



Drawings

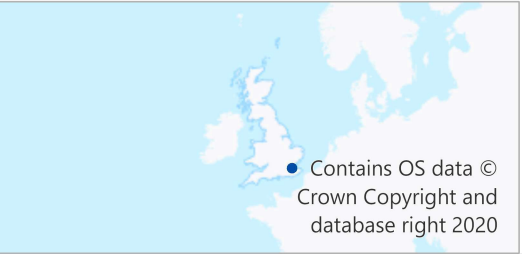




Drawing 1: Site Location

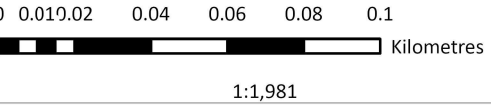


- KEY**
- Site Boundary
 - 100m buffer



Coordinate System: British National Grid
Projection: Transverse Mercator

Attributions: <attributions>



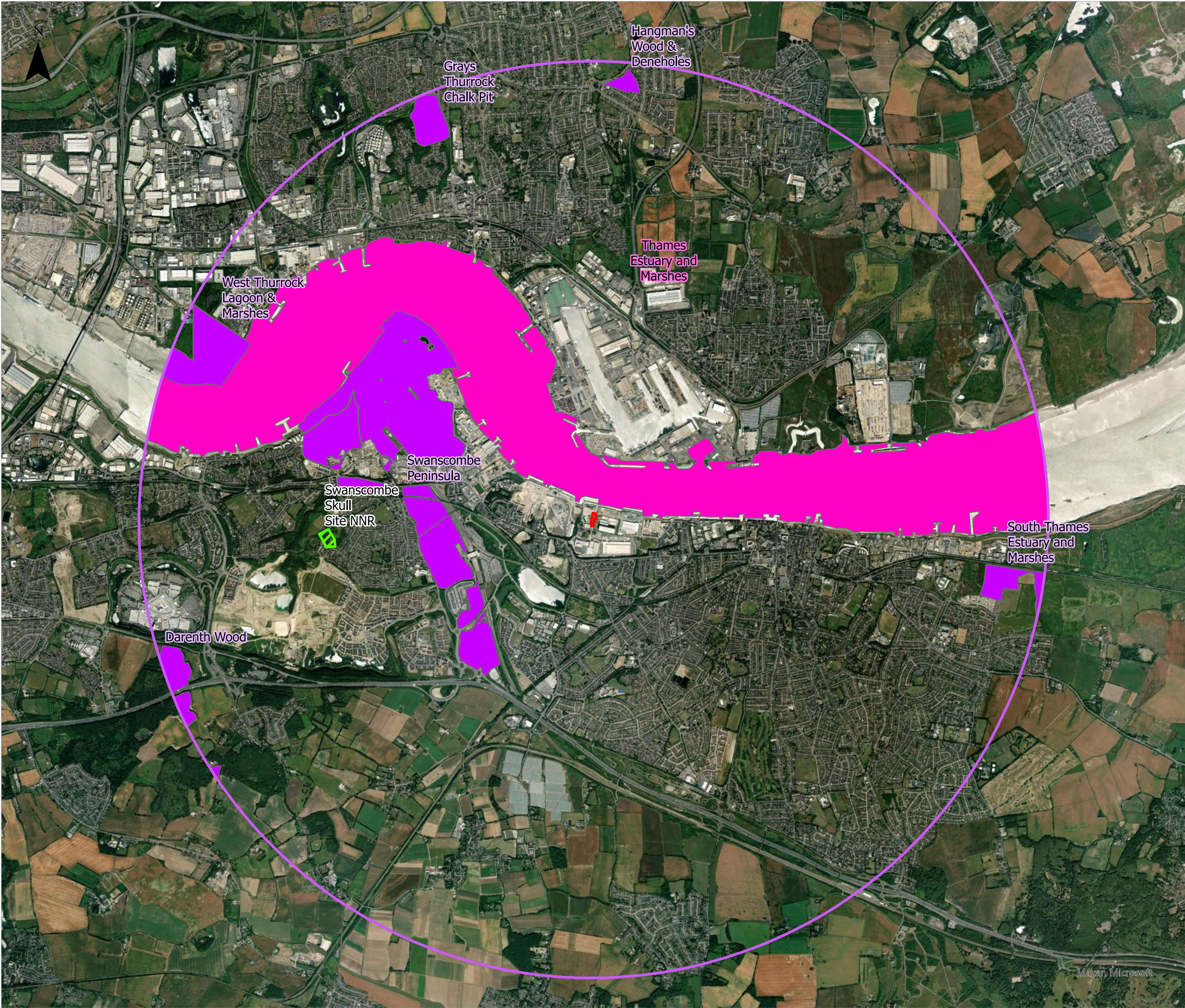
Northfleet / 5956
Preliminary Ecological Appraisal
Drawing 1
Site Location

Date:	Lead:	Review:	Version:
05/03/2025	SG	SR	1.0

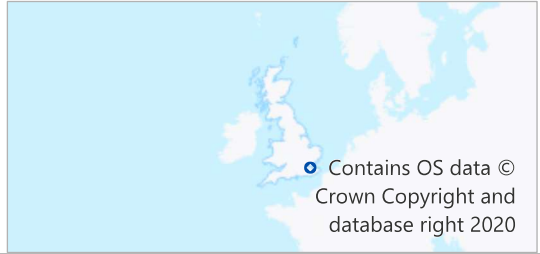
Maxar, Microsoft



Drawing 2: Nature Conservation Designations



- KEY**
- Site boundary
 - 5km Buffer
 - NNR
 - SSSI
 - IBA



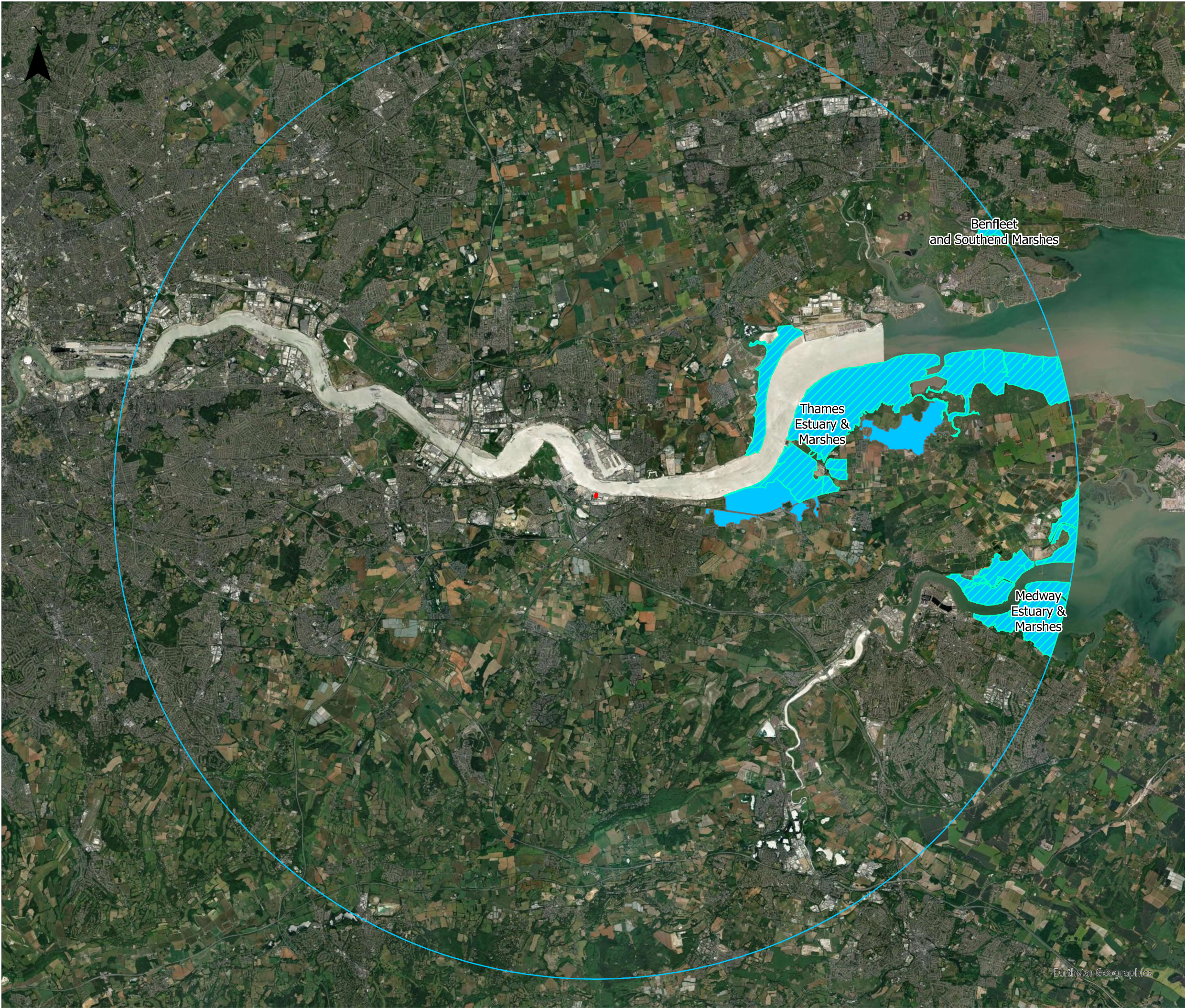
Coordinate System: British National Grid
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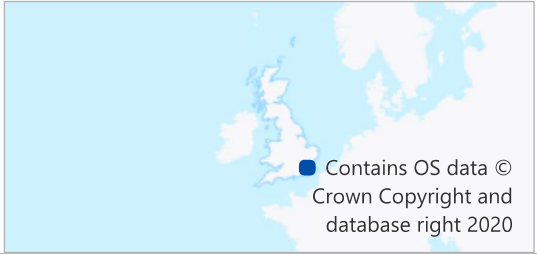
Northfleet / 5956
Preliminary Ecological Appraisal
Drawing 2a
Nature Conservation Designations within 5 km

Date: 27/03/2025	Lead: OA	Review: SR	Version: 1.0
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KEY

- Site Boundary
- SPA
- Ramsar
- 20km buffer



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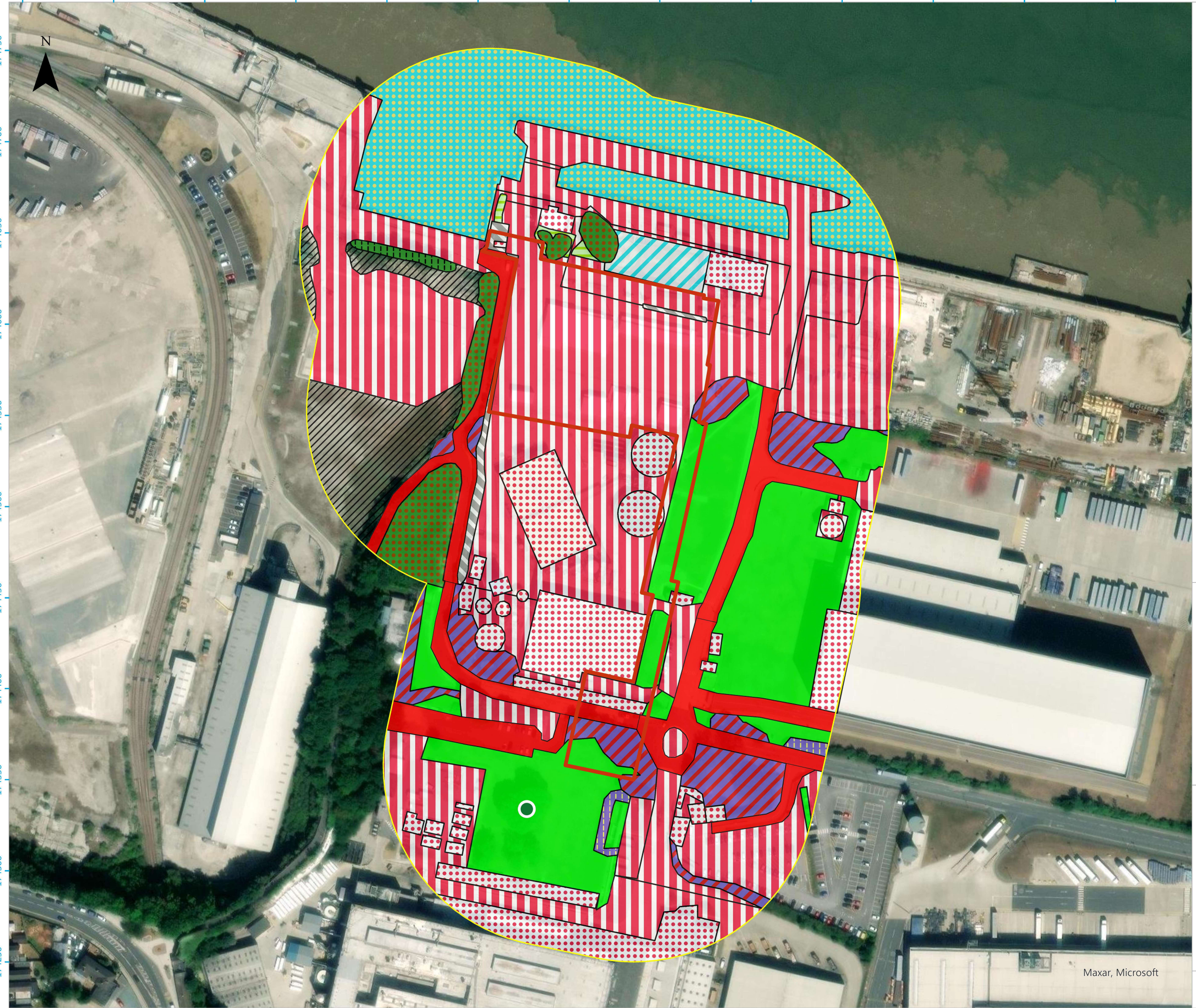
Northfleet / 5956
Preliminary Ecological Appraisal
Drawing 2b
Nature Conservation Designations within 20 km

Date: 27/03/2025	Lead: OA	Review: SR	Version: 1.0
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Earthstar Geographics



Drawing 3: UK Habitat Classification



KEY

Site Boundary	r1
100m buffer	r2
Tree	s1a9
UKHab Habitats	
g3c	u1b
g4	u1b5
h2	u1e
h3	w1g
not surveyed	w1g6

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database right 2020

Coordinate System: British National Grid
Projection: Transverse Mercator

Attributions: <attributions>

0 0.010.02 0.04 0.06 0.08 0.1
Kilometres

1:1,981

ITPENERGISED
PART OF SLR

Northfleet / 5956
Preliminary Ecological Appraisal
Drawing 3
UK Habitat Classification

Date: 10/03/2025	Lead: SG	Review: SR	Version: 1.0
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Drawing 4: Biodiversity Net Gain Assessment Post-Development Enhancements Plan



KEY

Site Boundary

100m Buffer

BNG Areas

Create - h3e

Enhance - g3c

Enhance - h3e

Overlapping Boundary Area

UK Habitat classification

g3c

g4

h2

h3

r1

r2

s1a9

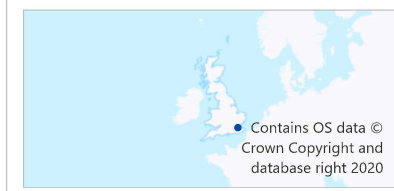
u1b

u1b5

u1e

w1g

w1g6



Coordinate System: British National Grid
Projection: Transverse Mercator

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0 0.01 0.02 0.04 0.06 0.08 0.1
Kilometres

1:1,981

ITPENERGISED
PART OF SLR

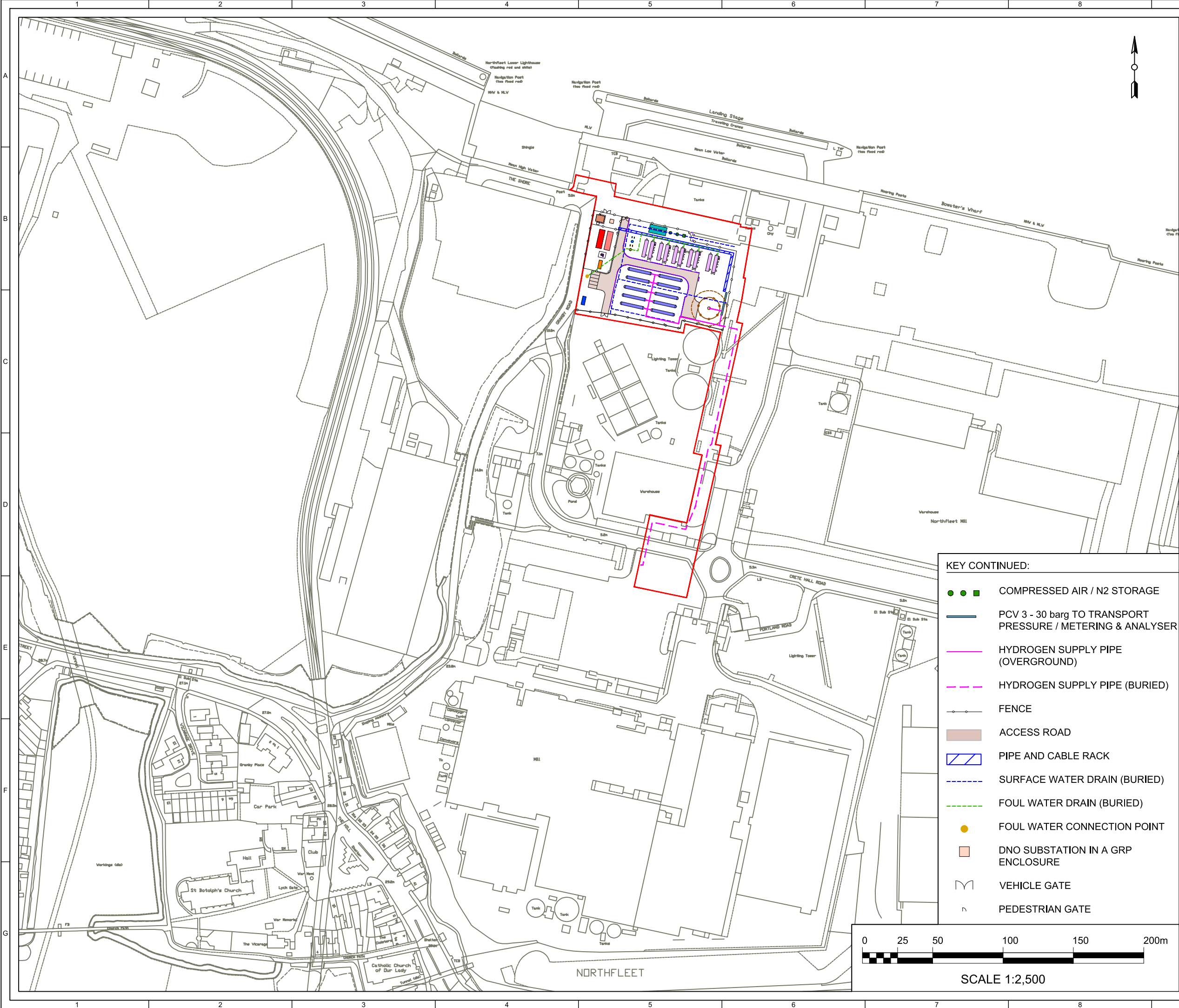
Northfleet Hydrogen Facility / 5956
Preliminary Ecological Appraisal

Drawing 4
Biodiversity Net Gain Assessment
Post-Development Enhancements Plan

Date: 03/04/2025	Lead: OA	Review: SR	Version: 1.0
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Drawing 5: Proposed Layout Plan showing the Site Boundary and Proposed Development area



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2024 LICENCE NUMBER 0100031673.

- KEY:
- PROPOSED DEVELOPMENT BOUNDARY (1.39 HECTARES) (OUTSIDE EDGE OF LINE DENOTES BOUNDARY)
 - HYDROGEN ELECTROLYSERS
 - HYDROGEN STORAGE TANK
 - HIGH VOLTAGE ROOM
 - LOW VOLTAGE ROOM
 - COMPRESSOR, AIR/N2 TANK AND PRODUCTION
 - DNO SUBSTATION BUILDING
 - VENT
 - VENT THERMAL EXCLUSION FENCE (UP TO Ø18m ZONE)
 - VENT SOUND EXCLUSION AREA (Ø25m)
 - CONTROL ROOM
 - MAINTENANCE STORAGE
 - WASTE WATER BUFFER TANK WITH PUMP
 - FEED WATER BUFFER TANK AND PUMPS
 - TRANSFORMER
 - VEHICLE BARRIER
 - BOLLARD

KEY CONTINUED...

- KEY CONTINUED:
- COMPRESSED AIR / N2 STORAGE
 - PCV 3 - 30 barg TO TRANSPORT PRESSURE / METERING & ANALYSER
 - HYDROGEN SUPPLY PIPE (OVERGROUND)
 - HYDROGEN SUPPLY PIPE (BURIED)
 - FENCE
 - ACCESS ROAD
 - PIPE AND CABLE RACK
 - SURFACE WATER DRAIN (BURIED)
 - FOUL WATER DRAIN (BURIED)
 - FOUL WATER CONNECTION POINT
 - DNO SUBSTATION IN A GRP ENCLOSURE
 - VEHICLE GATE
 - PEDESTRIAN GATE



7	BM	BS	CA	2025-01-31	UPDATED BOUNDARY
6	BM	DC	IB	2025-01-23	UPDATED LAYOUT AS PER FEED MODEL
5	BM	DC	IB	2024-08-02	UPDATED DEVELOPMENT BOUNDARY
4	BM	CA	BS	2023-09-01	ADDED SCALE BAR AND DELETE SHEETS 2-5
ISSUE	DRAWN	CHKD	APPD	DATE	REVISION NOTES
PURPOSE				COORDINATES	
PLANNING				OSGB 1936	
SCALE				DATUM	
1:2,500 @A3				N/A	
LAYOUT DRAWING				T-LAYOUT NO	
N/A				N/A	
PROJECT TITLE					
NORTHFLEET GREEN HYDROGEN FACILITY					
DRAWING TITLE					
INFRASTRUCTURE LAYOUT					
RES DRAWING NUMBER					REV
05135-RES-PRO-DR-PT-001					7
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Appendices

Appendix A: Species Specific Legislation

Bats

Bats are protected as European Protected Species under the Conservation (Natural Habitats, &c.) Regulations 1994 (as amended). For any wild bat species, it is an offence to deliberately or recklessly:

- Capture, injure or kill a bat;
- Harass a bat or group of bats;
- Disturb a bat in a roost (any structure or place it uses for shelter or protection);
- Disturb a bat while it is rearing or otherwise caring for its young;
- Obstruct access to a bat roost or otherwise deny an animal use of a roost;
- Disturb a bat in a manner or in circumstances likely to significantly affect the local distribution or abundance of the species;
- Disturb a bat in a manner or in circumstances likely to impair its ability to survive, breed or reproduce, or rear or otherwise care for its young; and
- Disturb a bat while it is migrating or hibernating.

It is also an offence to:

- Damage or destroy a breeding site or resting place of such an animal (whether or not deliberately or recklessly); and
- Keep, transport, sell or exchange, or offer for sale or exchange any wild bat (or any part or derivative of one) obtained after 10 June 1994.

It is a strict liability offence to damage or destroy a bat roost. A bat roost is protected at all times irrespective as to whether any bats are using the roost at a given time. If the work proposed is to affect bats or their roosts, an EPS licence, issued by the licensing authority Natural England under Regulation 44 of the Habitats Regulations will be required in order to permit an otherwise illegal activity.

Badger

Badgers and their setts are protected under the Protection of Badgers Act 1992. Under this legislation it is an offence to intentionally or recklessly:

- Kill, injure, take, possess or cruelly ill-treat a badger or attempt to do so;
- Interfere with a sett by damaging or destroying it;
- Obstruct access to a badger sett;
- Disturb a badger whilst it is occupying a sett;
- Cause or allow a dog to enter a sett;
- Sell a live badger, or offer one for sale, or possess a live badger; and
- Be in the possession, or control of, a dead badger or anything derived from a dead badger.

Under the Protection of Badgers Act 1992, a badger sett is defined as 'any structure or place which displays signs indicating current use by a badger'.



Birds

All wild bird species in the UK are protected under the Wildlife and Countryside Act 1981 (as amended), with species listed on Schedules A1, 1 and 1A afforded additional protection.

For any wild bird species, it is an offence to intentionally or recklessly:

- Kill, injure or take a bird;
- Take, damage, destroy or interfere with a nest of any bird while it is in use or being built;
- Obstruct or prevent any bird from using its nest;
- Take or destroy an egg of any bird;
- Possess or control a living or dead wild bird; and
- Possess or control an egg of a wild bird (or any such derivatives).

For any wild bird species listed on Schedule 1, it's an offence to disturb:

- Any bird while it is building a nest;
- Any bird while it is in, on, or near a nest containing eggs or young;
- Any bird while lekking; and
- The dependent young of any bird.

For any wild bird species listed on Schedule 1A, it's an offence to intentionally or recklessly harass any bird.

For any wild bird species listed on Schedule A1, it's an offence to intentionally or recklessly take, damage, destroy or interfere at any time with a nest habitually used by any bird.

Licenses cannot be issued for the purpose of development in relation to any of the above offences.

Conservation of Habitats and Species (Amendments) (EU Exit) Regulations 2019

European Protected Species (EPS) and their breeding sites or resting places are protected under Regulation 41 of the Conservation of Habitats and Species (Amendments) (EU Exit) Regulations 2019 which makes it illegal to:

- Deliberately capture, injure, or kill any such animal or to deliberately take or destroy their eggs;
- Deliberately disturb such an animal; and
- Damage or destroy a breeding site or resting place of such an animal.

Examples of EPS include bats, otter, and great crested newt.

EPS licenses can be granted by Natural England in respect of development to permit activities that would otherwise be unlawful under the Conservation Regulations, providing that the following 3 tests (set out in the Habitats Directive) are passed, namely:

- The development is for reasons of overriding public interest;
- There is no satisfactory alternative; and
- The favourable conservation status of the species concerned will be maintained and/or enhanced.

Under Regulation 9(5) of the Conservation Regulations, Planning Authorities have a duty to 'have regard to the requirements of the Habitats Directive' i.e., LPAs must consider the above 3 'tests' when determining whether Planning Permission should be granted for developments likely to cause an offence under the Conservation Regulations.



Wildlife and Countryside Act 1981

Animal species listed under Schedule 5 of the Wildlife and Countryside Act 1981 (and as amended) receive full protection which makes it illegal (subject to certain exceptions) to:

- Intentionally kill, injure, or take any such animal;
- Intentionally or recklessly damage, destroy or obstruct any place used for shelter or protection by any such animal; and
- Intentionally or recklessly disturb such animals while they occupy a place used for shelter or protection.

Some species receive partial protection under The Wildlife and Countryside Act 1981 (as amended by the Countryside and Rights of Way Act 2000), which provide protection against intentional killing or injury of any such animal.

All wild birds (as defined by the act) are protected under the Wildlife and Countryside Act 1981 (and as amended), which makes it illegal (subject to exceptions) to:

- Intentionally kill, injure, or take any wild bird;
- Take, damage, or destroy the nest (whilst being built or in use) or eggs of any wild bird.

Additional protection is provided to birds listed on Schedule 1 of the Wildlife and Countryside Act 1981 (and as amended). In addition to the offences detailed above relating to all wild birds, it is illegal to:

- Intentionally or recklessly disturb any bird listed on Schedule 1, or their dependent young while nesting.

Plant species listed under Schedule 8 of the Wildlife and Countryside Act 1981 (and as amended) are protected from unauthorised intentional picking, uprooting and destruction.



Appendix B: Plant species list with common and scientific names

Common Name	Scientific Name
Wall barley	<i>Hordeum murinum</i>
Cocks foot	<i>Dactylis glomerata</i>
Yorkshire fog	<i>Holcus lanatus</i>
Fescue spp.	<i>Festuca</i>
Perennial rye grass	<i>Lolium perenne</i>
Yarrow	<i>Achillea millefolium</i>
Nettle	<i>Urtica dioica</i>
Greater plantain	<i>Plantago major</i>
Ragwort	<i>Jacobaea vulgaris</i>
Pyramidal orchid	<i>Anacamptis pyramidalis</i>
Lesser celandine	<i>Ficaria verna</i>
Meadow buttercup	<i>Ranunculus acris</i>
Daisy	<i>Bellis perennis</i>
Ribwort plantain	<i>Plantago lanceolata</i>
Common poppy	<i>Papaver rhoeas</i>
Rosebay willowherb	<i>Chamaenerion angustifolium</i>
Bull rush	<i>Scirpoides holoschoenus</i>
Iris	<i>Iris</i>
Bamboo sp.	<i>Bambusa</i>
Rough hawkbit	<i>Leontodon hispidus</i>
Bristly oxtongue	<i>Helminthotheca echioides</i>
Vetch sp.	<i>Vicia</i>
Wild clematis	<i>Clematis vitalba</i>
Doves-foot-cranesbill	<i>Geranium molle</i>



Germander speed well	<i>Veronica chamaedrys</i>
Bramble	<i>Rubus fruticosus</i> agg.
Common ivy	<i>Hedera helix</i>
Crab apple	<i>Malus sylvestris</i>
False acacia	<i>Robinia pseudoacacia</i>
Hazel	<i>Corylus avellana</i>
Hawthorn	<i>Crataegus monogyna</i>
Sycamore	<i>Acer pseudoplatanus</i>
Elder	<i>Sambucus nigra</i>
Dog rose	<i>Rosa canina</i>
Laurel	<i>Laurus</i> sp
Privet	<i>Ligustrum vulgare</i>
Blackthorn	<i>Prunus spinosa</i>
Holly	<i>Ilex aquifolium</i>
Buddleia	<i>Buddleia davidii</i>

Appendix C: Photographs

	Photographs and location descriptions
1	 View of the Site with the tall herb communities located on the north of the Site. Camera facing west.
2	 Woodland and other neutral grassland located to the north of the Site within the Study Area.

3



Standing water located to the north of the Site within the Study Area.

4



The western boundary of the Site supporting tall herb communities along the boundary wall. Camera facing south.

5



Woodland located to the south-west of the Site within the Study Area.

Update Photographs and location descriptions	
1	 View of the Site with the tall herb communities located on the north of the Site. Camera facing west
2	 Woodland and other neutral grassland located to the north of the Site within the Study Area.
3	



Standing water located to the north of the Site within the Study Area.

4



The western boundary of the Site supporting tall herb communities along the boundary wall. Camera facing south.

5



Woodland located to the south-west of the Site within the Study Area.

6



Areas of modified grassland and mixed scrub outside the Site to be used for Biodiversity Net Gain and transitioned to neutral grassland with areas of scrub created within.



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