



Integrating sustainable drainage systems: Henry Box affordable housing scheme, Witney, Case experience from Oxfordshire UK

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ABSTRACT

Integrating sustainable drainage systems. Case experience from Oxfordshire UK. Surface water drainage manufacturer ACO outline the design challenges on housing development in Oxfordshire. The Henry Box development of 92 houses within a flood plane may be increasingly typical of the challenges that face designers: meeting the requirements of low impact development (sustainable drainage), enabling practical amenity and doing so economically were key goals. Runoff volume limitations for the 1.1ha site were 9.5l/s, traditional drainage methods were not deemed appropriate by the Local Authority. The solution was based on careful integration of engineered products such as combined kerb drainage units with on-site mass attenuation, this linking to swales for quality treatment. A study of rainfall event impact over an 18 month period has validated the design. Details of the challenges and the necessary cooperation that enabled the solutions will be discussed.

KEYWORDS

Application, kerb linear drainage, sustainable drainage