NORTH WEST SuDS PRO-FORMA TEMPLATE

Document (Change Log	
Version	Date Agreed	Changes made
Version 1	April 2020	Initial version issued
Version 2	July 2020	 Page 1 – 'Guidance to support you' section – word 'approved' changed to 'appropriate' Section 5 – Box 4 'Evidence Required' - word 'approved' changed to 'appropriate' Section 5 – Box 9 'Summarise how storage will be provided for 1 in 100 year (plus climate change) event on site' - word 'approved' changed to 'appropriate'
Version 3	August 2020	 Front sheet and Document Change Log added Page 1 – Para 1 Footnote – words 'of 0.5 hectares' removed
Version 4	July 2021	 Front page amended and branding removed. Section 1 - Previously Developed/ Brownfield Site – words 'then one of the approaches outlined in Section 24.5 of The SuDS Manual (C753) should be adopted' removed. Section 7b – Hierarchy Level 2 – Note wording amended from 'Where third party land is cited as a barrier, you should provide visibility of discussions held to date with the riparian landowner of the waterbody' to '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'
Version 5	May 2022	 Pro-forma guidance updated to take account of the new climate change allowances published on 10 May 2022. There is no change to the pro-forma itself.

Website: The Flood Hub

This website is an online resource which has been funded by the North West Regional Flood and Coastal Committee as a one stop shop for flood advice and information across the North West.

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[PLEASE ADD LOCAL AUTHORITY LOGO TO THIS PAGE]

[LOCAL AUTHORITY] SuDS PRO-FORMA

This Pro-forma is endorsed by the North West Regional Flood and Coastal Committee, including representatives from Lead Local Flood Authorities, Highway Authorities, United Utilities and the Environment Agency

[Amend as appropriate]

NORTH WEST SuDS PRO-FORMA

This pro-forma is a requirement for any planning application for major development¹.

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

Your sustainable drainage system should be designed in accordance with <u>CIRIA The SuDS Manual C753</u> and any necessary adoption standards.

HOW TO COMPLETE

Blue Box	Instruction/ Question
Orange Box	Evidence Required
White Box	To be completed by Developer / Consultant

- 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 orange boxes of this pro-forma.

GUIDANCE TO SUPPORT YOU

The pro-forma should be completed in conjunction with 'Completing your SuDS Pro Forma Guide.'

The pro-forma can be completed using freely available tools such as <u>Tools for Sustainable Drainage Systems</u> or appropriate industry standard surface water management design software.

¹ as defined in Section 2 of <u>Statutory Instrument 2015 No. 595</u> or on sites in Critical Drainage Areas.

SECTION 1. APPLICATION & DEVELOPMENT DETAILS

Planning Application Reference (if available)		
State type of planning application i.e. Pre-application, Outline, Full, Hybrid, Reserved Matters* *Information only required if drainage is to be considered as part of reserved matters application		
Developer(s) Name:		
Consultant(s) Name:		
Development Address (including postcode)		
Development Grid Reference (Eastings/Northings)		
Total Development Site Area (Ha)		
Drained Area (Ha)* of Development		
Please indicate the flood zone that your development is in. Tick all that apply. Based on the Environment Agency Flood Map for Planning and the relevant Local Authority Strategic Flood Risk Assessment (to identify Flood Zones 3a/3b).	Flo Flo	ood Zone 1
What is the surface water risk of the site? Tick all that apply. Based on the Environment Agency Surface Water Flood Map.		High □ Medium □ Low □
Have you submitted a Site Specific Flood Risk Assessment (FRA)? See separate guidance notes for clarification on when a FRA is required	Yes □	No □
Have you submitted a Sustainable Drainage Strategy?	Yes □	No □
Does your drainage proposal provide multi-functional benefits via SuDS?	Yes □	No □
Expected Lifetime of Development (years) Refer to Planning Practice Guidance "Flood Risk and Coastal Change" Paragraph 026		
Development Type:		State Proposed Number of Units
Greenfield Site]	
Site is wholly undeveloped, and a new drainage system will be installed Drawing by David and A Brown field Site		
Previously Developed/ Brownfield Site Site is already developed, and the entirety 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); OR		
 Where records of the previously developed system are not available so that the hydraulic characteristics of the system cannot be determined or where the drainage system is not in reasonable working order i.e. broken, blocked or no longer operational for other reasons. 		
Please list any relevant document and or drawing numbers (including revision reference) to support your answers to Section 1.		

SECTION 2: IMPERMEABLE AREA AND EXISTING DRAINAGE

	Existing (E)	Proposed (P)	Change (P – E)	
State Impermeable Area (Ha)				
Evidence Required: Plans showing development layout of site w	ith existing and proposed imper	meable areas.		
Are there existing sewers, watercoul	ses, water bodies, highway	drains, soakaways or	s □ No □ Don't	Know □
filter drains on the site? Evidence Required:				
Plan(s) showing existing layout to include al	l:			
Watercourses, open and culverted				
 Water bodies – ponds, swales etc. Sewers, including manholes 				
 Highway drains, include manholes, gul 	ies etc			
 Infiltration features - soakaways, filter 				
		·		
Drainage Design				
Outline planning applications should be	able to demonstrate that a s	uitable drainage system is ad	chievable.	
<u>All other type of planning application</u> sl details have been submitted or approve		ference to previous planning	application where di	rainage
Select which design approach you ar	e taking to manage water o	uantity (refer to Section 3.3	SuDS Manual)	
Approach 1 – Volume control / Long The attenuated runoff volume to the greenfield runoff volume utilising long term storage and	for the 1 in 100 year 6 hour e e for the 1 in 100 year 6 hour	vent (plus climate change all event, with any additional ru		

The discharge rate for the critical duration 1 in 1 year event is restricted to the 1 in 1 year greenfield runoff 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 greater. **Evidence Required:** Plans showing: П Existing flow routes and flood risks Modified flow routes 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

Please list any relevant d reference) to support you	ocument and or drawing numb ur answers to Section 2.	ers (including revision	
SECTION 3: PEAR (UNLESS S1 APPI		TECHNICAL STANDA	RDS S2, S3 AND S6
Rainfall Event	Existing Rate (I/s)	Greenfield Rate (I/s)	Proposed Rate (I/s) Previously developed sites - In line with S3 should be equivalent to Greenfield runoff rates – discuss with LLFA if this is not achievable pre-application
Qbar (Approach 2)			
1 in 1 Year Event (Approach 1)			
1 in 30 Year Event			
1 in 100 Year Event* (Approach 1)			
with additional volumes (lo	ng-term storage volume) released	d to the greenfield runoff volume j I at a rate no greater than 2 l/s/ha proposed rate and not the existing	where infiltration is not possible.
Evidence Required: Methodology used to calculate	e peak runoff rate clearly stated and	justified.	
Impermeable areas plan, supp	ported by topographical survey confir	ming positive drainage.	
Hydraulic calculations and det	cails of software used.		
State the hydraulic meth (Refer to Table 24.1 of The Su	od used in your calculations DS Manual)		
Please list any relevant d reference) to support you	ocument and or drawing numb ur answers to Section 3.	ers (including revision	

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 4: DISCHARGE <u>VOLUME</u> – 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)			
Long term storage is not ach Statutory Technical Standards	ply to your development proportion ievable on this site and, in according for SuDS, the surface water dispersional event are limited to Qb	cordance with S6 of the Non scharge rates for events up to	Yes □ No □
Evidence Required: Approach to managing the quantity	of surface water leaving the site clea	arly stated and justified	
Methodology used to calculate disc	charge volume clearly stated and justi	ified.	
Hydraulic calculations and details o	f software used.		
Please list any relevant docum	nent and or drawing numbers (including revision reference)	

SECTION 5: STORAGE - TECHNICAL STANDARDS S7 AND S8

State climate change allowance used (%)	
State housing density (houses per ha)	
State urban creep allowance used (%)	
Evidence Required: State / used in appropriate industry standard surface water management design software.	
State storage volume required (m³) (excluding non-void spaces)	
Must include an allowance for climate change and urban creep	
Have you incorporated interception into your design? (Refer to Chapter 24 of The SuDS Manual C753)	
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.	Yes □ No □
Evidence Required: Drainage plans showing location of attenuation and all flow control devices and supporting calculations.	
Summarise how storage will be provided for 1 in 30 year event on site.	
Storage must be designed to ensure that at no flooding occurs onsite in a 1 in 30 year event except in designed areas <u>and</u> no flooding occurs offsite in a 1 in 100 year (plus climate change allowance) event.	
Summarise how storage will be provided for 1 in 100 year (plus climate change) event on site.	
Where storage above the 1 in 30 year rainfall event 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	
Evidence Required: Plans showing size and location of storage and supporting calculations. Where there is controlled flooding, extents and depths must be indicated.	
Please list any relevant document and or drawing numbers (including revision	

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 proposa	l site knowr	to be or potentially contaminated?	Yes □	No□
		ed, it should be demonstrated that the sustainable drainage system will no vaters though the mobilisation of contaminants and/or creation of new po		_
		ard Level of the proposed development - Tick <u>ALL</u> that apply ndices for different Land Use Classifications in Table 26.2 of The SuDS N	Лапиаl C753 ј	for further
Pollution Ha		Surface water run-off from the proposed development will drain from	om:	
VERY LOW		Residential roofs		
LOW		 Other roofs (typically commercial/industrial roofs) Individual property driveways, residential car parks, low traffic roads home-zones and general access roads) Non-residential car parking with infrequent change (e.g. schools, off movements/day 		
MEDIUM		 Commercial yard and delivery areas Non-residential car parking with frequent change (e.g. hospitals, ret All roads except low traffic roads and trunk roads/motorways² 	ail)	
HIGH		 Sites with heavy pollution (e.g. haulage yards, lorry parks, highly free approaches to industrial estates, waste sites) Sites where chemicals and fuels (other than domestic fuel oil) are to stored, used or manufactured Industrial sites Trunk roads and motorways¹ 		handled,
· ·		ition Hazard Level is 'Very Low' or 'Low', has the sustainable assessed and appropriate mitigation measures included?	Yes □	No□
	•	ment has a very low or low polluting potential, you should design your sust propriate treatment train in accordance with The SuDS Manual (C753).	tainable drain	age
· ·		ation Hazard Level is 'Medium' or 'High', is the application rater quality risk assessment?	Yes □	No□
appropriatIf the prop	e SuDS treati osed develop	ment has a high polluting potential, a detailed risk assessment <u>will</u> be requent train and ensure compliance with Paragraph 170 of the National Plar ment has a medium polluting potential, a detailed risk assessment <u>may</u> be cation of the development.	nning Policy Fr	amework.
Has pre-applic	cation advice	e on water quality been obtained from the Environment Agency?	Yes □	No□
If YES, provide	e details:		ı	

² Motorways and trunk roads should follow the guidance and risk assessment process set out in Highways Agency (2009).

Please list any relevant document and or drawing numbers (including revision reference) to support your answers to Section 6.		
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)?	Yes □	No □
Evidence Required: Please provide a brief sentence in the adjacent white box to describe how this function has been achieved.		
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.		

b) Hierarchy of Drainage Options – Planning Practice Guidance

Please list any relevant document and or drawing numbers (including revision

reference) to support your answers to Section 7a.

The proposed method of discharge are set out within 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.

Pronosed	d method of surface water discharge			Is this proposed?
Порозес	interior of surface water discharge			is this proposed:
Hierarch	y Level 1: Into the ground (via infiltration	n)		Yes □ No □
	If YES - Evidence Required			If NO — Evidence Required Tick <u>ALL</u> that apply
	A. Completed Infiltration Checklist from The SuDS Manual (C753) Appendix B An editable version of this form is available on SusDrain website.		A.	Site investigation to demonstrate that the ground is not free draining. Test results to be provided in accordance with: The methodology within BRE 365 (2016), <u>OR</u> Falling head permeability tests BS EN ISO 22282-2: 2012
	B. British Geological Survey (BGS) Infiltration SuDS Map		В.	NOTE: where an applicant is unable to access a site to undertake testing, e.g. where unable to access a site for an outline application, they can submit a <u>SuDS GeoReport</u> or similar.
	C. Infiltration testing to BRE 365 (2016) or falling head permeability tests to BS EN ISO 2228-2: 2012 (optional for outline)		C.	Evidence to confirm that infiltration to ground would result in a risk of deterioration to ground water quality.
	'Plan B' sustainable drainage plan and statement of approach with an alternative discharge method, in case infiltration		D.	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.

	further site specific ground investigation e.g. to consider seasonal variations to groundwater.			*Note: Competent person may include a Chartered Engineer, Chartered Geologists, Registered Ground Engineering Professionals (RoGEP).
Proposed	d method of surface water discharge			Is this proposed?
Hierarch	y Level 2: To a surface water body (select	type)		Yes □ No □ N/A □
NOTE: Co	onsent from LLFA or Permit from Environme	nt Ager	псу	☐ Main river ☐ Canal
may be re	equired – refer to guidance			☐ Ordinary watercourse ☐ Other water body
	If YES - Evidence Required			If NO — Evidence Required Tick <u>ALL</u> that apply
	Surface water body / watercourse survey and report			owing nearby watercourses and waterbodies
	and report		AND Stateme	ent providing justification in your Sustainable Drainage Strategy
				/here discharge of any element in the hierarchy is discounted, an nt should provide justification. If the reasoning for discounting a
			discharg	ge of surface water to watercourse relates to issues associated
				rd party land or the securing of any other required consent, it necessary for the applicant to provide evidence to the local
			planning	g authority to support their proposed approach.
Proposed	d method of surface water discharge			Is this proposed?
Hierarch	y Level 3: To a surface water sewer or hi	ghway	drain	Is this proposed? Yes □ No □ N/A □
	y Level 3: To a surface water sewer or hi	ghway	drain	
Hierarch	y Level 3: To a surface water sewer or hi	ghway	drain	Yes □ No □ N/A □
Hierarch	y Level 3: To a surface water sewer or hi e) If YES - Evidence Required Written correspondence from Water and	ghway (Yes □ No □ N/A □ □ Surface water sewer □ Highway drain If NO – Evidence Required
Hierarch	y Level 3: To a surface water sewer or hi e) If YES - Evidence Required		Plan sho	Yes No N/A Highway drain If NO – Evidence Required Tick ALL that apply
Hierarch	y Level 3: To a surface water sewer or hi e) If YES - Evidence Required Written correspondence from Water and Sewerage Company/ Highway Authority		Plan sho	Yes No N/A Highway drain Surface water sewer Highway drain If NO – Evidence Required Tick ALL that apply Dwing nearby sewers and highway drains
Hierarch (select typ	y Level 3: To a surface water sewer or hi e) If YES - Evidence Required Written correspondence from Water and Sewerage Company/ Highway Authority		Plan sho	Yes No N/A Highway drain Surface water sewer Highway drain If NO – Evidence Required Tick ALL that apply Dwing nearby sewers and highway drains
Hierarch (select typ	y Level 3: To a surface water sewer or hise) If YES - Evidence Required Written correspondence from Water and Sewerage Company/ Highway Authority regarding proposed connection.		Plan sho	Yes No N/A Surface water sewer Highway drain If NO – Evidence Required Tick ALL that apply Dwing nearby sewers and highway drains ent providing justification in your Sustainable Drainage Strategy
Hierarch (select typ	y Level 3: To a surface water sewer or hise) If YES - Evidence Required Written correspondence from Water and Sewerage Company/ Highway Authority regarding proposed connection.		Plan sho	Yes No N/A Surface water sewer Highway drain If NO – Evidence Required Tick ALL that apply Dwing nearby sewers and highway drains ent providing justification in your Sustainable Drainage Strategy Is this proposed?
Hierarch (select typ	y Level 3: To a surface water sewer or hi e) If YES - Evidence Required Written correspondence from Water and Sewerage Company/ Highway Authority regarding proposed connection. d method of surface water discharge y Level 4: To combined sewer		Plan sho	Yes No N/A Highway drain If NO – Evidence Required Tick ALL that apply Owing nearby sewers and highway drains ent providing justification in your Sustainable Drainage Strategy Is this proposed? Yes No N/A
Hierarch (select typ	y Level 3: To a surface water sewer or hi e) If YES - Evidence Required Written correspondence from Water and Sewerage Company/ Highway Authority regarding proposed connection. d method of surface water discharge y Level 4: To combined sewer If YES - Evidence Required Written correspondence from Water and		Plan sho	Yes No N/A Highway drain Surface water 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
			Tick ALL that apply		
	☐ Infiltration system [Type: ☐ Surface level ☐ Below ground]		☐ Filter strips	☐ Filter drains	☐ Swales
Within development site boundary	☐ Bio retention system	☐ Detention basins	☐ Ponds and wetlands	☐ Attenuation tanks/ Oversized pipes	☐ Other (state below)
(not property)	If 'Other' please state:				
	I				
Off site	Please state:				
boundary of the proposed development)					
, ,					
I confirm that the above selected components have been designed in accordance with The SuDS Manual (C753).					
I confirm that the management of flows resulting from rainfall in excess of a 1 in 100 year plus climate change 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 □		
Please list any relevant document and or drawing numbers (including revision reference) to support your answers to Section 7c.					

SECTION 8: OPERATION AND MAINTENANCE — TECHNICAL STANDARD S12 AND NATIONAL PLANNING POLICY FRAMEWORK

The applicant is responsible to ensure that ALL components selected in Section 7 can be maintained for the design life of the development. This information is required so the Local Planning Authority can ensure the maintenance and management of the sustainable drainage system. The Local Planning Authority will discuss how this will be secured (e.g. via planning condition or planning obligation).

	Information Provided?
Management Plan	Yes □ No □
Evidence Required:	
Plan/ drawing provided to show the position of the different SuDS components with:	
 Key included to identify any of the adopting bodies that you will be offering your 	
sustainable drainage components for adoption (relates to maintenance and management arrangements below).	
 Plan/ drawing to identify any areas where certain activities are prohibited, detailing 	
reasons why.	
Action plan for accidental pollutant spillages.	
	·

	Information Provided?
Maintenance Schedule	Yes □ No □
Evidence Required:	
A copy of the maintenance schedule including:	
1. Proactive and preventative maintenance	
Detailing regular, occasional and remedial maintenance activities including	
recommendations for inspection and monitoring. This should include recommended	
frequencies, advice on plant/ machinery required and an explanation of the objectives	
for the maintenance proposed and potential implications of not meeting them.	
2. Reactive and corrective maintenance (e.g. product repair and replacement).	
Including advice on excavations, or similar works, in locations that could affect the SuDS	
components/ adjacent structures.	

	Information Provided?
Maintenance and Management Arrangements	Yes 🗆 No 🗆
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 Section 104 agreement (Water Industry Act 1991)	
☐ Highway Authority Section 278/38 agreement (Highways Act 1980)	
☐ Local Authority Public Open Space [Refer to Local Authority Policy]	
Please select the arrangement(s) for all non-adopted sustainable drainage components. Tick all that apply.	
☐ Management Company	
□ Property Owner (for SuDS components within property boundary only)	
☐ Other (please state)	

Please list any relevant document and or drawing numbers (including revision	
reference) to support your answers to Section 8.	

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			
Completed by		Email Address	
		Telephone Number(s)	
Signed off by		Accreditation(s) and/or Qualification(s) of Signatory	
Date (dd/mm/yyyy)		Company	

Client Details		
Name	Company	