Appendix 2

Tewkesbury Borough Council

Flood and Water Management Supplementary Planning Document

Response Report (January 2018)



1. Purpose and Background

- 1.1. This report sets out details of the consultation that has taken place which has informed the development and refinement of the Flood and Water Management Supplementary Planning Document (SPD). The report has been produced in accordance with regulation 12 of the Town and Country Planning (Local Planning) (England) Regulations 2012. The regulation states that, before adoption of a supplementary planning document, the local planning authority must prepare a statement setting out:
 - the persons the local planning authority consulted when preparing the supplementary planning document;
 - a summary of the main issues raised by those persons; and
 - how those issues have been addressed in the supplementary planning document.
- 1.2. The Council has prepared its own Statement of Community Involvement (SCI) (2013) to show how it will involve the community in its plan and policy making process. This can be viewed on the Council's web site at https://www.tewkesbury.gov.uk/emerging-planning-policies/.
- 1.3. The aim of this SPD is to provide more detailed guidance on the approach that should be taken to manage flood risk and the water environment as part of new development proposals to achieve a high standard of management. The SPD seeks to drive forward development that will help deliver innovative, adaptive and integrated flood risk management solutions that can also maximise social, environmental and economic objectives. It is focused on the very best of practices; to deliver effective and more sustainable solutions that can meet the challenges presented by our changing environment.
- 1.4. The SPD provides more guidance on how the flood and water management policies contained within the Development Plan Documents of the Local Plan should be applied. For Tewkesbury Borough, the principle policy is set out in the adopted Gloucester, Cheltenham and Tewkesbury Joint Core Strategy through Policy INF3: Flood Risk Management.

2. Consultation Process

- 2.1. A period of formal public consultation was undertaken on a draft SPD for a 6 week period from Monday 25th September 2017 until 5pm on Monday 6th November 2017.
- 2.2. Around 1,000 organisations and individuals were written to to inform them of the consultation and invite comments on the draft SPD. Contacts were taken from the existing Tewkesbury Borough Plan consultation database as those who have been involved in, or have an interest in, the plan making process in Tewkesbury. This includes all Parish Councils in the Borough, neighbouring local authorities, Gloucestershire County Council, as well as the following statutory consultees:
 - Environment Agency
 - Lead Local Flood Authority

- Historic England
- Sport England
- Marine Management Organisation
- Thames Water
- Severn Trent
- Highways England
- Network Rail
- 2.3. In addition to this a notice of the consultation was placed in the local press through the Gloucestershire Echo as well as advertised on the Borough Council's website news feed.
- 2.4. In line with the Council's SCI the SPD was made available for viewing in the following ways:
 - Electronically on the Tewkesbury Borough Council website (https://www.tewkesbury.gov.uk/flood-and-water-management-spd)
 - In hard copy at Tewkesbury Borough Council Offices, Gloucester Road, Tewkesbury
 - In hard copy at Tewkesbury Borough libraries (Tewkesbury, Bishops Cleeve, Winchcombe, Churchdown, Brockworth)

3. Consultation Responses

- 3.1. A total of 17 responses were received, and the main issues raised were that the technical requirements were more onerous than national guidance; that it was felt it could bring a financial burden to development, contrary to what the NPPF states regarding a SPD; and the length and complexity of the document. However the majority of responses were positive and welcomed the purpose of the document. These issues were then considered and appropriate amendments were made to the SPD.
- 3.2. A number of respondents to the plan supported the content of the SPD and its aims and objectives. However, a number of respondents also raised issues with the SPD that they felt needed further review. A summary table of these issues, and the Council's response, is provided in the table below:

Summary of Response	Response in SPD
Aspects of the SPD content is not	It is not considered that the SPD provides any
supplementary to the wider development plan	conflict with the provisions of the NPPF, PPG
policies (i.e. JCS) and does not adhere to what	or the strategic flood risk policy (Policy INF2)
the NPPF or NPPG envisages should make up	of the Joint Core Strategy. In addition the SPD
an SPD. There is also some conflict between	does follow the guidance presented by the
the guidance in the SPD and the policies of the	Environment Agency.
JCS.	
The SPD is too lengthy and complicated and	It is recognised that the SPD is a lengthy
could be made more concise. It also repeats	document and will need to contain a certain
guidance that is provided in other existing	level of detail due to the technical nature of
documents, particularly the in particular the	the guidance it is providing. Nevertheless, the
CIRIA SuDS guidance. This is unnecessary and	SPD has been reduced by removing guidance
could lead to the SPD becoming out of date	around the implementation of SuDS where it

quickly. is already contained within an existing document. This avoids repetition and also addresses the issue of the SPD potentially becoming out of date if this 'external' guidance is updated. The requirement for a 70% climate change The SPD requirement for major development to provide an FRA which presents a 70% allowance is considered to be appropriate and is not in conflict with the Environment Agency climate change allowance to peak river flows is over and above Environment Agency guidance. guidance. The 70% allowance is set out as the Environment Agency's 'Upper' allowance for the Severn river basin district in their 'Adapting to Climate Change' document. The Borough of Tewkesbury is located in an area where non-standard catchment type is possible. As such, a number of modelled catchments exhibit significantly greater increases to river flood flows than the standard catchment. Similarly, as has been demonstrated historically, the scale of the flooding impact may extend far wider than the immediate locality of the flooding incident e.g. water treatment works, the power network, road infrastructure, sustainable urban extensions. The upper limit of climate projections that are considered plausible for the Severn river basin district (for the period 2070-2115) is 90%. Therefore, it is deemed reasonable to adopt a precautionary approach and apply just the 'Upper' allowance figure of 70%. Further explanation of this has been provided in the Introduction and Objectives section of the SPD. 70% climate changes allowance should not be The SPD sets out that, within the 1% flood used to determine the developable area of a extent with a 70% climate change allowance, site or be used as a design standard. It is more more vulnerable uses and above will not appropriate for sensitivity testing which generally be accepted. However, a sequential mitigation should take account of. test will need to be applied in the event of any deviation away from this, in line with national guidance. Further clarification has been provided on the different vulnerabilities of different development types and uses. Some of which may be acceptable with the 70% allowance

areas subject to the Sequential Test.

The SPD takes an onerous approach to the design of attenuation basins which will result in a large proportion of development sites being required for attenuation. This will add to the financial burden on development and affect the delivery of residential and employment growth.

If the SuDS management train design concept is applied, and an innovative approach is taken, then there would be a reduced need for attenuation basins and the associated land take for them. The SPD provides details of different approaches that can be taken, which can be achieved without additional financial burden.

The purpose of the SPD is to help drive forward development that will deliver innovative, adaptive and integrated flood risk management solutions that can also maximise social, environmental and economic objectives.

Nevertheless, the design criteria for the maximum gradient for attenuation basins has been amended from 1in6 to 1in4. However, the SPD emphasises the need for safety mitigation features to be designed in from the outset, to reduce risk.

The requirement of a 70% climate change allowance for rainfall events/surface water drainage storage is not correct and not in line with Environment Agency guidance.

The wording of the SPD has been amended to clarify that the 70% climate change requirement for rainfall events is an aspiration that the Council will seek, taking a precautionary approach due to the flood risk sensitivity of the area. The SPD makes clear that a 40% allowance must be applied as a bare minimum in line with Environment Agency guidance.

Requiring attenuation to have a low Flood Hazard Ratings in all cases was felt to be unrealistic. Instead their design should be on a risk based approach depending on circumstances and flood frequency affecting a site.

The SPD has been amended to require a flood hazard rating of less than 1.25 for attenuation schemes. This provides a more flexible approach while still seeking to protect the most vulnerable people within the 'danger for some' category (i.e. children, elderly). In addition, where this is not feasible, the SPD requires safety design measures to be incorporated.

Requiring attenuation to a 1 in 1 year greenfield run-off rate is considered to be over-precautionary and impractical in most circumstances. This will also result in overly large attenuation basins which will increase hazards on-site and maintenance responsibilities. It could also encroach of usability of public open space provided on site. This is contradictory to all other guidance contained in the Government guidance and in

It is considered that attenuating to a 1in1 year greenfield run-off rate is achievable with innovative approaches that follow the SuDS management train design concept. This can include the use of public open space as part of multi-functional green infrastructure strategy. However, the SPD has been amended to be more flexible and the requirement is for the 1in1 greenfield rate for the 1in1 event, and the mean annual flood flow green-field rate

the JCS evidence base (SFRA2).	for all events above the 1 in 1 and up to the
	1% event (plus climate change).
The greenfield discharge rate guidance in the SPD should reference developable areas, but not include any significant areas of public open space. This is in line with Ciria guidance.	Additional flexibility has been provided in the SPD to take into account of circumstances of different developments to be judged on their merits where the desired approach is not feasible.
The requirements for brownfield developments to restrict run-off to the 1 in 1 greenfield rate, make 70% allowance for climate change, betterment and urban creep is more onerous that other national guidance and could impact on development viability.	The SPD has introduced wording to clarify that a more flexible approach may be taken on brownfield sites to take into account of potential different circumstances and challenges in developing brownfield sites. However, the aspirations to achieve the greenfield run-off rate for the 1in1 event and 40% betterment have been retained.
The ReFH2 hydrological method can be appropriate as per the Ciria guidance. However, this is prescriptive and doesn't allow any flexibility. Clarification should be provided on what other acceptable methods should be based on this guidance.	The SPD maintains that the ReFH2 method is preferred as it the most up to date model available. The SPD recognises that other methods may be used, however, the SPD states that a comparison with the ReFH2 method should be provided.
The use of open to surface or below ground SuDS techniques for a development should be based on the circumstances of the individual site. This may include ground conditions, topography, build costs and maintenance costs.	The SPD does not prescribe the exact SuDS techniques to be used. The SuDS management train design concept should be followed to determine the most appropriate approach. However, the SPD prefers the open to surface methods due to their many multiple benefits that achieve other objectives, such as improvements to biodiversity and water quality. Below ground methods are recognised in the SPD but they must be shown to be effective and maintainable.
There should be greater recognition and detail in the SPD on the need for safe access to be provided for development, but for residential schemes in particular.	This has now been addressed; the SPD now more clearly defines and includes additional guidance on flood mitigation measures which includes the provision of safe access and egress routes in new developments. This includes dry pedestrian access without the need for emergency service assistance.
There should be stronger reference to the role of watercourse management and SuDS to provide biodiversity betterment and habitat improvements.	There is a dedicated chapter in the SPD on biodiversity as well as guidance throughout the SPD about water management methods that are complimentary to the biodiversity objectives such as naturalising water courses and preference for open to surface SuDS.

The SPD should contain greater references and signposting to the requirements of the Water Framework Directive.	Additional references have been incorporated into the SPD, particularly as part the biodiversity chapter.
The potential impact of changes to the water environment and approaches to flood risk management on heritage assets and their setting could be recognised in the SPD.	Flood and water management solutions need to cover all concerns; including heritage. There is specific reference to historic environment within the requirements for Flood Risk Assessments. The NPPF, JCS and other plans provide adequate protections to the historic environment.
The SPD should recognise the potential for alternative adoption and maintenance arrangements where a statutory organisation is unable to fulfil that role. There should also be stronger mention of the need for long term management of the monitoring and enforcement that will be put in place to ensure this for the lifetime of the development.	The SPD provides details within the SuDS chapter and sets out the position in regards to adoption and maintenance. The SPD sets out that alternative bodies, such as private management companies, may also be able to maintain SuDS.
The SPD has a lack of detail on issues around geology and soils.	Additional information is provided in the SPD within the chapter on setting the local context to signpost to the JCS 'Sustainable Drainage Systems for Local Development Framework' report which gives more guidance.