

THIS DRAWING IS TO BE USED ONLY FOR THE PURPOSES OF WHICH IT WAS ISSUED FOR AND IS SUBJECT TO AMENDMENT WITHOUT NOTICE.

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 return period and a return period in flood risks to repair (R2020) (Data and Government Agency, 2020).
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 Galls
Wall

Notes
As one of the studies in the Level 2 Strategic Flood Risk Assessment (SFRA) for Colchester Borough Council (CBC), revised modelling has been carried out to provide an up to date assessment of the risk of flood from the River Colne to the east of the town of Colchester. Details are provided in Appendix B.
Flood hazard is a function of the flood depth and flow velocity as well as the characteristics of the floodplain. Each grid cell within the EUFLOOD model contains a mean assigned one of four hazard categories: Extreme Hazard, Significant Hazard, Moderate Hazard and Low Hazard. The hazard categories are based on Flood Risk to People (FR2020) (Data & Government Agency, 2020), using the following equation:
Flood Hazard Rating = (FR2020) + DF
Where DF = defences (100, 0 = open field) and DF = defences 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 Number	Revision Description	By	Check	Date	Status
1	Issue for Approval				

VERSION 1
Colchester, the place to live, learn, work, and visit.

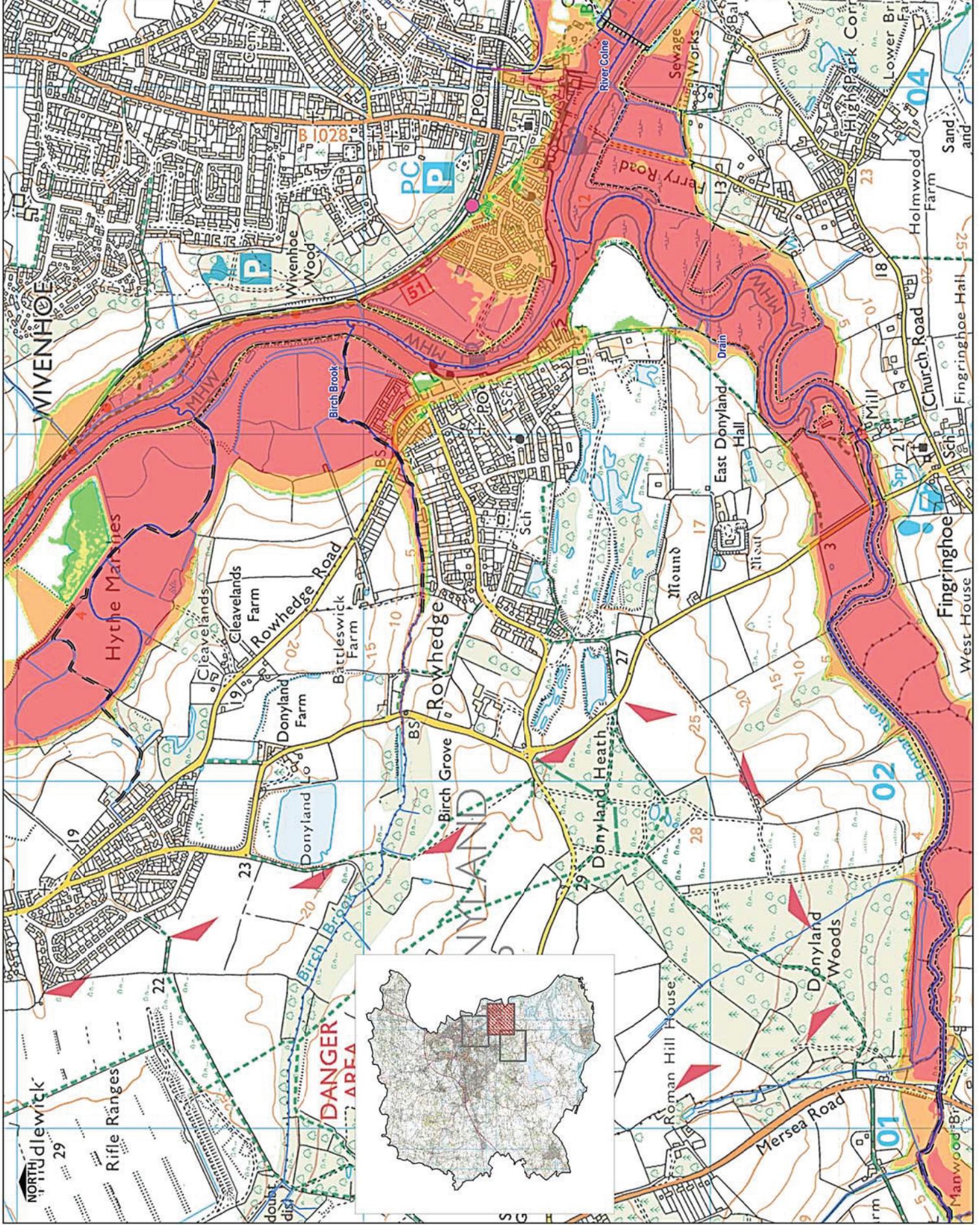
COLCHESTER BOROUGH COUNCIL
STRATEGIC FLOOD RISK ASSESSMENT

Drawing Title
COLNE BARRIER BREACH MODELLING
MAXIMUM FLOOD HAZARD
0.1% AEP (100YR) 2015

Drawn	Checked	Approved	Date
SL	SK	CP	AUG 2016

Scale of A3
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FIGURE A25
1



THIS DOCUMENT 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)

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 data set, and is presented in the following categories:

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

Asset Information Management System - Delineations

- Embankment
- High Ground
- Flood Gate
- Wall

Notes

As part of the studies in the Level 2 Strategic Flood Risk Assessment (SFRA) for Colchester Borough Council (CBC), revised modelling has been undertaken to provide an up to date assessment of the flood risk to the site. This assessment is based on the most up to date data available at the time of writing. Details are provided in Appendix B.

Flood hazard is a function of the flood depth and flow velocity as well as the characteristics of the floodplain. Each plot with the TUFLOW model crown has been assigned one of four hazard categories: Extreme Hazard, Significant Hazard, Moderate Hazard and Low Hazard. The hazard rating is based on the Environment Agency (EA) 2005, using the following equation:

Flood hazard rating = $(V \times D)^2 \times (1 + D)$

Where V = velocity (m/s), D = depth (m) and DF = 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	By

VERSION 1

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

COLCHESTER BOROUGH COUNCIL
STRATEGIC FLOOD
RISK ASSESSMENT

COLINE BARRIER BREACH MODELLING
MAXIMUM FLOOD HAZARD
0.1% AEP (1000/YR) 2015

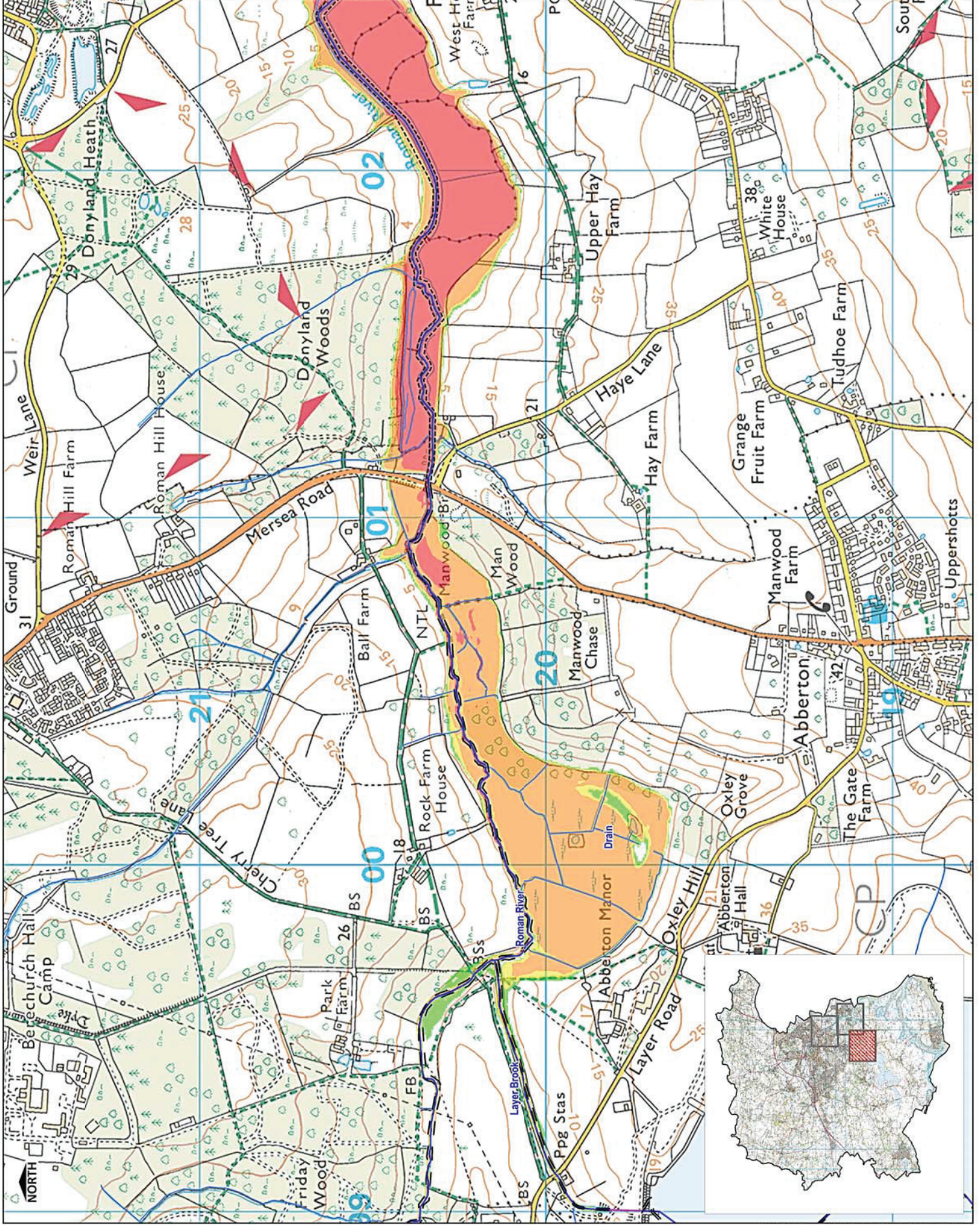
Drawn: SL
 Checked: SK
 Approved: CP
 Date: AUG 2016

AECOM Internal Project No: 60473444
 Scale: A3
 Scale of Map: 1:10,000

AECOM

Project Number: **FIGURE A26**

Rev: **1**



THIS DRAWING IS TO BE USED ONLY FOR THE PURPOSES OF WHICH 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
 - High Ground
 - Wall
 - Enbankment
 - Flood Gate

Notes

As part of the update to the Level 2 Strategic Flood Risk Assessment (SFRA) for Colchester Borough Council (CBC), revised modelling has been undertaken to provide an up-to-date assessment of the residual flood risk at Wivenhoe. Details are provided in Appendix B.

Maximum flood depths have been presented above the map to ensure a clear understanding of the extent of the risk. The map does not intend 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	Scale

Purpose of Issue
VERSION 1

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

Project File
COLCHESTER BOROUGH COUNCIL
STRATEGIC FLOOD
RISK ASSESSMENT

Drawing Title
COLLINE BARRIER BREACH MODELLING
MAXIMUM FLOOD DEPTH
0.1% AEP (100YR) INCL. CLIMATE CHANGE 2115

Drawn
Checked
Approved
Date

Scale of A3
1:10,000

ACCOM Internal Project No.
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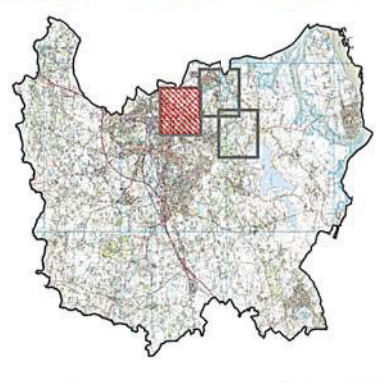
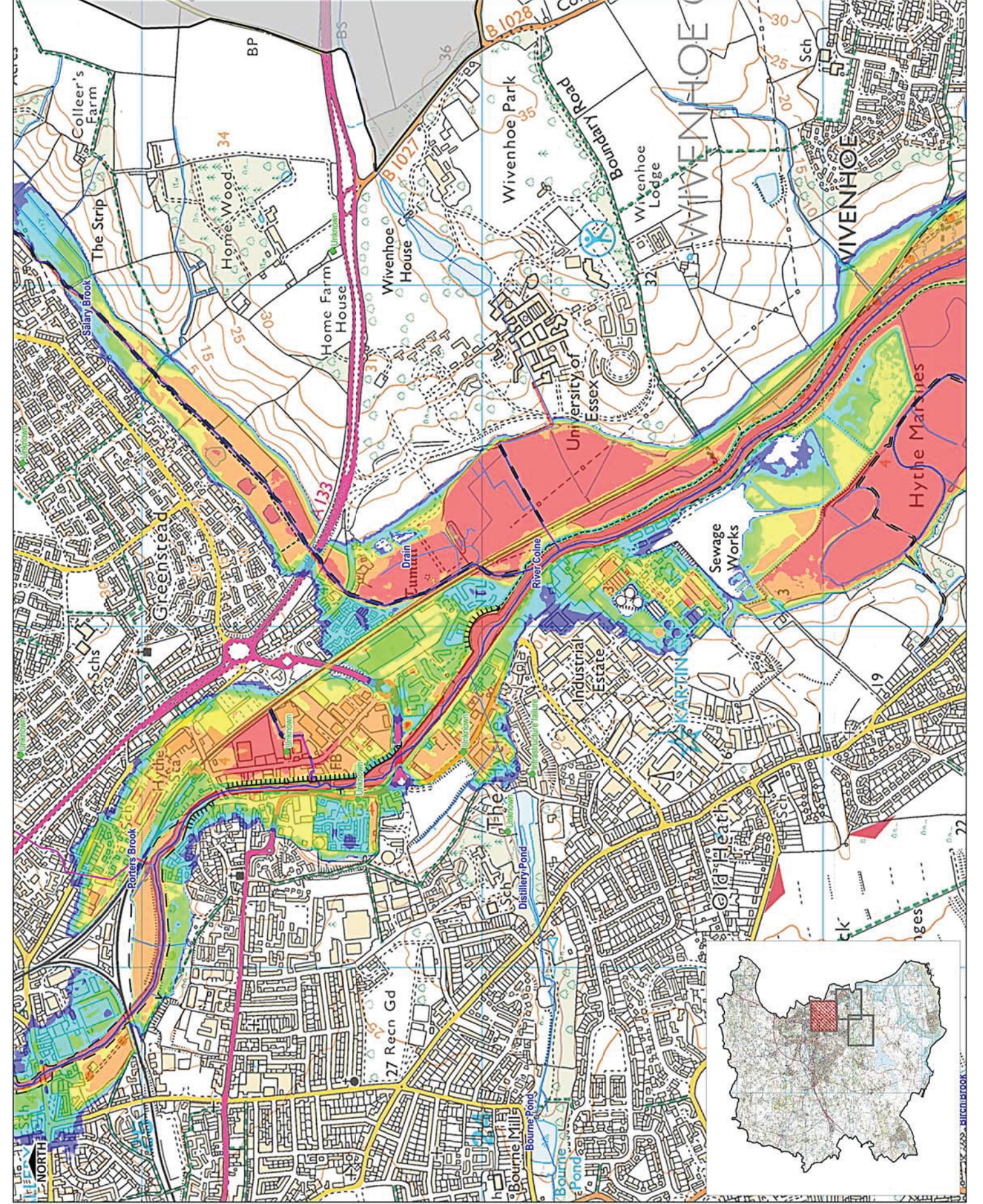


FIGURE A27
1

THIS DRAWING IS TO BE USED ONLY FOR THE PURPOSES OF ISSUE THAT IT WAS ISSUED FOR AND IS SUBJECT TO AMENDMENT WITHOUT NOTICE.

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

- High Ground
- Embankment
- Wall
- Flood Gate

Notes

As part of the update to the Level 2 Strategic Flood Risk Assessment (SFRA) for Colchester Borough Council (CBC), revised modelling has been undertaken to provide an up-to-date assessment of the residual flood risk from the River Colne and the River Crouch in the Colne Basin at Wivenhoe. Details are provided in Appendix B.

The maximum flood depths have been presented above the 1:10,000 return period of flooding throughout each point in the catchment throughout the entire model simulation.

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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Version 1

Client Colchester, the place for life, learn, work, and visit.

Project File COLCHESTER BOROUGH COUNCIL STRATEGIC FLOOD RISK ASSESSMENT

Drawing Title COLNE BARRIER BREACH MODELLING MAXIMUM FLOOD DEPTH 0.1% AEP (100YR) INCL CLIMATE CHANGE 2115

Drawn SL

Checked SK

Approved CP

Date AUG 2016

Scale of A3 1:10,000

AECOM Internal Project No. 60473444

Revision 1

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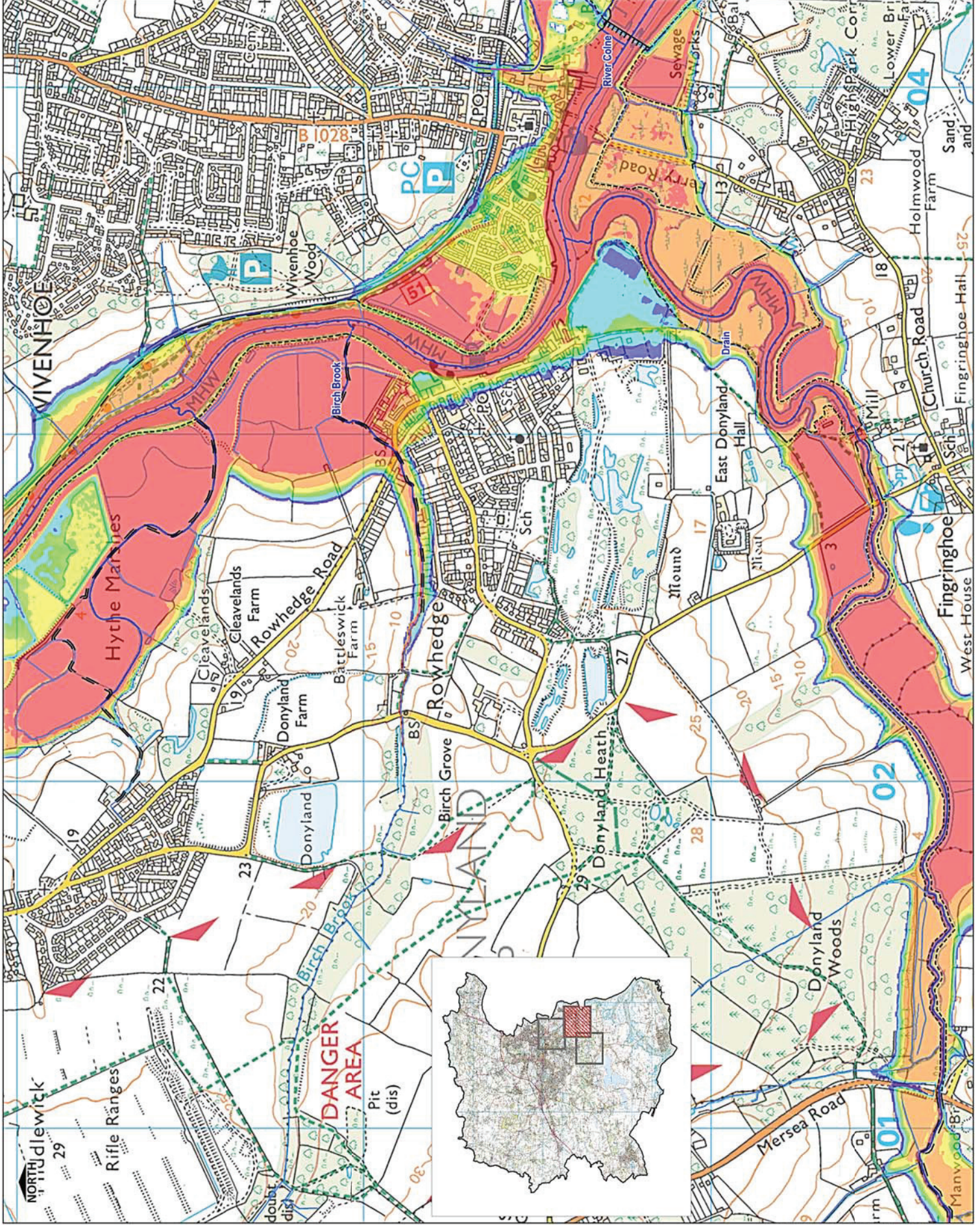
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LEGEND

- 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 update to the Level 2 Strategic Flood Risk Assessment (SFRA) for Colchester Borough Council (CBC), revised modelling has been undertaken to provide an up-to-date assessment of the residual flood risk from the River Colne and the River Crouch. Details are provided in Appendix B.

Maximum Flood Depth results have been presented above the 100-year return period of flooding throughout each point in the catchment throughout the entire model simulation.

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	By	Check	Date	Status

Purpose of Issue: **VERSION 1**

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

Project File: COLCHESTER BOROUGH COUNCIL STRATEGIC FLOOD RISK ASSESSMENT

Drawing Title: COLNE BARRIER BREACH MODELLING MAXIMUM FLOOD DEPTH

0.1% AEP (1000YR) INCL. CLIMATE CHANGE 2115

Drawn	Checked	Approved	Date
SL	SK	CP	AUG 2016

AECOM Internal Project No: 60473444

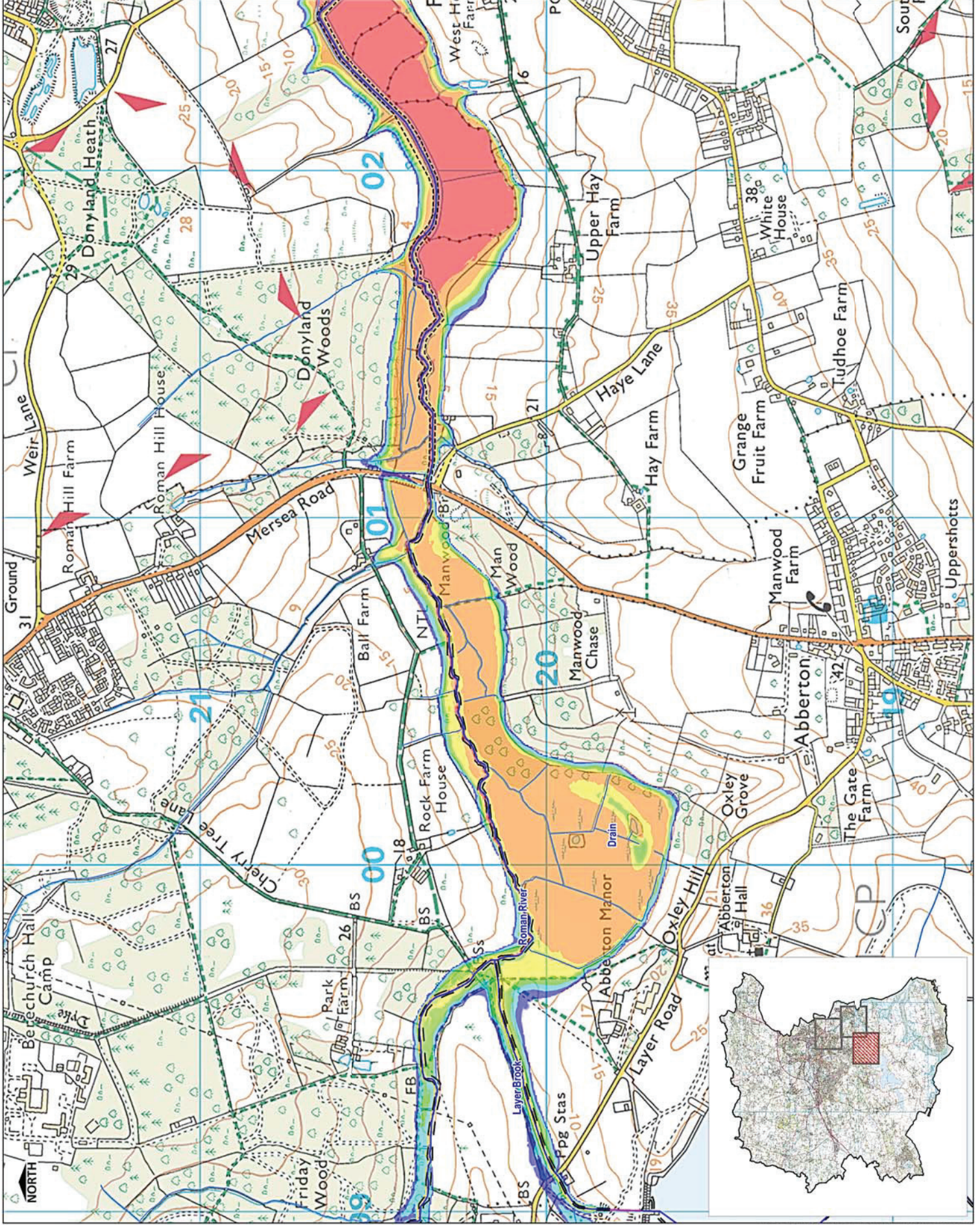
Scale of A3: 1:10,000

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Drawing Number: **FIGURE A29**

Rev: **1**



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

LEGEND

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

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 return period and the protection afforded by any flood defences. Flood data is taken from the Environment Agency (EA).

- Low Hazard
- Moderate Hazard (Danger for Some)
- Significant Hazard (Danger for Most)
- Extreme Hazard (Danger for All)
- Asset Information Management System - Defences

Asset Information Management System - Defences

- Embankment
- High Ground
- Flood Gate
- Wall

Notes
 As part of the update to the Level 2 Strategic Flood Risk Assessment (SFR) for Colchester Borough Council (CBC), revised modelling has been undertaken to provide an up-to-date assessment of the residual flat flood risk across the town. This assessment has taken into account the effect of the River Barne at Wivenhoe. Details are provided in Appendix B.

Flood hazard is a function of the flood depth and flow velocity and is an assigned one of four hazard categories: Extreme Hazard - Significant Hazard, Moderate Hazard, and Low Hazard. The Flood Hazard Rating (FHR) is a function of the Flood Hazard Category and the Flood Hazard Rating = (Low) (2) + (2) + (2) = 6 (Extreme Hazard).
 (Flood Hazard Rating = (Low) (2) + (2) + (2) = 6 (Extreme Hazard))
 (Flood Hazard Rating = (Low) (2) + (2) + (2) = 6 (Extreme Hazard))

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.	Description	By	Date	Status

Purpose of Issue

VERSION 1

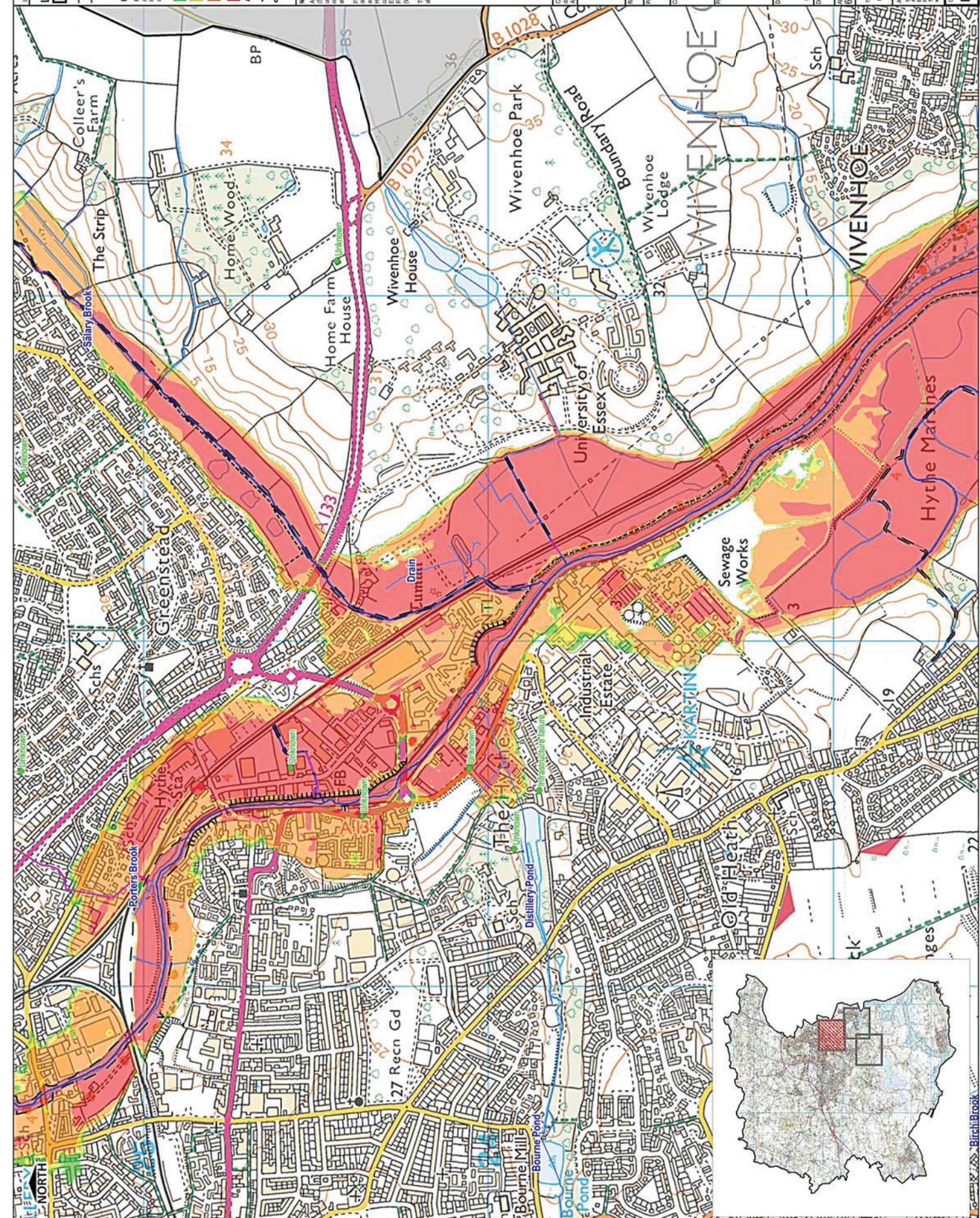
Client: Colchester, the place to live, learn, work, and visit.
 Project File: COLCHESTER BOROUGH COUNCIL STRATEGIC FLOOD RISK ASSESSMENT

Drawing Title: COLCHESTER BOROUGH COUNCIL STRATEGIC FLOOD RISK ASSESSMENT
 Drawing No.: 0.1% AEP (100YRS) INCL. CLIMATE CHANGE 2115
 Author: SK
 Checker: CP
 Date: AUG 2018
 Scale: A3
 AECOM Internal Project No.: 80473444
 AECOM Drawing No.: 80473444

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FIGURE A30

Rev: 1



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

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 return period and a return period in flood risks to repair (R2020) (Data and Government Agency, 2020).

- 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

As part of the update to the Level 2 Strategic Flood Risk Assessment (SFRA) for Colchester Borough Council (CBC), revised modelling has been undertaken to provide an up to date assessment of the flood risk to the River Colne and the River Cocker at Wivenhoe. Details are provided in Appendix B.

Flood hazard is a function of the flood depth and flow velocity as well as the return period. Each grid cell within the TUFLOW model domain has been assigned one of four hazard categories: Extreme Hazard, Significant Hazard, Moderate Hazard and Low Hazard. Significant Hazard is based on Flood Risk to People (F2020) (Data & Government Agency, 2020), using the following equation:

Flood Hazard Rating = (F₂₀₂₀)^{0.75} × (V₂₀₂₀)^{0.5} × (R₂₀₂₀)^{0.5}

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

Version Details		No.	Check	Date	By
Proposed by Issue					

VERSION 1

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

Project Title: COLCHESTER BOROUGH COUNCIL STRATEGIC FLOOD RISK ASSESSMENT

Contract Title: COLNE BARRIER BREACH MODELLING MAXIMUM FLOOD HAZARD 0.1% AEP (100YR) INCL. CLIMATE CHANGE 2115

Contract No: 80473444

Scale: 1:10,000

Issue: 1

Date: AUG 2018

Project No: 80473444

Scale: 1:10,000

Date: AUG 2018

Issue: 1

