

Beccy Dunn
Project Manager
Water Engineering and Management
Halcrow Group Limited
Lyndon House
62 Hagley Road
Edgbaston
Birmingham
B16 8PE

Our ref: Cinderford Level 2 SFRA

Your ref:

Date: 2 September 2009

Dear Beccy

Cinderford Level 2 SFRA – Environment Agency confirmation letter

Thank you for sending the second/final draft of the Cinderford SFRA Level 2 for our comments, following our initial response to the first draft. This letter confirms our acceptance of the document and highlights key matters for the Council so I am copying it to Nigel Gibbons at the Forest of Dean District Council.

We note and welcome the changes you have made in light of our initial comments and the Council's comments. We are satisfied with the final draft of the document, both from the mapping/technical perspective, and the written report/policy recommendations perspective. We can therefore confirm we consider the document a sound basis on which the Forest of Dean District Council can base its Local Development Framework, in particular the Core Strategy and Cinderford Area Action Plan Development Plan Document.

A key benefit of the Level 2 SFRA is the 'suitability raking' that you have used to assess the potential development sites identified by the Council. This is a useful tool for the Council in developing their Core Strategy and the Cinderford Area Action Plan, and for undertaking the Sequential Testing of potential allocations. We take this opportunity to highlight that two potential development sites/allocations have received the lowest suitability ranking of 1: Newton Steam Mills and Land at Broadmoor. This means these sites may be unsuitable for built development due to the presence of functional floodplain (flood zone 3b). The suitability ranking is explained fully in Section 6.7 of the Level 2 SFRA and summarised in Appendix F and we recommend the Council reviews this section of the document in particular and reconsiders the need for these sites. We have already raised this issue with the Council's consultants undertaking the Sustainability Appraisal/Strategic Environmental Assessment of the Cinderford Area Action Plan.

As our discussions and comments on the Level 2 SFRA have taken place via email and telephone, I have included as an attachment to this letter a table to record some of the comments we have made, and the way they have been addressed. I trust this 'audit trail' will be of use in demonstrating the improvements that have been made to the document and why.

Yours sincerely,

Ruth Clare
Planning Technical Specialist

Direct dial 01684 864383

Direct fax 01684 293599

Direct e-mail ruth.clare@environment-agency.gov.uk

Cc Nigel Gibbons - Forest of Dean District Council

Enclosure: Table showing 'audit trail' of comments

Table showing ‘audit trail’ of Environment Agency comments and Halcrow’s changes on the Cinderford Level 2 SFRA.

Environment Agency’s comments on first draft	How addressed in final draft (including comments made by Halcrow in covering email)
<p>MAPS It would be useful if an additional single map was included that shows all layers in different colours (20,100, 100+cc and 1,000 year extents as well as ordinary watercourses and culverts)</p>	<p>Halcrow confirmed this is included</p>
<p>SURFACE WATER FLOODING Are there integrated surface water and fluvial flooding problems in this location which may require a Surface Water Management Plan (SWMP) to be undertaken?</p>	<p>Halcrow’s view on comment about a possible SWMP in the area: The flooding issues are not extensive enough or sufficiently integrated to warrant an SWMP, but some kind of additional SUDS assessment (as Halcrow did in Telford, for example) may be beneficial to the Council. Beccy Dunn will discuss this with Nigel Gibbons but it will be entirely down to the Council as to whether or not this extra work can be funded.</p>
<p>HISTORIC FLOODING The report mentions a little about historic flooding making reference to the Level 1 SFRA, it would be useful to consider the causes of this flooding as this may indicate further work is required for some of the proposed allocations.</p>	<p>Halcrow has included a fuller description of the flood history in Cinderford including the recorded incidents of flooding from other sources. Halcrow has advised on which sites may need a further assessment of this risk in their individual FRAs.</p>
<p>FLOOD RESILLIANT DESIGN / FUTURE MAINTENANCE The flood modelling shows that the river is sensitive to flows, roughness, debris and it is therefore critical that allowances for this are included in any new development, such as the 600mm freeboard we request on finished floor levels. Any development alongside the Cinderford Brook would require a maintenance plan to look after the brook.</p>	<p>Halcrow confirmed advice on this is included.</p>
<p>MINOR WATERCOURSES Some of the proposed allocations are adjacent to or have minor watercourses running through them, modelling will be required at FRA stage and assessments of any structures (culverts or weirs) which might impact on flood risk.</p>	<p>Halcrow has indicated which sites have minor watercourses and culverts running through them, and have given guidance on how this should be dealt with.</p>
<p>SEQUENTIAL TEST It would probably be easier for us and the LPA, if each site had a reference number and Halcrow gave some scoring in terms of flood risk linked to the text in 7.2 and any other flood risk issues. It just makes it a bit easier for the Local Authority to understand rather than just words, and also shows some sort of audit trail as to how flood risk issues have been considered. It can also identify additional investigation work or studies which the site owners may wish to do if they want</p>	<p>Halcrow has included an assessment of each potential site in Cinderford and have assigned a 'suitability ranking' in order to assist the Council with the Sequential Test. This is explained fully in Section 6.7 and summarised in the new Appendix F. Halcrow has</p>

<p>to persist in putting their site forward for allocation in the event that the LPA are not satisfied that the site is suitable for allocation.</p>	<p>considered the flood risk posed from 'other sources' of flooding in this suitability assessment and have revised the score accordingly</p>
<p>EXCEPTION TEST Most of the proposed allocations are in flood zone 1, there are however some other potential residential allocations in flood zone 2 and flood zone 3 to the North of the plan where we do have concerns that these sites may find it difficult to pass the exception test part c or the amount of developable land may be restricted as a result of flood risk issues. These sites are either adjacent to or next to culverted watercourses and have a small parcel of floodplain within them. In these instances we would be looking for detailed flood risk assessments to consider the following as well as the recommendations Halcrow make within their SFRA..</p> <ul style="list-style-type: none"> - Identification of any overland flood flow routes as a consequence of a culvert blockage or exceeding its capacity. This flow route should be kept clear and free of any buildings or structures. - In the first instance, consideration should be given to opening up of the culvert, which would bring both conservation and flood risk benefits, and may allow additional footprint of buildings if the flooding problem is resolved. - If both the LPA and the Environment Agency believe it is not feasible to remove the culvert, then we would require an 8 metre easement either side of the culvert. If the site is to be developed consideration should be given to the structural condition of the culvert and determine that it is in a reasonable condition. 	<p>Comments from Halcrow as per above on the suitability ranking.</p>