Hull City Council

Sustainable drainage system (SuDs) design guide for Hull

January, 2015

1. Introduction

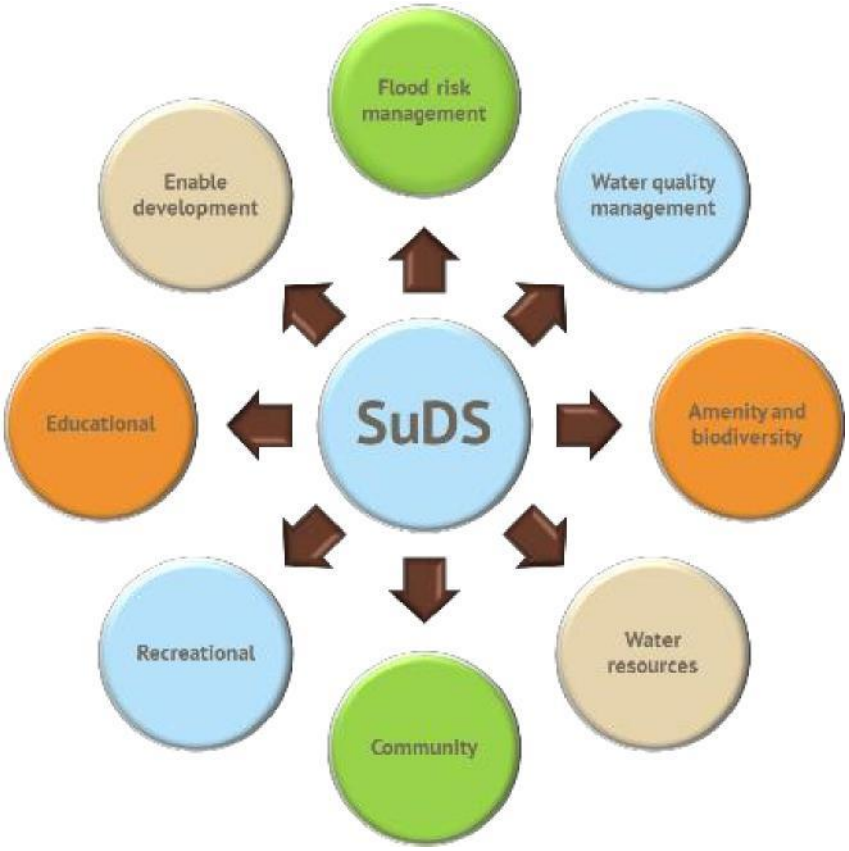
1.1 Drainage is important in dealing with surface water that occurs in the city especially as rainfall is likely to increase over the long term future. The urban drainage system is unique in Hull because the local watercourse and surface water run-off due to low infiltration connects into a piped drainage system which can, rarely, become overwhelmed with storm water. Furthermore, there are few natural watercourses for surface water flows to discharge into. This guide provides details about the use of Sustainable Drainage Systems to prevent or alleviate potential flooding, improve biodiversity and reduce pollution from incidents involving surface water.

1.2 As from 6 April 2015 local planning policies and decisions on planning applications relating to major development (over 10 dwellings or more or equivalent non-residential or mixed use development) will ensure that sustainable drainage systems (SuDs) for the management of surface water runoff are put in place unless demonstrated to be inappropriate.

1.3 The purpose of the guide is to respond to these requirements. It is primarily aimed at developers and designers by providing consistent advice on planning, design, and delivery of attractive and high quality Sustainable Drainage Systems (SuDs). Adherence to the guidance will help in determining planning applications involving SuDs although pre-application advice should always be sought.

1.5 The overall aim of this guide is to reduce surface water run-off and mitigate flood risk by returning to more natural methods of dealing with surface water. Appropriately designed constructed and maintained SuDs can support the ideal of sustainable development. SuDs can bring additional benefits in terms of preventing and treating surface run-off pollution. They can also have visual and community benefits and provide natural habitats for wildlife. The requirement for greenspace and SuDs can be combined to provide multiple benefits in a cost effective way.

The value of SuDs is wide ranging



1.5 This document complements the more comprehensive SuDs Manual C697 produced by CIRIA, along with national standards available separately or through the Council's web site.

2. Context

2.1 Assessing the risks of flooding is complicated. It is based on many factors including climate, geography, geology and infrastructure capacity. It has become a science.

2.2 Located on the eastern side of England, the city receives average rainfall levels but these are anticipated to increase over time given climate change, leading to wetter but warmer winters but drier summers. The number of rain days and average intensity are expected to increase.

2.3 The city has two rivers one of which forms an estuary. The River Hull has a large catchment extending from the Yorkshire Wolds to its egress along the River Humber estuary. The city also has a number of land drains feeding toward the estuary. These water features contribute to the city's character and identity.

2.4 Geology is mainly clay and silt sub-soils varying in depth across the city and beyond, plus there is a high degree of hard surfacing in parts of the city resulting in relatively high run-off and low infiltration rates. Sub-soils can also become rapidly waterlogged during intense or sustained rainfall.

2.5 Surface water is managed via a system of linking pipes to trunk sewers and outfalls toward the River Humber supported by pumping stations and water treatment works at Saltend. The sewer system in the city of Kingston upon Hull was overhauled in the 1950's, 60's and 70's to a system of gravity fed trunk combined sewers which are now all connected to the Waste Water Treatment Works at Saltend to the east of the city. The Bransholme/Kingswood area also feeds surface water to the River Hull and foul water flows to the East Hull sewer catchment.

2.6 Flood risk areas have been mapped as part of the Environment Agency's flood mapping and by the Council as part of its strategic flood risk assessment. Surface water flooding also takes account of former flood incidents that took place in 2007 and 2013. The 2007 event was derived from an unfortunate combination of an intense rainfall in addition to prolonged soil saturation, high water table, limited natural watercourses, flows from rural to edge of an urban area (and/or where backing up occurred) and a land drainage system not being able to cope with this. Surface water flooding occurred in susceptible locations including parts of Derringham (west Hull), Orchard Park and Bransholme in the main. The flooding encountered and prospective future events are being mitigated by proposed SuDS measures including aqua-greens (flood alleviation works) and improved maintenance regimes.

3. Policy context

3.1 The Development Plan for the city comprises the current Local Plan (adopted 2000) and two Area Action Plans, one focused around parts of west Hull and the other around Holderness Road in east Hull. Combined, these provide detailed policies and proposals governing the future of these areas, although a new plan is set to replace this shortly, along with an emerging Area Action Plan for Kingswood, focussing on a large urban extension to the north of the city.

3.2 The current Local Plan policy refers to a number of drainage issues and related recreational benefit of water features in and around the city. The culverting of watercourses is also resisted unless there are particular safety issues. New revised policies will be introduced once the new Local Plan is

ready, taking account of new national policy on surface water management and flood risk mitigation. Prior to new policy being agreed this document provides a context for decision making in relation to particular development proposals requiring SuDS.

3.3 A Strategic Flood Risk Assessment and Surface Water Management Plan have been prepared to underpin local policy and guidance for development proposals. These reports detail relative flood risk along with Standing Advice operative in the city, in addition to measures to improve surface water management.

4. SUDS measures

4.1 A management train is a fundamental principle that underpins SuDs design. It comprises a series of stages in a journey starting when rain falls over surfaces, then flows to its destination such as wetland, stream, river or aquifer. SuDs seek to mimic these natural processes in order to incrementally reduce pollution, flow rates and volume. The management train seeks to detain water, clean run-off and improve water quality as it moves down stream.

4.2 There is considerable need and scope in Hull to address surface water flooding risks. This can be achieved by the introduction of measures forming part of the drainage system in Hull, via collection, conveyance, storage and disposal routes. Other benefits may accrue as greenspace can have multiple uses, such as amenity and nature conservation value. Working these details into a scheme design from the outset is important as retro-fitting will more likely be less effective and more expensive.

4.3 Surface water can be collected from roof drainage on buildings or gullies in the highway, but these need to be maintained to ensure performance. The convenience system in Hull is largely piped infrastructure, pumping stations and treatment works. Storage of surface water for short periods can form an important part of the drainage system, as water can be slowly released into a conveyance or disposal system after peak flows have passed. Disposal is the means by which collected water and sewage is returned to the environment.

SuDs bio-cell can be useful in contributing to infiltration and add visual amenity

4.4 Drainage and the environment in Hull can be improved by applying a range of measures across a site where development is proposed, such as by:

- limiting the amount of run-off such as by ensuring paved surfaces are permeable with storage below or the introduction of bio-cells or water butts to intercept roof drainage at source and to recycle this or by diverting rainwater to help in the creation of a rain garden;
- establishing large capacity interceptors on roads linked to storage areas, but there would be a need to ensure that this only collected clean surface water;
- creating storage areas and ponds (below the level at which water is collected) used to delay entry of surface water into the conveyance system releasing stored water slowly (by means of deploying a hydro brake) once storms have passed, but these also need to be free of sewage contamination;
- providing soakaways and filter drains used to store water below ground in perforated chambers or pipe, prior to infiltration into surrounding soils, although extensive use is not appropriate for Hull because of poor ground permeability; and
- introducing aqua-greens to delay overland flows but often these can be used to minimise flows entering the urban area.

SuDs as integral part of a major housing scheme, Berewood

5. Design criteria

5.1 Core design principles are in addition to national standards but because of the local need to detain surface water in and around the city, local expectations are outlined. Retro-fitting of measures will also be important and may be secured through planning condition or legal agreement as appropriate. Advice should also be sought from the Council, Environment Agency and Yorkshire Water, and as confirmed through the results of a flood risk assessment to include a drainage

assessment, to be carried out as part of the submission of a planning application. A health and safety audit should also be undertaken to ensure risks are minimised.

5.2 Core design principles include:

Principle 1 – A range of SuDs measures should be deployed as an integral part of development proposals where surface water storage measures will be required on-site.

Principle 2 - Ensure the site is drained in the most sustainable and cost effective manner and that it is to be well maintained for the life of the development incorporating existing natural features in conveying surface water.

Principle 3 - Existing water courses should be retained as a feature of development and be protected from pollution sources or preferably improve water quality.

Principle 4 – Culverting of open watercourses will not be allowed unless justified (including impacts being offset elsewhere) and their re-opening supported.

Principle 5 – Run – off rates from previously developed (or brownfield) sites should be reduced by 50% of what existed prior to the development scheme and for greenfield sites, measures should be used to manage run-off so these do not exceed 1.4 litres per second per hectare and the site should be capable of storing water from a 1% (1 in 100 year storm) flood event. As weather is likely to become more extreme including intense rainfall events, an allowance should be made in scheme design of 30%.

Principle 6 – Drainage infrastructure should be confirmed as not causing surface water flooding from a 1 in 75 year storm event and for any flows to be tackled within the boundary of the application site.

Principle 7 – Avoid the use of paved areas or replace these with permeable surfaces and include storage beneath (such as storage crates) and include green roofs and/or water butts/rainwater harvesting systems.

Principle 8 – Use underground tanks to intercept and store water on a temporary basis provided these are adequately filtered but especially where there is limited space for development on the site.

Permeable block paving

Principle 9 – Filter drains used as part of a piped network and soakaways can be used provided these link to a discharge point and/or storage, to hold water in permeable material below ground but have other benefits in terms of removing pollutants through filtration and sedimentation processes. They can form part of open spaces or road verges and planted to add visual interest and wildlife habitats.

Filter drain mainly used along roads

Principle 10 – Balancing ponds, detention basins and wetlands should form an integral part of larger development schemes so its full potential can be realised where there is space to provide valuable amenity or wildlife areas, to be fed by piped drains or swales (a wide shallow grassed feature ditches), although care is needed to prevent ground water contamination. Large deep ponds with steep sides are not acceptable.

Swale

Retention ponds hold water permanently and can be used for landscaping. Detention basins hold water temporarily and are mainly used for controlling flood water. Either way, ponds should blend into the surroundings and also be as shallow as possible (so fencing is not required to constrain access and maintenance) with gentle side slopes not exceeding 1 in 3 gradient. They can reduce peak flows but a 'bomb-crater' appearance should be avoided. Outflow controls should be provided to ensure operation does not exceed 5 litres per second. Water levels must also not rise more than 500mm during a 1 in 30 year or greater rainfall event.

Attenuation pond

Balancing pond from start to finish, Hull Kingston Rover

Cost estimates of the measures to be deployed are set out below.

Table 1 – Estimated capital cost of SuDs works

SuDs measure	Estimated cost	Unit
Filter drain	£100 - £140	Per m3 stored volume
Soakaway	> £100	Per m3 stored volume
Permeable pavement	£30 - £40	Per m2 surface
Detention basin	£15 - £20	Per m3 stored volume
Wetland	£25 - £30	Per m3 treatment volume
Retention pond	£15 - £25	Per m3 treatment volume
Swale	£10 - £15	Per m2 area
Filter strip	£2 - £4	Per m2 area

Source SUDS Manual#

Principle 11 - The amount of impermeable area of a housing site can change over the lifetime of the development. Building extensions and paving of gardens will often occur outside of the planning process because it does not require planning permission, so regard should be had to potential increases of impermeable surfaces. As such proposed housing schemes must make an allowance for this as detailed in the table below.

Table 2 – Allowance for impermeable surfaces in housing schemes

Residential dwellings per hectare	% allowance for impermeable surfaces
Less than 25 dwellings	10
30	8
35	6
45	4
Greater than 50	2
Flats and apartments	0

Principle 12 – Site design must ensure that when SuDs features fail or be exceeded, routes do not cause flooding of properties on or off-site. This can be achieved by designing suitable above ground exceedance or flood pathways.

6. Responsibilities for maintenance

6.1 Generally, surface water drainage system maintenance is the responsibility of the land owner unless otherwise transferred via adoption to the Council or to a third party. Responsibility for SuDs serving more than one property lies with an accountable organisation expected to have financial capacity to meet long term maintenance costs. A s106 legal agreement will usually be required to secure such provisions and appendix 1 provides model terms.

6.2 SuDs measures that are provided within the curtilage of dwellings are the responsibility of the home owner.

6.3 SuDs measures that form part of the highway network will be adopted by the Council provided these meet adoptable principles (listed above) and responsibilities for maintenance will transfer on adoption.

6.4 SuDs measures that form part of public open space or public realm will be adopted by the Council provided these meet the principles listed above and responsibilities for maintenance will transfer on adoption. Payment for long term maintenance will be anticipated to cover the lifetime of the development as detailed from the estimated costs set out in Table 2, payable prior to adoption. An alternative would be to establish a management company to manage maintenance to be secured via a s106 legal agreement.

6.5 SuDs measures that link to, or form part of, the foul water drainage network (outside the remit of individual home owners boundary) are the responsibility of Yorkshire Water Services.

6.6 SuDs measures that link to, or form part of, the above ground drainage as part of water courses are usually the responsibility of the City Council. The Environment Agency is responsible for maintaining the existing River Hull flood defences shared with land owners adjacent to the river bank.

6.7 SuDs works that require maintenance or repair (or involve works to bring them to adoptable standards) can be carried out by the City Council. In such circumstances the costs involved will be subject to a claim for reimbursement from the land owner or any subsequent owner.

Table 2 – Estimate of operational costs per annum

SUDs measure	Estimated cost	Unit
Filter drain	£1	m2 surface area
Soakaway	£0.10	m2 treated area
Permeable pavement	£1	m2 surface area
Detention basin	£0.30	m2 surface area
Wetland	£0.10	m2 surface area
Retention pond	£1.50	m2 surface area
Swale/filter strip	£0.10	m2 surface area

Source SUDS Manual

6.8 A maintenance and operations manual for all SuDs should be supplied to include details of physical access arrangements and establishment of legal rights of entry in perpetuity prior to commencement of any development phase. This should include the name, address and operational details of the organisation responsible for ongoing maintenance. Funding arrangements for the maintenance of SuDs should also be explained in demonstrating how this will work over the lifetime of the development.

7. Drainage impact assessment requirements

7.1 A drainage impact assessment should form part of planning scheme submissions for the applicant to demonstrate how drainage has been addressed taking into account the design principles raised in this guide. In particular, steps taken to minimise surface water run-off separate from foul drainage, will be scrutinised. Ownership of, and responsibility for maintenance of the surface water drainage system should also be identified. A separate Drainage Impact Assessment guide provides further details which is available from Planning Services.

Reference: ICoP SUDS MA1

Planning Obligation – Incorporating SUDS Provisions

Town and Country Planning Act 1990

This AGREEMENT is made the day of 200

Date of the agreement.

BETWEEN (NAME) ("the Council") of the First Part (NAME) [of (ADDRESS) or whose registered office is at (ADDRESS)] ("the Developer") of the Second Part (NAME) [of (ADDRESS) or whose registered office is situated at (ADDRESS)] ("the Owner") of the Third Part and (NAME) [of (ADDRESS) or whose registered office is situated at (ADDRESS)] ("the Mortgagee").

Details of parties to be inserted.

WHEREAS

( ) The Council is the Local Planning Authority for the purposes of the Town and Country Planning Act 1990 ("the Act") of the area within which the property described in the First Schedule hereto ("the Land") and shown edged red on the plan ("the Plan") attached hereto is situated.

A plan showing the extent of the land should be attached to the Planning Obligation as First Schedule.

( ) The Owner is the registered proprietor under Title Number [blank] of the freehold interest in the Land.

( ) The Developer is the person interested in the Land under [ ].

Any person who has an interest in the land is required to enter into the obligation and provide details of their interest.

( ) The Mortgagee is the registered proprietor of a charge dated [ ] made with [ ].

( ) By written application (dated) ("the Application") the Developer applied to the Council for planning permission under reference number (blank) for permission to develop the Land for [set out the description of the development] (the "Development").

Insert details of the planning application.

( ) The Council resolved to grant planning permission for the Development in accordance with the Application subject to the making of this Deed without which planning permission for the Development would not be granted.

( ) For the purposes of the determination by the Council of the Application the Developer and the Owner wish to enter into the planning obligations hereinafter specified pursuant to section 106 of the Act with the intention that if the Council approves the Application and grants planning permission for the Development pursuant thereto the Council will then be able to enforce the obligations pursuant to section 106 of the Act.

( ) This Agreement is a planning obligation made in pursuance of section 106 of the Act and to the extent that the covenants in this Agreement are not made under section 106 of the Act they are made under section 111 of the Local Government Act 1972 and all other powers so enabling.

Relationships between the parties and the commencement of their respective obligations once any planning permission is implemented.

( ) The provisions and obligations of this Agreement are conditional upon and shall not take effect until

(i) Grant of planning permission ("the Permission") for the Development by the Council and

(ii) The implementation of the Permission by the commencement of the Development on the Land and that in the event that development not being so commenced (in accordance with sections 56 and 91–93 of the Act) so that the Permission shall lapse this Agreement shall absolutely determine and be of no effect.

SAVE THAT any work of or associated with demolition, site clearance, remediation work, environmental investigations, site and soil surveys, erection of contractors work compound, erection of site offices, erection of fencing to site boundary shall not constitute such a material operation and commencement of the Development shall not be construed accordingly.

This defines what material operation constitutes implementation of the Development thereby activating the terms of the Agreement.

( ) The Owner with the intent to binding its successors in title hereby covenants with the Council to perform the obligations (and that the Land shall be permanently subject to the restrictions and provisions) specified in the Second Schedule hereto such obligations being planning obligations for the purposes of section 106 of the Act.

Binding of successors to the obligation.

( ) The Council hereby covenants with the Owner with the intention of binding their successors in title (including statutory successor) as set out in the Third Schedule hereto.

( ) Any notice, communication or payment required to be given hereunder shall be sufficiently served if forwarded by Special Delivery or Recorded Delivery post to it at its registered office stated herein and on the Council if forwarded by Special Delivery or Recorded Delivery post to its (details to be inserted) at its address stated herein and a notice so sent by post shall be deemed to have been given when it ought in due course to have been delivered at the address which it is sent.

Requirements for communications.

It is important to inform any parties of a change of address.

( ) Nothing herein shall prohibit or limit the right to develop any part of the Land in accordance with planning permission (other than the Permission relating to the Development as specified in the Application) granted after the date of this Agreement.

( ) The expressions the [Owner], [the Council], [the Developer] and [the Mortgagee] shall include their successors and assigns.

Binding of successors to the obligation.

( ) In so far as the provisions hereof shall require any party to obtain the consent or approval of another party and such consent or approval shall not be unreasonably withheld.

( ) No party shall be liable for any breach of the covenant, restrictions or obligations contained within this Agreement occurring after they have parted with their interest in the Land or the part of the Land in respect of which such breach occurs.

Once a Party has disposed of its particular interest in the Land it will be no longer liable for any subsequent breach of the Agreement but will retain liability for any breach occurring during its ownership.

Include this clause if a Mortgagee is party to the

( ) The Mortgagee hereby consents to the execution of this Deed and declares that subject as herein provided the Land shall be bound by the obligations contained in the Second Schedule hereto and his legal charge on the Land Property shall take effect as if such legal charge had been executed after the date of this Deed.

Agreement.

This Agreement is a local land charge for the purpose of the Local Land Charges Act 1975 and shall be registered as such by the Council.

It is important for the parties to ensure that a copy of the Agreement is registered with the Local Land Charges Register.

FIRST SCHEDULE

Required for Options 1, 2 and 3

(Description of Land)

The boundaries of the site should be clearly marked in red, and all pertinent details of the SUDS described, including the type of drainage system, the outfall location (if any) and any control structures or pollution control devices.

SECOND SCHEDULE

Option 1 – SUDS to be maintained by the Council

Definitions

Within this Schedule the following definitions and interpretations apply:

Definitions relevant to the Agreement.

( ) "the Specification" means any guidance notes on design and construction of SUDS from time to time published by CIRIA including:

Book 14 Design of flood storage reservoirs
Report I56 Infiltration drainage
C522 Sustainable urban drainage systems – design manual for England and Wales
C523 Sustainable urban drainage systems – best practice manual C582 Source control using constructed pervious surfaces
C609 Sustainable drainage systems – hydraulic, structural and water quality advice

or revisions or updates to the above.

The Specification may be updated as revised design guidance becomes available.

All relevant drawings should be listed or attached to the Agreement.

( ) "Planning Agreement" means any agreement made pursuant to section 106 of the 1990 Act in respect of the Land.

( ) "SUDS" means the sustainable drainage system comprising all treatment and drainage systems including any pipework, swales, reed beds, ponds, filter trenches, attenuation tanks and detention basins.

Covenants by the Owner (Developer) to the Council.
The Owner and the Developer hereby covenant with the Council:

( ) To observe and perform all the obligations of the Developer [Owner] under the Permission and hereby indemnify the Council in respect of any leases, claims, demands, costs or expenses arising out of any breach or non-performance thereof.

Developer indemnifies the Council.

( ) To pay to the Council the sum of [ ] ("the Periodic Sum") on the completion of the SUDS and thereon on each subsequent anniversary [until the 30th anniversary] in respect of maintenance costs of the SUDS.

Periodic Sum is the amount required for maintenance of the SUDS on an annual basis.

( ) The Periodic Sum shall be increased annually from the date of this Agreement by the same percentage as the increase in the Retail Price Index produced by National Statistics or any different publication substituted for it to the date of payment.

Provision for increase with inflation.

( ) [calculation of Periodic Sum]

This will be subject to the Local Planning Authorities usual calculations for such sums.

Alternative

( ) To pay to the Council the sum of [ ] ("the Sum") on the completion of the SUDS in respect of repair maintenance costs.

Alternatively, the Local Planning Authority and Developer may agree a single amount.

( ) That the works have been completed in accordance with all Environmental Laws.

Parties should be aware that other consents may

		be required in addition to planning permission, in connection with flood defence or land drainage from the Environment Agency for example.
( )	Construct the SUDS to the satisfaction of the Council and in accordance with plans and specifications to be approved in writing by the Council.	*Council must approve the design and construction of the SUDS.*
( )	That if at any time after the date of this Deed the Owner shall enter into any lease, agreement or transfer confirming that part of the land comprising as including and part of the SUDS it shall in each case procure the lessee, transferee or assignee (as the case may be) to enter into direct covenants with the Council identical to those contained in this Schedule.	*Transfer of obligations to successive owners.*

THIRD SCHEDULE

Option 1 – SUDS to be maintained by the Council

The Council hereby covenants with the Owner:

( )	From the date of completion of the SUDS and payment of [the Periodic Sum] (the Sum) maintain and keep in a good state of repair the SUDS in accordance with the specification for maintenance and management of the SUDS.	*The Council's obligations.*
( )	To use the [Periodic Sum] (the Sum) for the maintenance and repair of the SUDS.	*Funds for SUDS maintenance may not be used for other activities.*
( )	To ensure that although the right to flood granted under this Agreement shall be exercisable at any time without previous notice the Council will use its best endeavours to give notice of intention to exercise such right.	*Right to flood.*

IN WITNESS WHEREOF

SECOND SCHEDULE

Option 2 – Sustainable Drainage System to be vested in the Council

Definitions

Within this Schedule the following definitions and interpretations apply:

( ) **"the Specification" means any guidance notes on design and** construction of SUDS from time to time published by CIRIA including:

Book 14 Design of flood storage reservoirs
Report I56 Infiltration drainage
C522 Sustainable urban drainage systems **–** design manual for England and Wales
C523 Sustainable urban drainage systems **–** best practice manual
C582 Source control using constructed pervious surfaces
C609 Sustainable drainage systems **–** hydraulic, structural and water quality advice

or revisions or updates to the above.

The Specification may be updated as revised design guidance becomes available.

All relevant drawings should be listed or attached to the Agreement.

( ) **"Planning Agreement" means any agreement made** pursuant to section 106 of the 1990 Act in respect of the Land.

( ) **"SUDS" means the sustainable drainage system comprising all treatment** and drainage systems including any pipework, swales, reed beds, ponds, filter trenches, attenuation tanks and detention basins.

( ) **"Engineer" means such officer as may be designated by the Council.**

( ) **"the Drawings" means all plans, drawings, sections and the design or** working documents listed in schedule [ ] [and attached to this Agreement].

( ) **"the final Certificate" means the final certificate issued by the Engineer in** connection with the SUDS construction.

( ) The Council shall (subject to the Developer/the Owner complying with the terms of this Agreement and in particular the terms of clause [ ] below) by declaration vest the SUDS in the Council.

Vesting of the SUDS in the Council.

( ) The Council shall not be required to vest or to take over responsibility for the SUDS or any part of them until the following have occurred:

Mechanism to ensure the SUDS have been properly constructed before vesting.

( ) The Engineer shall have issued a certificate in writing certifying that:

( ) The SUDS have been constructed and completed in accordance with the Drawing and the Specification to the reasonable satisfaction of the Engineer and have been maintained by the Owner during any defects correction period and any defects arising or work required in connection with the SUDS during that period and prior to the date of the Final Certificate of the make good or carried out by the Owner to the reasonable satisfaction of the Engineer.

( ) No building structure or act has been erected or carried out so as to impair the proper operation of the Works.

( ) All requisite consents have been obtained and provided to the Engineer.

Consents.

[Periodic or Commuted Sum to be provided]

Sums to be provided by the Owner or Developer to facilitate future maintenance of the SUDS.

IN WITNESS WHEROF

SECOND SCHEDULE

Option 3 – Sustainable Drainage System to be maintained by a Third Party

The Owner and the Developer hereby covenant with the Council:		
( )	To implement a maintenance scheme with a company to be approved in writing by the Council to repair and maintain the SUDS (the Maintenance Scheme).	
( )	The Owner will not commence development on the Land until the Maintenance Scheme has been approved in writing by the Council.	
( )	The Owner will not commence development on the Land until the Maintenance Scheme set out in the Third Schedule hereto [to incorporate National Model] has been entered into and a copy provided to the Council.	*Detail of the Maintenance Scheme to be set out in the Third Schedule.*
( )	To provide a bond in the sum of [£.....] ("the Bond Sum") for the projected maintenance of the SUDS in accordance with the Maintenance Scheme. Such form of Bond to be agreed in writing between the Owner and the Council before commencement of the Development.	*Bond provision.*

THIRD SCHEDULE

Option 3 – Sustainable Drainage System to be maintained by a Third Party

[Maintenance Provisions to be drafted]

Detail of the Maintenance Scheme to be completed in the Third Schedule.

Note that this could be the "Maintenance Framework Agreement" but not necessarily so.

IN WITNESS WHEROF