

**TENDRING DISTRICT COUNCIL  
STRATEGIC FLOOD RISK ASSESSMENT  
NON-TECHNICAL SUMMARY**

Prepared for

**TENDRING DISTRICT COUNCIL**

by

Applied Environmental Research Centre Ltd

AERC Ref: 96005/R1549

April 2004

Tey Grove, Elm Lane  
Feering, Colchester  
Essex CO5 9ES

Tel: 01376 572582

Fax: 01376 572700

E-mail: [aerc@aerc.co.uk](mailto:aerc@aerc.co.uk)

**Copyright: Applied Environmental Research Centre Ltd. (April 2004)**

This Non-Technical Summary has been prepared by Applied Environmental Research Centre Ltd ('AERC') under the terms of an agreement with Tendring District Council ('the Client') to provide environmental consultancy services and in accordance with the Client's instructions. The Summary is for the sole use and reliance of the client and it shall not be used or relied upon by any other party without the express written agreement of AERC.

The enclosed summary provides the following primary flood risk information only to assist Tendring District Council with strategic planning considerations regarding:

- Floodplain development allocations;
- Standards of protection provided by flood defences;
- Flood Zone classification according to Planning Policy Guidance Note 25 (PPG25); and
- Main considerations of site-specific Flood Risk Assessments.

AERC shall not be liable for the consequences of any use of the summary for any purpose other than that for which it was prepared.

***Strategic Flood Risk Assessment – Non-Technical Summary: Tendring District Council  
Report Ref: 96005-R1549***

Summary prepared by:	Dr Kelvin James Limbrick Senior Advisor	Signature Date
----------------------	---	-------------------

Summary approved by:	Dr Sue Gregson Director	Signature: Date:
----------------------	----------------------------	---------------------

## NON-TECHNICAL SUMMARY

A total of 327 potential development sites have been identified by Tendring District Council for possible inclusion in its Review Local Plan for 2004 to 2011. An assessment of the main flood risk issues and subsequent land-use suitability for each of these sites has been undertaken and the results summarised in Tables 1 to 5 below.

Almost a third of the potential Local Plan sites assessed were located within floodplains. These sites would automatically require Flood Risk Assessments (FRAs) to be undertaken before any planning application could be fully considered. Of the sites not located in floodplains, some would also require FRAs to be undertaken, but this would be dependent on the proposed land-use type and location.

A quarter of the sites located in floodplains are undefended against flooding. These sites are predominantly in river floodplains. Another quarter of the sites located in floodplains have inadequate flood defences. These sites are predominantly in tidal floodplains. Half of the sites located in floodplains are adequately or well defended against flooding. These sites are all in tidal floodplains.

Almost two thirds of the potential Local Plan sites assessed are located in the Low to Medium Flood Risk Zone and their proposed land-use types considered suitable under Planning Policy Guidance Note 25 (PPG25). The suitability of some sites within this Flood Zone will depend on the chosen land-use type.

Approximately one in six of all sites are located in High Risk, Developed Areas. The proposed land-use types for these sites are considered suitable under PPG25. However, one in ten of all sites are located in High Risk, Undeveloped or Sparsely Developed Areas, with land-use types considered unsuitable under PPG25.

These sites are unsuitable in terms of flood risk as High Risk, Undeveloped or Sparsely Developed Areas are generally not suitable for residential, commercial and industrial development. Unless a particular location is essential, alternative lower-risk locations should be sought for these land-use types.

Four out of five of all sites are likely to require site-specific FRAs. Although only a third of all sites are located directly in floodplains, others represent 'Greenfield' developments. Approximately half of all sites are likely to require site-specific FRAs that would be concerned principally with the sustainable management of post-development surface runoff. However, about one in five of all sites would require FRAs that would need to consider the full range of flood risk issues and mitigation measures.

---

## SUMMARY OF RESULTS

**Table 1. Potential Local Plan Site Use**

<b>Land-use</b>	<b>Number of Potential Local Plan Sites</b>
Brook Park, Clacton	1
Brownfield sites	15
Employment site allocation to be retained	26
Employment sites proposed	13
Exchem works	2
Extension to caravan sites	3
Greenfield sites	59
Late Representations to Issues Report	37
New additional housing sites	6
New LUC housing sites	25
Safeguarded existing employment sites	44
Safeguarded caravan chalet parks	28
Urban capacity sites of 12 or more	68
<b>Total number of sites</b>	<b>327</b>

**Table 2. Floodplain Allocations**

<b>Floodplain Allocation</b>	<b>Number of Potential Local Plan Sites</b>
1:200 Year Tidal	72
1:100 Year Fluvial	19
Neither	236
<b>Total number of sites</b>	<b>327</b>

**Table 3. Standard Of Flood Protection**

<b>Standard Of Flood Protection</b>	<b>Number of Potential Local Plan Sites</b>
At Risk: undefended - Widespread Impacts	7
At Risk: undefended - Restricted Impacts	16
At Risk: Inadequate Defences	24
At Risk: Adequately Defended	33
At Risk: Well Defended	12
Site Located Outside EA's IFM*	235
<b>Total number of sites</b>	<b>327</b>

\* Indicative Floodplain Map

**Table 4. PPG25 Sequential Test Zone Allocation**

<b>Flood Zone</b>	<b>Number of Potential Local Plan Sites</b>
Zone 2: Low to Medium Risk - Suitable	202
Zone 2: Low to Medium Risk - Suitability depends on usage	33
Zone 3a: High Risk Developed - Suitable	55
Zone 3b: High Risk Undeveloped and Sparsely Developed Areas - Unsuitable	35
Zone 3b: High Risk Undeveloped and Sparsely Developed Areas - Suitability depends on usage	2
<b>Total number of sites</b>	<b>327</b>

**Table 5. Main considerations of site-specific FRAs (see Key to Table 5 below)**

<b>Main Considerations of Site-Specific FRAs</b>	<b>Number of Potential Local Plan Sites</b>
Category 1	20
Category 2	28
Category 3	19
Category 4	169
Category 5	24
Category 6	67
<b>Total number of sites</b>	<b>327</b>

**Key to Table 5**

<b>Value</b>	<b>Definition</b>
Category 1	Site-Specific Flood Risk Assessment must: 1) verify the level of flood protection currently provided; 2) ensure that an adequate level of flood protection will be provided throughout the intended site design life (i.e. flood risk mitigation); 3) ensure that Sustainable Urban Drainage Systems are incorporated and that surface runoff is balanced to the present Greenfield Rate and 4) provide details on the emergency evacuation procedure to be adopted in the event of a catastrophic flood event and ensure that those using the site are enrolled on and have access to the Environment Agency's Flood Warning Service.
Category 2	Site-Specific Flood Risk Assessment must: 1) verify the level of flood protection currently provided; 2) ensure that an adequate level of flood protection will be provided throughout the intended site design life (i.e. flood risk mitigation) and 3) provide details on the emergency evacuation procedure to be adopted in the event of a catastrophic flood event and ensure that those using the site are enrolled on and have access to the Environment Agency's Flood Warning Service.
Category 3	Site-Specific Flood Risk Assessment must: 1) verify the level of flood protection currently provided; 2) ensure that Sustainable Urban Drainage Systems are incorporated and that surface runoff is balanced to the present Greenfield Rate and 3) provide details on the emergency evacuation procedure to be adopted in the event of a catastrophic flood event and ensure that those using the site are enrolled on and have access to the Environment Agency's Flood Warning Service.
Category 4	Site-Specific Flood Risk Assessment must ensure that Sustainable Urban Drainage Systems are incorporated and that surface runoff is balanced to the present Greenfield Rate.
Category 5	Site-Specific Flood Risk Assessment must: 1) verify the level of flood protection currently provided and 2) provide details on the emergency evacuation procedure to be adopted in the event of a catastrophic flood event and ensure that those using the site are enrolled on and have access to the Environment Agency's Flood Warning Service.
Category 6	No Flood Risk Assessment Required