Sustainable Urban Drainage Guidance

<u>Blue – Green sustainable drainage schemes</u>

Guidance can be drawn from the ICE Manual of Blue-Green Infrastructure which draws together an exceptional breadth of material to provide a complete practical reference on Blue-Green Infrastructure (BGI) solutions. Written and edited by leading specialists, each chapter provides a contemporary overview of a significant area within the field and guidance on key considerations in BGI design, creation, retrofitting and maintenance.

Further guidance publications include Ciria 768, Ciria 753, Ciria Best Tool, Ciria 687, Ciria 698, Ciria 802F and Ciria 790.

Grey Water Harvesting

BS 8525-1:2010 Greywater systems - this Code of Practice provides recommendations for design, installation, alteration, testing and maintenance of greywater systems, that use domestic wastewater generated in households or offices to supply non-potable water in the UK. Further guidance can be found in Ciria 626.

General Guidance

Sources of pollution need to be categorised across the site with low, medium and high identified based on the intended use.

Use of appropriate pollution hazard index based on CIRIA C753 Manual.

Requirement for appropriate SuDS mitigation indices for discharge to surface waters based on the above

A simple index approach on its own is insufficient for high-risk surfaces, so needs to be accompanied with comprehensive risk assessments including both surface and groundwater risks.

Design size is very important (flow rate/storm event to use) to achieve pollution mitigation indices (for manufactured devices and vegetative schemes) with reference to minimum design requirements based on C753 required.

Developers need to consult manufacturers. This is especially the case if bypassing higher flows round the treatment device to prevent pollution being washed out becomes necessary. Such collaborative working can reduce dependence on treatment devices and is key when also considering maintenance plans.

Manufactured devices (treatment) should be included where high pollution loads are encountered, to protect vegetative SuDS & receiving waters.