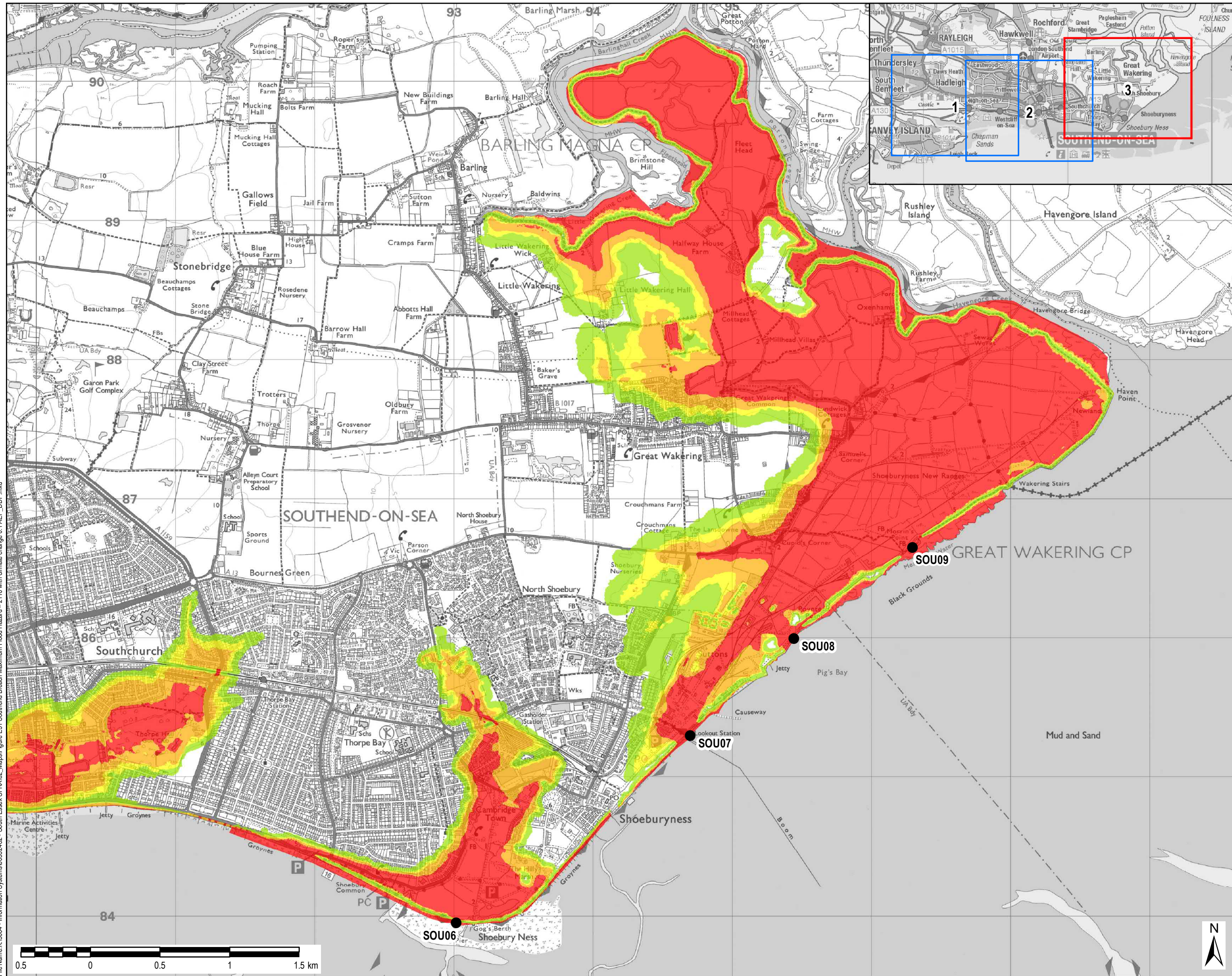


File Name: K:\5004 - Information Systems\60532482 - South Essex SFRA\02\_Maps\Figure E51 Southend Breach Maximum Flood Hazard - 2116 with climate change 0.1 AEP\_DDP.mxd



THIS DRAWING IS TO BE USED ONLY FOR THE PURPOSE OF ISSUE THAT IT WAS ISSUED FOR AND IS SUBJECT TO AMENDMENT

**LEGEND**

- Breach Location
- Maximum Flood Hazard**
- Low Hazard
- Moderate Hazard (Danger to Some)
- Significant Hazard (Danger to Most)
- Extreme Hazard (Danger to All)

**NOTES**

Hydraulic modelling has been undertaken using 2-D hydraulic modelling software MIKE21-HDFM (ver.2011), to assess the effect of a breach at a specific point in the defences. The model simulates 3 tidal cycles with the peak level occurring on the second peak and two slightly smaller peaks either side. Breaches in the defence walls are modelled to occur in advance of the peak tide level to assess the maximum potential volume of inflow into the flood cell. Flood hazard is calculated as a function of flood depth and flow velocity at a particular point in the floodplain, along with a suitable debris factor and is based on the methodology from Flood Risk to People FD2320 (Defra & EA, 2005). These hazard classifications do not indicate a change in the flood probability. When using flood hazard maps it should be noted that they represent the hazard arising from one or more specified breach locations, and that the rating will almost certainly vary spatially if the breach locations are in different local areas. It should be noted that the breach width and depth, though based on EA guidance, are arbitrary and do not necessarily represent the actual dimensions of a potential breach at a given location. A thorough description of methodology and assumptions is included within the SFRA Main Report.

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Purpose of Issue  
**FINAL**

Client  
**Basildon Council**  
BASILDON - BILLERICA - WICKFORD  
**castlepoint**  
**Rochford District Council**  
**southend on sea**  
BOROUGH COUNCIL

Project Title  
**SOUTH ESSEX  
LEVEL 1 SFRA**

Drawing Title  
**SOUTHEND BREACH  
MAXIMUM FLOOD HAZARD  
2116 WITH CLIMATE CHANGE  
0.1% AEP**

|             |               |                |                    |
|-------------|---------------|----------------|--------------------|
| Drawn<br>JW | Checked<br>BB | Approved<br>CP | Date<br>09/04/2018 |
|-------------|---------------|----------------|--------------------|

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**FIGURE E51c**

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