

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

**LEGEND**

- Administrative Boundaries
- Main River
- Ordinary Watercourse
- Flood Records (Essex County Council)

**Maximum Flood Depth (m)**

- 0.1 - 0.5m
- 0.5 - 1.0m
- 1.0 - 1.5m
- 1.5 - 2.0m
- 2.0 - 3.0m
- > 3.0m

**Asset Information Management System - Defences**

- Entrenchment
- High Ground
- Wall
- Flood Gate

**Notes**

An update of the Environment Agency national programme of coastal and fluvial modelling, a model of the Colne and Blackwater Estuary was developed in 2010 (UKCP18). In the background of the River Colne, the most recent model used was the Environment Agency's 2010 model. The River Colne Catchwater upstream to Wivenhoe Station, and the River River upstream to Layer de la Haye, (but not as far as Marks Tey).

Outputs from the modelling from defences scenarios, have been presented. As part of the development of a model to simulate a breach in the Colne Estuary, the Environment Agency has produced a set of maps showing the maximum depth of flooding experienced at each point in the floodplain through-out the extreme model calculation.

This map is intended to provide a strategic overview of flood risk and should not be used to assess flood risk for individual properties.

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Revision Details	No.	Check	Date	By

Proposed by Issue

**VERSION 1**

Client: Colchester, the place to live, learn, work, and visit.

Project No: COLCHESTER BOROUGH COUNCIL STRATEGIC FLOOD RISK ASSESSMENT

Drawn	Checked	Approved	Date
SL	SK	CP	AUG 2016

Scale of A3: 1:20,000

ACCOM Inland Project No: B0473444

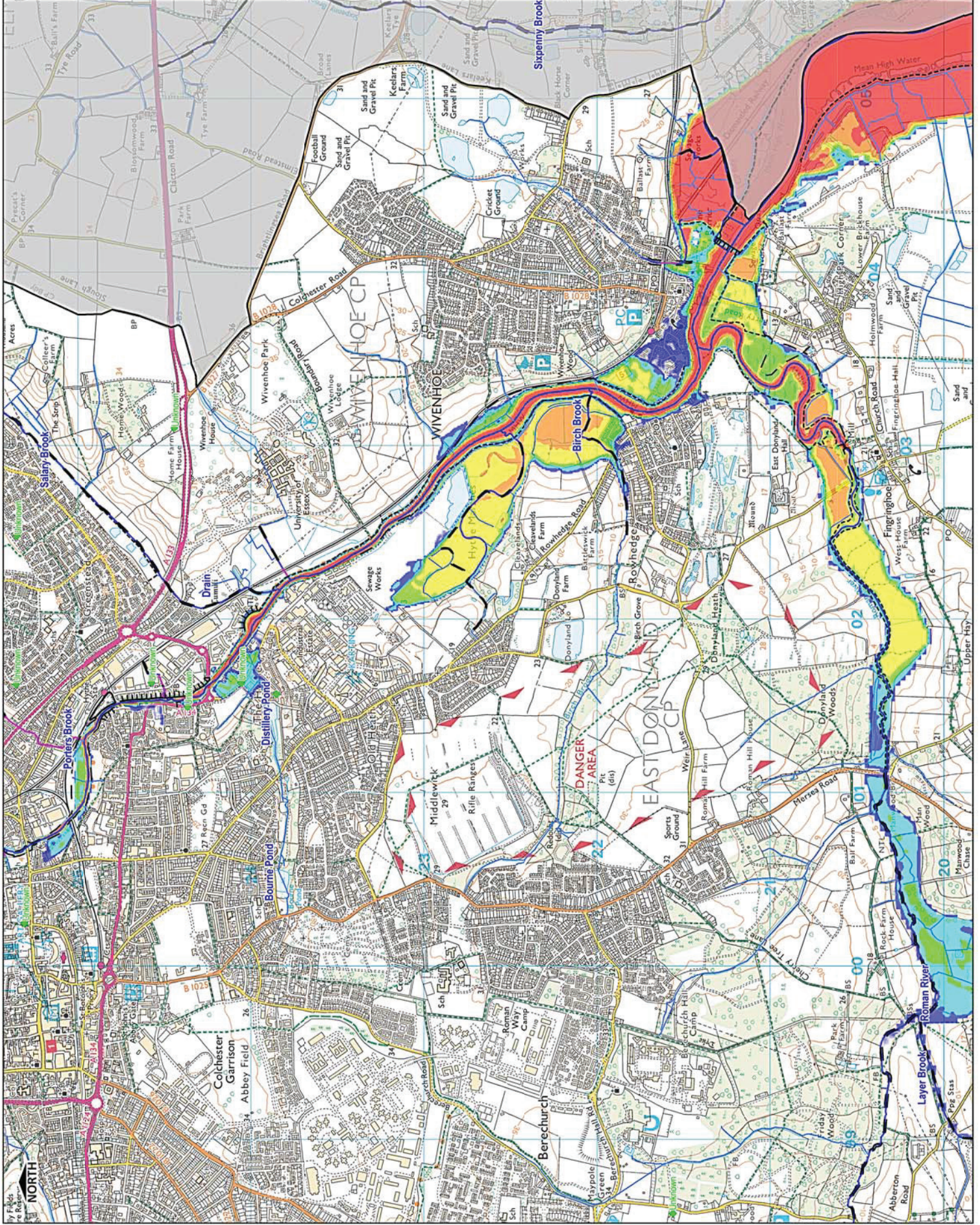
**COLCHESTER BOROUGH COUNCIL STRATEGIC FLOOD RISK ASSESSMENT**

**COLNE AND BLACKWATER ESTUARY MODEL MAXIMUM FLOOD DEPTH 0.1% AEP (1000YR) INCL CLIMATE CHANGE 2016**

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1

**FIGURE A4.1**



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**LEGEND**

- Administrative Boundaries
- Main River
- Ordinary Watercourse
- Flood Records (Essex County Council)

**Maximum Flood Depth (m)**

- 0.1 - 0.5m
- 0.5 - 1.0m
- 1.0 - 1.5m
- 1.5 - 2.0m
- 2.0 - 3.0m
- > 3.0m

**Asset Information Management System - Defences**

- Embankment
- High Ground
- Wall
- Flood Gate

**Notes**

As part of the Environment Agency national programme of coastal and fluvial modelling, a model of the Colne and Blackwater Estuary was developed (UCL/EA project). The modelling of the River Colne was the most recent model run for the River Colne. The River Colne was modelled to Colchester upstream to Wyle Station, and the River River upstream to Layer de la Haye (but not as far as Marks Tey).

Outputs from the modelling from selected scenarios, have been presented. As part of the development of a model to simulate a breach in the Colne, the model was run for the present day (2010), and modelled for climate change to 2115. The outputs presented in the adjacent maps therefore correspond to these time horizons.

Maximum flood depth mapping has been generated which shows the maximum depth of flooding experienced at each point in the floodplain through out the entire model calculation.

This map is intended to provide a strategic overview of flood risk and should not be used to assess flood risk for individual properties.

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Revision Details	No.	Check	Date	By

**Proposed Issue**

**VERSION 1**

**Client**

Colchester, the place to live, learn, work, and visit.

**Project Title**

COLCHESTER BOROUGH COUNCIL  
STRATEGIC FLOOD  
RISK ASSESSMENT

**Location**

COLNE AND BLACKWATER ESTUARY MODEL  
MAXIMUM FLOOD DEPTH  
0.1% AEP (100YR) INCL CLIMATE CHANGE 2115

Drawn	Checked	Approved	Date
SL	SK	CP	AUG 2016

**ACCOM Inset Project No:** B0473444

**Scale of A1:** 1:35,000

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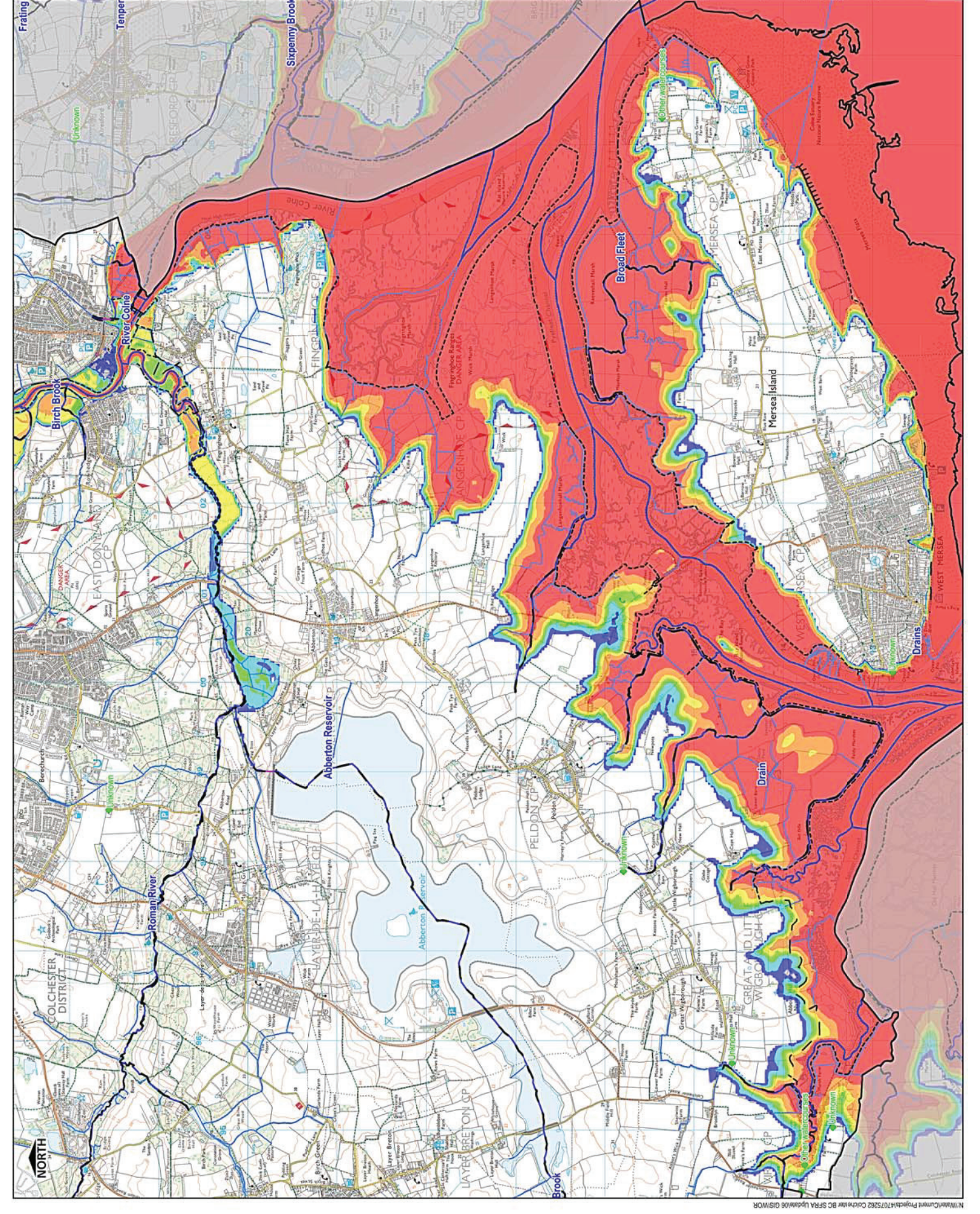
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**Drawing Number**

**FIGURE A4.2**

**Revision**

**1**

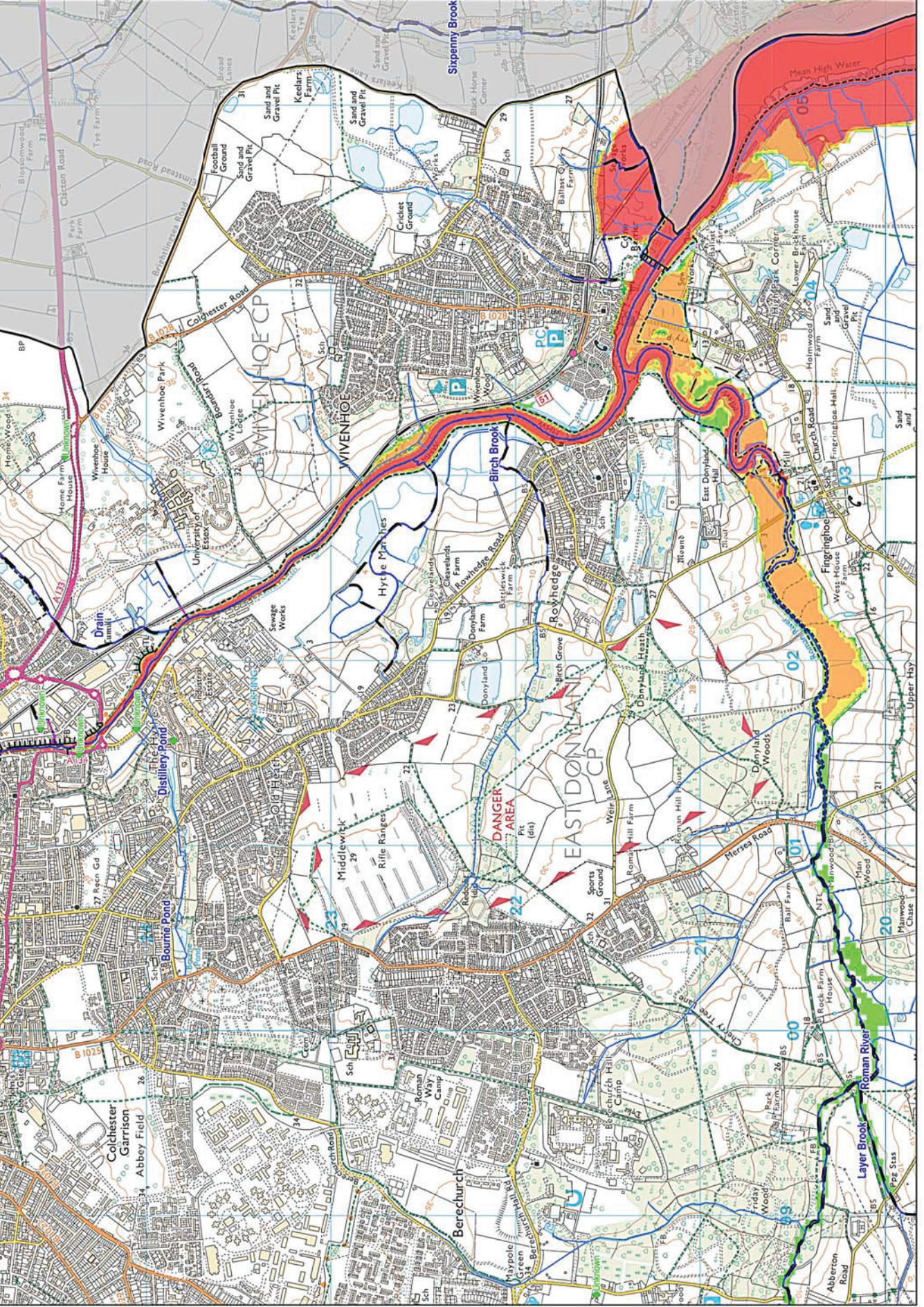


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**LEGEND**  
 Administrative Boundaries  
 Main River  
 Ordinary Watercourse  
 Flood Records (Essex County Council)  
 Hazard Rating  
 Flood hazard is calculated as a function of the flood depth and flow velocity at a particular point in the floodplain, along with a suitable factor, and is shown on the hazard rating map in five categories of risk. For more information on the Flood Hazard Rating and Government Agency (GAs).  
 Low Hazard  
 Moderate Hazard (DANGER for Some)  
 Significant Hazard (DANGER for Most)  
 Extreme Hazard (DANGER for All)  
 Asset Information Management System - Defences  
 Embankment  
 High Ground  
 Flood Gate  
 Wall

**Notes**  
 An update of the Environment Agency national programme of coastal and fluvial modelling, a model of the Colne and Blackwater Estuary was developed for the purposes of this study. The model is based on the most recent data available for the Colne and Blackwater Estuary. The model was developed using the Colchester Urban Storm Water Model (CUSHM) software. The model is based on data from a site visit in late 2010, and includes data for the current climate change to 2015. The outputs presented in the adjacent maps therefore correspond to these time horizons.  
 Outputs from the modelling from selected scenarios, have been presented in the form of hazard rating maps. These maps show the areas of the Colne and Blackwater Estuary that are at risk of flooding. The hazard rating maps are based on the following categories: Low Hazard, Moderate Hazard, Significant Hazard, and Extreme Hazard. The assessment of these categories is based on flood risks to people (F0202), (D02) & (D01) (Where v = velocity (m/s), D = depth (m) and GF = sports facility).  
 This map is intended to provide a strategic overview of flood risk and should not be used to assess flood risk for individual properties.

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 Revision Details  
 No. Change Date Issue  
 Purpose of Issue  
**VERSION 1**  
 Client  
 Colchester, the place to live, learn, work, and visit.  
 Project ID  
**COLCHESTER BOROUGH COUNCIL  
 STRATEGIC FLOOD  
 RISK ASSESSMENT**  
 Drawn By  
 Checked By  
 Approved By  
 Date  
 Scale at A4  
 AECOM Internal Project No.  
 B0473444  
 1:20,000  
 Drawing No.  
 0.5% AEP (GD04) 2015  
 AECOM Infrastructure & Environment UK Limited  
 15, Waterhouse Lane  
 Wokingham, Hampshire  
 RG40 7AT  
 Tel: +44 (0)1329 247200  
 Fax: +44 (0)1329 247201  
 www.aecom.com  
**AECOM**  
 Drawing Number  
**FIGURE A5.1**  
 Rev  
**1**



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**LEGEND**

- Administrative Boundaries
- Main River
- Ordinary Watercourse
- Flood Records (Essex County Council)

**Hazard Rating**

Flood hazard is calculated as a function of the flood depth and flow velocity at a particular point in the floodplain, along with a suitable debris factor, and is presented in the following hazard rating categories:

- Low Hazard
- Moderate Hazard (Danger for Some)
- Significant Hazard (Danger for Most)
- Extreme Hazard (Danger for All)

**Asset Information Management System - Defences**

- Embankment
- High Ground
- Flood Gate
- Wall

**Notes**

As part of the Environment Agency national programme of coastal and fluvial modelling, a model of the Colchester and Blackwater Estuary was developed (TU) (Colchester) in the background of the River Colchester. The model extent covers the area from the River Colchester at the Colchester station to the River Colchester at the River Colchester station. The model extent covers the area from the River Colchester at the Colchester station to the River Colchester at the River Colchester station.

Output from the modelling from selected scenarios, have been presented. As part of the development of a model to simulate a breach in the Colchester River, the model was run for a period of 10 days (2010) and modelled the breach in the river. The outputs presented in the adjacent maps therefore correspond to these time horizons.

Flood hazard is a function of the flood depth and flow velocity as well as a debris factor. It is not possible to predict the exact location of debris in the floodplain. The debris factor is a subjective measure of debris risk and should not be used to assess flood risk for individual properties.

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Revision Details	No.	Check Date	Date

**VERSION 1**

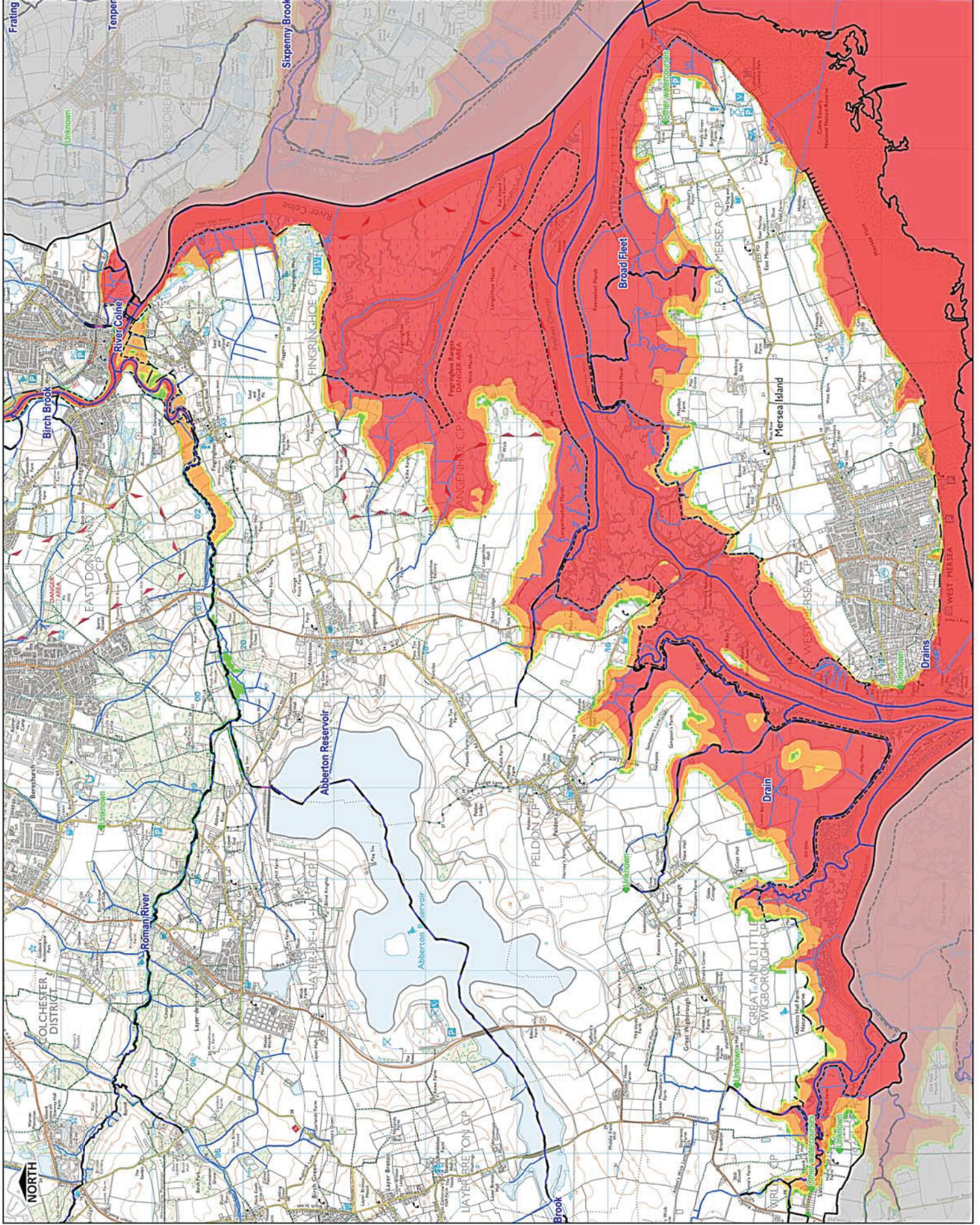
Colchester, the place to live, learn, work, and visit.

**COLCHESTER BOROUGH COUNCIL  
STRATEGIC FLOOD  
RISK ASSESSMENT**

Client: COLCHESTER BOROUGH COUNCIL  
Project No: 60473444  
Scale: A3  
Date: AUG 2016

ACCOM Investment Project No: 1-35,000  
Scale: A3  
Date: AUG 2016

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**LEGEND**

- Administrative Boundaries
- Main River
- Ordinary Watercourse
- Flood Records (Essex County Council)

**Hazard Rating**

Flood hazard is calculated as a function of the flood depth and flow velocity at a particular point in the floodplain, along with a suitable factor, and is expressed on the following hazard rating scale:

- Low Hazard
- Moderate Hazard (Danger for Some)
- Significant Hazard (Danger for Most)
- Extreme Hazard (Danger for All)

**Asset Information Management System - Defences**

- High Ground
- Embankment
- Flood Gate
- Wall

**Notes**

An update of the Environment Agency national programme of coastal and fluvial modelling, a model of the Colne and Blackwater Estuary was developed in 2010 (M10). In the background of the River Colne, the most recent model used was the Environment Agency's River Colne Flood Hazard Model (RCFH) developed in 2010. The River Colne Flood Hazard Model (RCFH) was developed by the Environment Agency in 2010, and is based on the River Colne Flood Hazard Model (RCFH) developed by the Environment Agency in 2010. The River Colne Flood Hazard Model (RCFH) was developed by the Environment Agency in 2010, and is based on the River Colne Flood Hazard Model (RCFH) developed by the Environment Agency in 2010.

Output from the modelling from selected scenarios, have been presented in this report. The outputs presented in the adjacent maps have been generated from the River Colne Flood Hazard Model (RCFH) developed by the Environment Agency in 2010. The River Colne Flood Hazard Model (RCFH) was developed by the Environment Agency in 2010, and is based on the River Colne Flood Hazard Model (RCFH) developed by the Environment Agency in 2010.

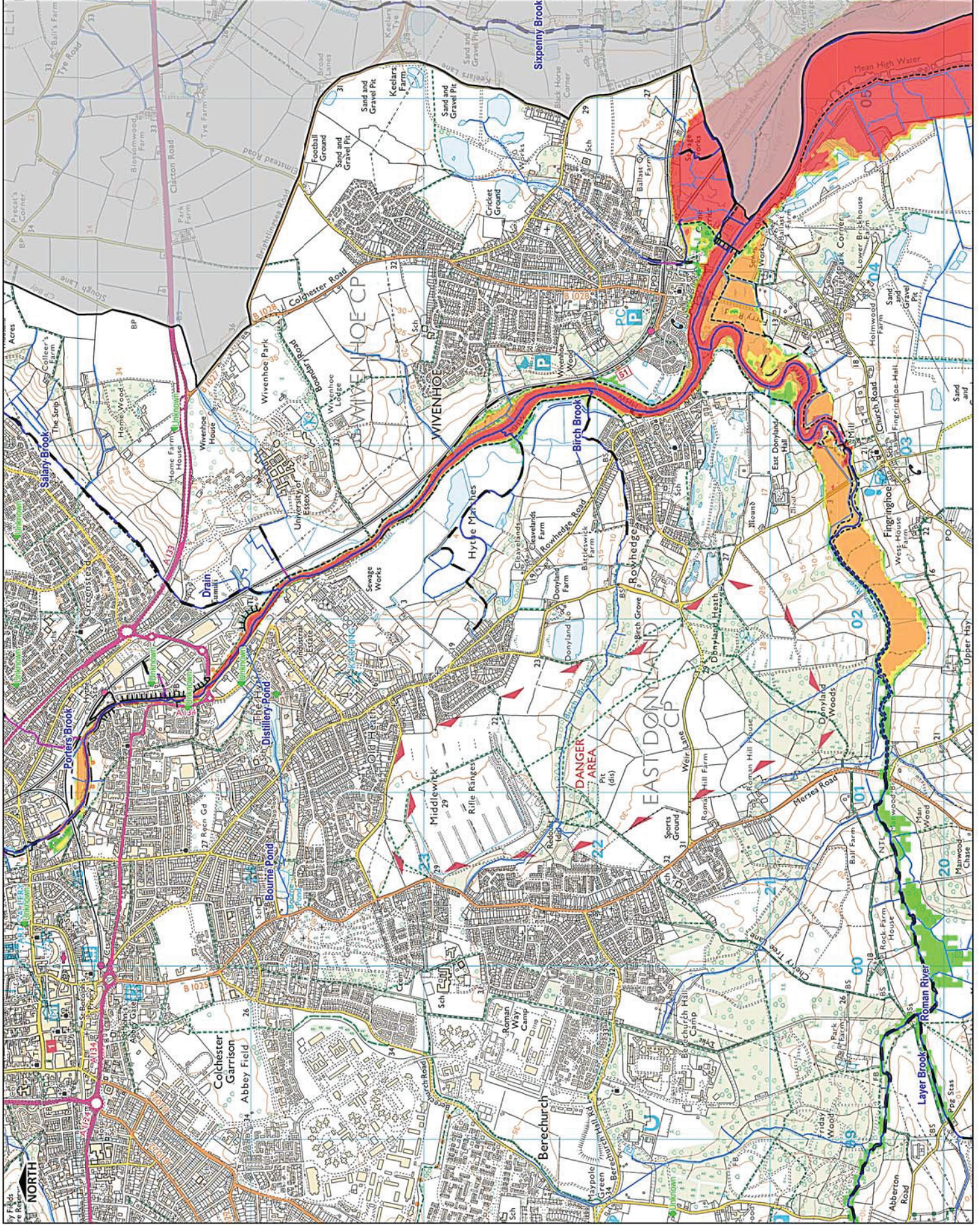
This map is intended to provide a strategic overview of flood risk and should not be used to assess flood risk for individual properties.

Revision Details	No.	Check	Date	By
Purpose of Issue				
VERSION 1				
Client				
Project File				
Project No.				
Colchester, the place to live, learn, work, and visit.				

**COLCHESTER BOROUGH COUNCIL**  
**STRATEGIC FLOOD**  
**RISK ASSESSMENT**

Drawing Title: COLNE AND BLACKWATER ESTUARY MODEL MAXIMUM FLOOD HAZARD  
 0.5% AEP (200YR) INCL. CLIMATE CHANGE 2115  
 AECOM Internal Project No: B0473444  
 Scale of A1: 1:20,000  
 Date: AUG 2016

**AECOM**  
 AECOM Infrastructure & Environment UK Limited  
 11th Floor, 110 Abchurch Lane, London EC4N 3DF  
 T: +44 (0)20 7008 8000  
 F: +44 (0)20 7008 8001  
 E: uk@aecom.com  
 Drawing Number: **FIGURE A6.1**  
 Rev: **1**



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**LEGEND**

- Administrative Boundaries
- Main River
- Ordinary Watercourse
- Flood Records (Essex County Council)

**Hazard Rating**

Flood hazard is calculated as a function of the flood depth and flow velocity at a particular point in the floodplain, along with a suitable factor, and is presented in the following hazard rating categories:

- Low Hazard
- Moderate Hazard (Danger for Some)
- Significant Hazard (Danger for Most)
- Extreme Hazard (Danger for All)

**Asset Information Management System - Defences**

- Embankment
- High Ground
- Flood Gate
- Wall

**Notes**

As part of the Environment Agency national programme of coastal and fluvial modelling, a model of the Colne and Blackwater Estuary was developed (TU101001). The purpose of the River Colne Flood Hazard Assessment (RCHFA) is to provide a detailed assessment of the flood hazard to Colchester upstream to Mythe Station, and the Roman River upstream to Layer de la Haye, (but not as far as Marks Tey).

Outputs from the modelling from selected scenarios, have been presented. As part of the development of a model to simulate a breach in the Colne River, the model was used to assess the flood hazard to the town of Colchester in the event of a breach in the present day (2010), and to assess the flood hazard to the town of Colchester in the event of a breach in the present day (2010), and to assess the flood hazard to the town of Colchester in the event of a breach in the present day (2010).

Flood hazard is a function of the flood depth and flow velocity as well as a debris factor. Sites are not well within the TUFLOW model domain have been identified. The model does not take account of the debris factor. The hazard categories are based on Flood Risk to People (FRRP) (Data & Defences) (Where v = velocity (m/s), D = depth (m) and GF = debris factor).

This map is intended to provide a strategic overview of flood risk and should not be used to assess flood risk for individual properties.

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Revision Details	No.	Check Date	Date

**VERSION 1**

Colchester, the place to live, learn, work, and visit.

**COLCHESTER BOROUGH COUNCIL**  
**STRATEGIC FLOOD RISK ASSESSMENT**

**COLNE AND BLACKWATER ESTUARY MODEL**  
**FLUVIAL FLOOD HAZARD AND RISK ASSESSMENT**  
**0.5% AEP (2010) INCL. CLIMATE CHANGE 2115**

Item	SL	SK	CP	DATE
Approved				AUG 2016
Scale of A1				
ACCOM Internal Project No.				1720000

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Drawing Number: **FIGURE A6.2**  
 Rev: **1**

