



Wylfa Newydd Project

6.4.29 ES Volume D - WNDA Development
App D8-4 - Flood Consequence Assessment
(Part 5/8)

PINS Reference Number: EN010007

Application Reference Number: 6.4.29

June 2018

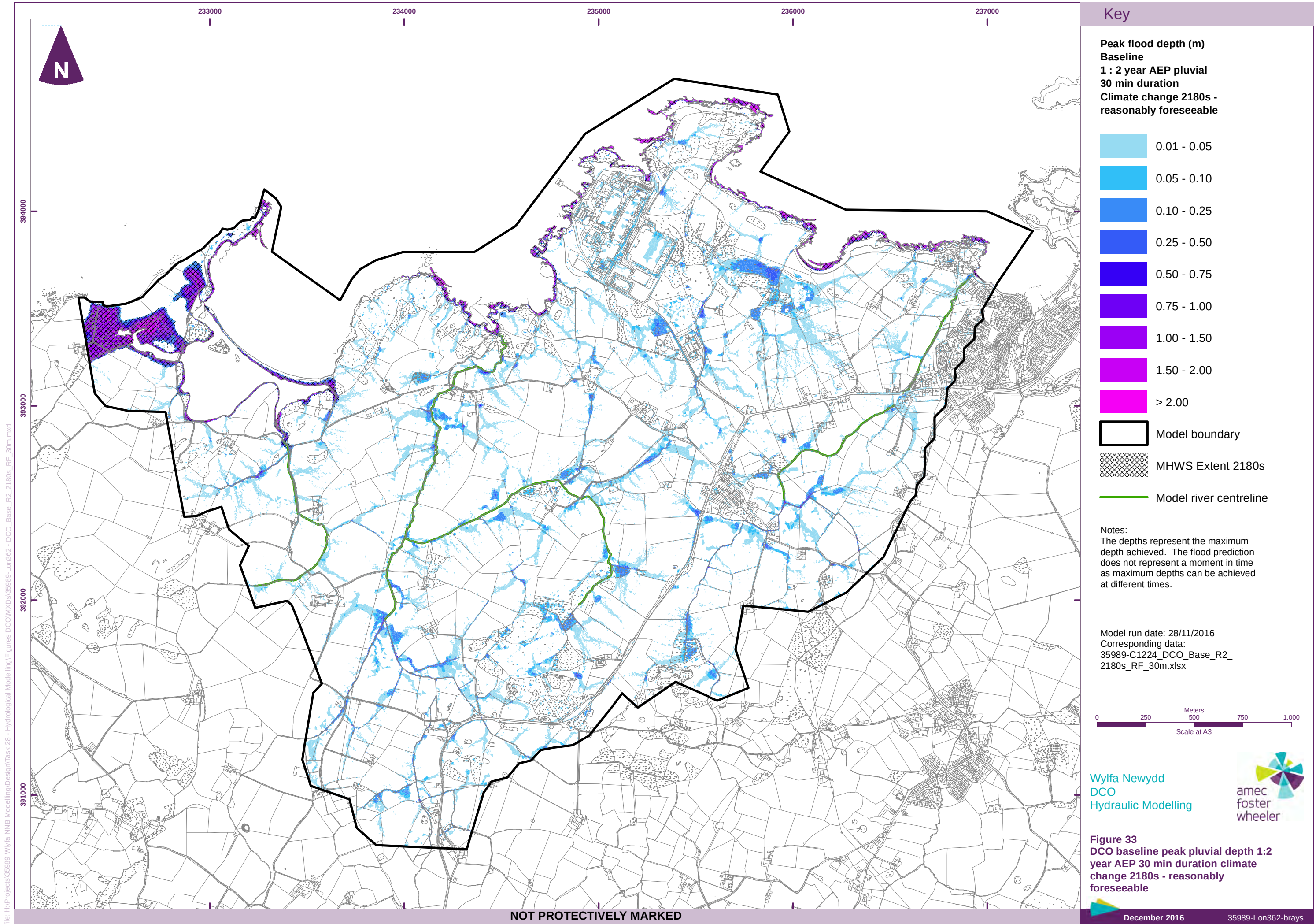
Revision 1.0

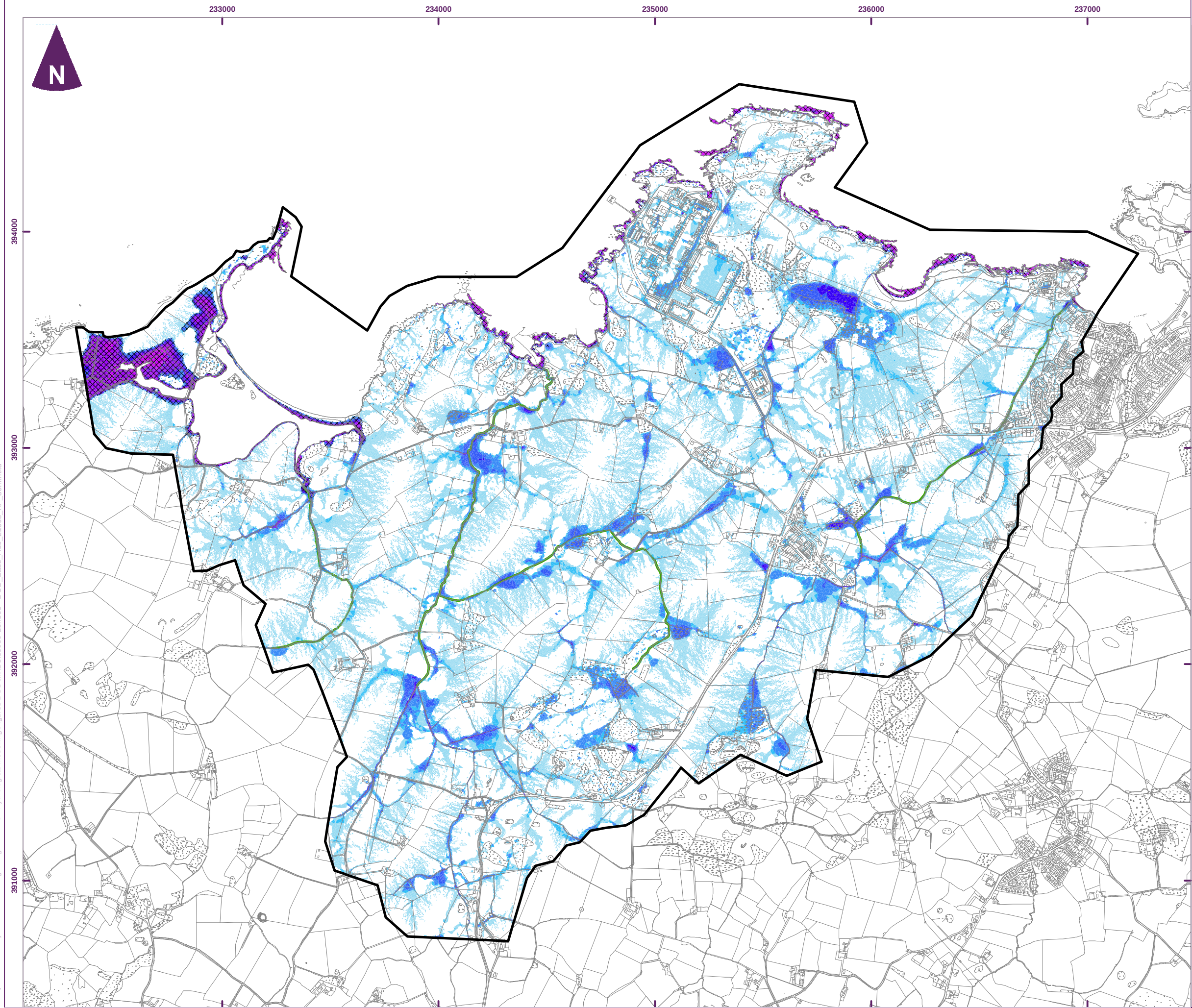
Regulation Number: 5(2)(a) and (e)

Planning Act 2008

Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009

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Key

- Peak flood depth (m)
- Baseline
- 1 : 30 year AEP pluvial
- 30 min duration
- Climate change 2180s - reasonably foreseeable
- 0.01 - 0.05
 - 0.05 - 0.10
 - 0.10 - 0.25
 - 0.25 - 0.50
 - 0.50 - 0.75
 - 0.75 - 1.00
 - 1.00 - 1.50
 - 1.50 - 2.00
 - > 2.00
- Model boundary
- MHS Extent 2180s
- Model river centreline

Notes:

The depths represent the maximum depth achieved. The flood prediction does not represent a moment in time as maximum depths can be achieved at different times.

Model run date: 28/11/2016

Corresponding data: 35989-C1225_DCO_Base_R30_2180s_RF_30m.xlsx

0 250 500 750 1,000

Meters

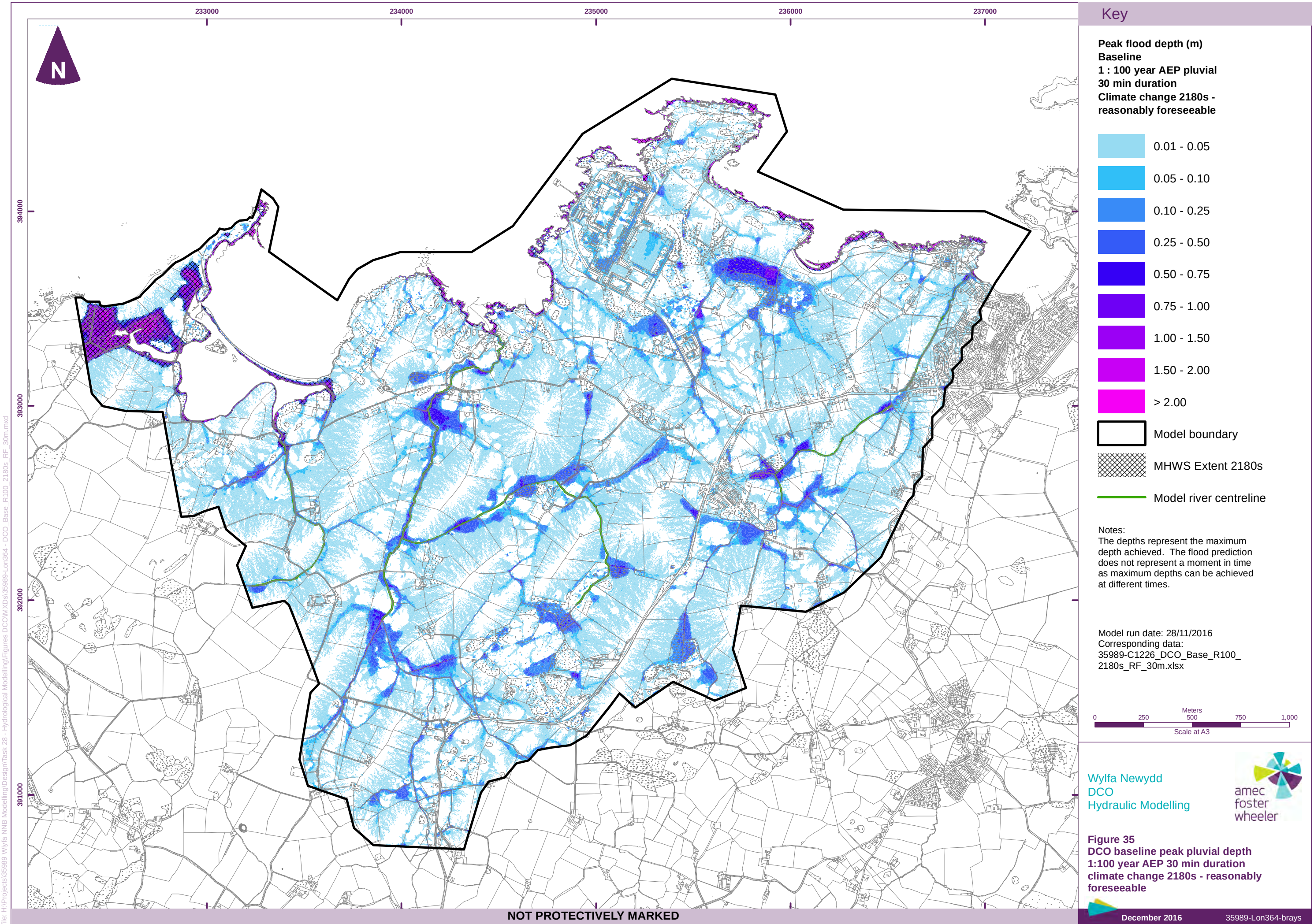
Scale at A3

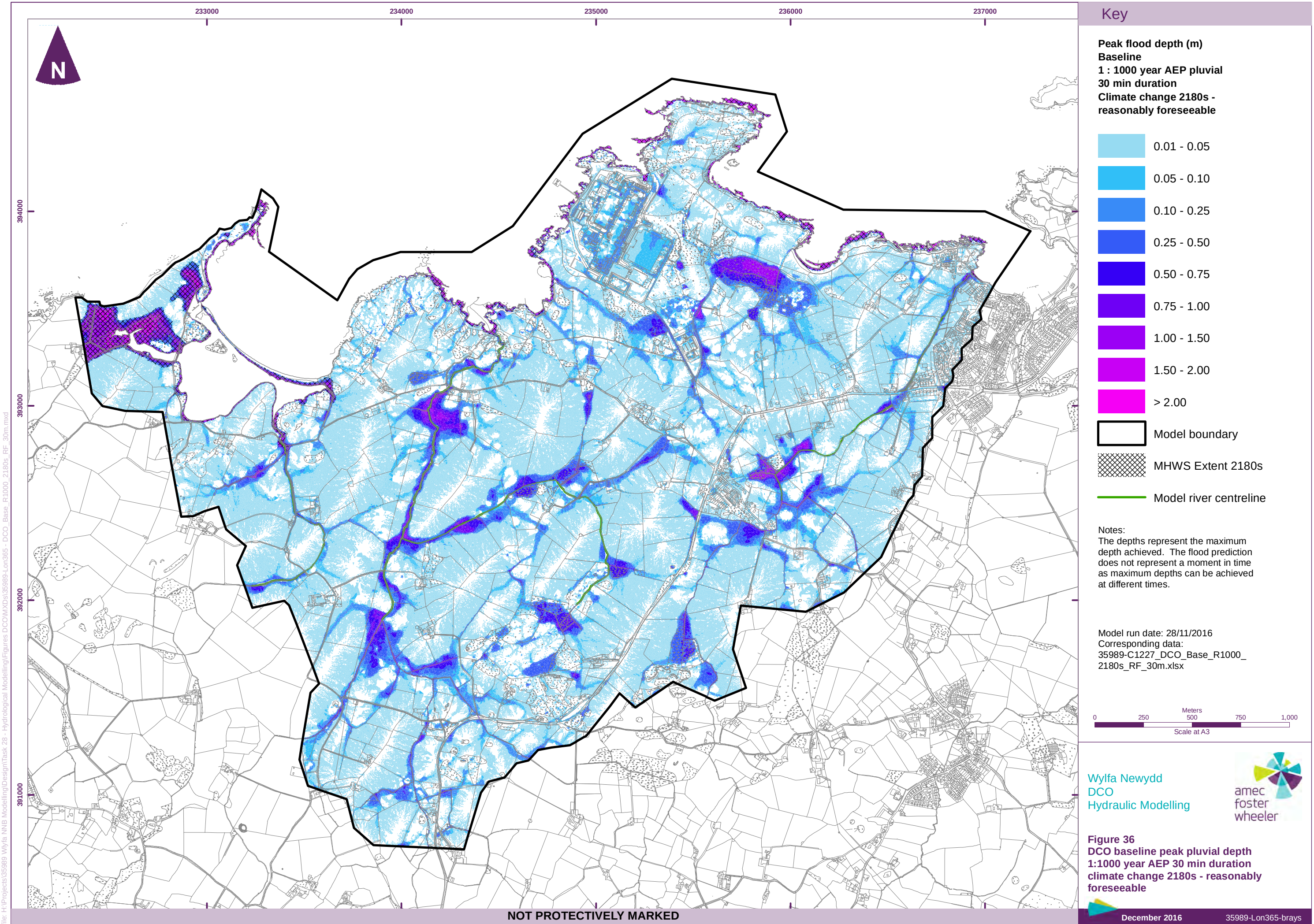
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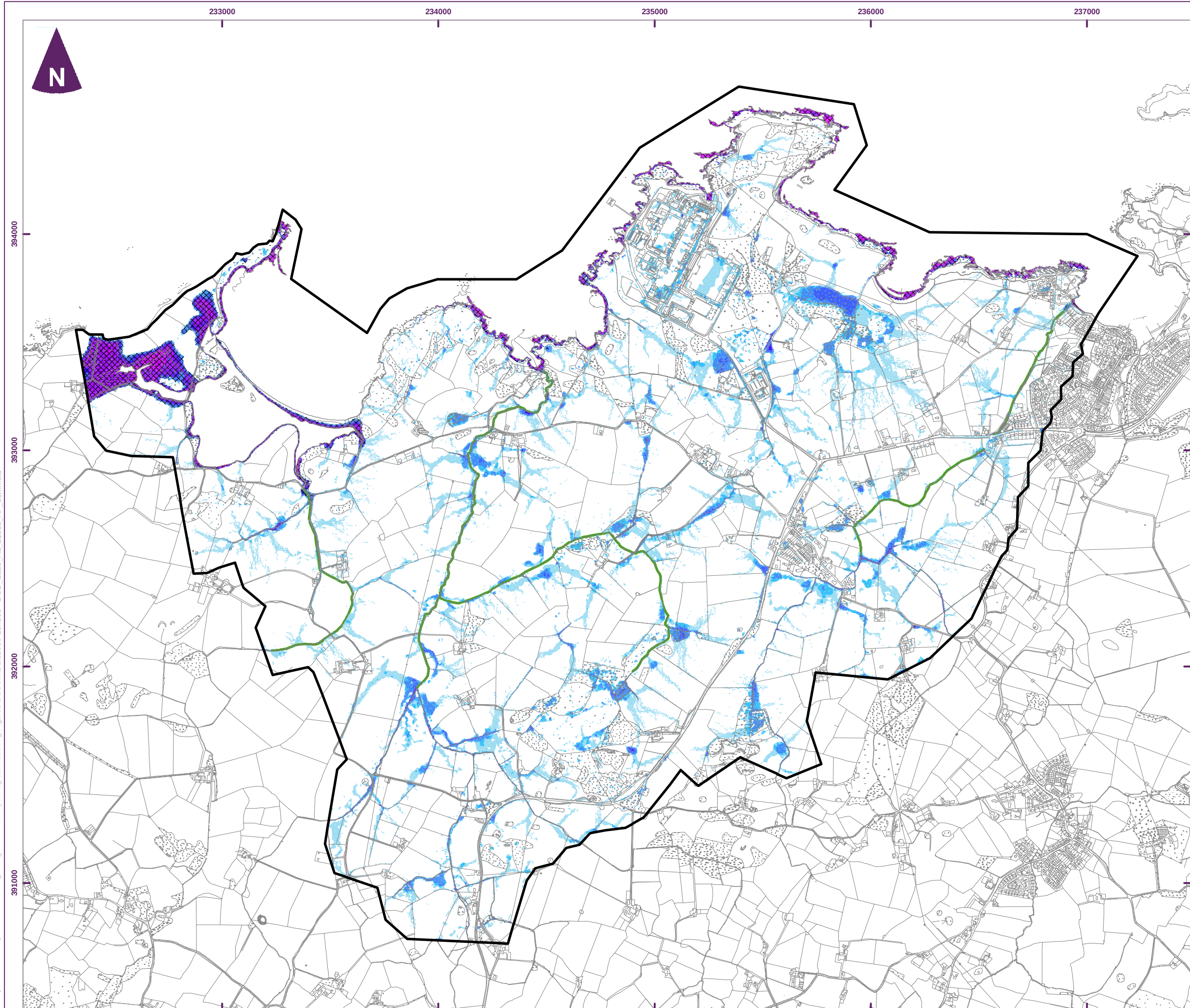
Figure 34
DCO baseline peak pluvial depth
1:30 year AEP 30 min duration
climate change 2180s - reasonably foreseeable

NOT PROTECTIVELY MARKED





NOT PROTECTIVELY MARKED



Key

Peak flood depth (m)
Baseline
1 : 2 year AEP pluvial
60 min duration
Climate change 2180s -
reasonably foreseeable

- 0.01 - 0.05
- 0.05 - 0.10
- 0.10 - 0.25
- 0.25 - 0.50
- 0.50 - 0.75
- 0.75 - 1.00
- 1.00 - 1.50
- 1.50 - 2.00
- > 2.00
- Model boundary
- MHWS Extent 2180s
- Model river centreline

Notes:
The depths represent the maximum
depth achieved. The flood prediction
does not represent a moment in time
as maximum depths can be achieved
at different times.

Model run date: 28/11/2016
Corresponding data:
35989-C1228_DCO_Base_R2_
2180s_RF_60m.xlsx

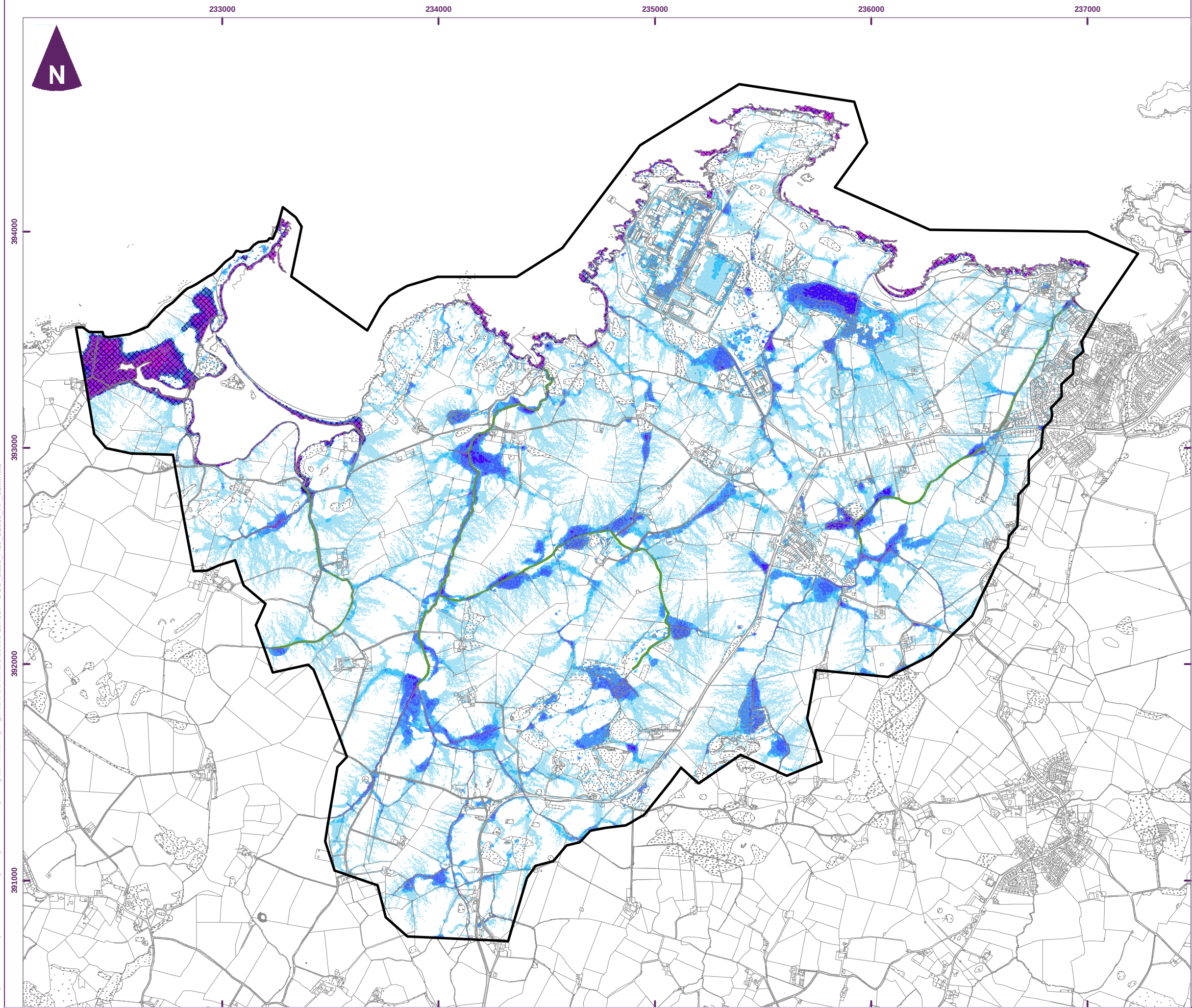
0 250 500 750 1,000
Meters
Scale at A3

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Figure 37
DCO baseline peak pluvial depth 1:2
year AEP 60 min duration climate
change 2180s - reasonably
foreseeable

NOT PROTECTIVELY MARKED



Key

- Peak flood depth (m)
- Baseline
- 1 : 30 year AEP pluvial
- 60 min duration
- Climate change 2180s - reasonably foreseeable
- | |
|-------------|
| 0.01 - 0.05 |
| 0.05 - 0.10 |
| 0.10 - 0.25 |
| 0.25 - 0.50 |
| 0.50 - 0.75 |
| 0.75 - 1.00 |
| 1.00 - 1.50 |
| 1.50 - 2.00 |
| > 2.00 |
- Model boundary
- MHWS Extent 2180s
- Model river centreline

Notes:

The depths represent the maximum depth achieved. The flood prediction does not represent a moment in time as maximum depths can be achieved at different times.

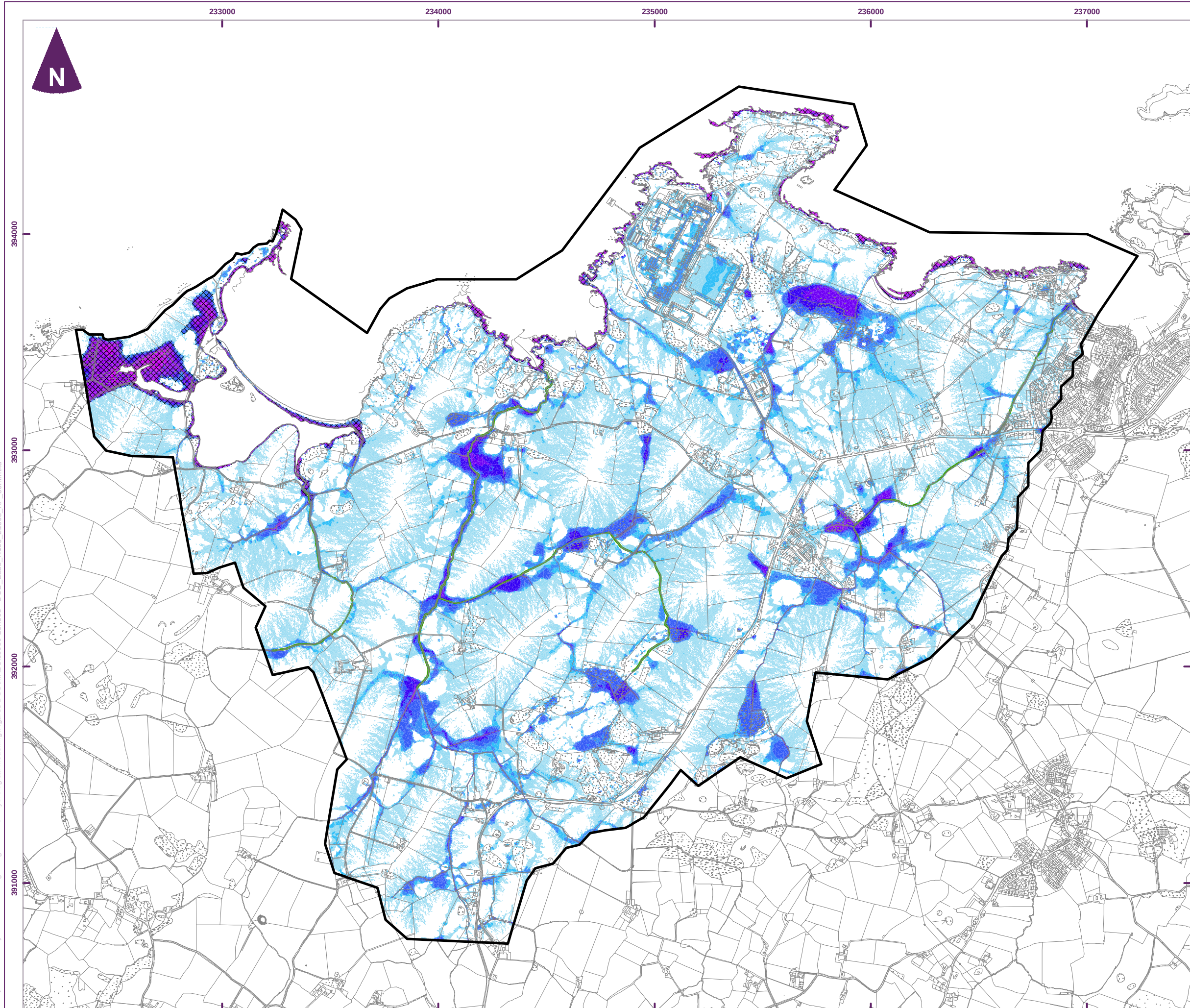
Model run date: 28/11/2016

Corresponding data: 35989-C1229_DCO_Base_R30_2180s_RF_60m.xlsx



Figure 38
DCO baseline peak pluvial depth
1:30 year AEP 60 min duration
climate change 2180s - reasonably foreseeable

NOT PROTECTIVELY MARKED



Key

- Peak flood depth (m)
- Baseline
- 1 : 100 year AEP pluvial
- 60 min duration
- Climate change 2180s - reasonably foreseeable
- 0.01 - 0.05
 - 0.05 - 0.10
 - 0.10 - 0.25
 - 0.25 - 0.50
 - 0.50 - 0.75
 - 0.75 - 1.00
 - 1.00 - 1.50
 - 1.50 - 2.00
 - > 2.00
- Model boundary
- MHS Extent 2180s
- Model river centreline

Notes:

The depths represent the maximum depth achieved. The flood prediction does not represent a moment in time as maximum depths can be achieved at different times.

Model run date: 28/11/2016

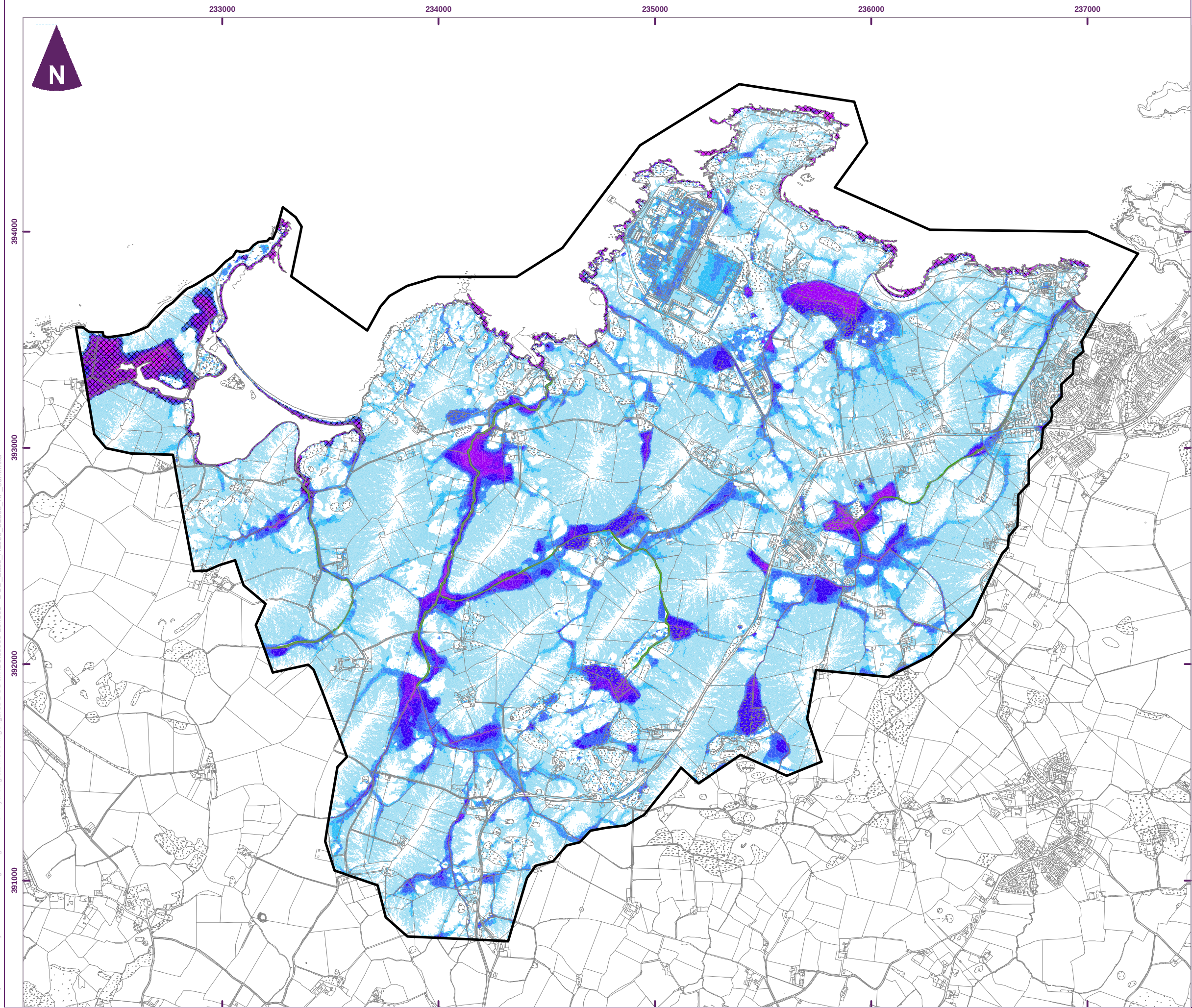
Corresponding data: 35989-C1230_DCO_Base_R100_2180s_RF_60m.xlsx



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Figure 39
DCO baseline peak pluvial depth
1:100 year AEP 60 min duration
climate change 2180s - reasonably foreseeable

NOT PROTECTIVELY MARKED



Key

- Peak flood depth (m)
Baseline
1 : 1000 year AEP pluvial
60 min duration
Climate change 2180s -
reasonably foreseeable
- 0.01 - 0.05
 - 0.05 - 0.10
 - 0.10 - 0.25
 - 0.25 - 0.50
 - 0.50 - 0.75
 - 0.75 - 1.00
 - 1.00 - 1.50
 - 1.50 - 2.00
 - > 2.00
- Model boundary
- MHS Extent 2180s
- Model river centreline

Notes:
The depths represent the maximum
depth achieved. The flood prediction
does not represent a moment in time
as maximum depths can be achieved
at different times.

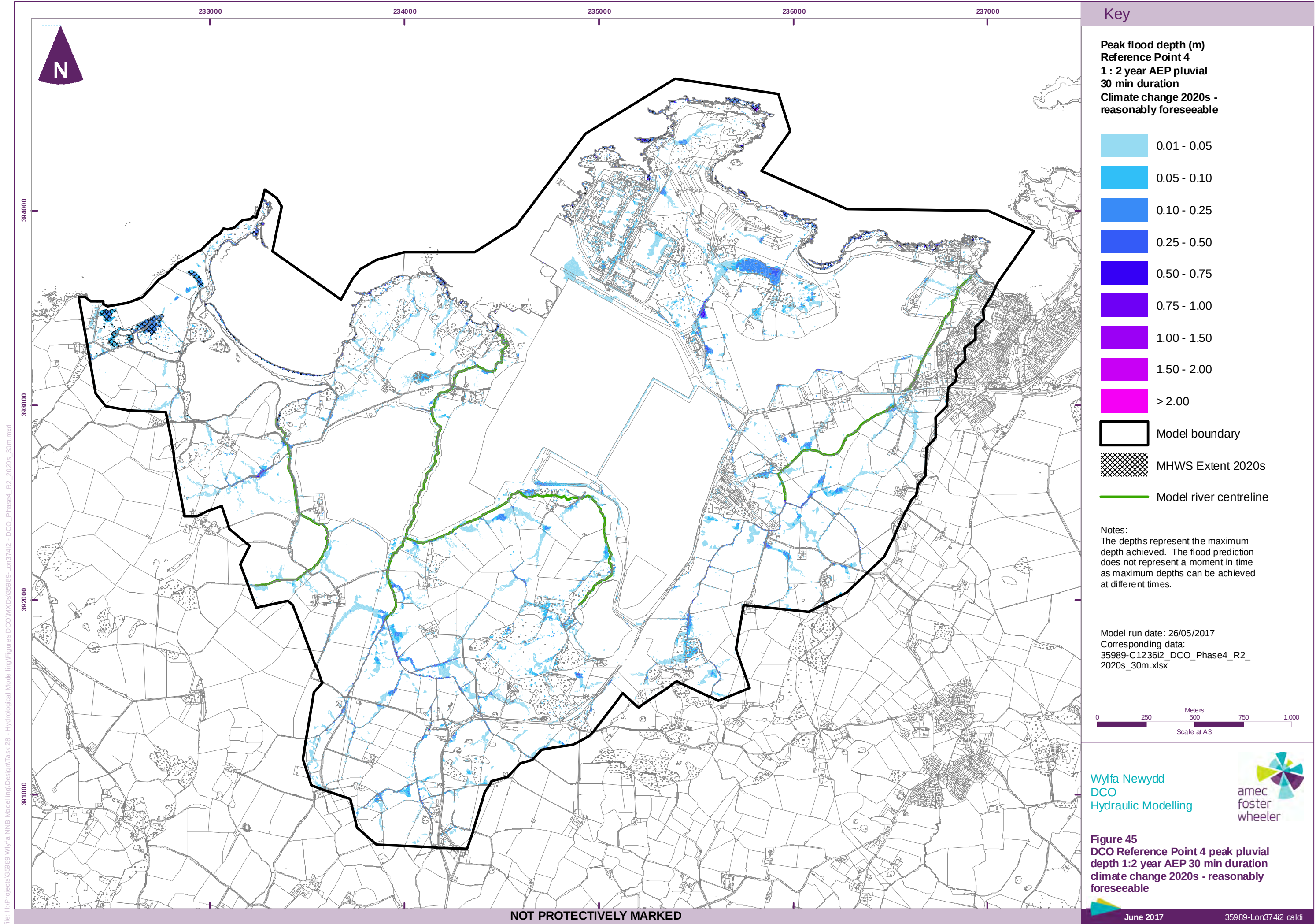
Model run date: 28/11/2016
Corresponding data:
35989-C1231_DCO_Base_R1000_
2180s_RF_60m.xlsx

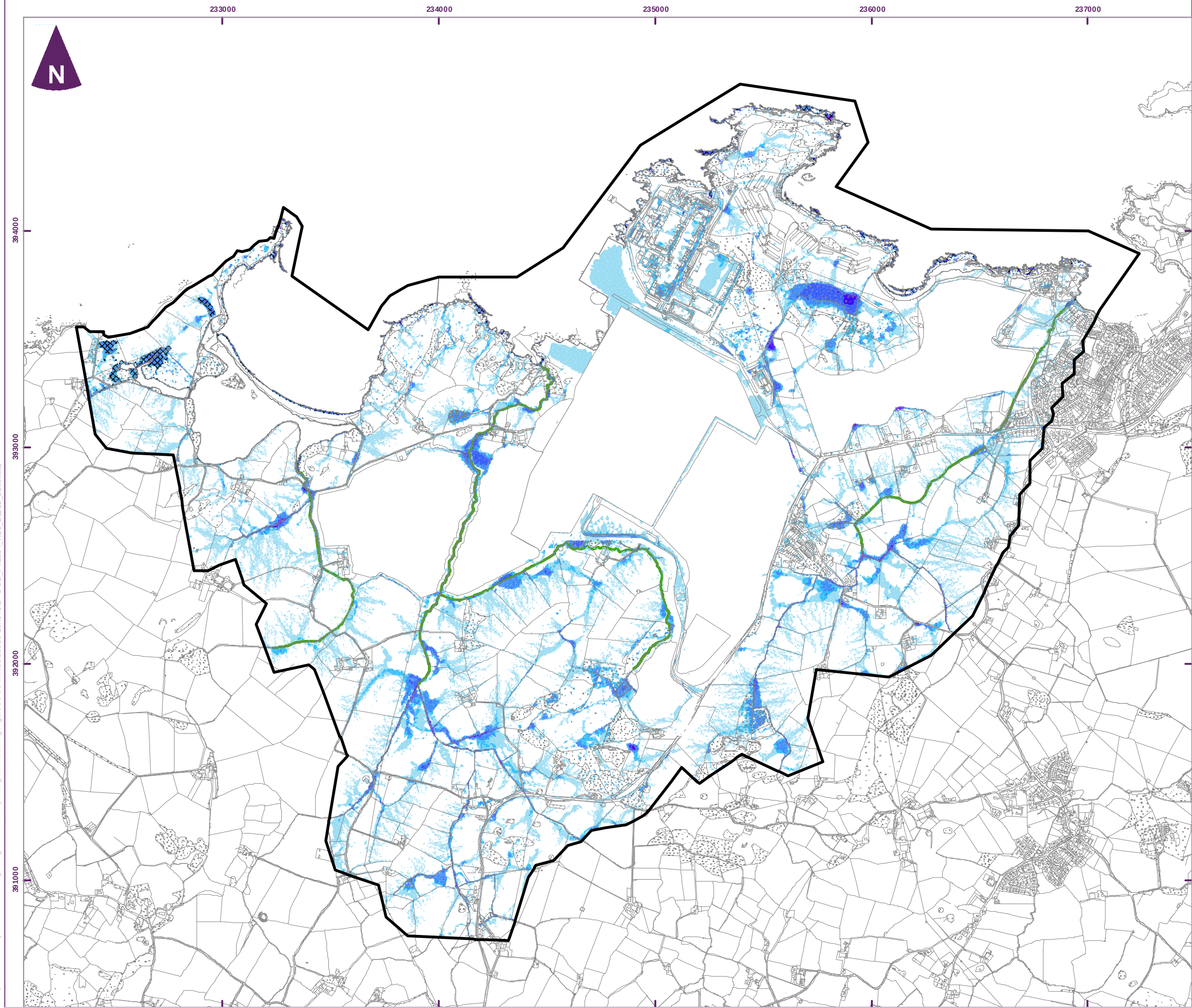


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Figure 40
DCO baseline peak pluvial depth
1:1000 year AEP 60 min duration
climate change 2180s - reasonably
foreseeable

Appendix D8-4-7 Pluvial construction phase modelling results





Key

- Peak flood depth (m)
Reference Point 4
1 : 30 year AEP pluvial
30 min duration
Climate change 2020s -
reasonably foreseeable
- | |
|------------------------|
| 0.01 - 0.05 |
| 0.05 - 0.10 |
| 0.10 - 0.25 |
| 0.25 - 0.50 |
| 0.50 - 0.75 |
| 0.75 - 1.00 |
| 1.00 - 1.50 |
| 1.50 - 2.00 |
| > 2.00 |
| Model boundary |
| MHWS Extent 2020s |
| Model river centreline |

Notes:
The depths represent the maximum
depth achieved. The flood prediction
does not represent a moment in time
as maximum depths can be achieved
at different times.

Model run date: 26/05/2017
Corresponding data:
35989-C1237i2_DCO_Phase4_R30_
2020s_30m.xlsx

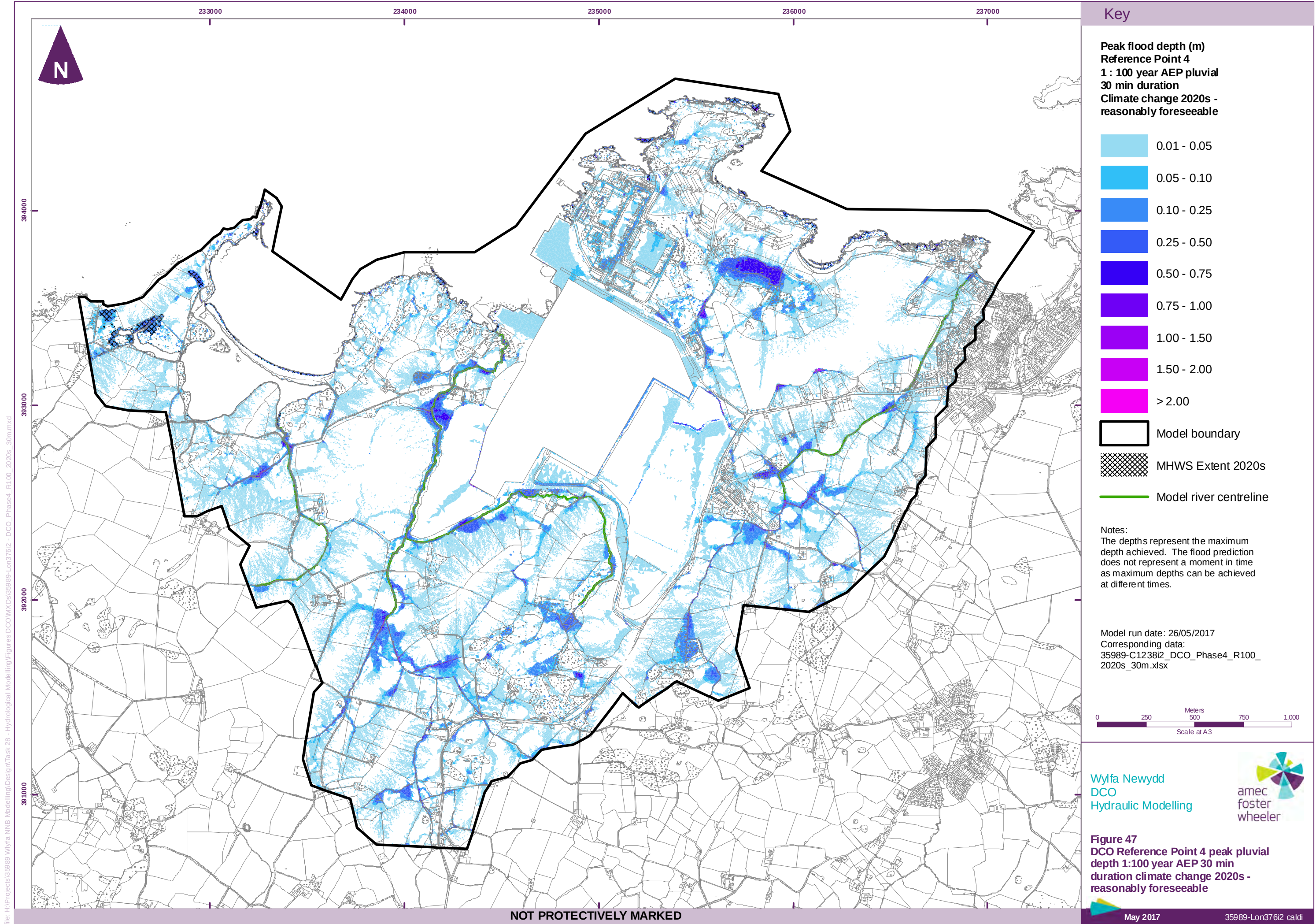
0 250 500 750 1,000
Meters
Scale at A3

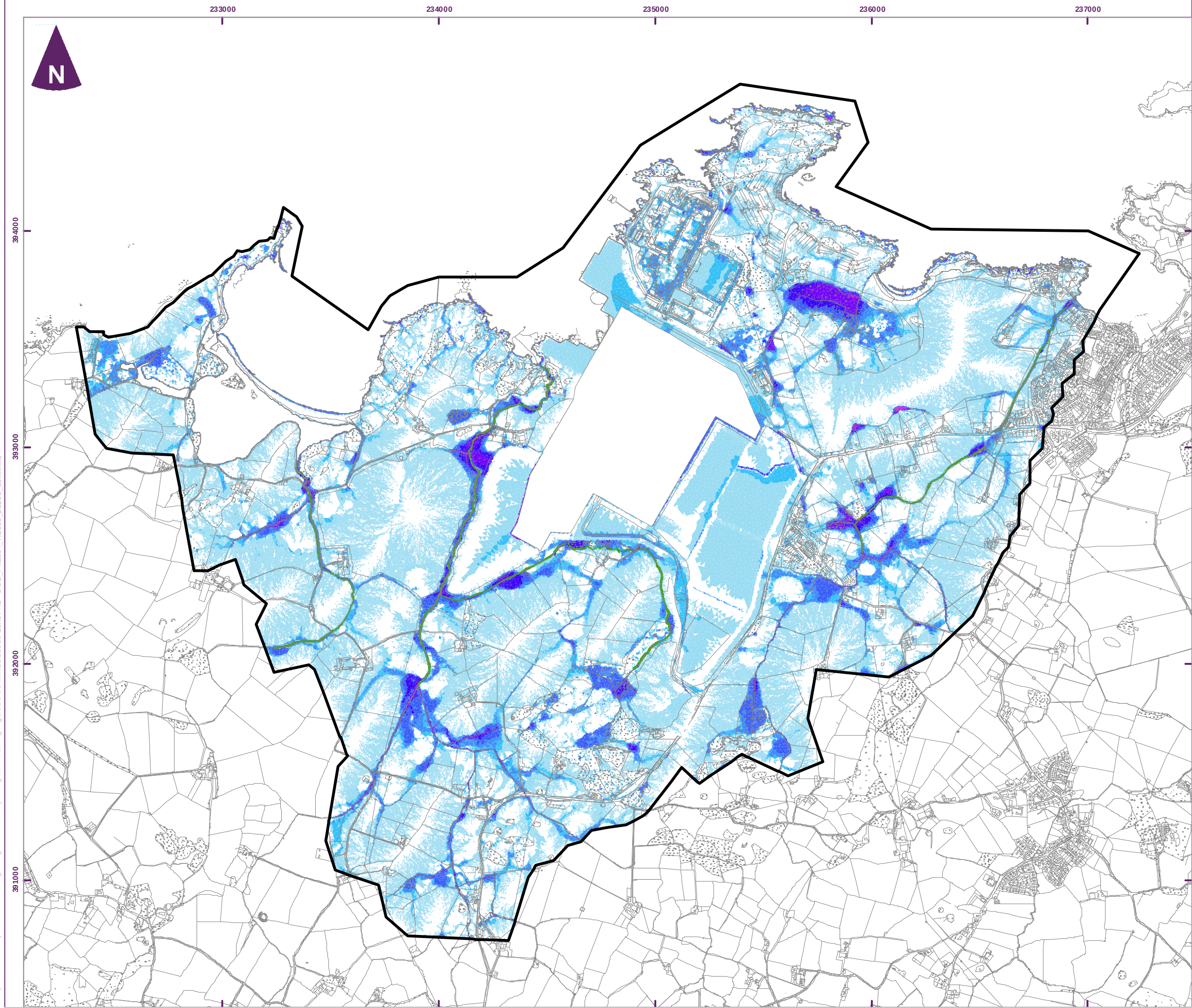
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Figure 46
DCO Reference Point 4 peak pluvial
depth 1:30 year AEP 30 min duration
climate change 2020s - reasonably
foreseeable

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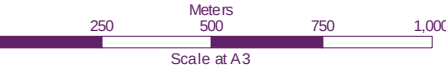
Key

Peak flood depth (m)
Reference Point 4
1 : 1000 year AEP pluvial
30 min duration
Climate change 2020s -
reasonably foreseeable

	0.01 - 0.05
	0.05 - 0.10
	0.10 - 0.25
	0.25 - 0.50
	0.50 - 0.75
	0.75 - 1.00
	1.00 - 1.50
	1.50 - 2.00
	> 2.00
	Model boundary
	MHWS Extent 2020s
	Model river centreline

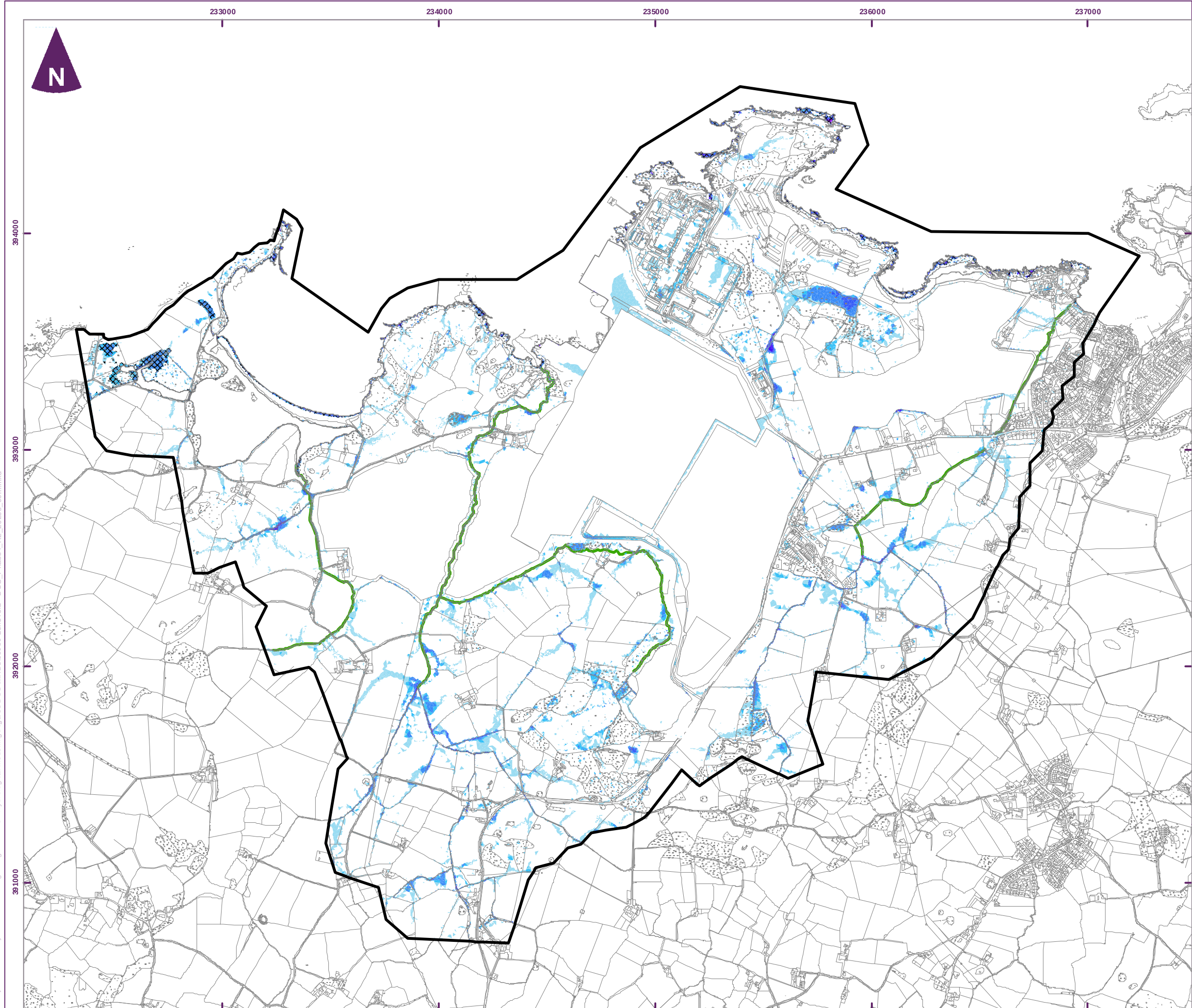
Notes:
The depths represent the maximum depth achieved. The flood prediction does not represent a moment in time as maximum depths can be achieved at different times.

Model run date: 26/05/2017
Corresponding data:
35989-C1239I2_DCO_Phase4_R1000_2020s_30m.xlsx



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Figure 48
DCO Reference Point 4 peak pluvial depth 1:1000 year AEP 30 min duration climate change 2020s - reasonably foreseeable



Key

- Peak flood depth (m)
Reference Point 4
1 : 2 year AEP pluvial
60 min duration
Climate change 2020s -
reasonably foreseeable
- | |
|------------------------|
| 0.01 - 0.05 |
| 0.05 - 0.10 |
| 0.10 - 0.25 |
| 0.25 - 0.50 |
| 0.50 - 0.75 |
| 0.75 - 1.00 |
| 1.00 - 1.50 |
| 1.50 - 2.00 |
| > 2.00 |
| Model boundary |
| MHWS Extent 2020s |
| Model river centreline |

Notes:
The depths represent the maximum
depth achieved. The flood prediction
does not represent a moment in time
as maximum depths can be achieved
at different times.

Model run date:26/05/2017
Corresponding data:
35989-C1240i2_DCO_Phase4_R2_
2020s_60m.xlsx



Figure 49
DCO Reference Point 4 peak pluvial
depth 1:2 year AEP 60 min duration
climate change 2020s - reasonably
foreseeable