



ENVIRONMENTAL STATEMENT

VOLUME 3 – APPENDIX 12.1

Part 2 of 2

Flood Risk Assessment

Drax Bioenergy with Carbon Capture and Storage

The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 – Regulation 5(2)(a)

Document Reference Number: 6.3.12.1

Applicant: Drax Power Limited

PINS Reference: EN010120



REVISION: 02

DATE: December 2022

DOCUMENT OWNER: WSP UK Limited

AUTHOR: A. Wilks-Daly / E. Szostak

APPROVER: A. Smith

PUBLIC

APPENDIX M – FLOODPLAIN COMPENSATION ANALYSIS

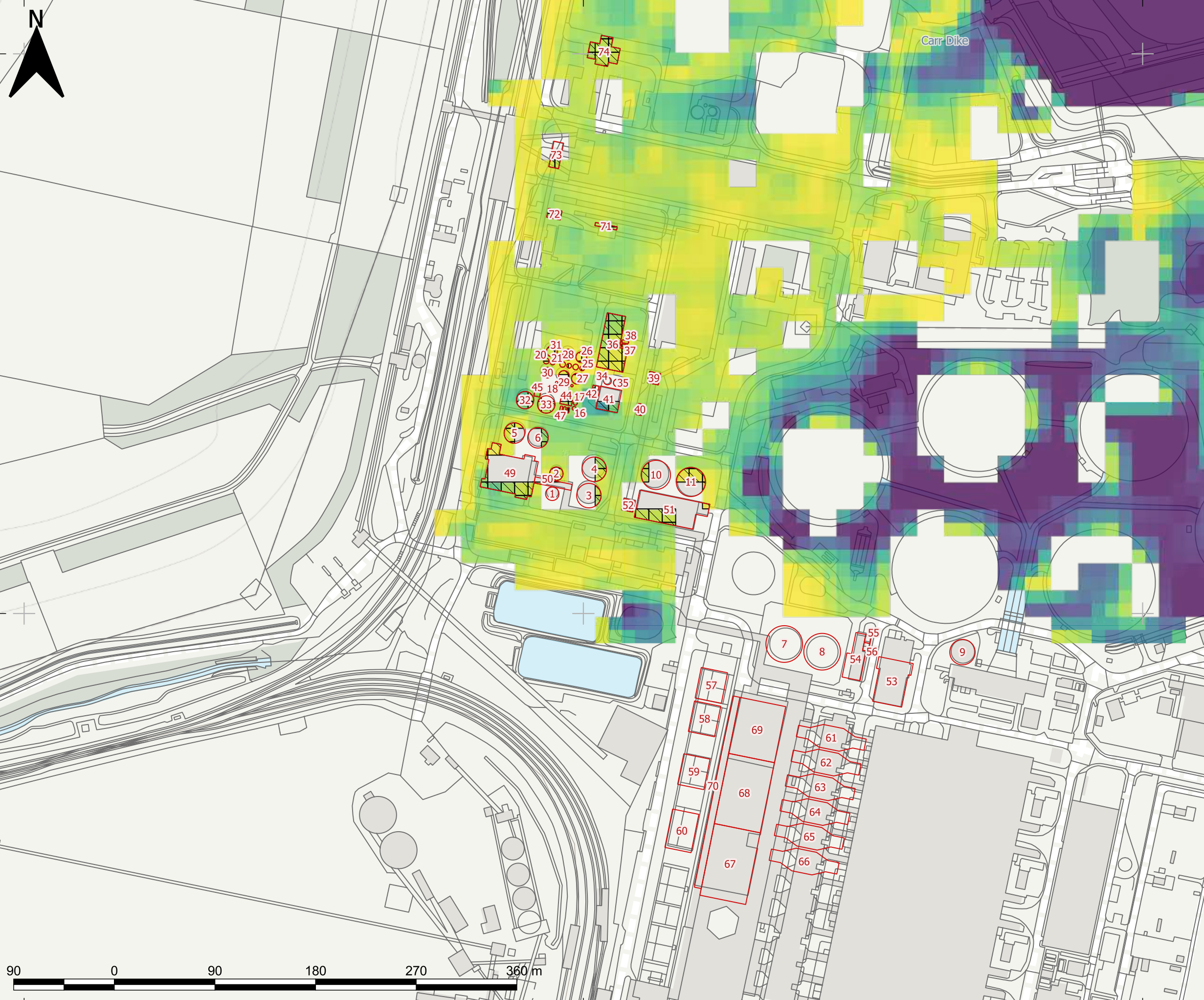
465500

466000

466500

428000

427500



KEY:

- Demolished Building Footprints
- Extracted

FT2 Flood Depth (m)

0 1

A	17/8/22	BW	FIRST ISSUE	ES	AS
REV	DATE	DRW	DESCRIPTION	CHK	APP

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CLIENT: **DRAX POWER**

ARCHITECT: -

PROJECT: **70072063 - Drax BECCS DCO**

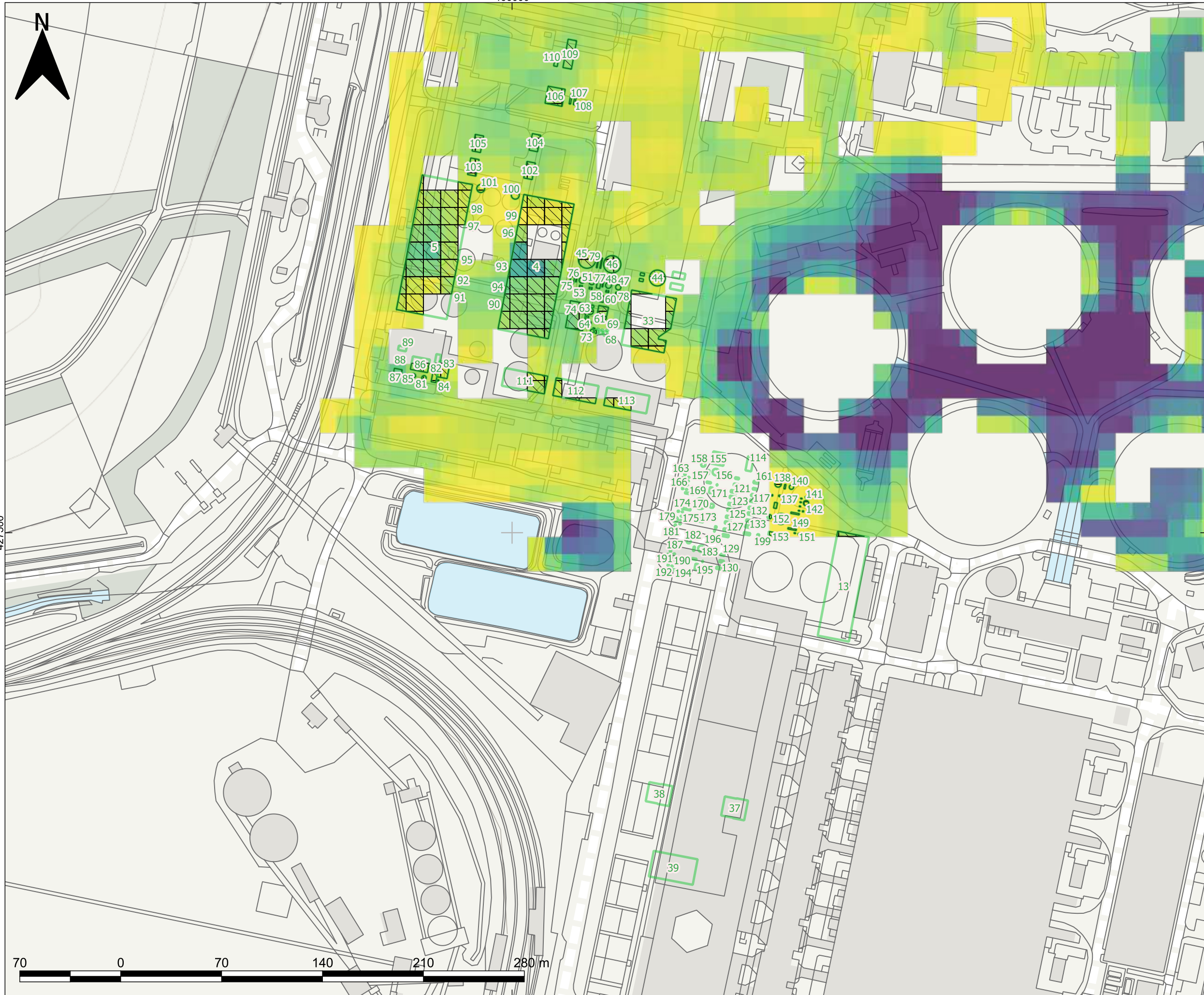
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FT2 Flood Result Demolished
Buildings Intersection**

DRAWN: BW	CHECKED: ES	APPROVED: AS
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PROJECT No: 70072063	DRAWING No: 70072063-FCA-1	REV: A
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KEY:

- Proposed Building Footprints
- Extracted

FT2 Flood Depth (m)

0 1

A	17/8/22	BW	FIRST ISSUE	ES	AS
REV	DATE	DRW	DESCRIPTION	CHK	APP

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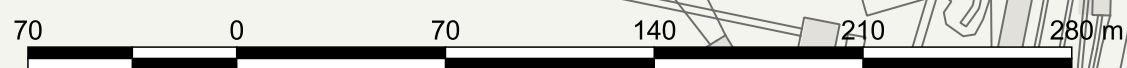
PROJECT: **70072063 - Drax BECCS DCO**

TITLE: **Flood Compensation Areas
FT2 Flood Result Proposed Buildings
Intersection**

DRAWN: BW	CHECKED: ES	APPROVED: AS
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QGIS FILE: Drax Flood Compensation Analysis.ggz	SCALE @A3: 1:2,530	DATE: 18/08/22
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PROJECT No: 70072063	DRAWING No: 70072063-FCA-2	REV: A
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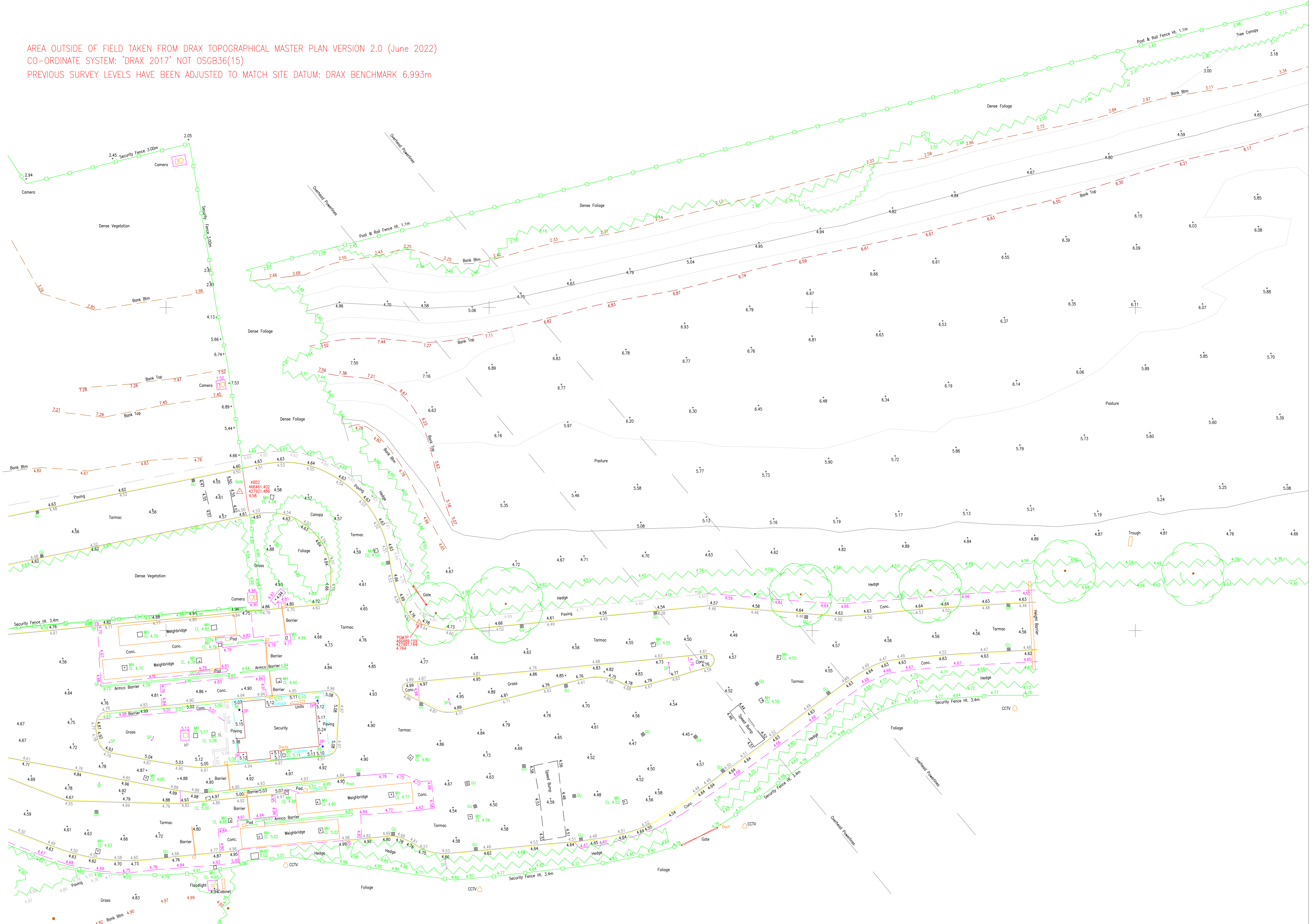


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PHOTOS OF PROPOSED COMPENSATION AREA

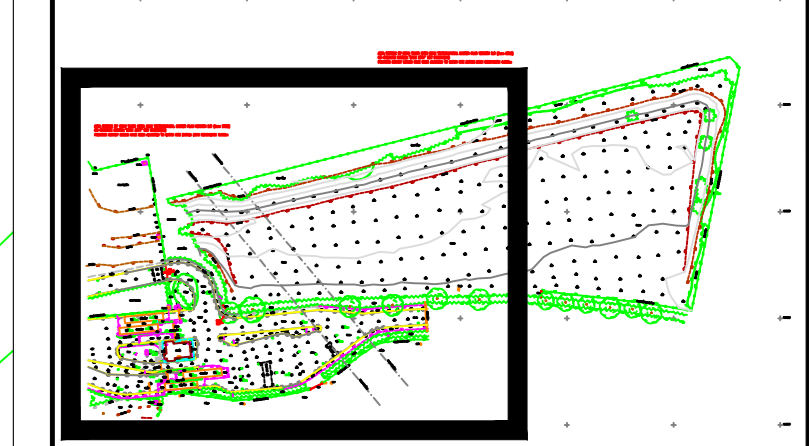
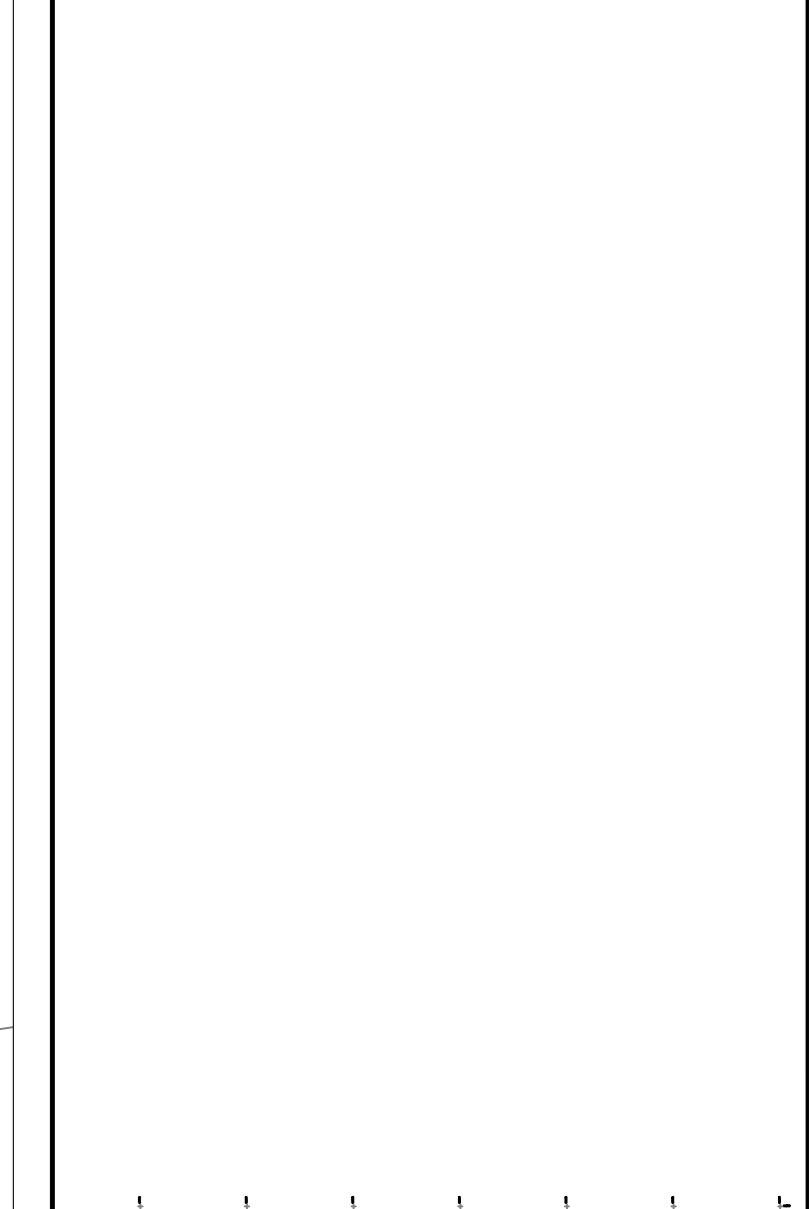


AREA OUTSIDE OF FIELD TAKEN FROM DRAX TOPOGRAPHICAL MASTER PLAN VERSION 2.0 (June 2022)
 CO-ORDINATE SYSTEM: "DRAX 2017" NOT OSGB36(15)
 PREVIOUS SURVEY LEVELS HAVE BEEN ADJUSTED TO MATCH SITE DATUM: DRAX BENCHMARK 6.993m



MANHOLE LEGEND		ABBREVIATIONS	
HLCT	Cable Television	LP	Lamp Post
HELE	Electricity	WK	Water Meter
HEGA	Gas	WSP	Water Stop Valve
HEWA	Surface Water	EP	Electricity Pole
HEWF	Foul Water	GM	Gas Marker Monument
HEWT	British Telecom	MS	Manhole
HEWT	Water	GU	Gully
HEWT	Water	FL	Fire Hydrant
+	Benchmark	WK	Water Meter
○	Electric Pole	WSP	Water Stop Valve
○	Electric Pole	GSV	Gas Stop Valve
○	Electric Pole	RE	Rodding Eye
○	Electric Pole	GU	Gully
○	Electric Pole	FL	Fire Hydrant
○	Electric Pole	WK	Water Meter
○	Electric Pole	WSP	Water Stop Valve
○	Electric Pole	GSV	Gas Stop Valve
○	Electric Pole	RE	Rodding Eye
○	Electric Pole	RE	Bottom of Bank
○	Electric Pole	RE	Building
○	Electric Pole	RE	Canopy Edge
○	Electric Pole	RE	Concrete Edge
○	Electric Pole	RE	Ditch
○	Electric Pole	RE	Drop Kerb
○	Electric Pole	RE	Overhead Cable
○	Electric Pole	RE	Fence
○	Electric Pole	RE	Gate
○	Electric Pole	RE	Kerb
○	Electric Pole	RE	Path
○	Electric Pole	RE	Post Line
○	Electric Pole	RE	Tarmac Edge
○	Electric Pole	RE	Top of Bank
○	Electric Pole	RE	Track
○	Electric Pole	RE	Wall
○	Electric Pole	RE	Verge
○	Electric Pole	RE	Hedge/Line
○	Electric Pole	RE	Grass Edge

SHEET LAYOUT



REVISION	DESCRIPTION	DATE

PRODAR
 Underground Mapping

PRODAR SURVEYS LTD.
 Unit 20 Carlisle House
 Carlisle Street
 Goolse DN14 5DS
 T: +44 (0) 1482 778 588
 F: +44 (0) 8443 913 111
 E: info@prodarsurveys.co.uk
 W: www.prodarsurveys.co.uk

JOB TITLE: DRAX POWER LIMITED
 BECOS PROJECT
 DRAX POWER STATION

DRAWING TITLE	TOPOGRAPHICAL SURVEY
DRAWING NO.	9239A-001
DATE	02/09/2022
SHEET NO.	No. 1 of 2
REVISION	
DRAWN BY	AB
SCALE	1:200 @ A3
CHECKED BY	MS
APPROVED BY	AD
SCALE BAR	0.9m 2.0m 4.0m 6.0m 8.0m 10.0m

466500



Site-won Material Volume (m3)	Flexible Extent	Minimum Required Extent
Providing Compensation	1,079	880
Total	2,505	2,038

- KEY:**
- Redline Boundary
 - Indicative Earthworks**
 - 1 in 4 Slope
 - Cut to 4.36m AOD
 - Site-Won Material Placement Area
 - Floodplain Compensation Extents**
 - Flexible
 - Minimum Required

NOTES

- Indicative cut area to be sloped up to existing ground levels at 1 in 4 slope.
- Site-won material to be placed in areas above 5.35m AOD.
- Proposed Flood Compensation Area is indicative and subject to detailed design.

REV	DATE	DRW	DESCRIPTION	CHK	APP
A	12/9/22	BW	FIRST ISSUE	ES	AS

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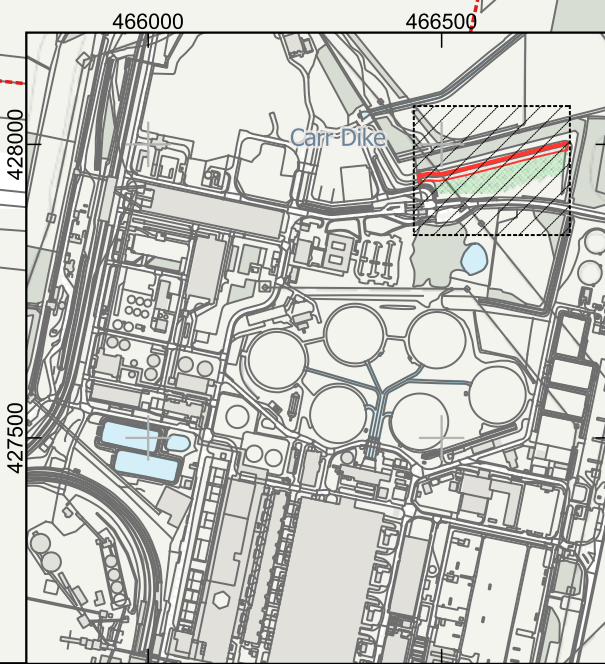
PROJECT: **70072063 - Drax BECCS DCO**

TITLE: **Indicative Flood Compensation Area**

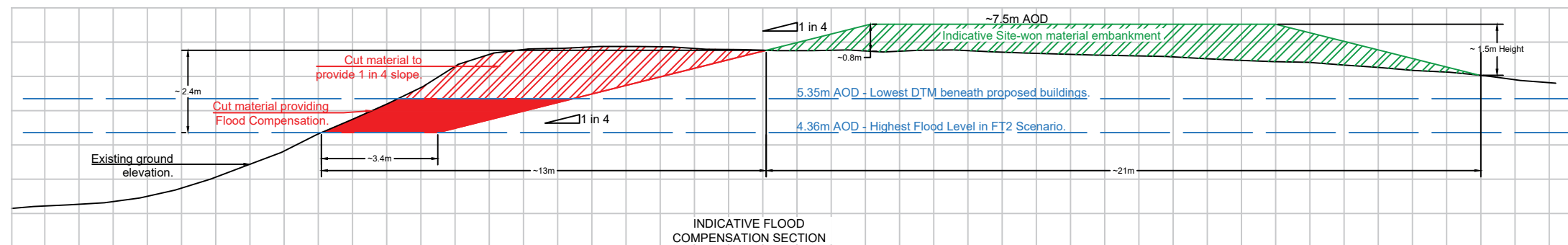
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BW	ES	AS

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Drax Flood Compensation Analysis.ggz	1:810	21/09/22

PROJECT No:	DRAWING No:	REV:
70072063	70072063-FCA-2	A



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NOTES
 - Indicative cut area to be sloped up to existing ground levels at 1 in 4 slope.
 - Site-won material to be placed in areas above 5.35m AOD.
 - Proposed Flood Compensation Area is indicative and subject to detailed design.

REV	DATE	DRW	DESCRIPTION	CHK	APP
A	12/9/22	BW	FIRST ISSUE	ES	AS

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ARCHITECT:
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PROJECT:
70072063 - Drax BECCS DCO

TITLE:
Indicative Flood Compensation Section

DRAWN: BW	CHECKED: ES	APPROVED: AS
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QGIS FILE: Drax Flood Compensation Analysis.ggz	SCALE @A3:	DATE: 13/09/22
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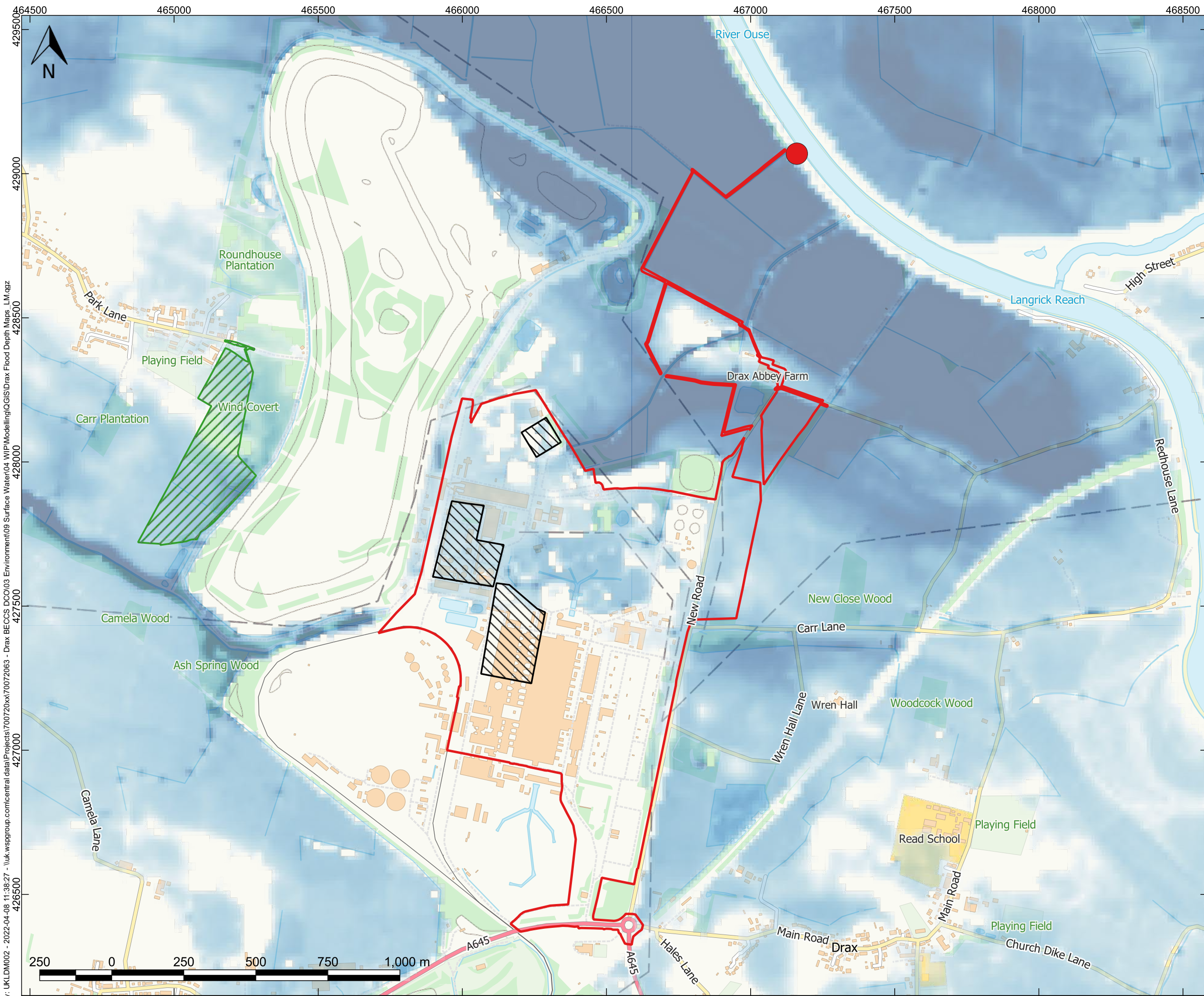
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APPENDIX N – 60 YEAR DESIGN LIFE FLOOD LEVELS



60 Year Design life flood levels

Building Reference	FD	FT1	FT5	T	Min design level (mAOD) based on 2046 design event FT2	Freeboard/flood depth (m)			
	Modelled 60yr design life flood levels (mAOD)					FD	FT1	FT5	T
1 East	0.00	0.00	0.00	0.00	6.58	0.3m above ground level			
1 West	0.00	0.00	0.00	0.00	6.20	0.3m above ground level			
10	5.68	5.58	4.90	4.85	5.40	-0.28	-0.18	0.50	0.55
12 East	5.68	5.58	4.90	4.85	5.40	-0.28	-0.18	0.50	0.55
12 West	5.68	5.58	4.90	4.85	5.40	-0.28	-0.18	0.50	0.55
13	5.68	5.58	4.90	4.85	5.40	-0.28	-0.18	0.50	0.55
14	5.68	5.58	4.90	4.85	5.40	-0.28	-0.18	0.50	0.55
16	5.68	5.58	4.90	4.85	5.40	-0.28	-0.18	0.50	0.55
3 East	0.00	0.00	0.00	0.00	6.15	0.3m above ground level			
3 West	0.00	0.00	0.00	0.00	6.23	0.3m above ground level			
4 East	5.68	5.58	4.90	4.85	5.40	-0.28	-0.18	0.50	0.55
4 West	0.00	0.00	0.00	0.00	5.91	0.3m above ground level			
8	0.00	0.00	0.00	0.00	6.26	0.3m above ground level			



KEY:

- Order Limits
- Indicative Areas of Proposed Works
- Off-Site Habitat Provision Area
- Breach Location

Maximum Flood Depth (m)

- 0.00 - 0.15 m
- 0.15 - 0.50 m
- 0.50 - 1.00 m
- 1.00 - 1.50 m
- 1.50 - 2.00 m
- 2.00 - 2.50 m
- >2.50m

A	08/04/22	LM	FIRST ISSUE	ES	AS
REV	DATE	DRW	DESCRIPTION	CHK	APP

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ARCHITECT: -

PROJECT: **DRAX BECCS DCO**

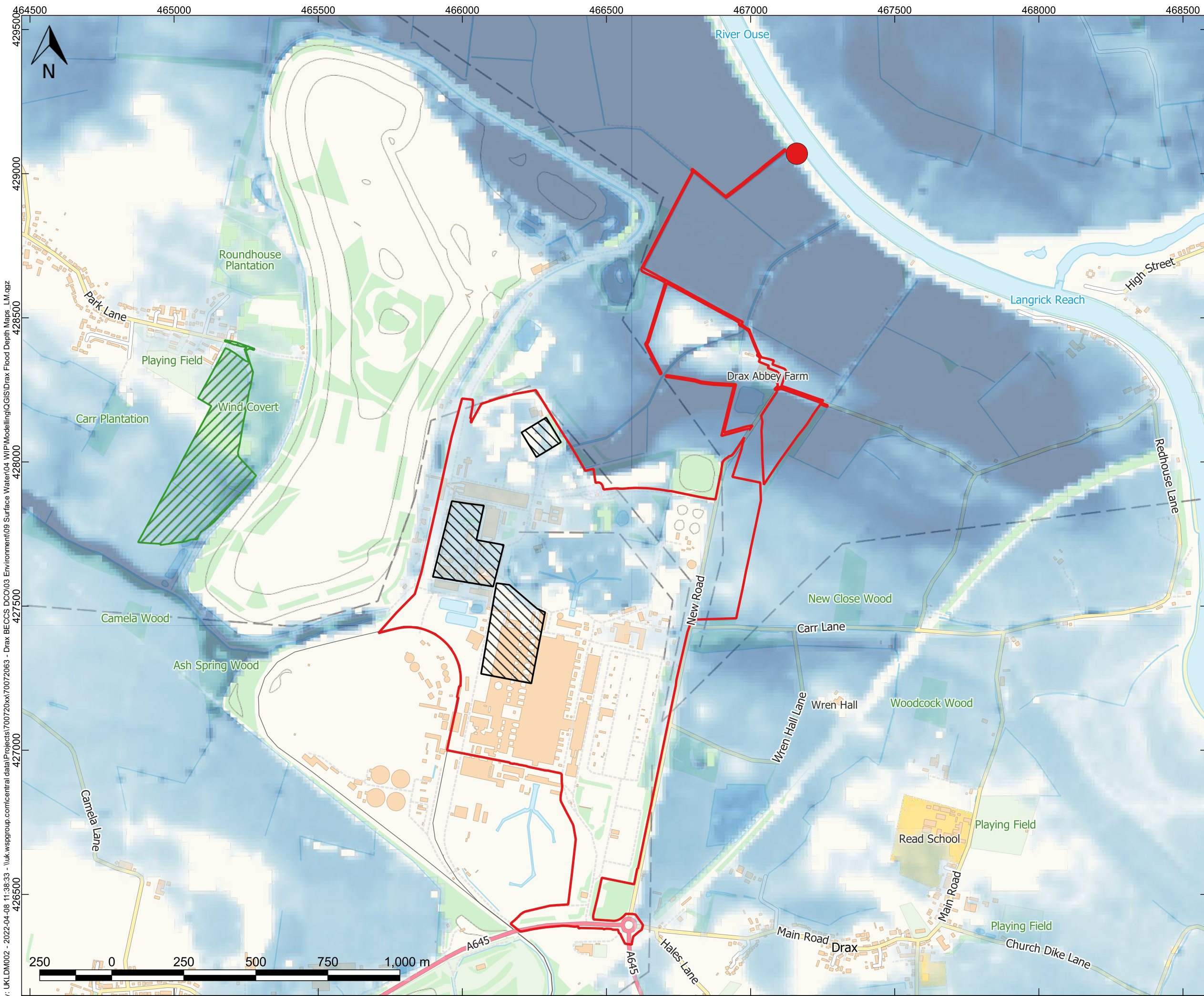
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DRAWN: LM	CHECKED: ES	APPROVED: AS
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KEY:

- Order Limits
- Indicative Areas of Proposed Works
- Off-Site Habitat Provision Area
- Breach Location

Maximum Flood Depth (m)

- 0.00 - 0.15 m
- 0.15 - 0.50 m
- 0.50 - 1.00 m
- 1.00 - 1.50 m
- 1.50 - 2.00 m
- 2.00 - 2.50 m
- >2.50m

A	08/04/22	LM	FIRST ISSUE	ES	AS
REV	DATE	DRW	DESCRIPTION	CHK	APP

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PROJECT: **DRAX BECCS DCO**

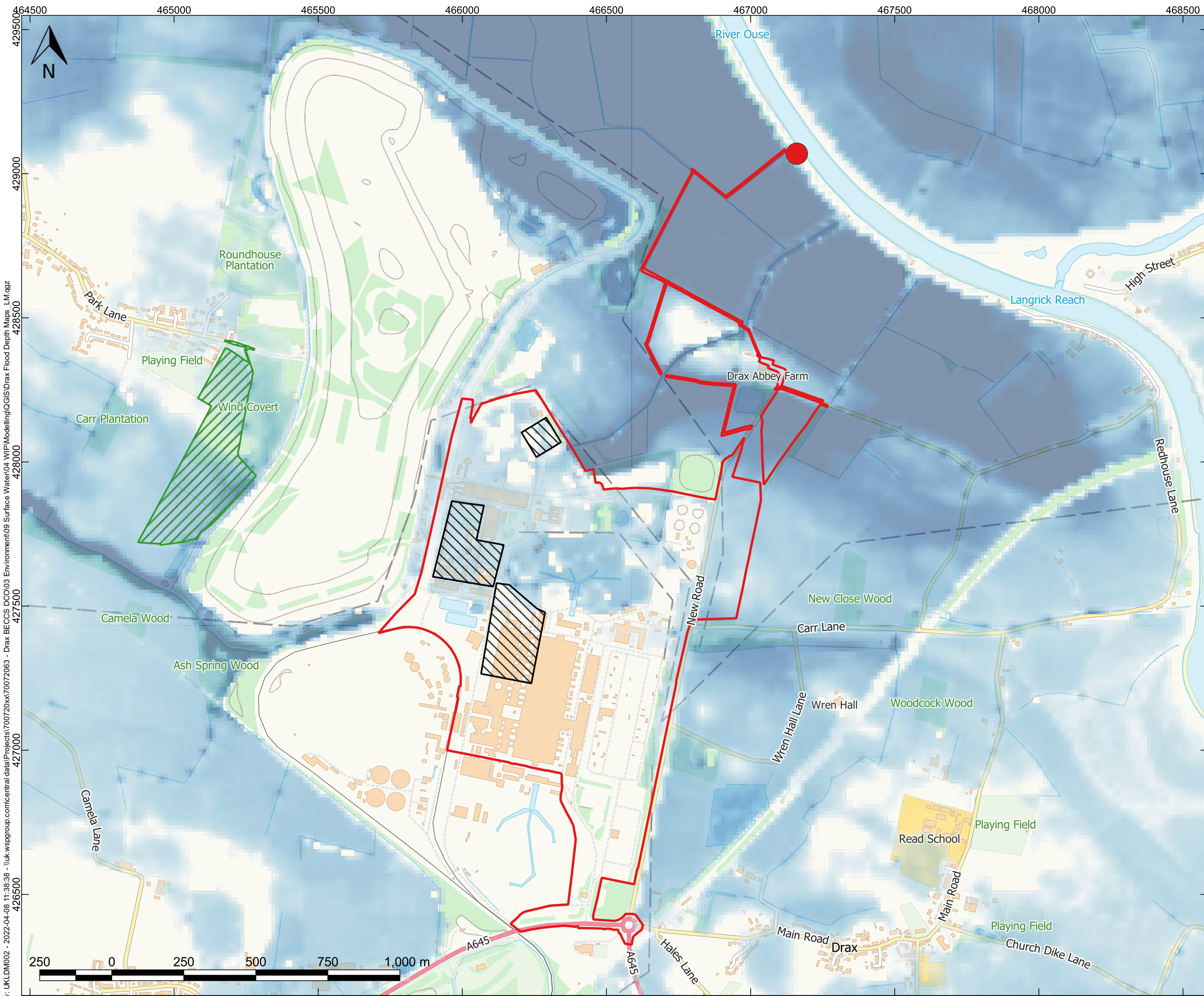
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DRAWN: LM	CHECKED: ES	APPROVED: AS
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KEY:

- Order Limits
- Indicative Areas of Proposed Works
- Off-Site Habitat Provision Area
- Breach Location

Maximum Flood Depth (m)

- 0.00 - 0.15 m
- 0.15 - 0.50 m
- 0.50 - 1.00 m
- 1.00 - 1.50 m
- 1.50 - 2.00 m
- 2.00 - 2.50 m
- >2.50m

A	08/04/22	LM	FIRST ISSUE	ES	AS
REV	DATE	DRW	DESCRIPTION	CHK	APP

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ARCHITECT: -

PROJECT: **DRAX BECCS DCO**

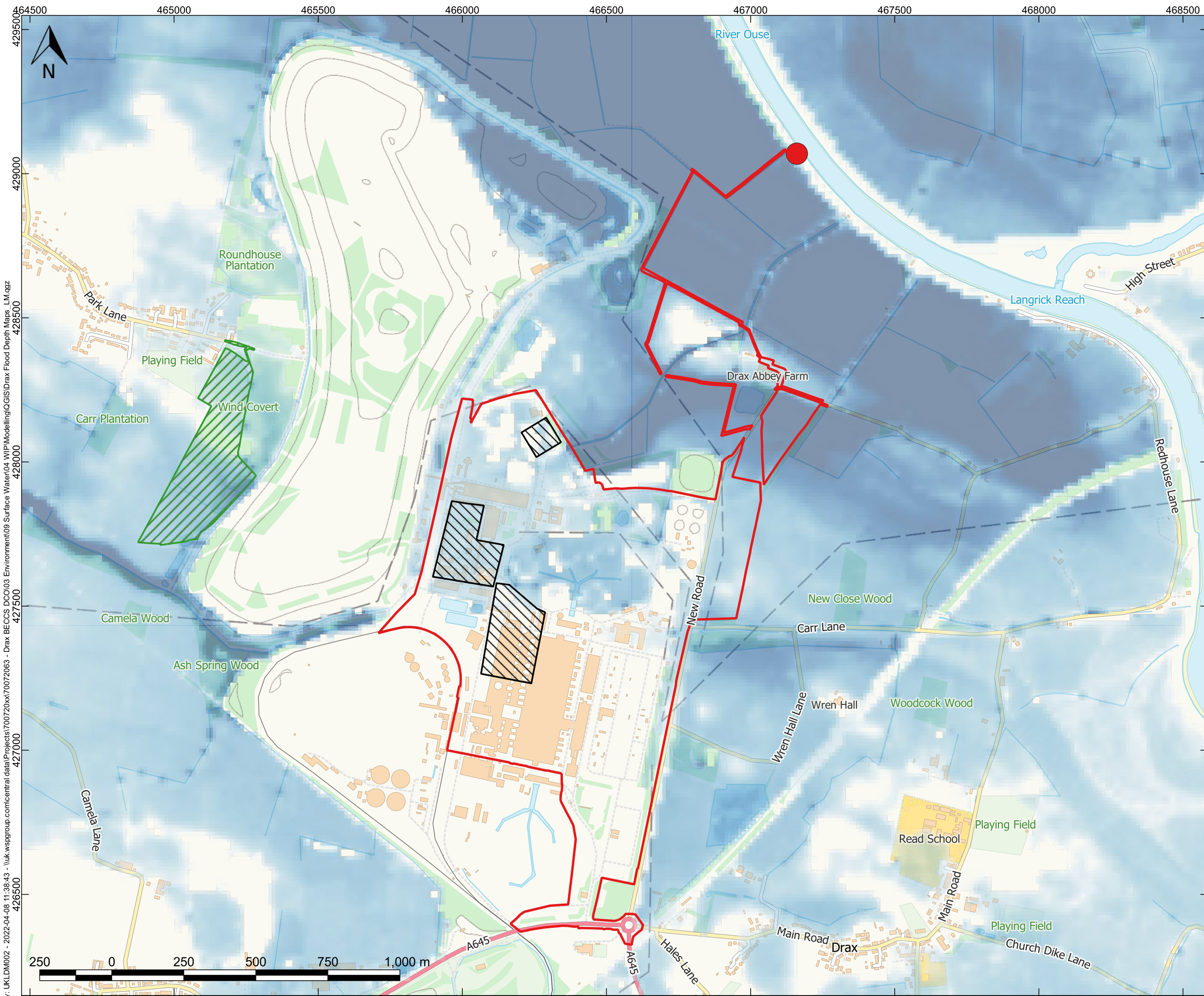
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DRAWN:	CHECKED:	APPROVED:
LM	ES	AS

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KEY:

- Order Limits
- Indicative Areas of Proposed Works
- Off-Site Habitat Provision Area
- Breach Location

Maximum Flood Depth (m)

- 0.00 - 0.15 m
- 0.15 - 0.50 m
- 0.50 - 1.00 m
- 1.00 - 1.50 m
- 1.50 - 2.00 m
- 2.00 - 2.50 m
- >2.50m

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REV	DATE	DRW	DESCRIPTION	CHK	APP

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ARCHITECT: -

PROJECT: **DRAX BECCS DCO**

TITLE: **MAXIMUM FLOOD DEPTHS FOR T DEFENDED - 60-YEAR DESIGN LIFE**

DRAWN: LM	CHECKED: ES	APPROVED: AS
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