### Historic Environment guidance for Sustainable Drainage Scheme developers

Kent County Council

#### October 2013

#### 1 Background

This document is intended as background guidance for those developing Sustainable Drainage Schemes. It provides information about the potential impact of SuDS on the historic environment, the range of mitigation measures available and how developers should proceed if their schemes are believed likely to impact on heritage assets.

### 2 Introduction

The historic environment is critical to the study and understanding of the development of the UK from the distant past to the present. The NPPF defines the historic environment as "All aspects of the environment resulting from the interaction between people and places through time, including all surviving physical remains of past human activity, whether visible, buried or submerged, and landscaped and planted or managed flora". The NPPF further identifies the historic environment as one of the key material considerations to be taken into account during the planning process and outlines how potential impacts should be considered and mitigated. SuDS should aim to sustain and enhance the historic environment, thus helping to achieve sustainable development as set out in the NPPF.

Some historic environment sites, or 'heritage assets' are nationally designated and protected by law. These include World Heritage Sites, Scheduled Monuments, Listed Buildings, Protected Wrecks and Military Remains, Conservation Areas and Registered Parks and Gardens as well as some prehistoric heritage sites specifically protected under non-heritage designations such as Sites of Special Scientific Interest. Others may not be nationally designated but may be regionally or locally significant. It is also important to note that not all heritage assets are known – many lie as yet un-noticed above the ground or undiscovered beneath it. They are valuable elements in the local historic environment nonetheless.

#### 3 Potential impacts of SUDS on the historic environment.

Sustainable Drainage Schemes (SuDS) have the potential to impact both directly and indirectly on the historic environment. Direct impacts can include damage to known heritage



assets - for example if a historic drainage ditch is widened and deepened as part of SuDS works or if an archaeological site is cut through. Indirect impacts are when the ground conditions are changed by SuDS works, thereby impacting on heritage assets and their settings. For example, using an area for water storage, or improving an area's drainage can change the moisture level in the local environment. Archaeological remains in particular are highly vulnerable to changing moisture levels which can accelerate the decay of organic remains and alter the chemical constituency of the soils. Waterlogged archaeology and palaeo-environmental (relict wetland) deposits are of significant interest and fragility; such sites may be even more vulnerable to changes in the ground conditions than modern wetland habitats (https://projects.exeter.ac.uk/marew/). The historic environment interest of wetland areas therefore needs to be considered as carefully as their biodiversity interest. Historic buildings are often more vulnerable than modern buildings to flood damage to their foundations (https://historicengland.org.uk/advice/technical-advice/flooding-and-historicbuildings/). However, it is the retro-fitting of SuDS solutions to historic buildings and other heritage assets that are of greatest concern to the historic environment and feasible solutions should be sought, which avoid harm to the significance of the heritage asset or its setting.

### 4 Avoiding damage to heritage assets during SuDS.

# During preparation of the SuDS

When SuDS are planned it is important that the potential impact on the historic environment is fully considered and any unavoidable damage is mitigated. This is best secured by early consideration of the local historic environment following consultation with the Kent Historic Environment Record (HER), Conservation Area Appraisals, Local Heritage Lists, historic characterisation studies, the National Heritage List, the Heritage at Risk Register and by taking relevant expert advice. Kent County Council maintains the County HER and can offer guidance on avoiding damage to the County's heritage. This can avoid additional delays and costs later in the process.

In particular, in assessing direct and indirect effects on heritage assets the following points should be considered:

- Will the scheme avoid harm to, and protect, designated heritage assets including their setting?
- Will the scheme sustain and enhance the historic environment including nondesignated heritage assets, palaeo-environmental deposits and areas of potential archaeology?
- Will the scheme alter the hydrological setting of water-dependent heritage assets?
- Will the scheme improve access to or enjoyment of heritage assets and maintain or enhance the character of historic landscapes and settlements?



### SuDS planning applications

The local planning authorities will consult Kent County Council's Heritage Conservation team on the likely impact of SuDS on heritage assets except where those impacts are limited to impacts on listed buildings for which local planning authorities have their own conservation advisors and processes. The potential impact on the historic environment could be of concern in relation to two key scenarios:

a) some solutions, such as the construction of storage features, ponds and wetlands, are likely to require significant ground disturbance which may negatively impact buried archaeological remains

b) the design and/or finish of permeable paving, swales and drains of redevelopment sites lying within, or within the settings of, heritage assets (e.g., Listed Buildings and Conservation Areas) needs to be considered with reference to the historic context and its significance.

If an impact is anticipated the local planning authority may choose to respond to SuDS applications in a number of ways:

- The application may be refused.
- The application may be granted subject to conditions
- The application may be granted without conditions
- The applicant may be asked to supply additional information

The application is likely to be refused if it impacts negatively on the significance of designated heritage assets. Any works affecting a Scheduled Monument or its setting will need Scheduled Monument Consent from the DCMS via English Heritage in addition to planning permission.

If an applicant is asked to supply additional information this may be in the form of a deskbased assessment, where a qualified expert will gather all available information about the heritage asset and consider the impact of the SuDS on its significance. Additionally, the applicant may be asked to carry out archaeological fieldwork in order to clarify aspects of the heritage asset and enable a decision to be taken on the SuDS application.

During implementation of the SuDS



Although a SuDS application may be granted planning permission, there may nonetheless be significant impacts on heritage assets that need to be mitigated using planning conditions. These can involve:

- Preservation in-situ.

The NPPF states that "When considering the impact of a proposed development on the significance of a designated heritage asset, great weight should be given to the asset's conservation". Where appropriate, planning conditions will be used to secure the preservation of important heritage assets. This may be achieved by amending the design of the SuDS so that the significance of the assets is not damaged. It is likely that planning conditions requiring preservation *in-situ* will require desk-based assessment and structured archaeological fieldwork or building recording.

- Preservation by record.

Where it is not felt appropriate to preserve the asset *in-situ* the applicant may be required to carry out a programme of archaeological work or building recording. This is a less satisfactory outcome than preservation *in-situ*, however, as it results in at least partial destruction of the asset. It is not therefore an alternative to preservation *in-situ* and the NPPF states that "the ability to record evidence of our past should not be a factor in deciding whether such loss should be permitted." The preservation by record programme can take many forms depending on the nature of the asset and the design of the SuDS. This may include desk-based assessment and structured fieldwork or building recording but may only require a watching brief.

It should be noted that all archaeological fieldwork or building recording should be based on a written specification. This will normally be supplied by Kent County Council. It should also be noted that all archaeological fieldwork will require a post-excavation phase that continues after the fieldwork has completed. This can represent a very significant proportion of all project costs, sometimes costing as much as the fieldwork. In addition, all the finds from the fieldwork must be deposited with a appropriate museum or archive centre. Storage charges are likely to be applied.

# 5 References and sources of information

Department for Communities and Local Government (2012) National Planning Policy Framework

English Heritage (2008) Climate Change and the Historic Environment.

Heritage at Risk Register (https://historicengland.org.uk/advice/heritage-at-risk/)

Kent Historic Environment Record (http://www.kent.gov.uk/HER)





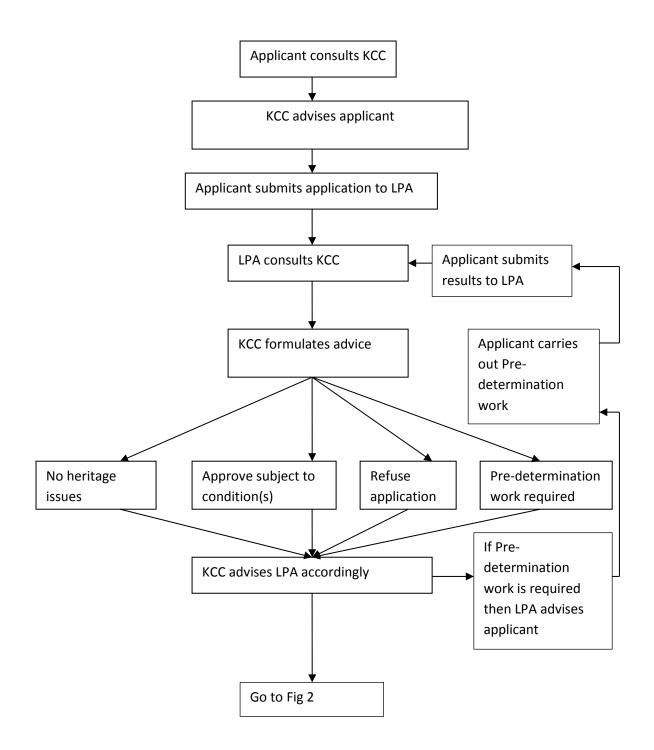


Fig 1 Pre-determination stages of SUDS applications with regards to heritage impacts (other than listed buildings)



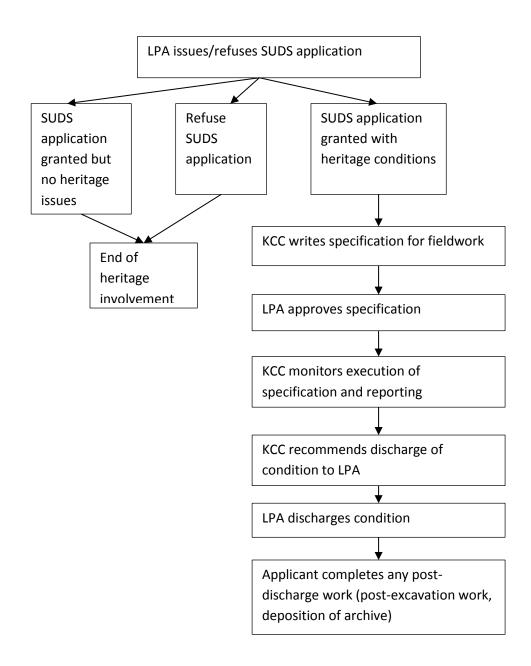


Fig 2. Post-determination stages of SUDS applications with regard to heritage impacts (other than listed buildings)

