

**KEY**

- Flood Cell
- ◆ Breach Location

**Time To Inundation [Hours]**

- < 1 Hour
- 1 - 4 Hours
- 4 - 8 Hours
- 8 - 12 Hours
- 12 - 16 Hours
- 16 - 20 Hours

Inundation from overtopping prior to breach

**TECHNICAL NOTE**

Hydraulic modelling has been undertaken using 2-D hydraulic modelling software MIKE21-HDFM (ver. 2009), to assess the effect of breaches at specified points and/or overtopping of 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 immediately before the peak tidal level to assess the potential impact of rapid inundation of floodwater.

In order to map Time to Inundation, time 0 (zero) is designated as the time when tidal water enters the breach. The <1 hour band encompasses all areas that are inundated within the first hour of water passing through the breach and into the flood cell. Subsequent bands have been produced to show inundated cells for each 4 hour interval up to 20 hours. Areas that experience flooding as a result of overtopping of the defences prior to the breach event, are shown as hatched areas.

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**FLOODABLE AREAS NOT SHOWN**

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SCALE @ A3 1 : 18,000		ISSUING OFFICE London

THAMES GATEWAY SOUTH ESSEX  
STRATEGIC FLOOD RISK ASSESSMENT

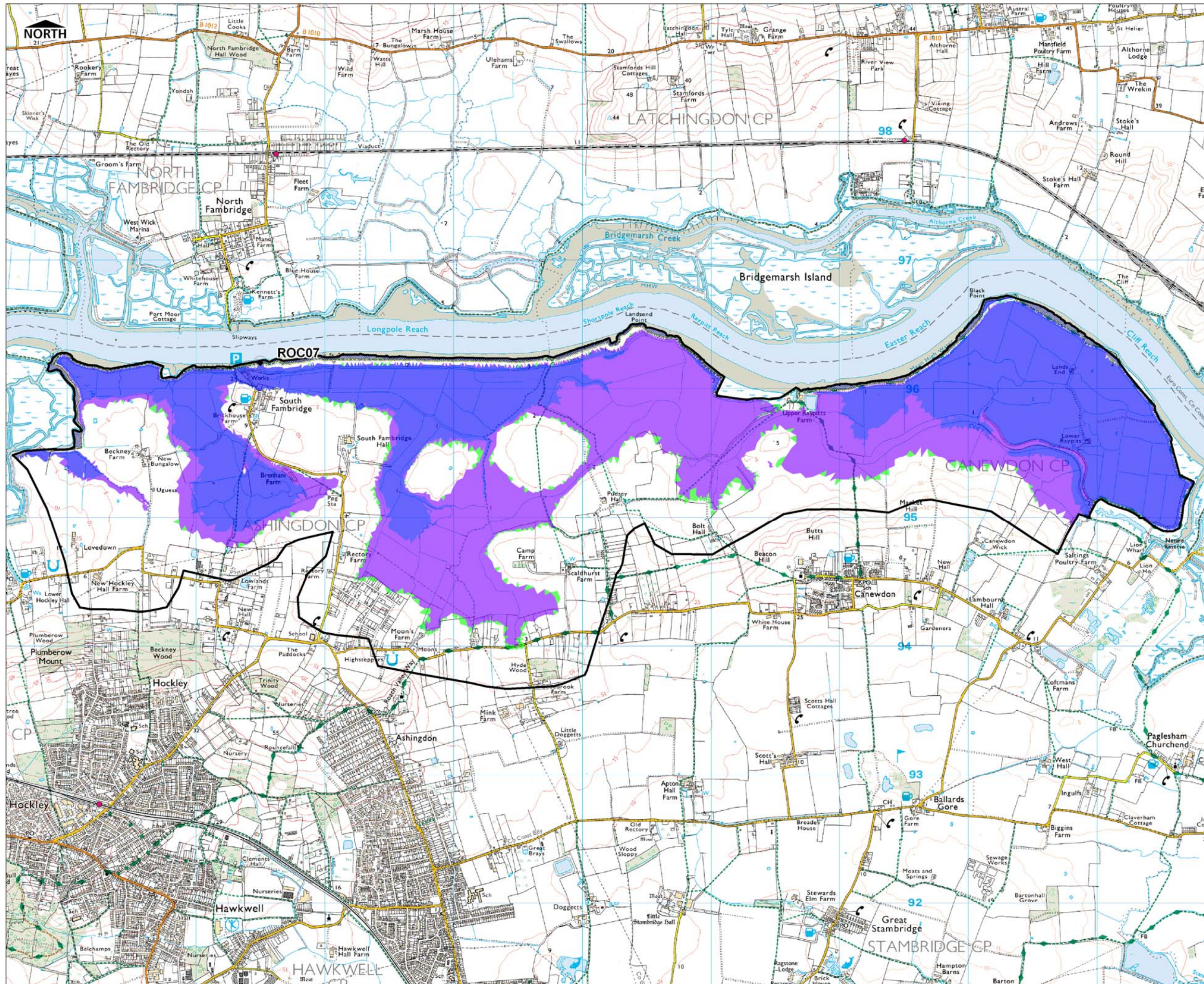
TIME TO INUNDATION  
1000YR (2010)  
BREACH ROC06



Scott Wilson  
6-8 Greencoat Place  
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Tel: (020) 7798 5000

DRAWING NUMBER  
**FIGURE D-20**





**KEY**

- Flood Cell
- Breach Location

**Time To Inundation [Hours]**

- < 1 Hour
- 1 - 4 Hours
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- 12 - 16 Hours
- 16 - 20 Hours

Inundation from overtopping prior to breach

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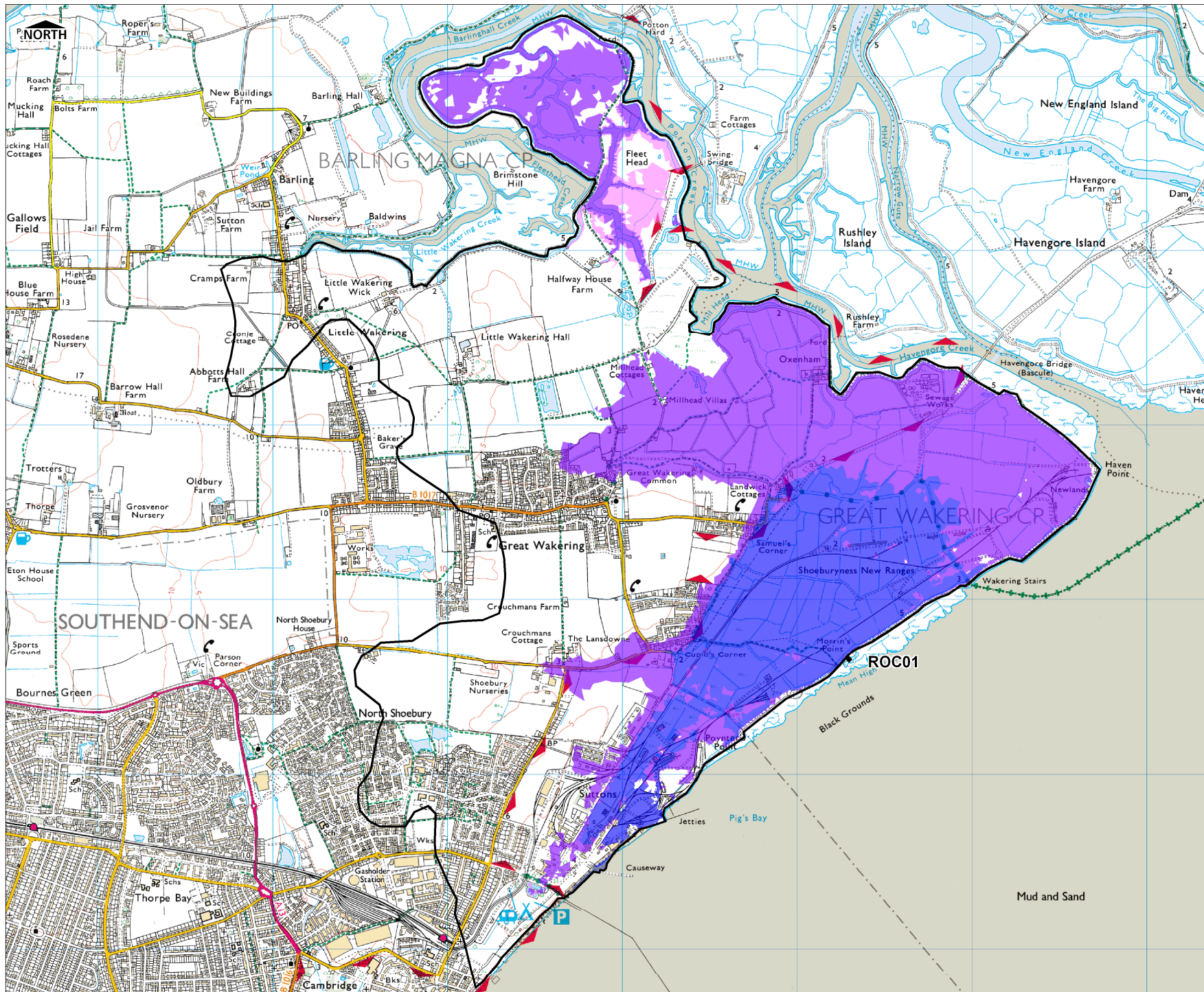
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**THAMES GATEWAY SOUTH ESSEX  
STRATEGIC FLOOD RISK ASSESSMENT**

**TIME TO INUNDATION  
1000YR (2010)  
BREACH ROC07**

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 6-8 Greencoat Place  
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 Tel: (020) 7798 5000





**KEY**

- Flood Cell
- ◆ Breach Location

**Time To Inundation [Hours]**

- < 1 Hour
- 1 - 4 Hours
- 4 - 8 Hours
- 8 - 12 Hours
- 12 - 16 Hours
- 16 - 20 Hours
- Inundation from overtopping prior to breach

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**THAMES GATEWAY SOUTH ESSEX  
STRATEGIC FLOOD RISK ASSESSMENT**

**TIME TO INUNDATION  
0200YR (2010)  
BREACH ROC01**

Basildon Council  
SANDON • FREESTREET • WOODS

castlepoint

Rochford  
DISTRICT COUNCIL

Scott Wilson  
6-8 Greencoat Place  
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Tel: (020) 7798 5000

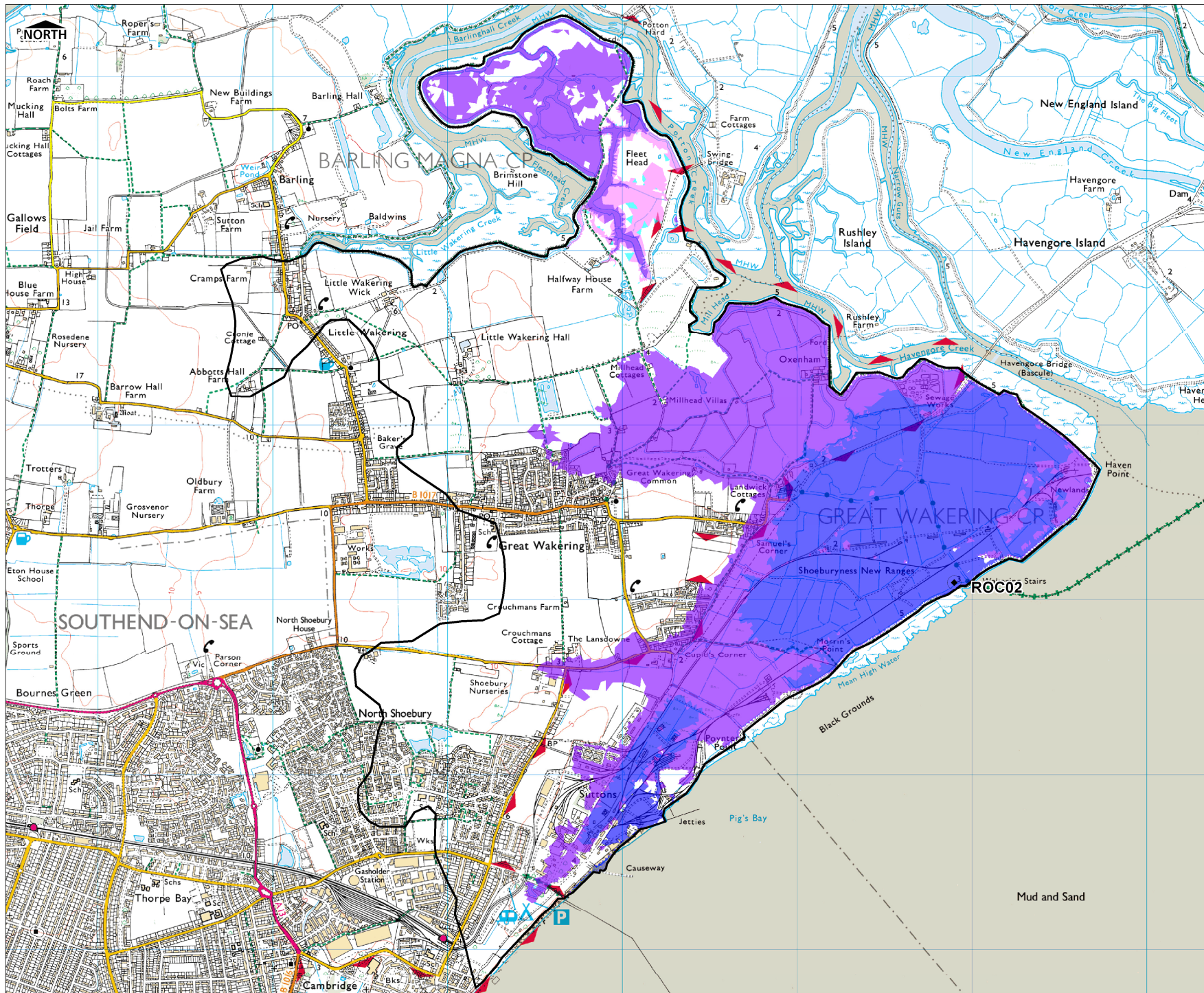
SCOTT WILSON

DRAWING NUMBER

**FIGURE D-22**

REV 01





**KEY**

- Flood Cell
- ◆ Breach Location

**Time To Inundation [Hours]**

- < 1 Hour
- 1 - 4 Hours
- 4 - 8 Hours
- 8 - 12 Hours
- 12 - 16 Hours
- 16 - 20 Hours
- Inundation from overtopping prior to breach

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**THAMES GATEWAY SOUTH ESSEX  
STRATEGIC FLOOD RISK ASSESSMENT**

**TIME TO INUNDATION  
0200YR (2010)  
BREACH ROC02**

Basildon Council  
MARDON • FREESTAT • WOODS

castlepoint

Rochford  
DISTRICT COUNCIL

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SCOTT WILSON

DRAWING NUMBER

**FIGURE D-23**

REV 01