



Legend

- LBHF Administrative Area
- Tree Planters

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London Borough of Hammersmith & Fulham



Surface Water Management Plan

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**Tree Planter Option
Overview of tree planter locations**

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Figure A-14a



LEGEND

— LBHF Administrative Boundary
 — Ward Boundary

Surface Water Flood Depth (m)

- < 0.1m
- 0.1 - 0.25m
- 0.25 - 0.5m
- 0.5 - 1.0m
- 1.0 - 1.5m
- > 1.5m

Reduction in maximum flood depth (m)
(Calculated from 'Option Depth minus Baseline Depth')

- 0.1m
- 0.01m
- 0 (No Change)

Ward Names

1 - College Park and Old Oak	9 - Fulham Reach
2 - Wormholt and White City	10 - North End
3 - Shepherd's Bush Green	11 - Palace Riverside
4 - Askew	12 - Munster
5 - Ravenscourt Park	13 - Fulham Broadway
6 - Hammersmith Broadway	14 - Town
7 - Addison	15 - Parsons Green and Waltham
8 - Avonmore and Brook Green	16 - Sands End

NOTES
 Hydraulic modelling has been undertaken using linked 2D-1D hydraulic modelling software TUFLOW-ESTRY (ver 2012). Refer to the LBHF Model Build Report (2015) for further information on model limitations. The intended purpose of this drawing is to illustrate flood depth in areas in excess of 81m². Due to the coarse nature of the data the results should not be used to examine flooding at property level.

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Purpose of Issue: **FINAL**



Project Title: **LONDON BOROUGH OF HAMMERSMITH AND FULHAM UPDATED SURFACE WATER MANAGEMENT PLAN**

Drawing Title: **OPTION 1: TREE PLANTERS FLOOD DEPTH AND AREAS OF BETTERMENT (10% AEP)**

Drawn	Checked	Approved	Date
SL	MI	MT	08/04/2015
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 6 - 8 Greencoat Place
 London SW1P 1PL
 Telephone +44 (0)207 7985000

CAPITA URS
 Flood Risk Management

Drawing Number: **FIGURE A-14b** Rev: **2**



LEGEND

- LBHF Administrative Boundary
- Ward Boundary

Surface Water Flood Depth (m)

- < 0.1m
- 0.1 - 0.25m
- 0.25 - 0.5m
- 0.5 - 1.0m
- 1.0 - 1.5m
- > 1.5m

Reduction in maximum flood depth (m)
(Calculated from 'Option Depth minus Baseline Depth')

- 0.1m
- 0.01m
- 0 (No Change)

Ward Names

1 - College Park and Old Oak	9 - Fulham Reach
2 - Wormholt and White City	10 - North End
3 - Shepherd's Bush Green	11 - Palace Riverside
4 - Askew	12 - Munster
5 - Ravenscourt Park	13 - Fulham Broadway
6 - Hammersmith Broadway	14 - Town
7 - Addison	15 - Parsons Green and Waltham
8 - Avonmore and Brook Green	16 - Sands End

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Purpose of Issue: **FINAL**



Project Title: **LONDON BOROUGH OF HAMMERSMITH AND FULHAM UPDATED SURFACE WATER MANAGEMENT PLAN**

Drawing Title: **OPTION 1: TREE PLANTERS FLOOD DEPTH AND AREAS OF BETTERMENT (1.33% AEP)**

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London SW1P 1PL
Telephone +44 (0)207 7985000

CAPITA URS
Flood Risk Management

Drawing Number: **FIGURE A-14c** Rev: **2**



LEGEND

— LBHF Administrative Boundary
 — Ward Boundary

Surface Water Flood Depth (m)

- < 0.1m
- 0.1 - 0.25m
- 0.25 - 0.5m
- 0.5 - 1.0m
- 1.0 - 1.5m
- > 1.5m

Reduction in maximum flood depth (m)
 (Calculated from 'Option Depth minus Baseline Depth')

- 0.1m
- 0.01m
- 0 (No Change)

Ward Names

1 - College Park and Old Oak	9 - Fulham Reach
2 - Wormholt and White City	10 - North End
3 - Shepherd's Bush Green	11 - Palace Riverside
4 - Askew	12 - Munster
5 - Ravenscourt Park	13 - Fulham Broadway
6 - Hammersmith Broadway	14 - Town
7 - Addison	15 - Parsons Green and Waltham
8 - Avonmore and Brook Green	16 - Sands End

NOTES
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Purpose of Issue: **FINAL**

Client: 
 hammersmith & fulham

Project Title: **LONDON BOROUGH OF HAMMERSMITH AND FULHAM UPDATED SURFACE WATER MANAGEMENT PLAN**

Drawing Title: **OPTION 1: TREE PLANTERS FLOOD DEPTH AND AREAS OF BETTERMENT (1% AEP)**

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 6 - 8 Greencoat Place
 London
 SW1P 1PL
 Telephone +44 (0)207 7985000

CAPITA URS
 Flood Risk Management

Drawing Number	Rev
FIGURE A-14d	2



Legend

- LBHF Administrative Area
- Modelled Green Roof Areas

NOTE

The green roof layer shown has been extracted from the model, and shows the roof areas of Council owned buildings which have been identified to be suitable for the installation of green roof systems.

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London Borough of Hammersmith & Fulham



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**Green Roof Option
Overview of Green Roof Locations**

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---	--

Figure A-15a



LEGEND

— LBHF Administrative Boundary
 — Ward Boundary

Surface Water Flood Depth (m)

- < 0.1m
- 0.1 - 0.25m
- 0.25 - 0.5m
- 0.5 - 1.0m
- 1.0 - 1.5m
- > 1.5m

Reduction in maximum flood depth (m)
 (Calculated from 'Option Depth minus Baseline Depth')

- 0.1m
- 0.01m
- 0 (No Change)

Ward Names

1 - College Park and Old Oak	9 - Fulham Reach
2 - Wormholt and White City	10 - North End
3 - Shepherd's Bush Green	11 - Palace Riverside
4 - Askew	12 - Munster
5 - Ravenscourt Park	13 - Fulham Broadway
6 - Hammersmith Broadway	14 - Town
7 - Addison	15 - Parsons Green and Waltham
8 - Avonmore and Brook Green	16 - Sands End

NOTES
 Hydraulic modelling has been undertaken using linked 2D-1D hydraulic modelling software TUFLOW-ESTRY (ver 2012). Refer to the LBHF Model Build Report (2015) for further information on model limitations. The intended purpose of this drawing is to illustrate flood depth in areas in excess of 81m². Due to the coarse nature of the data the results should not be used to examine flooding at property level.

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Purpose of Issue: **FINAL**



Project Title: **LONDON BOROUGH OF HAMMERSMITH AND FULHAM UPDATED SURFACE WATER MANAGEMENT PLAN**

Drawing Title: **OPTION 2: GREEN ROOFS FLOOD DEPTH AND AREAS OF BETTERMENT (10% AEP)**

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CAPITA URS
 Flood Risk Management

Drawing Number: **FIGURE A-15b** Rev: **2**



LEGEND

— LBHF Administrative Boundary
 — Ward Boundary

Surface Water Flood Depth (m)

- < 0.1m
- 0.1 - 0.25m
- 0.25 - 0.5m
- 0.5 - 1.0m
- 1.0 - 1.5m
- > 1.5m

Reduction in maximum flood depth (m)
 (Calculated from 'Option Depth minus Baseline Depth')

- 0.1m
- 0.01m
- 0 (No Change)

Ward Names

1 - College Park and Old Oak	9 - Fulham Reach
2 - Wormholt and White City	10 - North End
3 - Shepherd's Bush Green	11 - Palace Riverside
4 - Askew	12 - Munster
5 - Ravenscourt Park	13 - Fulham Broadway
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7 - Addison	15 - Parsons Green and Waltham
8 - Avonmore and Brook Green	16 - Sands End

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Purpose of Issue: **FINAL**



Project Title: **LONDON BOROUGH OF HAMMERSMITH AND FULHAM UPDATED SURFACE WATER MANAGEMENT PLAN**

Drawing Title: **OPTION 2: GREEN ROOFS FLOOD DEPTH AND AREAS OF BETTERMENT (1.33% AEP)**

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CAPITA URS
 Flood Risk Management

Drawing Number: **FIGURE A-15c** Rev: **2**



LEGEND

— LBHF Administrative Boundary
 — Ward Boundary

Surface Water Flood Depth (m)

- < 0.1m
- 0.1 - 0.25m
- 0.25 - 0.5m
- 0.5 - 1.0m
- 1.0 - 1.5m
- > 1.5m

Reduction in maximum flood depth (m)
(Calculated from 'Option Depth minus Baseline Depth')

- 0.1m
- 0.01m
- 0 (No Change)

Ward Names

1 - College Park and Old Oak	9 - Fulham Reach
2 - Wormholt and White City	10 - North End
3 - Shepherd's Bush Green	11 - Palace Riverside
4 - Askew	12 - Munster
5 - Ravenscourt Park	13 - Fulham Broadway
6 - Hammersmith Broadway	14 - Town
7 - Addison	15 - Parsons Green and Walham
8 - Avonmore and Brook Green	16 - Sands End

NOTES
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Purpose of Issue
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Client

 hammersmith & fulham

Project Title
 LONDON BOROUGH OF
 HAMMERSMITH AND FULHAM
 UPDATED SURFACE WATER
 MANAGEMENT PLAN

Drawing Title
 OPTION 2: GREEN ROOFS
 FLOOD DEPTH AND AREAS OF
 BETTERMENT (1% AEP)

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CAPITA URS
 Flood Risk Management

Drawing Number FIGURE A-15d	Rev 2
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Legend

- LBHF Administrative Area
- Permeable Paving Option Areas

NOTE

The permeable paving layer shown has been extracted from the model, and shows areas of impermeable land (paving, footpaths etc.) that fall within council owned land.

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London Borough of Hammersmith & Fulham



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**Permeable Paving Option
Overview of Permeable Paving Locations**

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CAPITA | URS
 Flood Risk Management

URS Infrastructure and Environment UK Ltd
 6 - 8 Greencoat Place
 London
 SW1P 1PL

Figure A-16a



LEGEND

— LBHF Administrative Boundary
 — Ward Boundary

Surface Water Flood Depth (m)

- < 0.1m
- 0.1 - 0.25m
- 0.25 - 0.5m
- 0.5 - 1.0m
- 1.0 - 1.5m
- > 1.5m

Reduction of maximum flood depth (m)
(Calculated from 'Option Depth minus Baseline Depth')

- 0.1m
- 0.01m
- 0 (No Change)

Ward Names

1 - College Park and Old Oak	9 - Fulham Reach
2 - Wormholt and White City	10 - North End
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NOTES
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Purpose of Issue: **FINAL**



Project Title: **LONDON BOROUGH OF HAMMERSMITH AND FULHAM UPDATED SURFACE WATER MANAGEMENT PLAN**

Drawing Title: **OPTION 3: PREMEABLE PAVING FLOOD DEPTH AND AREAS OF BETTERMENT (10% AEP)**

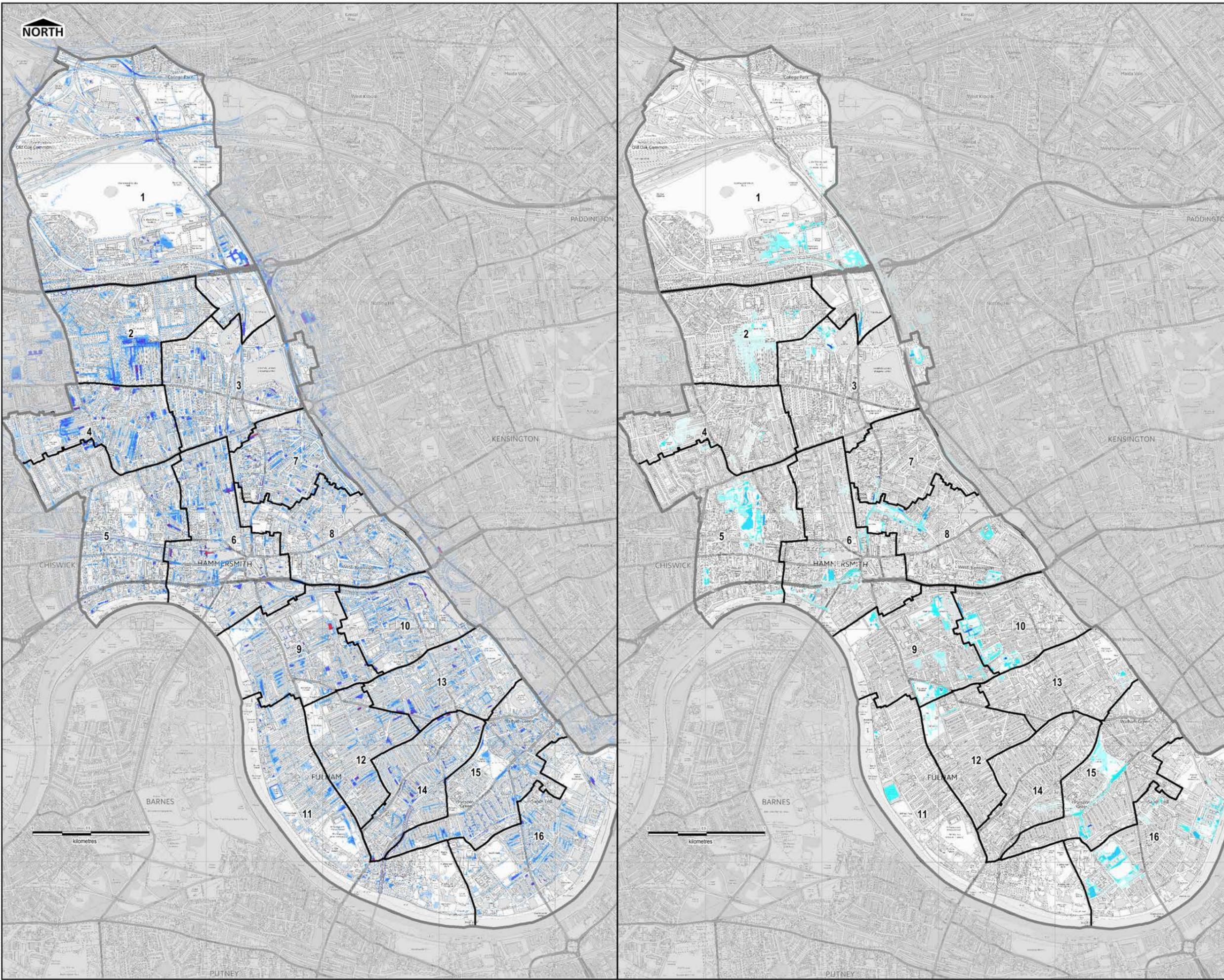
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 London SW1P 1PL
 Telephone +44 (0)207 7985000

CAPITA URS
 Flood Risk Management

Drawing Number: **FIGURE A-16b** Rev: **2**



LEGEND

— LBHF Administrative Boundary
 — Ward Boundary

Surface Water Flood Depth (m)

- < 0.1m
- 0.1 - 0.25m
- 0.25 - 0.5m
- 0.5 - 1.0m
- 1.0 - 1.5m
- > 1.5m

Reduction of maximum flood depth (m)
(Calculated from 'Option Depth minus Baseline Depth')

- 0.1m
- 0.01m
- 0 (No Change)

Ward Names

1 - College Park and Old Oak	9 - Fulham Reach
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3 - Shepherd's Bush Green	11 - Palace Riverside
4 - Askew	12 - Munster
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Project Title: **LONDON BOROUGH OF HAMMERSMITH AND FULHAM UPDATED SURFACE WATER MANAGEMENT PLAN**

Drawing Title: **OPTION 3: PREMEABLE PAVING FLOOD DEPTH AND AREAS OF BETTERMENT (1.33% AEP)**

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CAPITA URS
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Drawing Number: **FIGURE A-16c** Rev: **2**



LEGEND

— LBHF Administrative Boundary
 — Ward Boundary

Surface Water Flood Depth (m)

- < 0.1m
- 0.1 - 0.25m
- 0.25 - 0.5m
- 0.5 - 1.0m
- 1.0 - 1.5m
- > 1.5m

Reduction in maximum flood depth (m)
(Calculated from 'Option Depth minus Baseline Depth')

- 0.1m
- 0.01m
- 0 (No Change)

Ward Names

1 - College Park and Old Oak	9 - Fulham Reach
2 - Wormholt and White City	10 - North End
3 - Shepherd's Bush Green	11 - Palace Riverside
4 - Askew	12 - Munster
5 - Ravenscourt Park	13 - Fulham Broadway
6 - Hammersmith Broadway	14 - Town
7 - Addison	15 - Parsons Green and Waltham
8 - Avonmore and Brook Green	16 - Sands End

NOTES
 Hydraulic modelling has been undertaken using linked 2D-1D hydraulic modelling software TUFLOW-ESTRY (ver 2012). Refer to the LBHF Model Build Report (2015) for further information on model limitations. The intended purpose of this drawing is to illustrate flood depth in areas in excess of 81m². Due to the coarse nature of the data the results should not be used to examine flooding at property level.

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Purpose of Issue: **FINAL**



Project Title: **LONDON BOROUGH OF HAMMERSMITH AND FULHAM UPDATED SURFACE WATER MANAGEMENT PLAN**

Drawing Title: **OPTION 3: PREAMBLE PAVING FLOOD DEPTH AND AREAS OF BETTERMENT (1% AEP)**

Drawn	Checked	Approved	Date
SL	MI	MT	08/04/2015

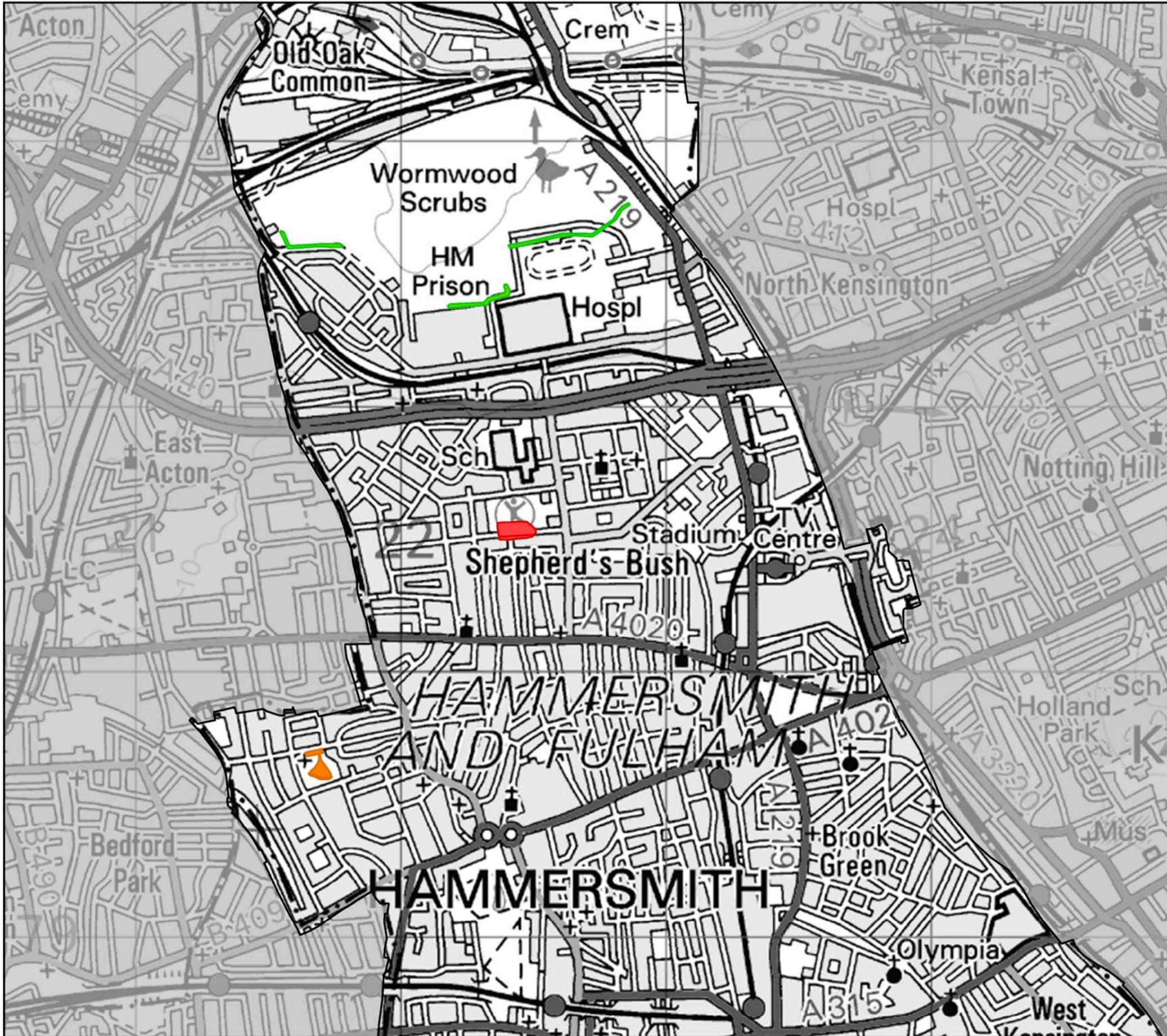
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 6 - 8 Greenoak Place
 London
 SW1P 1PL
 Telephone +44 (0)207 7985000

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Drawing Number: **FIGURE A-16d** Rev: **2**



Legend

- LBHF Administrative Area
- Wendell Park Flood Storage Area
- Wormholt Park Flood Storage Area
- Wormwood Scrubs & Old Oak Common Flood Storage Bunds

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London Borough of Hammersmith & Fulham



Surface Water Management Plan

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Scale at A3 1:15,000	Date Nov 2013	Drawn by DS	Approved by EC
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Flood Storage Options Overview of Storage Locations

Consultants
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 Flood Risk Management

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 London
 SW1P 1PL

Figure A-17a



LEGEND

- LBHF Administrative Boundary
- Ward Boundary

Surface Water Flood Depth (m)

- < 0.1m
- 0.1 - 0.25m
- 0.25 - 0.5m
- 0.5 - 1.0m
- 1.0 - 1.5m
- > 1.5m

Reduction in maximum flood depth (m)
(Calculated from 'Option Depth minus Baseline Depth')

- 0.1m
- 0.01m
- 0 (No Change)

Flood Storage Areas

Ward Names

1 - College Park and Old Oak	9 - Fulham Reach
2 - Wormholt and White City	10 - North End
3 - Shepherd's Bush Green	11 - Palace Riverside
4 - Askew	12 - Munster
5 - Ravenscourt Park	13 - Fulham Broadway
6 - Hammersmith Broadway	14 - Town
7 - Addison	15 - Parsons Green and Waltham
8 - Avonmore and Brook Green	16 - Sands End

NOTES
Hydraulic modelling has been undertaken using linked 2D-1D hydraulic modelling software TUFLOW-ESTRY (ver 2012). Refer to the LBHF Model Build Report (2015) for further information on model limitations. The intended purpose of this drawing is to illustrate flood depth in areas in excess of 81m². Due to the coarse nature of the data the results should not be used to examine flooding at property level.

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Purpose of Issue: **FINAL**

Client: **h&f**
hammersmith & fulham

Project Title: **LONDON BOROUGH OF HAMMERSMITH AND FULHAM UPDATED SURFACE WATER MANAGEMENT PLAN**

Drawing Title: **OPTION 4: FLOOD STORAGE FLOOD DEPTH AND AREAS OF BETTERMENT (10% AEP)**

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Flood Risk Management

Drawing Number: **FIGURE A-17b** Rev: **2**



LEGEND

- LBHF Administrative Boundary
- Ward Boundary

Surface Water Flood Depth (m)

- < 0.1m
- 0.1 - 0.25m
- 0.25 - 0.5m
- 0.5 - 1.0m
- 1.0 - 1.5m
- > 1.5m

Reduction in maximum flood depth (m)
(Calculated from 'Option Depth minus Baseline Depth')

- 0.1m
- 0.01m
- 0 (No Change)

Flood Storage Areas

Ward Names

1 - College Park and Old Oak	9 - Fulham Reach
2 - Wormholt and White City	10 - North End
3 - Shepherd's Bush Green	11 - Palace Riverside
4 - Askew	12 - Munster
5 - Ravenscourt Park	13 - Fulham Broadway
6 - Hammersmith Broadway	14 - Town
7 - Addison	15 - Parsons Green and Waltham
8 - Avonmore and Brook Green	16 - Sands End

NOTES
Hydraulic modelling has been undertaken using linked 2D-1D hydraulic modelling software TUFLOW-ESTRY (ver 2012). Refer to the LBHF Model Build Report (2015) for further information on model limitations. The intended purpose of this drawing is to illustrate flood depth in areas in excess of 81m². Due to the coarse nature of the data the results should not be used to examine flooding at property level.

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Purpose of Issue: **FINAL**



Project Title: **LONDON BOROUGH OF HAMMERSMITH AND FULHAM UPDATED SURFACE WATER MANAGEMENT PLAN**

Drawing Title: **OPTION 4: FLOOD STORAGE FLOOD DEPTH AND AREAS OF BETTERMENT (1.33% AEP)**

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CAPITA URS
Flood Risk Management

Drawing Number: **FIGURE A-17c** Rev: **2**



LEGEND

- LBHF Administrative Boundary
- Ward Boundary

Surface Water Flood Depth (m)

- < 0.1m
- 0.1 - 0.25m
- 0.25 - 0.5m
- 0.5 - 1.0m
- 1.0 - 1.5m
- > 1.5m

Reduction of maximum flood depth (m)
(Calculated from 'Option Depth minus Baseline Depth')

- 0.1m
- 0.01m
- 0 (No Change)

Flood Storage Areas

Ward Names

1 - College Park and Old Oak	9 - Fulham Reach
2 - Wormholt and White City	10 - North End
3 - Shepherd's Bush Green	11 - Palace Riverside
4 - Askew	12 - Munster
5 - Ravenscourt Park	13 - Fulham Broadway
6 - Hammersmith Broadway	14 - Town
7 - Addison	15 - Parsons Green and Waltham
8 - Avonmore and Brook Green	16 - Sands End

NOTES
Hydraulic modelling has been undertaken using linked 2D-1D hydraulic modelling software TUFLOW-ESTRY (ver 2012). Refer to the LBHF Model Build Report (2015) for further information on model limitations. The intended purpose of this drawing is to illustrate flood depth in areas in excess of 81m². Due to the coarse nature of the data the results should not be used to examine flooding at property level.

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Purpose of Issue
FINAL

Client

hammersmith & fulham

Project Title
LONDON BOROUGH OF
HAMMERSMITH AND FULHAM
UPDATED SURFACE WATER
MANAGEMENT PLAN

Drawing Title
OPTION 4: FLOOD STORAGE
FLOOD DEPTH AND AREAS OF
BETTERMENT (1% AEP)

Drawn SL	Checked MI	Approved MT	Date 08/04/2015
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Drawing Number FIGURE A-17d	Rev 2
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