



Mandatory SuDS: What could it mean for England's development industry and how can you prepare for change?

Introduction

We know our built environment needs to manage rainwater, and for many years we have used Sustainable Drainage systems (SuDS) as a set of principles to mimic the natural water cycle within new developments to achieve this. Their role in protecting communities from the impacts of climate change has been well documented given how they enhance our approach to water conservation and management, specifically in the face of increasing extreme weather and flooding events, never mind the added benefits they bring through quality placemaking, health and wellbeing, and biodiversity net gain.

In January 2023, the UK Government Department for Environment, Food and Rural Affairs (Defra) published a review identifying the benefits and impacts of making SuDS mandatory

for new developments in England. The review recommended the implementation of Schedule 3 of the Flood and Water Management Act (2010) across England. Following in the footsteps of equivalent provisions now being implemented in Wales, this would make SuDS mandatory for new development and provide a framework for the approval and adoption of such drainage systems.



THIS REPRESENTS A MAJOR POTENTIAL CHANGE IN DIRECTION COMING DOWN THE TRACK FOR DEVELOPMENT OF ALL TYPES AND SCALES. IF ENFORCED IN 2024, IT WILL HAVE A SIGNIFICANT IMPACT ON HOUSEBUILDING AND PLACE SHAPING ACROSS ENGLAND.



In this note we clarify the anticipated changes in legislation Schedule 3 could deliver and how we and you, our clients, can best prepare for the changes it could bring.

What is Schedule 3 of the Flood and Water Management Act (2010)?

The 2010 Flood and Water Management Act (FWMA) made provision through robust building and planning controls, for water and the management of risks in connection with flooding and coastal erosion. It created the role of a Lead Local Flood Authority (LLFA) and gave new powers to local authorities, the Environment Agency, The Welsh Ministers and water companies.

Schedule 3 of the FWMA provides a framework for the approval and adoption of drainage systems, an approving body (SuDS Approval Body - SAB), and national standards on the design, construction, operation, and maintenance of SuDS. It makes the right to connect surface water runoff to public sewers conditional upon the drainage system being approved before any construction work can start.

Schedule 3 has already been implemented in Wales (since January 2019), where SAB officers have been appointed by each Unitary Authority or County Council. Although still early in its implementation, there are lessons we can learn from its execution.



Andrew Johns,
Nature-based Solutions Lead

“Collaboration between technical specialists, planners, designers and developers will be key to unlock the full potential of the SuDS approach, enhancing value and maximising the benefits brought about by multi-functional features. Our integrated service offering will inspire the next generation of SuDS solutions that will deliver attractive, green, resilient and healthy new developments.”



In England, presently the LLFA is responsible for managing local flood risk and as such undertake a statutory consultee role providing technical advice on surface water drainage to Local Planning Authorities (LPAs) for major developments. The LLFA can recommend refusal to the Local Planning Authority if it is deemed that flood risk and drainage has not been adequately addressed in the Planning Application. However, in practice, this does not give the LLFA authority to make SuDS mandatory for new developments, and they tend not to look at the other pillars of SuDS such as biodiversity, water quality or amenity. Instead, they tend to focus on the quantity of runoff only.

A look at the challenges and solutions

What do good SuDS design look like? There are many preconceptions about SuDS that are prevalent in our industry, including cost, maintenance and land take. However, by recognising good SuDS design as part of the wider suite of blue green infrastructure solutions, we can bring the natural and built environment together, creating developments with enhanced value, and ultimately healthy, beautiful and functional place making.

Through our interdisciplinary team of planners and masterplanners, landscape architects, engineers and ecologists we can draw upon wide experiences and specialist knowledge to ensure consistent, high-quality design and implementation.

Our top tips for SuDS design that we are excited to bring into our projects:

- **Integrated:** SuDS sit at the interface between drainage, landscape and built environment. From roof and podium level to the surface and below ground; we understand the critical details to manage water at all levels and between the hard and soft landscape.
- **Multi-functional:** Land is precious, but we work hard to develop solutions that bring about multiple benefits; whether it's careful design of detention basins to allow safe access and additional play space, or enhancing public realm through engineered tree pits, that not only manage flooding, but also improve air quality and biodiversity in our urban centres.

- **Nature-based:** We learn from nature and we harness its processes, well designed SuDS mimic the natural water cycle, allowing infiltration where possible and evapotranspiration through green features. Collecting water at source provides an opportunity for passive irrigation, enhancing the resilience and quality of planting establishment, trees, green open spaces, green roofs and gardens.

- **Maximise wider benefits:** We get involved at the earliest stages of planning and design process to maximise the opportunity for our clients. With a wide view of the multiple project drivers and constraints we can work collaboratively across disciplines enabling us to draw together robust blue green infrastructure strategies that address nutrient neutrality, active travel, biodiversity, water resources and much more, to create valued and attractive places for communities who live, work and play there.

- **Stakeholder engagement:** We know the importance of community engagement when considering the amenity value potential of SuDS and how proposals will meet the needs of the end user. For SuDS to be delivered effectively with a long-term maintenance plan, it is essential to engage with the adopting bodies to ensure that proposed SuDS have appropriate access. Where features are dependent on proprietary systems and materials, the supply chain should be consulted to understand performance characteristics, maintenance regime and warranties.

The likely programme for Schedule 3 implementation should it go ahead

1

Government to consider scope, threshold & process

2

Consultation in late 2023 – Views on impact assessment, national standards and statutory instruments

3

Schedule 3 potentially in place by 2024



Understanding the impact SuDS design can have on the cost of schemes

We understand the concerns around the impact SuDS will have to the costs of a scheme. The reality is that poorly designed SuDS can be expensive in land take and construction or maintenance costs. However, early planned and well designed SuDS can bring about multiple cost savings, optimal use of land and many secondary benefits. Reflecting on experience to date we have generally found the following points to be important.

- Multifunctional SuDS require minimal additional cost and make use of available space within the proposed masterplan.
- Managing water at source can reduce the size (land take and cost) of deep attenuation ponds or tanks downstream, as well as reducing pipe size and depth of excavations.
- Early engagement is essential to consider how we can most efficiently fit schemes into existing landforms and minimise retrofit inconvenience.
- SuDS can bring an increase in value to properties.
- SuDS enhanced landscape features reduces (or even negates) the potable water demand and saves costs associated with replacing unhealthy trees and plants.
- SuDS for sound reduction - small parks (pocket parks) can be situated in rural areas and host SuDS including swales, attenuating planters, permeable paving, green roofs etc. Over and above their more well-known benefits, these 'pocket parks' can also reduce noise by creating a natural sound barrier.

How do we fund ongoing maintenance of SuDS?

The SAB is responsible for securing a sustainable funding mechanism for the lifetime of the development and for management and maintenance of SuDS assets. Three options have been considered in the Defra report:

- 1.** Developer pays upfront 'commuted' sum – there have however been concerns raised over this approach in the instances it has been used in Wales to date.
- 2.** Homeowner pays through utility bills to water companies, who in turn pay the SAB for surface water drainage
- 3.** Household gets rebate on water bill and pays this amount to the SAB.

Each of these options present some challenges, and further consideration needs to be given to develop funding mechanisms that will be acceptable to all stakeholders. A first step is to clearly define maintenance requirements for SuDS for each of the responsible bodies; private household, local and National Highways,

water companies and the SAB. This includes clear delineation of adoption responsibilities across the entire Surface Water Network of new developments.

Once the adoption responsibilities are clearly defined, opportunities can be explored for partnership funding models and coordination of resources between responsible bodies with shared or overlapping assets.

An important consideration is the role of community-based responsibility (property level SuDS), and whether this may be an opportunity to share risk and responsibility for SuDS. For this to be successful, property owners would be motivated by the additional benefits of SuDS and/or potential rebates on utility bills.



Who will be judging the quality of SuDS responses or setting regulatory levels?



Currently a number of bodies are responsible for the adoption and/or maintenance responsibility of surface water drainage systems including SuDS, from private landowners to Highways with Local Authorities and nationally, and water/sewerage companies.

Defra's review published in January 2023 concluded that the Lead Local Flood Authority (LLFA), who currently sit under the Unitary Authority or County Council, should take on the role of SAB (with support and funding). LLFA's have an existing strong understanding of water quantity, but support will be required to enhance skills in biodiversity, water quality and amenity. Interestingly, sitting in the same tier of local government as Local Highways Authorities, this may make it easier to influence and coordinate matters of approval and adoption.

We expect that the SAB will introduce a SAB Application process for approval of proposed SuDS strategies. This would likely require a greater amount of detail to be put forward at an early planning stage to specify proposed SuDS strategy along with proposed funding and maintenance plans.

What next?

Schedule 3 will make SuDS a key consideration in the early stages of development. Its effects will be far-reaching, with impacts on landscape design, ecology and biodiversity, masterplanning and urban design, water, flood risk and drainage.

As an interdisciplinary team of planners and masterplanners, landscape architects, engineers and environmental consultants, we see this change in legislation as an opportunity to rethink traditional approaches to sustainable drainage. We know that a more integrated approach to drainage early on - factoring it into landscape, highways, and urban design - can create better places and increase social value and benefit to our communities.

We can collectively design (masterplan) places and communities that are fit for purpose from the outset. In doing so we can create more integrated, multifunctional drainage systems, that are balanced against the wider demands of development, to deliver long-term value for our clients. This can range from optimised development capacity at the planning stage, to the delivery of attractive features and amenities for our communities, helping them be closer to nature and contributing to their health and wellbeing. The importance of this being considered and designed effectively at the outset

of a development will enable you to avoid pitfalls, enhance cost savings and maximise potential benefits to placemaking the environment and social value.

We are ready to advise you as our clients through the SAB Application process, highlighting how our blend of technical and creative services can help you navigate the upcoming change and overcome the challenges, whilst delivering truly enhanced development for all.



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