

## **DCLG / Defra consultation: Delivering Sustainable Drainage Systems**

Response of the Landscape Institute, 24 October 2014

---

### **Background**

The Landscape Institute (LI) is the royal chartered body for the landscape profession, which includes landscape planners, architects, scientists and managers. We are a professional organisation and educational charity working to protect, conserve and enhance the natural and built environment for the public benefit. We work to improve the planning, design and management of urban and rural landscapes. Through our advocacy programmes and support to our 6,000 members we champion landscape, and the landscape architecture profession, in order to inspire great places where people want to live, work and visit.

### **Our response**

#### **Q1. Do you agree that the proposed revision to planning policy would deliver sustainable drainage which will be maintained? If not, why?**

Recommendation 20 of the Pitt Review states that:

*“The Government should resolve the issue of which organisations should be responsible for the ownership and maintenance of sustainable drainage systems.”*

In our opinion the proposals set out in the consultation will not resolve this longstanding issue – they will not deliver SuDS that will be maintained in the way that they should. One of the reasons for this is that the proposals fail to deal with adoption, something which is an essential part of the process. Unless there is a legal requirement regarding adoption, it is unlikely that SuDS will be implemented to the extent that is necessary. In many instances around the country, no single organisation (whether local authority, water company or highways) wishes to adopt and purely focusing on the maintenance of SuDS, as is the case with this consultation, does nothing to address this problem. Despite the reference to the Water Act (2014), water companies will generally not accept, indeed they are unable to accept, surface water from ‘soft’ SuDS as it is deemed to be ‘land drainage’ and therefore they will not/cannot accept it. As a result, they cannot adopt and will not maintain it.

Another issue is that paragraph 2.7 of the consultation document states that the amendments to the National Planning Practice Guidance, as is proposed, would be based upon the draft National Standards. We believe that the current National Standards are extremely poor, as they have been reduced solely to compliance on issues of quantity. It is our opinion that if the National Standards are not amended, they will not deliver sustainable drainage as it is defined because they fail to address those aspects that should provide for potential simultaneous improvements to biodiversity, amenity, improvements in air and water quality and public health. The proposal therefore cannot deliver sustainable drainage as it is usually defined, and failure to amend the National Standards will represent a missed opportunity.

In addition to this Standard 12, as currently drafted, could result in water to be discharged that is poor quality, where the receiving watercourse is of equally poor quality. A well-designed SuDS system can cleanse water to a good standard and should be required to fulfil our obligations under the Water Framework Directive in relation to addressing the problem of diffuse pollution, a principle inherent in the catchment based approach.

Furthermore, incorporation of National Standards into the National Planning Practice Guidance (NPPG), means that they will not become a statutory requirement. Their application can therefore be significantly reduced from the level required, and enforced only by planning condition, and the willingness of the developer.

Paragraph 2.8 of the consultation document states that:

*“We envisage that the draft sustainable drainage systems National Standards will be supported by partner-led guidance maintained as a stand-alone document”*

We are of the understanding that guidance referred to in the NPPG can only be that produced by Government and its agencies, and not third parties. We are also aware that some existing guidance already referenced in the NPPG is undergoing a review (e.g. Defra’s Smarter Guidance consultation) which has already outlined proposals to archive extremely valuable information. For this reason, we have understandable concerns about the robustness of the process for ensuring that any guidance to support SuDS is maintained and enhanced in the future.

We are also concerned that the proposals do not provide the Lead Local Flood Authority (LLFA) with the duty to approve new SuDS scheme. This seems to run counter to their responsibilities under the Flood and Water Management Act. We believe that the current proposals are reliant on good will and voluntary agreements, both of which will be unworkable given the current constraints on public sector budgets, something that shows no sign of ending in the near future.

The proposals also assume local planning documents and the Strategic Flood Risk Assessment (SFRA) adequately reflect local surface water management risks and opportunities. In many circumstances these documents do not take into consideration surface water or SuDS which will impact on the development and planning process there will be challenges in obtaining the necessary evidence until these documents are updated.

**Q2. How should the Local Planning Authority obtain expert advice on sustainable drainage systems and their maintenance? What are the costs/benefits of different approaches?**

In reviewing the consultation document it is unclear at what stage in the planning process sufficient detailed information would be provided to enable an assessment of the appropriateness of a development’s SuDS proposals, regardless of who actually makes this assessment. At present it is usually the case that a flood risk assessment is, at best, accompanied by a vague SuDS strategy is insufficient information to allow a proper assessment to be made of a development proposal’s ability to accommodate adequately a site’s surface water.

Unless a SuDS system is integrated within a site masterplan from the very beginning, it is likely to be much more costly to include it at the detailed planning stage. This is the root cause of many of the assertions that SuDS take up valuable developable land, but is invariably a product of poor initial design and site planning. Expensive modelling is not necessarily required for an outline application, as simple calculations can provide a high degree of certainty around the necessary surface water attenuation requirements, sufficient to allow an adequate strategy to be developed.

Many local authorities at the district and borough level do not have sufficient competent in-house staff to fully understand detailed surface water models, and the Environment Agency will not assess detailed models for surface water schemes, particularly if the site falls in Flood Zone 1. If such work is to be contracted out by local authorities then the cost to those organisations is likely to be high. Expert advice, however it is provided, will need to be charged back to the developer.

Previous proposals placed the responsibility with the county or unitary authority. While still requiring funding, this gave responsibility where such expertise was likely to already be in-house, even if not to an adequate level of staffing.

One option that could be considered is for authorities to come together to provide a centralised service, as has already happened in relation to the production of SuDS guidance by the S7 group of authorities on the south coast.

It is our understanding that many Lead Local Flood Authorities (LLFAs) have started to increase capacity and knowledge on SuDS in readiness for their role as a SuDS Approval Body (SAB). Since the implementation of Flood and Water Management Act in 2010 many LLFAs have recruited specific staff, purchased software and undertaken training to fulfil their anticipated new role. Local Planning Authorities should therefore obtain information and advice from the LLFA, particularly as they have an overall responsibility for management local flood risk.

**Q3. What are the impacts of different approaches for Local Planning Authorities to secure expert advice within the timescales set for determining planning applications?**

Understanding the SuDS aspect of a development is a technical requirement, which a planning department is unlikely to be able to fulfil on its own. However, there is a need for SuDS to be a key aspect of pre-application discussions if it is to be properly integrated within development proposals. Early discussion and integration would enable proposals to come forward to planning in an appropriate manner as part of a planning application, and would help speed up the response time.

**Q4. Do you agree that minor size developments be exempt from the proposed revision to the planning policy and guidance? Do you think thresholds should be higher?**

We strongly disagree with the proposal to only apply the requirement for sustainable drainage systems to major development. All new development potentially contributes to flood risk, so the size of a development is irrelevant in this respect. Smaller developments collectively have the same impact as larger ones. It is our firm view that thresholds should not be higher, and should be reduced back to 'more than one house, as per the original principle which is that one building alone can contribute to the flood risk of another adjacent or downstream. Setting a threshold of nine or

more will just encourage developers to choose to develop just beneath the level to avoid compliance. This could increase flood risk significantly.

Government has previously accepted, and acted on, the importance of considering cumulative effect when it comes to managing flood risk. In its own guidance on the permeable surfacing of front garden, DCLG states that:

*“The drains in most urban areas were built many years ago and were not designed to cope with increased rainfall. Paving front gardens further adds to the problem. Although paving over one or two gardens may not seem to make a difference, the combined effect of lots of people in a street or area doing this can increase the risk of flooding.”*

With this in mind, we see no reason whatsoever for introducing thresholds whereby ‘minor size developments’ are exempt from the proposed revision to planning policy and guidance. There could be scope to consider higher thresholds where there is currently no known flood risk but there will need to be consideration given to future proofing such development.

**Q5. What other maintenance options could be viable? Do you have examples of their use?**

The Pitt Review recommended that either local authorities or water companies should be responsible for adoption. The Landscape Institute agrees with this recommendation. Drainage is critical, surface providing infrastructure which requires certainty in terms of long term maintenance. Options must be durable, affordable and sustainable and include the potential to raise funds for capital maintenance.

Originally the proposal was that SABs would undertake ongoing maintenance which would provide necessary funding and accountability. The proposals set out in this consultation document do not deal adequately with the issue of funding and this must be change if progress is to be made.

**Q6. What evidence do you have of expected maintenance costs?**

The cost of maintaining SuDS depends on their nature and who is maintaining them. If a SuDS system is designed as part of a public open space, in a proper integrated fashion, utilising predominantly soft features, then the cost of maintenance is unlikely to be significantly more compared to the cost of maintaining the public open space. There is likely to be slightly different maintenance tasks with a different frequency of operations, plus a requirement to check regularly any inlets and outlets to engineered structures within the system. The costs of maintenance would therefore be the ‘extra-over’ between anticipated parks maintenance, and the cost with the SuDS.

There will of course be some occasional maintenance, in that swales or wetlands may require the removal of sediment after 10-15 years. However research to date shows that well-designed systems only build sediment very slowly. The Environment Agency has confirmed that sediment arising from properly designed SuDS may be disposed of onsite in other landscape areas without any risk to public health. However it should also be noted that the funding of park maintenance is under continual pressure, as outlined in the Heritage Lottery Fund’s *State of UK public parks* (June 2014).

The opposite is true in relation to costs if, for example, the local highways authority adopts SuDS in highways and does not currently maintain any soft planting other than trees and grass. In this case, the cost undertaking such 'abnormal' maintenance may be relatively high and then the likely to be contracted out.

With regards permeable paving, this requires little maintenance other than sweeping as would be the case with regular road sweeping. There is no need to allow for gully clearance or cleaning or petrol interceptors as neither are required. Research has shown that silting of the interstices in permeable paving accumulates very slowly and occurs generally within the top 20mm of the block but does not pass down into the sub-base, so long as it has been properly laid. While a degree of siltation does occur, research has shown this to stabilise after a four to five year period and does not affect the hydraulic performance. In the unlikely event that a permeable pavement becomes completely silted and its function is impaired then research has shown that this can be adequately remediated by heavy road sweeping to remove the sediment from the interstices. The cost of maintaining permeable paving is therefore likely to be slightly cheaper than conventional road construction with traditional gully systems.

Cambridge City Council's *Sustainable Drainage: Design and Adoption Guide* provides useful examples of maintenance costs in appendices A and B. The guidance was the recipient of the 2010 Landscape Institute President's Award. The document can be accessed here:

<https://www.cambridge.gov.uk/sites/www.cambridge.gov.uk/files/docs/SUDS-Design-and-Adoption-Guide.pdf>

**Q7. Do you expect the approach proposed to avoid increases in maintenance costs for households and developers? Would additional measures be justified to meet this aim or improve transparency of costs for households?**

Developers understand that they will be required to contribute towards maintenance in some way, as has been the case for many years. Therefore, whatever system is adopted in relation to paying for maintenance, it must be clear and transparent and the procedures and methods of calculation known from the very outset. This allows developers to negotiate with landowners over land value, and once the houses are built the developer, or their agent, can provide advice to potential purchasers who can then make informed choices as part of their purchasing decision.

The use of commuted sums is well understood and could be adapted to address a longer-term maintenance requirement related to the SuDS aspect of a scheme. When considered as the 'extra over' cost of maintaining public open space, roads, parking areas or wherever the SuDS may be located.

Consideration should be given to the consequential cost for householders downstream of any development that does not adequately deal with its flood risk when they are flooded in the future. When one in six properties in England, totalling 5.2 million overall (Government's own figures from

June 2014) are currently at risk from some form of flooding, potentially increasing this figure is completely unacceptable.

## **Summary**

The Landscape Institute is extremely disappointed with these latest set of proposals from the Government. They completely undermine the excellent work undertaken by Sir Michael Pitt and his recommendations to encourage greater uptake of SuDS as a key tool in reducing flood risk. The proposals fail to improve on the current situation and represent a missed opportunity to get things right. It is perhaps to be expected that this Government's overarching approach to policy – deregulation and saving money in the short term – is reflected in the latest proposals set out in the consultation document.

It should be remembered that SuDS are about so much more than reducing flood risk. They have the potential, if properly planned, designed and maintained, to provide a wide range of benefits including improvements to water quality, enhancing biodiversity and providing better places for local communities. All of these are Government objectives so it should be a priority to devise a system that sees widespread uptake of SuDS. The proposals set out in the consultation will not deliver this. Instead they appear to be a continuation of the current situation, however if the intention is to apply the policy to major developments then there is a real danger that this situation will worsen, not improve.