of sustainable drainage components (C753 Chapter 7)
- Details of drainage ownership
- Details of exceedance routes (Technical Standards S9)
- Topographic survey
- Locations and number of existing and proposed discharge points

Note: Consideration should be given to manage surface water from both impermeable and permeable surfaces (including gardens and verges) likely to enter the drainage system.

☒



Section 3: Peak Runoff RATES

Technical Standards S2, S3 and S6 (unless S1 applies)

Rainfall Event	Existing Rate (l/s)	Greenfield Rate (l/s)	Proposed Rate (l/s)
Qbar (Approach 2)	30.2	30.2	2.4
1 in 1 Year Event (Approach 1)	Click or tap here to enter text.	Click or tap here to enter text.	Click or tap here to enter text.
1 in 30 Year Event	Click or tap here to enter text.	Click or tap here to enter text.	Click or tap here to enter text.
1 in 100 Year Event* (Approach 1)	Click or tap here to enter text.	Click or tap here to enter text.	Click or tap here to enter text.
* Total discharge at the 1 in 100 year rate should be restricted to the greenfield runoff volume for the 1 in 100 Year 6 hour event with additional volumes (long-term storage volume) released at a rate no greater than 2 l/s/ha where infiltration is not possible. Climate change allowance should only be applied to the proposed rate and not the existing or greenfield rate.			
Evidence Required: Methodology used to calculate peak runoff rate clearly stated and justified. Impermeable areas plan, supported by topographical survey confirming positive drainage. Hydraulic calculations and details of software used. (Use of InfoDrainage estimations , see sustainable drainage strategy)			☐ ☐ ☒

Section 4: Discharge VOLUME

Technical Standards S4, S5 and S6 (unless S1 applies)

Rainfall Event	Existing Volume (m³)	Greenfield Volume (m³)	Proposed Volume (m³)
1 in 100 Year 6 Hour Event (Approach 1)	199	199	311
Does the below statement apply to your development proposal? Long term storage is not achievable on this site and, in accordance with S6 of the Non Statutory Technical Standards for SuDS, the surface water discharge rates for events up to and including the 1 in 100 year critical event are limited to Qbar (Approach 2)			Yes ☒ No ☐
Evidence Required: Approach to managing the quantity of surface water leaving the site clearly stated and justified Methodology used to calculate discharge volume clearly stated and justified. Hydraulic calculations and details of software used. (Use of InfoDrainage estimations , see sustainable drainage strategy)			☐ ☐ ☒



Section 5: Storage

Technical Standards S7 and S8

State climate change allowance used (%) <i>Allowances must be applied when designing SuDS for both the 3.3% (1 in 30-year) and 1% (1 in 100-year) annual exceedance probability events</i>	3.3% AEP	Click or tap here to enter text.
	1% AEP	25%
Have you applied a 10% urban creep allowance in accordance with British Standard BS 8582 / 2013.	Yes ☐	No ☒ N/A ☐
Evidence Required: State / used in appropriate industry standard surface water management design software.	☒	

State storage volume required (m³) (excluding non-void spaces) <i>Must include an allowance for climate change and urban creep. Must be consistent with the contributing area used to calculate the runoff rates and volumes.</i>	Click or tap here to enter text.
Have you incorporated interception into your design? <i>(Refer to Chapter 24 of The SuDS Manual C753)</i> <i>Where possible, infiltration or other techniques are to be used to try and achieve zero discharge to receiving waters for rainfall depths up to 5mm.</i>	Yes ☐ No ☒
Evidence Required: Drainage plans showing location of attenuation and all flow control devices and supporting calculations. (see Figure 6.4 of the Environmental Statement (Volume 3))	☒

Summarise how storage will be provided for the 1 in 30 year event on site (plus climate change and urban creep allowances). <i>Storage must be designed to ensure that no flooding occurs onsite in a 1 in 30 year event (plus climate change and urban creep allowances) except in areas designated to hold and/or convey water as part of the design and no flooding occurs offsite in a 1 in 100 year (plus climate change and urban creep allowances) event.</i>	An assessment has been made of storage requirements in events greater than 1 in 30 at restricted run-off rates to ensure no flooding offsite.
Summarise how storage will be provided for the 1 in 100 year event on site (plus climate change and urban creep allowances). <i>Where storage above the 1 in 30 year event (plus climate change and urban creep allowances) is provided in designated areas designed to accommodate excess surface water volumes, plans showing storage locations and surface water depths and supported by calculations used in appropriate industry standard surface water management design software. It is important to run a range of duration events to ensure the worst case condition is found for each drainage element on the site</i>	An assessment has been made of storage requirements in the 1 in 100 year event plus climate change at restricted run-off rates to ensure no flooding offsite
Evidence Required: Plans showing size and location of storage and supporting calculations. Where there is controlled flooding, extents and depths must be indicated.	☒



Section 6: Water Quality Protection

Contaminated surface water run-off can have negative impacts on the quality of receiving water bodies. The potential level of contamination will influence final the design of an appropriate treatment train as part of your sustainable drainage system.

Is the proposal site known to be or potentially contaminated?	Yes ☐ No ☒
<i>If the site is contaminated, it should be demonstrated that the sustainable drainage system will not increase the risk of pollution to controlled waters though the mobilisation of contaminants and/or creation of new pollution pathways.</i>	

Confirm the Pollution Hazard Level of the proposed development - Select <u>ALL</u> that apply <i>Refer to Pollution Hazard Indices for different Land Use Classifications in Table 26.2 of The SuDS Manual C753 for further guidance.</i>		
Pollution Hazard Level <i>Tick <u>ALL</u> that apply</i>		Surface water run-off from the proposed development will drain from:
VERY LOW	☐	Residential roofs
LOW	☐	- Other roofs (typically commercial/industrial roofs) - Individual property driveways, residential car parks, low traffic roads (e.g. cul de sacs, home-zones and general access roads) - Non-residential car parking with infrequent change (e.g. schools, offices) i.e. < 300 traffic movements/day
MEDIUM	☒	- Commercial yard and delivery areas - Non-residential car parking with frequent change (e.g. hospitals, retail) - All roads except low traffic roads and trunk roads/motorways¹
HIGH	☐	- Sites with heavy pollution (e.g. haulage yards, lorry parks, highly frequented lorry approaches to industrial estates, waste sites) - Sites where chemicals and fuels (other than domestic fuel oil) are to be delivered, handled, stored, used or manufactured - Industrial sites - Trunk roads and motorways¹

If the development's Pollution Hazard Level is 'Very Low' or 'Low', has the sustainable drainage design been risk assessed and appropriate mitigation measures included?	Yes ☐ No ☐
<i>If the proposed development has a very low or low polluting potential, you should design your sustainable drainage system to include an appropriate treatment train in accordance with The SuDS Manual C753</i>	

¹ Motorways and trunk roads should follow the guidance and risk assessment process set out in Highways Agency (2009).



If the development's Pollution Hazard Level is 'Medium' or 'High', is the application supported by a detailed water quality risk assessment?		Yes ☐ No ☒ N/A ☐
<i>If the proposed development has a high polluting potential, a detailed risk assessment <u>will</u> be required to identify an appropriate SuDS treatment train and ensure compliance with Paragraph 180 of the National Planning Policy Framework.</i> <i>If the proposed development has a medium polluting potential, a detailed risk assessment <u>may</u> be required depending on the nature, scale and location of the development.</i>		
Has pre-application advice on water quality been obtained from the Environment Agency?		Yes ☒ No ☐
If YES, please provide details:	Informal comments have been provided by the EA on the application	

Section 7: Details of your sustainable drainage system

a) Function of your Sustainable Drainage System

Do your proposals store rainwater for later use (as a resource) using rainwater harvesting?	Yes ☐ No ☒
Evidence Required: Please provide a brief sentence in the adjacent white box to describe how this function has been achieved.	Click or tap here to enter text.

Do your proposals promote source control to manage rainfall close to where it falls? e.g. promoting natural losses through soakage, infiltration and evapotranspiration	Yes ☒ No ☐
Evidence Required: Please provide a brief sentence in the adjacent white box to describe how this function has been achieved.	Via filter trenches to convey surface water toward Site Drainage Attenuation Area.

b) Hierarchy of Drainage Options – Planning Practice Guidance

Method of discharge are set out in order of priority. Generally, the aim should be to discharge surface run off as high up the following hierarchy of drainage options as reasonably practicable, using as many options as possible as high up the hierarchy as you can.

i) Into the ground (infiltration)

Proposed method of surface water discharge		Is this proposed?	
Hierarchy Level 1: Into the ground (via infiltration)		Yes ☐ No ☒	
For full / reserved matters applications or outline applications where layout is <u>not</u> a reserved matter			
If YES – Evidence Required		If NO – Evidence Required	
☐	On-site ground investigation to demonstrate that the ground <u>is</u> free draining. Including infiltration test results in accordance with the methodology within BRE 365 (2016)	☐	On-site ground investigation to demonstrate that the ground <u>is not</u> free draining. Including infiltration test results in accordance with the methodology within BRE 365 (2016)
	AND		OR
☐	Completed Infiltration Checklist from The SuDS Manual (C753) Appendix B <i>An editable version of this form is available on Susdrain website.</i>	☐	Evidence to confirm that infiltration to ground would result in a risk of deterioration to ground water quality (e.g. a ground water source protection zone).
			OR
		☐	Geotechnical advice from a competent person* which determines that infiltration of water to ground would pose an unacceptable

		risk of geohazards to the site and/or local area. <i>*Note: Competent person may include a Chartered Engineer, Chartered Geologists, Registered Ground Engineering Professionals (RoGEP).</i>
For outline applications where layout is a reserved matter or <u>where an applicant is unable to access a site</u> to conduct site investigations		
If YES – Evidence Required		If NO – Evidence Required
☐ Thorough desk-based ground investigation e.g. a SuDS GeoReport or similar, making the best use of available resources including historical borehole logs and data available from the British Geological Survey	AND ☐ 'Plan B' sustainable drainage plan and statement of approach with an alternative discharge method, in case infiltration proposals are proven not feasible upon further site-specific ground investigation e.g. to consider seasonal variations to groundwater.	☒ Thorough desk-based ground investigation e.g. a SuDS GeoReport or similar, making the best use of available resources including historical borehole logs and data available from the British Geological Survey

ii) To a surface water body

Proposed method of surface water discharge	Is this proposed?
Hierarchy Level 2: To a surface water body (select type) <i>NOTE: Consent from LLFA or Permit from Environment Agency may be required – refer to guidance</i>	Yes ☒ No ☐ N/A ☐ Main River ☒ Ordinary Watercourse ☐ Canal ☐ Other water body ☐
If YES - Evidence Required	If NO – Evidence Required
☐ Surface water body / watercourse survey and report	☒ Plan showing nearby watercourses and waterbodies
AND ☐ (If the waterbody is off site or privately owned e.g. canal) – evidence of an agreement with the appropriate landowner(s) to connect to the waterbody, OR , for outline applications, a 'plan b' sustainable drainage plan and statement of approach with an alternative discharge point	☒ Statement providing justification in your Sustainable Drainage Strategy
	<i>Note: Where discharge of any element in the hierarchy is discounted, an applicant should provide justification. If the reasoning for discounting a discharge of surface water to watercourse relates to issues associated with third party land or the securing of any other required consent, it may be necessary for the applicant to provide evidence to the local planning authority to support their proposed approach.</i>



iii) To a surface water sewer or highway drain

Proposed method of surface water discharge		Is this proposed?	
Hierarchy Level 3: To a surface water sewer or highway drain (<i>select type</i>)		Yes ☐ No ☒ N/A ☐	
		Surface water sewer ☐ Highway drain ☐	
If YES - Evidence Required		If NO – Evidence Required	
☐	Written correspondence from the Water and Sewerage Company / Highway Authority regarding proposed connection.	☐	Plan showing nearby sewers and highway drains
	AND		AND
☐	(If the sewer is off site) – evidence of an agreement with the appropriate landowner(s) to connect to the sewer, OR , for outline applications, a 'plan b' sustainable drainage plan and statement of approach with an alternative discharge point	☒	Statement providing justification in your Sustainable Drainage Strategy

vi) To a Combined Sewer

Proposed method of surface water discharge		Is this proposed?	
Hierarchy Level 4: To combined sewer		Yes ☐ No ☒ N/A ☐	
If YES - Evidence Required		If NO – Evidence Required	
☐	Written correspondence from the Water and Sewerage Company	N/A	
	AND		
☐	(If the sewer is off site) – evidence of an agreement with the appropriate landowner(s) to connect to the sewer		



c) Proposed SuDS Component Types

	Tick ALL that apply					
Within property boundary	☐ Rainwater harvesting	☐ Green/ blue roofs	☐ Pervious pavements [Type: A ☐ B ☐ C ☐	☐ Soakaway	☐ Bio retention systems	☐ Water Butt

	Tick ALL that apply				
Within development site boundary (not property)	☐ Wetlands	☐ Infiltration basins	☐ Rain gardens	☐ Bio retention system	☒ Detention basins
	☐ Retention ponds	☐ Swales	☒ Filter strips, channels and rills	☐ Infiltration trenches	☐ Other (state below)
	If 'Other' please state: Click or tap here to enter text.				

Off site (not within the boundary of the proposed development)	Please state: Click or tap here to enter text.
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I confirm that the above selected components have been designed in accordance with The SuDS Manual (C753).	I confirm ☐
I confirm that the management of flows resulting from rainfall in excess of a 1 in 100 year (plus climate change and urban creep allowances) rainfall event, and their exceedance route(s), has been fully considered in order to minimise the risks to people, property (new and existing) and infrastructure.	I confirm ☒



Maintenance and Management Arrangements	Information Provided?
Evidence Required: Evidence of formal agreement with the party responsible for undertaking maintenance. Please select any of the adopting bodies that you will be offering your sustainable drainage components for adoption. Tick all that apply. ☐ Water and Sewerage Company <i>Section 104 agreement (Water Industry Act 1991)</i> ☐ Highway Authority <i>Section 278/38 agreement (Highways Act 1980)</i> ☐ Local Authority Public Open Space <i>[Refer to Local Authority Policy]</i> Please select the arrangement(s) for all non-adopted sustainable drainage components. Tick all that apply. ☐ Management Company ☐ Property Owner <i>(for SuDS components within property boundary only)</i> ☐ Other (please state) Click or tap here to enter text.	Yes ☐ No ☒ ☐

Your Evidence

Please list any relevant documents and or drawing numbers (including revision reference) to support your answers in this pro-forma.

Sustainable Drainage Strategy, Planning Application Document RVBC-P&R-APP-RP-005
Figure 6.4 of the Environmental Statement (Volume 3)
Figure 6.9 of the Environmental Statement (Volume 3).



Declaration and Submission

This pro-forma has been completed using evidence from information which has been submitted with the planning application.

The information submitted in the Sustainable Drainage Strategy and site-specific Flood Risk Assessment (FRA), where submitted, is proportionate to the site conditions, flood risks and magnitude of development and I agree that this information can be used as evidence to this sustainable drainage approach.

Submitter Details

<u>Completed by</u>	Ali Sajadi		
<u>Authorised by</u>	Ian Dalglish		
Date (dd/mm/yyyy)	28/02/2025	Company Name	Jacobs Ltd

Client Details

Name	Click or tap here to enter text.	Company Name	United Utilities Water Limited
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