



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: [042](#)

DATE: [December](#)~~May~~ 2022

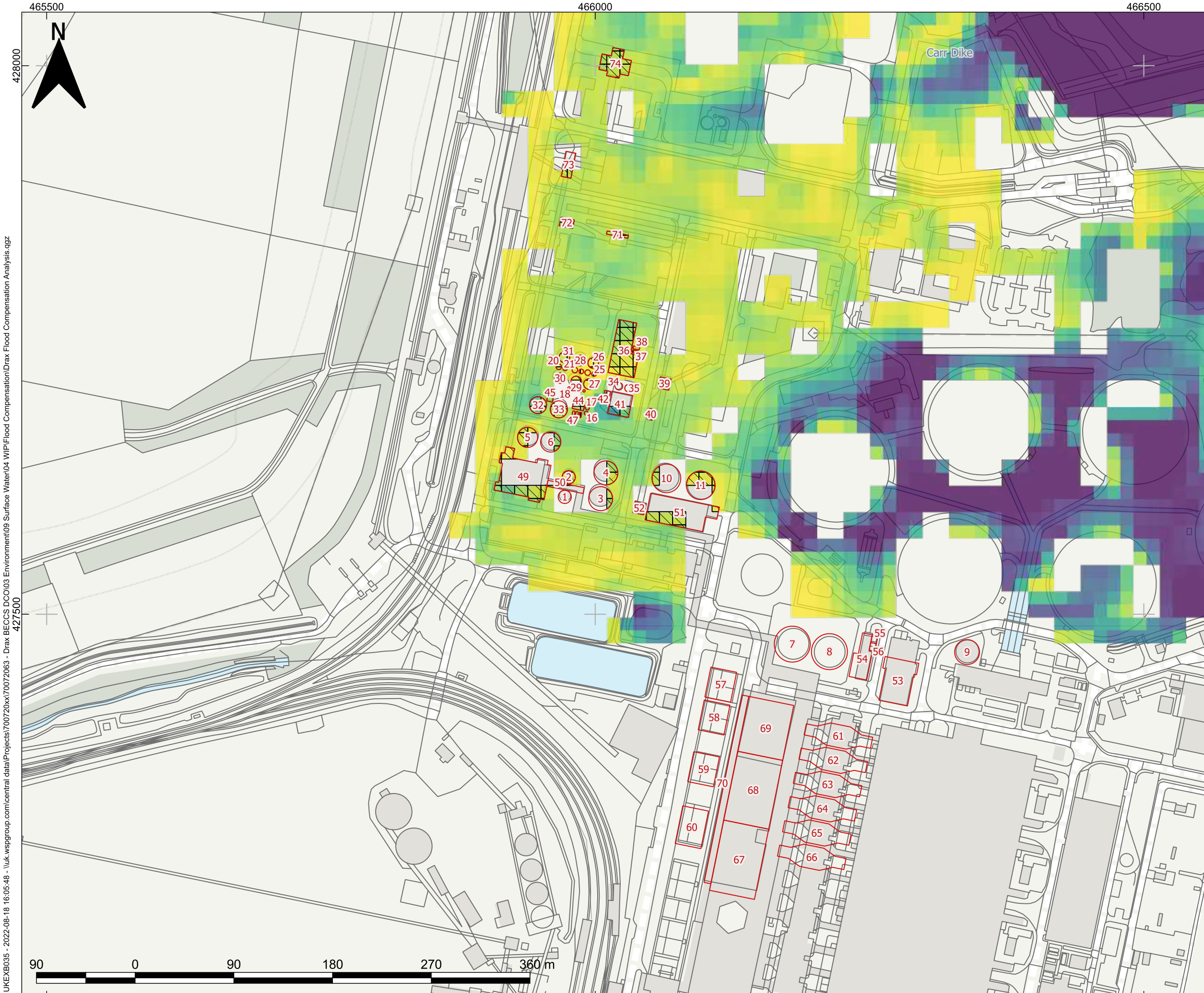
DOCUMENT OWNER: WSP UK Limited

AUTHOR: A. Wilks-Daly / E. Szostak

APPROVER: A. Smith

PUBLIC

APPENDIX M – FLOODPLAIN COMPENSATION ANALYSIS



KEY:

- Demolished Building Footprints
- Extracted

FT2 Flood Depth (m)

0 1

A	17/8/22	BW	FIRST ISSUE	ES	AS
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PROJECT: **70072063 - Drax BECCS DCO**

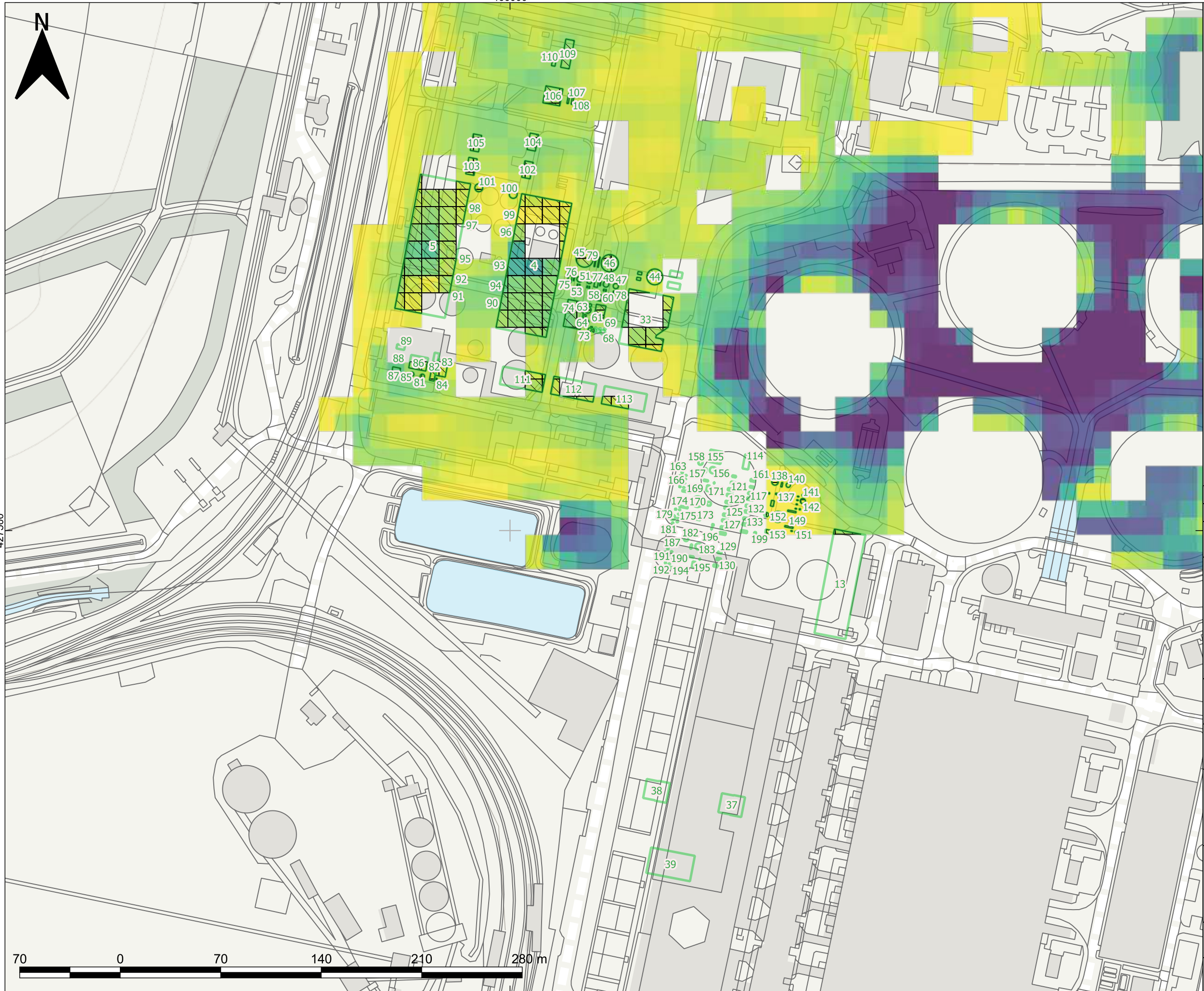
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FT2 Flood Result Demolished
Buildings Intersection**

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

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PROJECT: **70072063 - Drax BECCS DCO**

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

DRAWN:	CHECKED:	APPROVED:
BW	ES	AS

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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PHOTOS OF PROPOSED COMPENSATION AREA

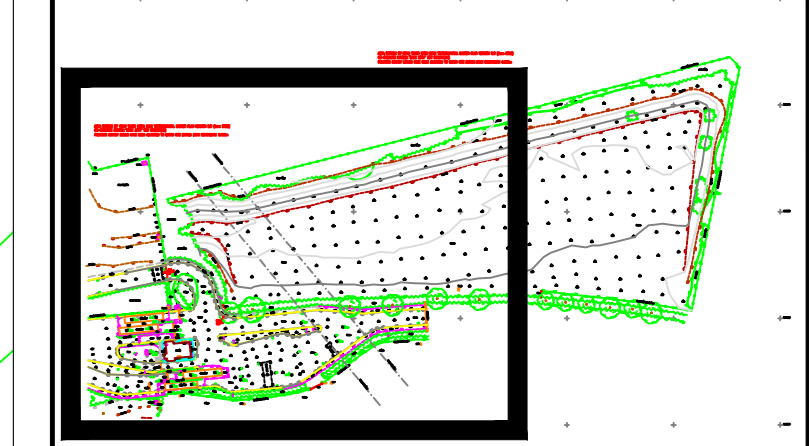
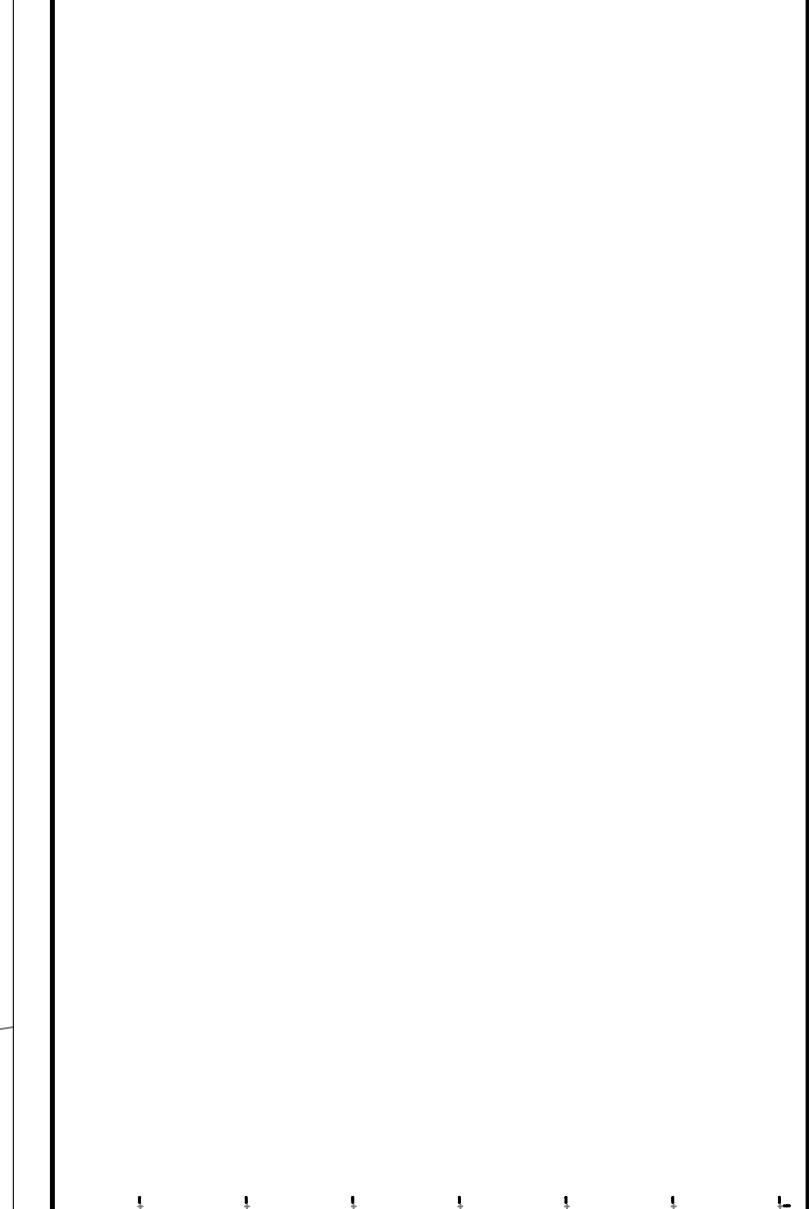


AREA OUTSIDE OF FIELD TAKEN FROM DRAX TOPOGRAPHICAL MASTER PLAN VERSION 2.0 (June 2022)
 CO-ORDINATE SYSTEM: "DRAX 2017" NOT OSGB36(15)
 PREVIOUS SURVEY LEVELS HAVE BEEN ADJUSTED TO MATCH SITE DATUM: DRAX BENCHMARK 6.993m



MANHOLE LEGEND		ABBREVIATIONS	
HT/CT	Cable Television	LP	Lamp Post
HT/EL	Electricity	TP	Telegraph Pole
HT/GA	Gas	EP	Electricity Pole
HT/SW	Surface Water	GM	Gas Marker Monument
HT/WF	Foul Water	MR	Manhole
HT/WT	British Telecom Water	GU	Gully
HT/WT	Water	FL	Fire Hydrant
HT/WT	Water	WM	Water Meter
HT/WT	Water	WSP	Water Stop Valve
HT/WT	Water	GSV	Gas Stop Valve
HT/WT	Water	EP	Electricity Pole
HT/WT	Water	RE	Rodding Eye
HT/WT	Water	RE	Bottom of Bank
HT/WT	Water	RE	Building
HT/WT	Water	RE	Canopy Edge
HT/WT	Water	RE	Concrete Edge
HT/WT	Water	RE	Ditch
HT/WT	Water	RE	Drop Kerb
HT/WT	Water	RE	Overhead Cable
HT/WT	Water	RE	Fence
HT/WT	Water	RE	Gate
HT/WT	Water	RE	Kerb
HT/WT	Water	RE	Path
HT/WT	Water	RE	Post Line
HT/WT	Water	RE	Tarmac Edge
HT/WT	Water	RE	Top of Bank
HT/WT	Water	RE	Track
HT/WT	Water	RE	Wall
HT/WT	Water	RE	Verge
HT/WT	Water	RE	Hedge/Line
HT/WT	Water	RE	Grass Edge

SHEET LAYOUT



REVISION	DESCRIPTION	DATE

PROGAR
 Underground Mapping

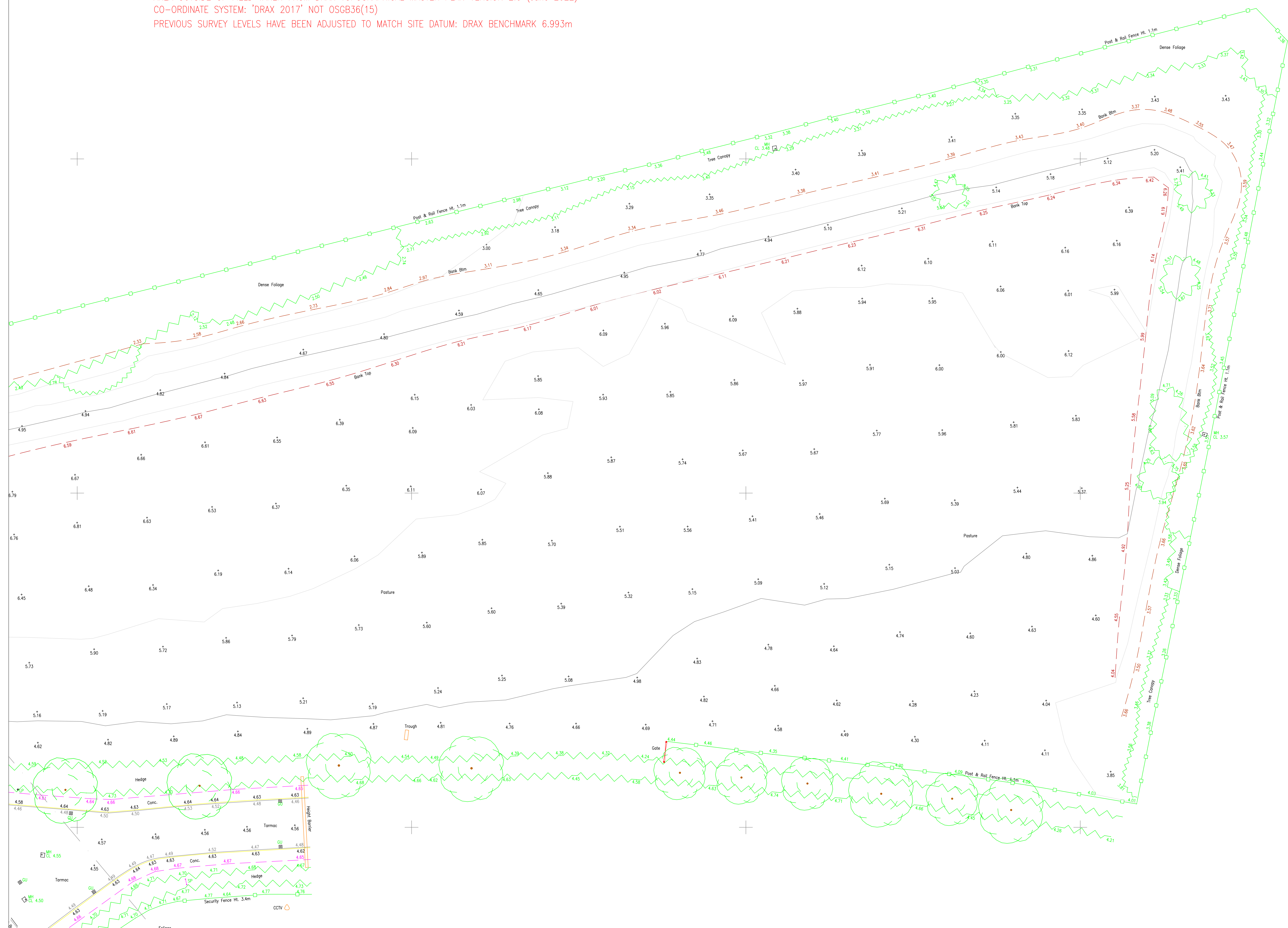
PROGAR SURVEYS LTD.
 Unit 20 Carlisle House
 Carlisle Street
 Goole DN14 5DS
 T: +44 (0) 1482 778 588
 F: +44 (0) 8443 913 111
 E: info@progarsurveys.co.uk
 W: www.progarsurveys.co.uk

JOB TITLE: DRAX POWER LIMITED
 BECOS PROJECT
 DRAX POWER STATION

DRAWING TITLE	TOPOGRAPHICAL SURVEY
DRAWING NO.	9239A-001
DATE	02/09/2022
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REVISION	
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CHECKED BY	MS
APPROVED BY	AD

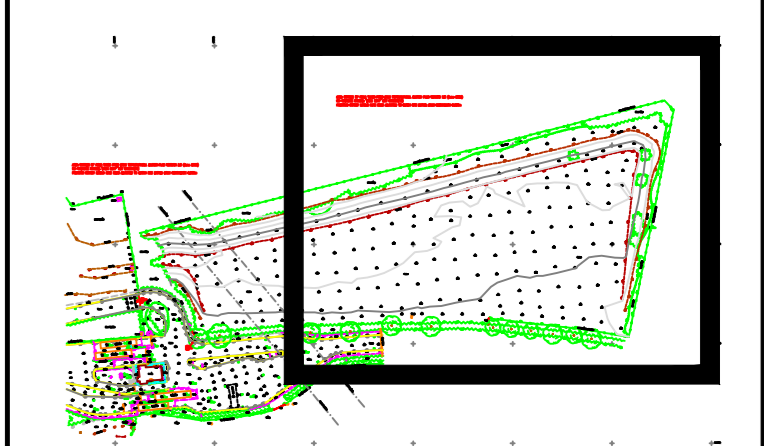
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 CO-ORDINATE SYSTEM: 'DRAX 2017' NOT OSGB36(15)
 PREVIOUS SURVEY LEVELS HAVE BEEN ADJUSTED TO MATCH SITE DATUM: DRAX BENCHMARK 6.993m



HANDICAP LEGEND		ABBREVIATIONS	
HWCT	Cable Television	LP	Lamp Post
HWEL	Electricity	TP	Telegraph Pole
HWGA	Gas	EP	Electricity Pole
HWFW	Surface Water	GM	Gas Marker Monument
HWFW	Foul Water	MS	Manhole
HWBT	British Telecom	GU	Gully
HWWT	Water	FL	Fire Hydrant
SYMBOL LEGEND		WM	Water Meter
+	Benchmark	WSSV	Water Stop Valve
□	Electric Box	GSV	Gas Stop Valve
⊕	Electric Pole	RZ	Rodding Eye
○	Fence Post	GU	Gully
□	Gas Stop Valve	FL	Fire Hydrant
●	Gate Post	WM	Water Meter
■	Gas Marker	WSSV	Water Stop Valve
■	Gas Marker	GSV	Gas Stop Valve
+	Gas Well	RE	Rodding Eye
⊕	Lamp Post	—	Bottom of Bank
+	Manhole Point	—	Building
△	Mis Triangular	—	Canopy Edge
△	Ground Marker	—	Concrete Edge
○	Marker Post	—	Ditch
○	Rodding Eye	—	Drop Kerb
○	Sample Point	—	Overhead Cable
○	Sign Post	—	Fence
+	Spot Height	—	Gate
+	Level	—	Kerb
+	Ridge Level	—	Path
△	Survey Station	—	Flow Line
○	Telegraph Pole	—	Tarmac Edge
○	Deciduous Tree	—	Top of Bank
○	Road Sign	—	Track
○	Valve	—	Wall
○	Water Meter	—	Verge
○	Letter Box	—	Hedge Line
○	Mis Circular	—	Grass Edge

SHEET LAYOUT



REVISION	DESCRIPTION	DATE

	PRODAR SURVEYS LTD. Unit 20 Carlisle House Carlisle Street Goole 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 BECCS PROJECT DRAX POWER STATION
	DRAWING TITLE: TOPOGRAPHICAL SURVEY DRAWING NO: 02394-001 DATE: 02/09/2022 SHEET NO: No.2 of 2 REVISION: DRAWN BY: AD SCALE: 1:200 @ A3 CHECKED BY: MS APPROVED BY: AD
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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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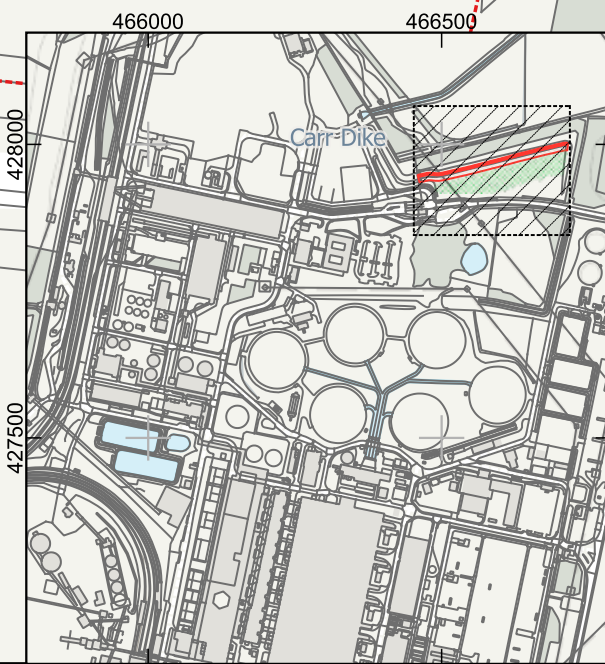
PROJECT: **70072063 - Drax BECCS DCO**

TITLE: **Indicative Flood Compensation Area**

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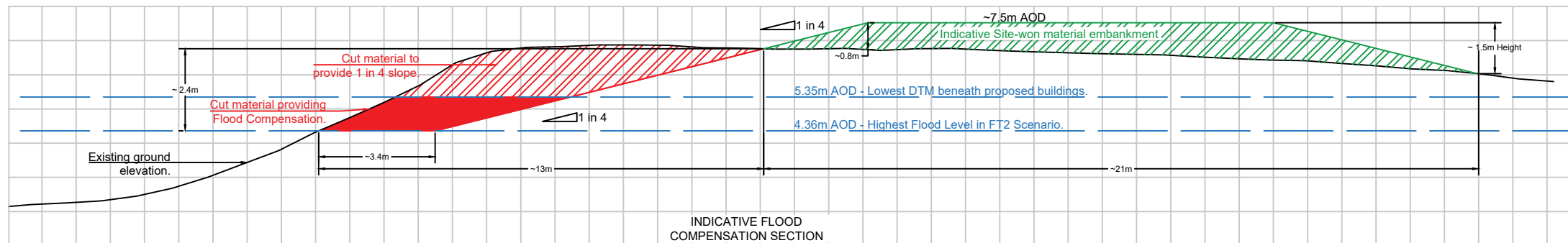
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NOTES
 - Indicative cut area to be sloped up to existing ground levels at 1 in 4 slope.
 - Site-won material to be placed in areas above 5.35m AOD.
 - Proposed Flood Compensation Area is indicative and subject to detailed design.

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

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ARCHITECT:
 -

PROJECT:
70072063 - Drax BECCS DCO

TITLE:
Indicative Flood Compensation Section

DRAWN: BW	CHECKED: ES	APPROVED: AS
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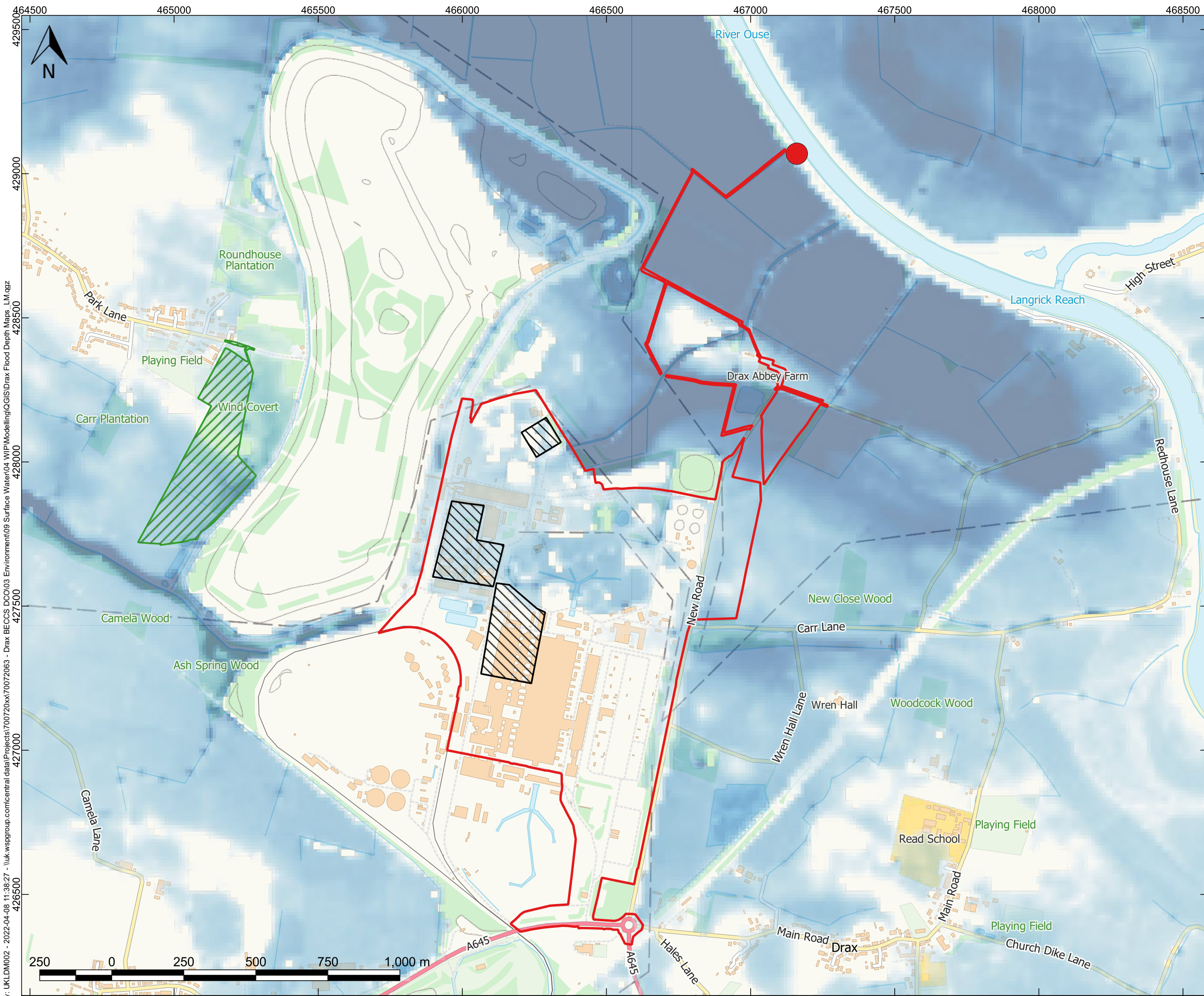
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APPENDIX N – 60 YEAR DESIGN LIFE FLOOD LEVELS



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
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ARCHITECT: -

PROJECT: **DRAX BECCS DCO**

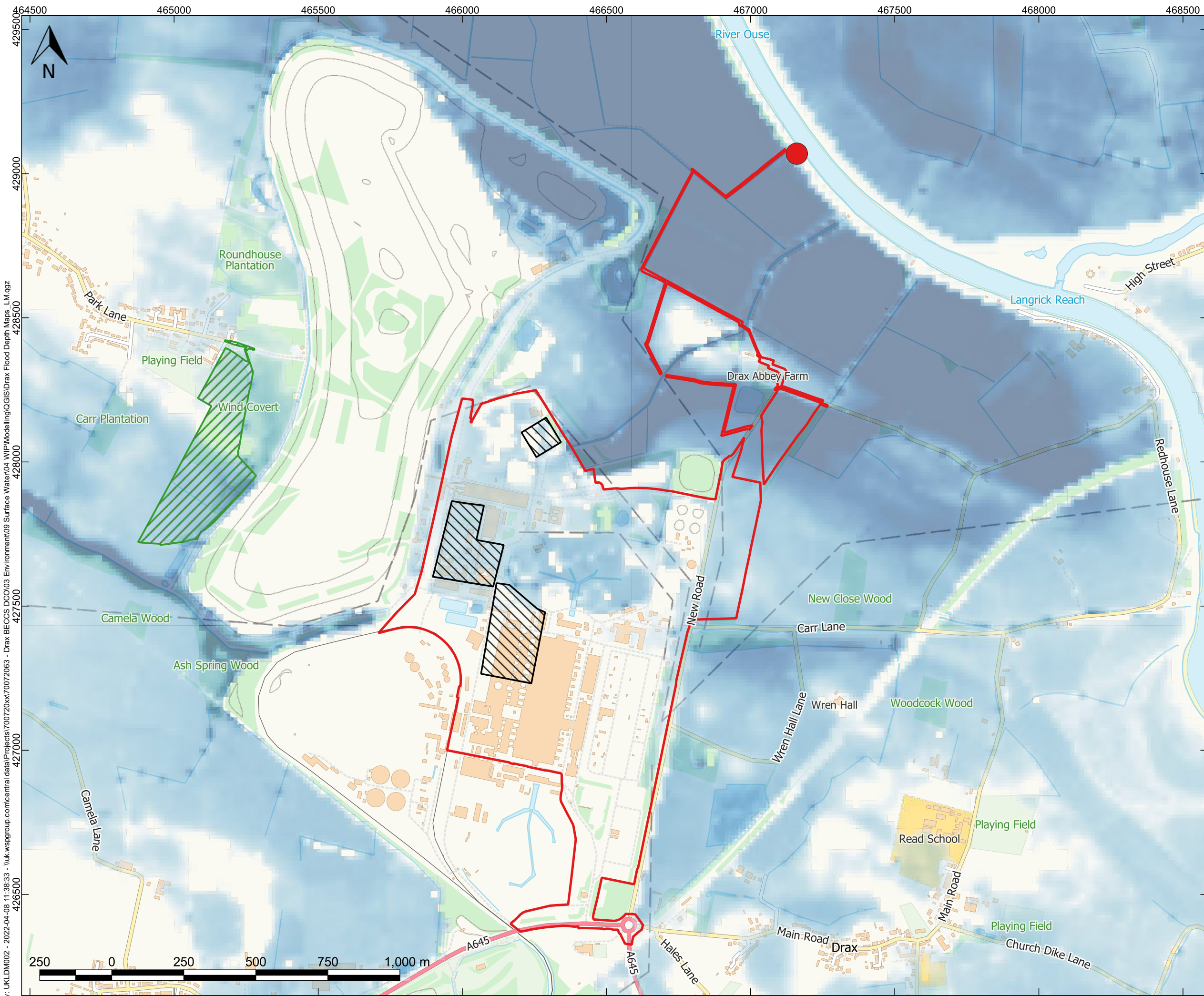
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DRAWN: LM	CHECKED: ES	APPROVED: AS
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KEY:

- 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
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ARCHITECT: -

PROJECT: **DRAX BECCS DCO**

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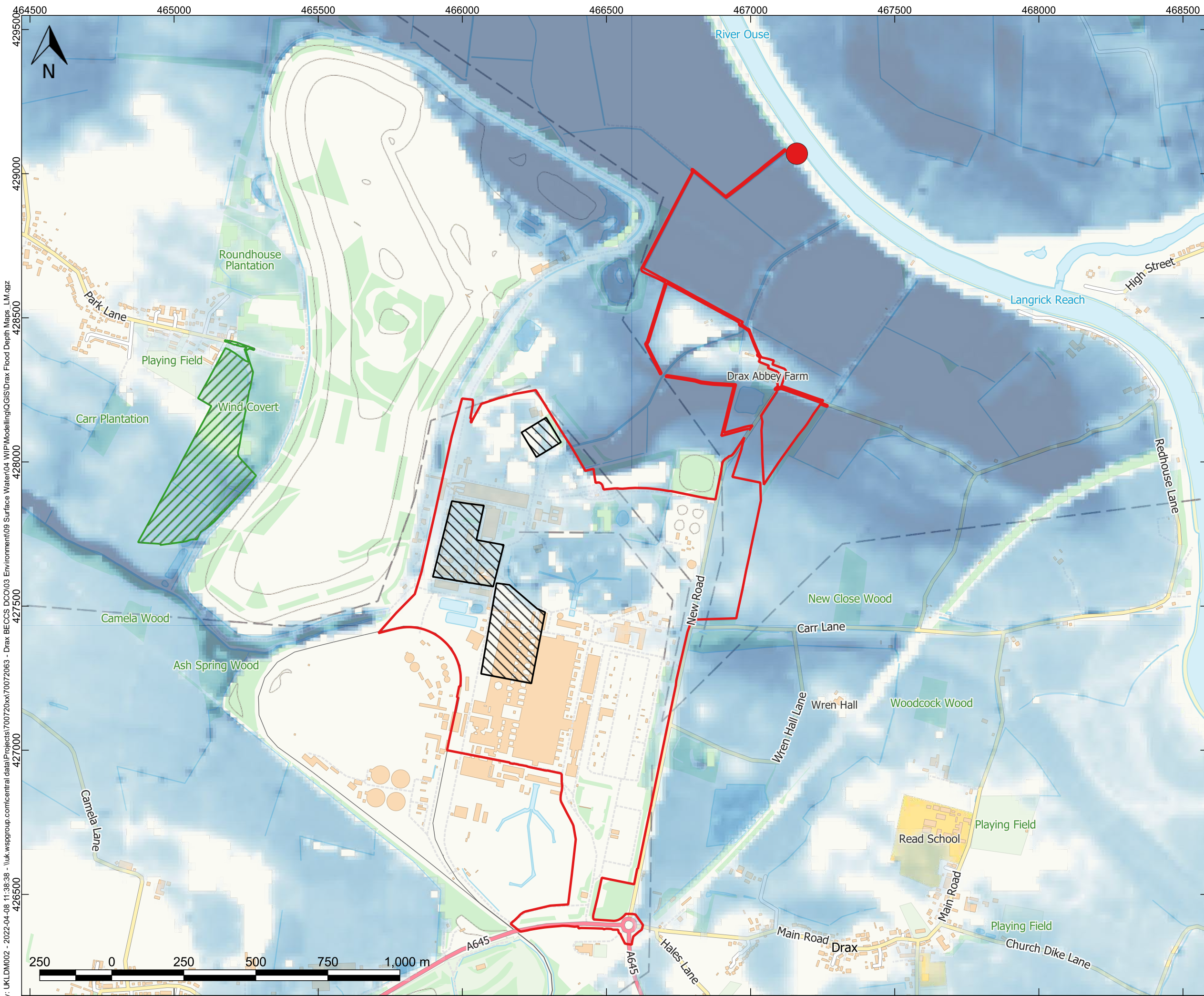
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LM	ES	AS

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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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PROJECT: **DRAX BECCS DCO**

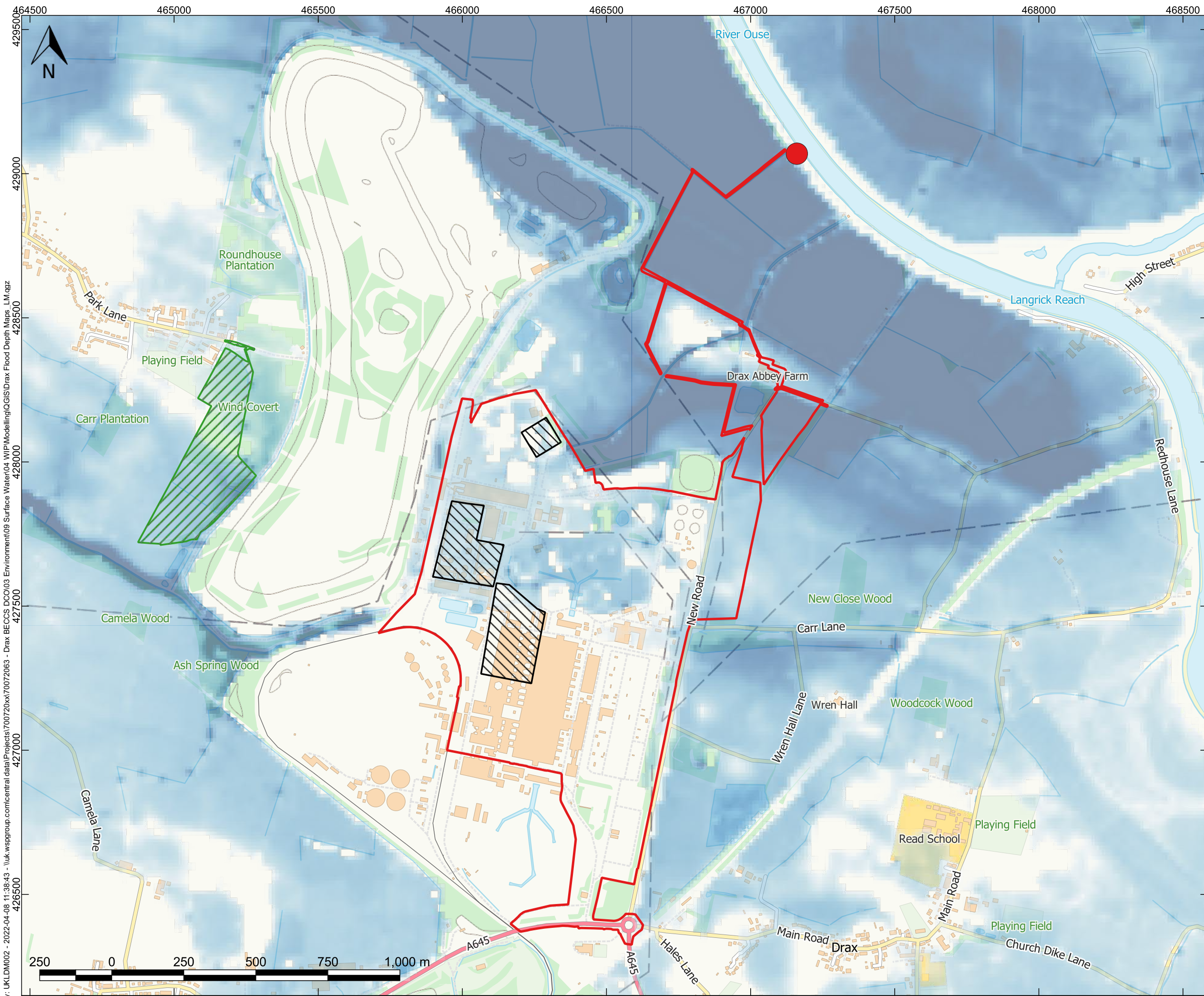
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DRAWN: LM	CHECKED: ES	APPROVED: AS
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KEY:

- 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

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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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