

Outer Dowsing Offshore Wind

Environmental Statement

Chapter 21 Onshore Ecology

Volume 3 Appendices

Appendix 21.7 Great Crested Newt Surveys

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Volume 3, Appendix 21.7: Great Crested Newt Surveys

Outer Dowsing Offshore Wind Environmental Statement

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Annexes

Annex A HSI Results for Ponds



Acronyms and Abbreviations

Acronyms and Abbreviations	Description
BAP	Biodiversity Action Plan
CIEEM	The Chartered Institute of Ecology and Environmental Management
DCO	Development Consent Order
ECC	Export Cable Corridor (offshore ECC or indicative onshore ECC)
eDNA	Environmental DNA
EIA	Environmental Impact Assessment
ES	Environmental Statement
GCN	Great Crested Newt
GLNP	Greater Lincolnshire Nature Partnership
HSI	Habitat Suitability Index
IDB	Internal Drainage Board
MAGIC	Multi-Agency Geographic Information for the Countryside
NGSS	National Grid Substation
NSIP	Nationally Significant Infrastructure Project
ODOW	Outer Dowsing Offshore Wind (The Project)
OnSS	Onshore Substation
OSS	Offshore Substation
PEIR	Preliminary Environmental Information Report
PRoW	Public Right of Way

Terminology

Term	Definition
400kV cables	High voltage cables linking the OnSS to the NGSS.
400kV cable corridor	The 400kV cable corridor is the area within which the 400kV cables connecting the onshore substation to the NGSS will be situated.
Baseline	The status of the environment at the time of assessment without the development in place.
Connection Area	An indicative search area for the NGSS.
Development Consent Order (DCO)	An order made under the Planning Act 2008 granting development consent for a Nationally Significant Infrastructure Project (NSIP).
Environmental Impact Assessment (EIA)	A statutory process by which certain planned projects must be assessed before a formal decision to proceed can be made. It involves the collection and consideration of environmental information, which fulfils the assessment requirements of the EIA Regulations, including the publication of an Environmental Statement (ES).
Environmental Statement (ES)	The suite of documents that detail the processes and results of the EIA.



Term	Definition
400kV cables	High voltage cables linking the OnSS to the NGSS.
Export cables	High voltage cables which transmit power from the Offshore Substations (OSS) to the Onshore Substation (OnSS) via an Offshore Reactive Compensation Platform (ORCP) if required, which may include one or more auxiliary cables (normally fibre optic cables).
Impact	An impact to the receiving environment is defined as any change to its baseline condition, either adverse or beneficial.
Landfall	The location at the land-sea interface where the offshore export cables and fibre optic cables will come ashore.
Mitigation	Mitigation measures are commitments made by the Project to reduce and/or eliminate the potential for significant effects to arise as a result of the Project. Mitigation measures can be embedded (part of the project design) or secondarily added to reduce impacts in the case of potentially significant effects.
Onshore Export Cable Corridor (ECC)	The Onshore Export Cable Corridor (Onshore ECC) is the area within which, the export cables running from the landfall to the onshore substation will be situated.
Onshore Infrastructure	The combined name for all onshore infrastructure associated with the Project from landfall to grid connection.
Onshore substation (OnSS)	The Project's onshore HVAC substation, containing electrical equipment, control buildings, lightning protection masts, communications masts, access, fencing and other associated equipment, structures or buildings; to enable connection to the National Grid.
Order Limits	The area subject to the application for development consent, the limits shown on the works plans within which the Project may be carried out.
Outer Dowsing Offshore Wind (ODOW)	The Project.
Preliminary Environmental Information Report (PEIR)	The PEIR was written in the style of a draft Environmental Statement (ES).
Receptor	A distinct part of the environment on which effects could occur and can be the subject of specific assessments. Examples of receptors include species (or groups) of animals or plants, people (often categorised further such as 'residential' or those using areas for amenity or recreation), watercourses etc.
Study Area	Area(s) within which environmental impact may occur – to be defined on a receptor-by-receptor basis by the relevant technical specialist.
The Applicant	GT R4 Ltd. The Applicant making the application for a DCO. The Applicant is GT R4 Limited (a joint venture between Corio Generation, Total Energies and Gulf Energy Development (GULF)), trading as Outer Dowsing Offshore Wind. The Project is being developed by Corio Generation (a wholly owned Green Investment Group portfolio company), Total Energies and GULF.
The Planning Inspectorate	The agency responsible for operating the planning process for Nationally Significant Infrastructure Projects (NSIPs).
The Project	Outer Dowsing Offshore Wind, an offshore wind generating station together with associated onshore and offshore infrastructure.



21.0 Great Crested Newt Surveys

21.1 Introduction

1. Outer Dowsing Wind Offshore (ODOW) is a Nationally Significant Infrastructure Project (NSIP). An Environmental Impact Assessment (EIA) has been undertaken, the findings of which are presented within an Environmental Statement (ES), which accompanies the Development Consent Order (DCO) application under the Planning Act2008.
2. SLR Consulting was commissioned by GoBe Consultants, whom has been instructed by GT R4 Limited (trading as Outer Dowsing Offshore Wind) (the Applicant) , to undertake a suite of ecological surveys of those relevant parts of the Project site that may be affected by the construction, operation and maintenance, and decommissioning of the onshore aspects of the Project.
3. This report presents the findings of the great crested newt (GCN) (*Triturus cristatus*) surveys undertaken in 2022 and 2023 and supports Volume 1, Chapter 21: Onshore Ecology (document reference 6.1.21).

21.2 The Project

4. The Project will include both offshore and onshore infrastructure including an offshore generating station (windfarm) located approximately 54km from the Lincolnshire coastline, export cables to landfall, onshore cables, an onshore substation, connection to the electricity transmission network, and ancillary and associated development (see Volume 1, Chapter 3: Project Description 6.1.3 (document reference 6.1.3) for full details).
5. The ES references the Project's 'Order Limits' which comprises the extent of the land for which the DCO application has been made. Onshore it reflects the landfall, the Onshore Export Cable Corridor (a typically80m wide corridor around a centre line totalling approximately 70km in length) the Onshore substation (OnSS), a 400kV cable corridor connecting the OnSS to the Connection Area (an indicative search zone for the National Grid substation (NGSS) in to which the project will ultimately connect).
6. Due to the linear footprint of the Project, the Survey Area for some receptors is relatively large-scale, therefore, to assist with the interpretation and explanation of associated



data, the Order Limits have been split into segments. The extent of these segments has been aligned with key geographical features such as roads or rivers which cross the Order Limits.

7. The segments for the Onshore Order limits are shown in Table 21.1 below.

Table 21.1: Onshore Segment Names

Segment Name
ECC 1: Landfall to A52 – Hogsthorpe
ECC 2: A52 – Hogsthorpe to Marsh Lane
ECC 3: Marsh Lane to A158 - Skegness Road
ECC 4: A158 – Skegness Road to Low Road
ECC 5: Low Road to Steeping River
ECC 6: Steeping River to Fodder Dike Bank/Fen Bank
ECC 7: Fodder Dike Bank/Fen Bank to Broadgate
ECC 8: Broadgate to Ings Drove
ECC 9: Ings Drove to Church End Lane
ECC 10: Church End Lane to The Haven
ECC 11: The Haven to Marsh Road
ECC 12: Marsh Road to Fosdyke Bridge
ECC 13: Fosdyke to Surfleet Marsh OnSS/Marsh Drove
ECC 14: Surfleet Marsh OnSS/Marsh Drove to the Connection Area

21.3 Purpose of this Report

8. The purpose of this report is to present the findings of the habitat suitability index (HSI) assessments and eDNA surveys for GCN that were completed during 2022 and 2023.

21.4 Legislation

9. GCN are protected through inclusion on Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) and Schedule 2 of the Conservation of Habitats and Species Regulations 2017 (as amended) (The Habitats Regulations). In brief, this legislation makes it an offence to:

- Deliberately kill, injure or take a great crested newt;
- Deliberately disturb a great crested newt in such a way as to be likely to impair their ability to survive, breed or reproduce, or rear or nurture their young; to



hibernate or migrate; or to affect significantly the local distribution or abundance of that species;

- Deliberately take or destroy the eggs of a great crested newt;
- Damage or destroy the breeding or resting place of a great crested newt;
- Intentionally or recklessly obstruct access to a place that great crested newts use for shelter or protection; and,
- Intentionally or recklessly disturb a great crested newt whilst it is occupying a place which it uses for shelter or protection.



21.5 Methodology

10. An EIA Scoping Report (ODOW, 2022) was prepared and submitted to The Planning Inspectorate in July 2022. The Scoping Opinion (Case Reference EN010130, The Planning Inspectorate 2022) provided by the Planning Inspectorate in response to the Scoping Report, contained advise from Natural England on extension of the survey area beyond 250m where there is habitat connectivity between the project and potentially suitable breeding ponds.
11. In June 2022, the Preliminary Environmental Information Report (PEIR) was published. Following this, the majority of GCN surveys took place within the PEIR Boundary, which included a buffer of 250m for field survey. The PEIR Boundary has since been revised to the Order Limits Boundary, which covers a smaller area within the PEIR Boundary. Following advice from Natural England (2022), this appendix incorporates survey findings for ponds that surpass the 250m Order Limits buffer yet have suitable connecting habitat with the project for GCN.

21.5.1 Desk Study

12. In August 2023, an updated desk study was undertaken for the Order Limits and land within a 2km surrounding radius. The desk study involved a review of the following sources of information for GCN:
 - The MAGIC website for information relating to GCN European Protected Species Licences that have been issued within a 2km radius; and,
 - Greater Lincolnshire Nature Partnership (GLNP) for information regarding protected and notable species.

21.5.2 Survey Area

13. Surveys for GCN were undertaken on all accessible ponds within the Order Limits plus a 250m buffer (Figure 21.7.2 and Figure 21.7.3) and all accessible ditches within the Order Limits boundary plus a 100m buffer (Figure 21.7.1). The survey area was extended where suitable connecting habitat between potential breeding ponds and the project exists.



21.5.3 Habitat Suitability Index Assessment (HSI)

14. All water bodies located within the survey area were subject to a HSI if water was found to be present at the time of survey using the method set out in ARG UK Advice Note 5 (2010). Water bodies were subject to HSI assessment between the dates of 20th September 2022 and 20th October 2023, with the majority of field data collected between November 2022 and June 2023. Survey data was collected by suitably experienced ecologists from SLR Consulting Ltd and Thomson Environmental Consultants Ltd.

15. The HSI assessment for GCN developed by Oldham *et al.* (2000), uses a numerical index, numbered between 0 and 1 with values closer to 0 indicating the water body is unsuitable, whilst a value closer to 1 indicates optimal habitat for GCN. The HSI incorporates 10 suitability indices overall, which include the following factors known to affect GCN:

- SI₁ Location;
- SI₂ Pond Area;
- SI₃ Pond Drying;
- SI₄ Water Quality;
- SI₅ Shade;
- SI₆ Fowl;
- SI₇ Fish;
- SI₈ Pond Count;
- SI₉ Terrestrial Habitat; and
- SI₁₀ Macrophytes (between May and the end of September)

16. The HSI scoring system developed by Oldham *et al.* (2000) can be useful in:

- “Evaluating the general suitability of a pond, or ponds, for great crested newts;
- Comparing general suitability of ponds across different areas;
- Evaluating the suitability of receptor ponds in a proposed mitigation scheme; and,
- Identifying habitat management priorities”.



17. Whilst the HSI will provide a score on the habitat suitability of a waterbody, it is not a substitute for newt surveys and will not on its own prove presence or absence of this species.
18. Water bodies with higher HSI scores are considered more likely to support GCN, whilst water bodies with a lower HSI score are considered less likely to support GCN. Each of the ten suitability indices together will result in one of the following pond suitability scores:
- <0.5 = Poor
 - 0.5 – 0.59 = Below Average
 - 0.6 – 0.69 = Average
 - 0.7 – 0.79 = Good
 - >0.8 = Excellent
- #### **21.5.4 Environmental DNA (eDNA) Survey**
19. The analysis of eDNA for determining the presence or absence of GCN was approved by Natural England. A technical advice note (Biggs et al. 2014) was developed which contained the eDNA field and laboratory methods to be used for the detection of GCN using eDNA for use from the 2014 GCN season onwards. Any water bodies (ponds and ditches) that returned a HSI score of 0.6 (average) or higher were subject to an eDNA survey, where accessible. Water bodies were sampled for eDNA during the Natural England approved period of the 15th April and 30th June 2023 by suitably experienced ecologists from SLR Consulting Ltd and Thomson Environmental Consultants Ltd.
20. Using eDNA kits purchased from ADAS and Nature Metrics, 20 water samples were collected from each pond using sterile equipment provided in each kit at points evenly spread out along the perimeter of the water body (where access was permitted). The water at each sampling area was gently stirred using a sterile ladle before samples were taken, whilst ensuring that sediment on the pond base was not disturbed.
21. The samples were then ‘fixed’ in an ethanol preserving solution and sent to an ADAS or Nature Metrics laboratory for analysis. To avoid contamination, the surveyors avoided entering the water. Latex gloves were worn when sampling, and only sterile equipment



came into contact with the water. Separate sampling kits, and new gloves, were used for each of the water bodies sampled.

21.5.5 Population Class Assessment

22. No water bodies located within 250m of the Order Limits returned a positive eDNA result, therefore, no population class assessments for GCN were carried out during the 2023 survey season.

21.5.6 Limitations

23. It should be noted that lack of evidence of a protected species does not necessarily preclude it from being present in varying seasons.

24. Access permission was not granted for some land parcels within the study area. In these cases, records were made from the perimeter of accessible areas (i.e., other land parcels or PRoW) and/or through aerial mapping to identify the types of habitats present or likely to be present in these areas where possible. In some instances, access was granted but cattle were present, limiting and/or prohibiting access to certain land parcels. A number of water bodies had to be scoped out of survey due to being located on residential lands with no permitted access.

25. Where waterbodies were particularly steep or dangerous to access, surveyors carried out a HSI assessment from above the bank to avoid climbing down any significantly steep slopes, particularly if the survey occurred during bad weather.

26. During the eDNA surveys, there were a small number of instances where water samples taken from ditches were contaminated with dissolved chalk, resulting in an indeterminate result. Where contamination occurred, the survey was repeated with water sampled using a chalk filter unit and syringe. This ensured there was no limitations to the quality of the water sample supplied to the laboratories.

27. Much of the ditch network located along the route and several of the ponds had dried up during May-June 2023 due to prolonged periods of dry weather. This meant that eDNA surveys could not be carried out on some of the ditches with 'average' HSI scores or above. However, this is not considered to be a significant limitation or to alter the results of the assessment as the ponds were dry, meaning they would be unlikely to support GCN if they dry up regularly throughout the active season.



28. A total of 22 ponds and 553 ditches within 250m of the Order Limits could not be subjected to a HSI assessment when approached within the field. The most common reason for this was due to the following; access restrictions; water bodies being dry upon inspection; or, that a water body was not present when surveyed for within the field. This is not considered a significant limitation, however as in reference to ponds that are dry throughout the majority of the active GCN season, these would not be suitable for GCN and therefore would naturally be scoped out. The remainder of ditches and ponds that were HSI assessed provide a representation of the overall suitability of water bodies along the Order Limits for GCN, with the results described per segment as outlined in Table 21.4.
29. The dates of all surveys and their extent and purpose has been recorded in SLR's habitat survey database. Some HSI assessments were undertaken outside of the peak growing season for macrophytes (May-end of September). For any HSI assessments undertaken outside of the macrophyte survey season, a precautionary survey approach for macrophyte percentage was used. For ditches (holding water), a precautionary 30% was applied, whilst for ponds (holding water), the highest percentage score recorded on site was used. These percentages were then converted using the HSI calculator.
30. A total of 285 ditches/ponds were subject to a late HSI assessment following the eDNA survey period. Therefore, any HSI assessments following this period (30th June) would not have been subject to an eDNA survey if the pond scored an average score or above. A total of 28 ditches resulted in an average score or above. There were no accessible ponds scoring average or above. However, this is not considered a significant limitation as only a small number of ponds/ditches were subject to a HSI assessment following the eDNA period whilst only one pond, which was located outside of the route returned a positive result for GCN.
31. It is expected that the above limitations would not have a significant impact on the results, such that they would alter the conclusions made in this report. It is also determined that the amount of data gathered during the GCN survey season provided a robust overview of the potential GCN population within the area.



21.6 Results

21.6.1 Desk Study Results

21.6.1.1 GLNP Results

32. GLNP returned records of GCN from within the study area with no records of GCN returned from within the Order Limits. Table 21.2 below provides a summary of records for GCN within the study area returned by GLNP. Desk study results for GCN are shown within Figure 21.1.6 (document reference 6.3.21.1).

Table 21.2: Records for GCN Within the Study Area

Segment	Total Number of Records	
	Inside Order Limits	Beyond Order Limits
ECC 1: Landfall to A52 – Hogsthorpe	0	2
ECC 2: A52 – Hogsthorpe to Marsh Lane	0	0
ECC 3: Marsh Lane to A158 – Skegness Road	0	16
ECC 4: A158 – Skegness Road – Low Road	0	5
ECC 5: Low Road to Steeping River	0	0
ECC 6: Steeping River- Fodder Dyke Bank	0	7
ECC 7: Fodder Dike Bank/Fen Bank to Broadgate	0	0
ECC 8: Broadgate to Ings Drove	0	0
ECC 9: Ings Drove to Church End Lane	0	0
ECC 10: Church End Lane – The Haven	0	0
ECC 11: The Haven – Marsh Road	0	0
ECC 12: Marsh Road – Fosdyke Bridge	0	0
ECC 13: Fosdyke to Surfleet Marsh OnSS/Marsh Drove	0	0
ECC 14: Surfleet Marsh OnSS/Marsh Drove to Connection Area	0	0
Total	0	30

33. Class Licence Survey Returns published on the MAGIC website include records of GCN presence at four locations within the study area near to the segment ECC 4: A158 – Skegness Road – Low Road). Details are provided in Table 21.3.



Table 21.3: Records of GCN Class Licence Surveys Within the Study Area

Location	Nearest Segment	Date	Details
TF 520653 c.0.4km southwest of Order Limits	ECC 3: Marsh Lane to A158 - Skegness Road	26.04.17; 09.05.17; 13.06.17; 21.06.17 and 24.06.17.	Positive result of GCN presence found during every survey.
TF 517651 c.0.6km north of Order Limits	ECC 3: Marsh Lane to A158 - Skegness Road	10.05.17; 15.05.17; 25.05.17 and 05.06.17	Positive result of GCN presence found during every survey. A peak count of 9 individuals was made on 25.05.17 and again on 30.05.17.
TF 500565 c.1.8km east by southeast of Order Limits	ECC 6: Steeping River to Fodder Dike Bank/Fen Bank	30.05.17	Positive result of GCN presence from single survey.
TF 520536 c.1.7km west of Order Limits	ECC 11: The Haven to Marsh Road	20.05.15; 23.05.15; 27.05.15; 29.05.15 and 03.06.15	Positive result of GCN presence found during every survey.

34. The Lincolnshire Biodiversity Action Plan (BAP), authored in 2011 (Lincolnshire

Biodiversity Partnership, 2011) states that 'great crested newt populations appear to be relatively widespread in the county but there is a lack of comprehensive data on the distribution and population size of the species. The loss of ponds due to agricultural intensification and increasing development in the county over recent years is well documented and this can only result in less suitable wet habitat for newts. The terrestrial habitat required by the species is also suffering from development and changes in agriculture. Moats and other water bodies associated with the county's sites of historic interest can often be found to support colonies of this species.'

35. Map 13 within the Lincolnshire BAP (p212) illustrates several records from the former Lincolnshire Environmental Records Centre of GCN presence in the northern half of the desk study area. It should be noted however, that these records are from 2001 to 2011 and are now outdated by the GLNP records (Table 21.2).

36. The Lindsay Marsh Internal Drainage Board also note GCN within the Habitat Action Plan for ponds.

21.7 Field Survey Results

37. Results of the GCN HSI assessments and eDNA surveys relating to the Order Limits are presented below in Sections 21.7.1 and 21.7.2 and Figure 21.7.1, Figure 21.7.2 and Figure 21.7.3.



21.7.1 HSI Assessment Results

38. Table 21.4 presents the results of HSI assessments completed within the Order Limits and surrounding 250m survey buffer for GCN.

Table 21.4: HSI Assessment Results by ECC segment

Route Segment	Water body type	HSI Pond Suitability Rating					Total
		Poor	Below Average	Average	Good	Excellent	
ECC 1	Pond	1	6	4	3	2	16
	Ditch	15	24	7	14	1	61
ECC 2	Pond	2	1	0	1	0	4
	Ditch	19	26	8	3	1	57
ECC 3	Pond	3	1	1	1	0	6
	Ditch	5	7	2	3	0	17
ECC 4	Pond	1	0	0	0	0	1
	Ditch	9	14	5	0	0	28
ECC 5	Pond	4	1	0	1	0	6
	Ditch	18	14	17	4	0	53
ECC 6	Pond	0	1	0	0	0	1
	Ditch	13	8	5	4	1	30
ECC 7	Pond	1	1	0	0	5	7
	Ditch	10	4	8	6	0	28
ECC 8	Pond	0	0	2	1	0	3
	Ditch	19	25	19	5	1	69
ECC 9	Pond	0	0	0	0	0	0
	Ditch	10	9	4	1	0	24
ECC 10	Pond	0	0	0	2	1	3
	Ditch	6	9	2	2	0	19
ECC 11	Pond	1	0	0	1	0	2
	Ditch	4	9	7	3	0	23
ECC 12	Pond	1	0	0	0	0	1
	Ditch	3	8	9	3	0	23
ECC 13	Pond	0	0	0	0	0	0
	Ditch	7	4	5	3	0	19
ECC 14	Pond	2	0	0	0	1	3
	Ditch	0	4	0	0	0	4



39. Ditch number 20276 is located along the boundary line of segments ECC 6 and ECC7 and has only been included within the table in ECC6 to avoid duplication. This ditch resulted in a good HSI result.

21.7.2 eDNA Survey Results

40. Table 21.5 presents the results of eDNA surveys completed within the Order Limits and surrounding 250m survey buffer for GCN.

Table 21.5: eDNA Survey Results by ECC segment

Route Segment	Water body type	eDNA Survey Result				Total
		Negative	Positive	Indeterminate	Not possible/dry	
ECC1	Pond	5	0	0	4	9
	Ditch	15	0	0	6	21
ECC2	Pond	1	0	0	0	1
	Ditch	9	0	0	1	10
ECC3	Pond	0	1	0	0	1
	Ditch	0	0	1	3	4
ECC4	Pond	0	0	0	0	0
	Ditch	2	0	0	0	2
ECC5	Pond	1	0	0	0	1
	Ditch	7	0	3	9	19
ECC6	Pond	0	0	0	0	0
	Ditch	6	0	1	3	10
ECC7	Pond	5	0	0	0	5
	Ditch	6	0	0	5	11
ECC8	Pond	2	0	0	1	3
	Ditch	14	0	0	8	22
ECC9	Pond	0	0	0	0	0
	Ditch	3	0	2	0	5
ECC10	Pond	3	0	0	0	3
	Ditch	0	0	0	3	3
ECC11	Pond	1	0	0	0	1
	Ditch	3	0	1	6	10
ECC12	Pond	0	0	0	0	0
	Ditch	4	0	1	6	11
ECC13	Pond	0	0	0	0	0



Route Segment	Water body type	eDNA Survey Result				Total
		Negative	Positive	Indeterminate	Not possible/dry	
	Ditch	1	0	0	3	4
ECC14	Pond	0	0	0	0	0
	Ditch	0	0	0	0	0

41. An eDNA survey was undertaken at ditch number 20276, which falls between segments ECC6 and ECC7 and has only been included once in Table 21.5 in ECC6 to avoid duplication.

42. A total of nine waterbodies with a HSI score of average or above returned indeterminate results which included ditch numbers 624 (ECC3), 20026, 20052, 20142 (ECC5), 20152 (ECC6), 20726, 20836 (ECC9), 1411 (ECC11), and 1537 (ECC12).

Water body 42 (WM_42) returned a positive GCN result (12 of 12 replicates) with date of receipt: 12/06/2023. This pond is located approximately 345m to the east of the Order Limits (route segment ECC 3.), and approximately 100m south of a planned access track running adjacent to ditch 625. The pond is 9.2m at its nearest point from Ditch 626, which runs around the pond on two sides and crosses within the Order Limits. Ditch 626 returned a negative eDNA result. At 11.6m south from the pond, is Ditch 627 which also returned a negative result for GCN eDNA.



Photograph 1 – Water body 42 (WM_P42) with a positive GCN eDNA result



21.8 Conclusion

43. The ditch network present within the Order Limits is considered to be of poor suitability for GCN due to agricultural run-off and pollution, low water levels, poor surrounding habitat and significantly steep banks in many ditches. The water bodies are largely disconnected by open, poor quality arable habitat which can also be determined as a barrier to GCN movements.
44. With regard to ponds across the Order Limits and 250m survey buffer, a total of 16 ponds returned a poor HSI result, 11 ponds returned a below average HSI result, and seven ponds returned an average HSI result. A smaller proportion of ponds returned a good or excellent result with 10 good HSI results and 9 excellent HSI results for ponds across all segments.
45. An even smaller proportion of ditches returned a good or excellent HSI result in comparison across the survey area combined, with only 51 ditches returning a good HSI result and only four ditches returning an excellent HSI result. A much higher proportion of ditches returned a score of average or lower, with the highest number of ditches returning a HSI result of below average. In total, 98 ditches returned an average HSI result, 165 ditches returned a below average result, and 138 ditches returned a poor HSI result. No water bodies returned a positive result for GCN within the route itself.
46. Only one water body returned a positive result for GCN during the 2023 survey season which was pond 42 (WM_42) located approximately 345m to the east of the Order Limits (route segment ECC 3). The location of this pond is illustrated in Figure 21.7.3.
47. For the purposes of the assessment, this pond has been treated as a breeding habitat. As a precaution, the ditches surrounding this pond have also been considered as suitable habitat, particularly for GCN commuting. Although the pond is located outside of the Order Limits, it is considered that a metapopulation of GCN may utilise habitats within and surrounding the Order Limits. Pond WM_42 is located adjacent to Ditch 626, which is situated less than 500m away from records of GCN returned by the GLNP data search. Therefore if, in the future, GCN are recorded as present within WM_42 and the surrounding ditch network, they could all form part of the same metapopulation. Although the surrounding ditch network (Ditch 626 and Ditch 627) returned negative results for GCN eDNA, it is possible that this network is utilised by the metapopulation.



48. The results suggest that GCN are only present in one isolated metapopulation and indicate that the habitats within the survey area are of poor suitability for GCN.
49. Terrestrial habitats within the Order Limits are generally of poor structure, primarily consisting of flat, highly modified, arable fields which are subject to regular human use. There is minimal terrestrial habitat present suitable for foraging, shelter, dispersal, and hibernation such as woodland, scrub or overgrown grassland. The terrestrial habitats within the Order Limits are therefore considered to be of low suitability for GCN.
50. Overall, it is considered that the habitats present within the Order Limits are of low suitability for GCN due to their quality and structure. The most suitable habitat available for GCN within the Order Limits and the surrounding 250m survey area are ponds, however, in many areas these are separated from each other, or connected by low quality ditch networks, which would not be suitable for GCN to commute through. The large proportion of ditches are of low suitability for GCN due to potential agricultural run-off and pollution, low water levels, poor surrounding habitat, and significantly steep banks in many ditches. Coupled with the poor structure and quality of terrestrial habitats along the route and surrounding the route, it can be concluded that the habitats on site are of low suitability for GCN.



21.9 References

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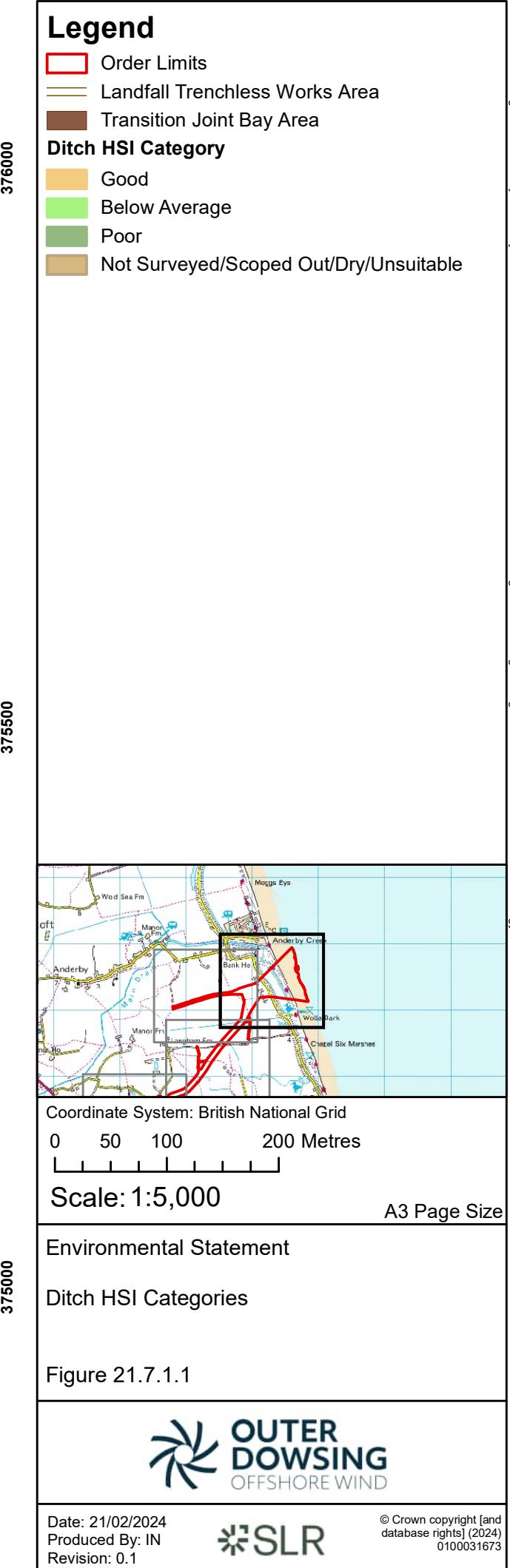
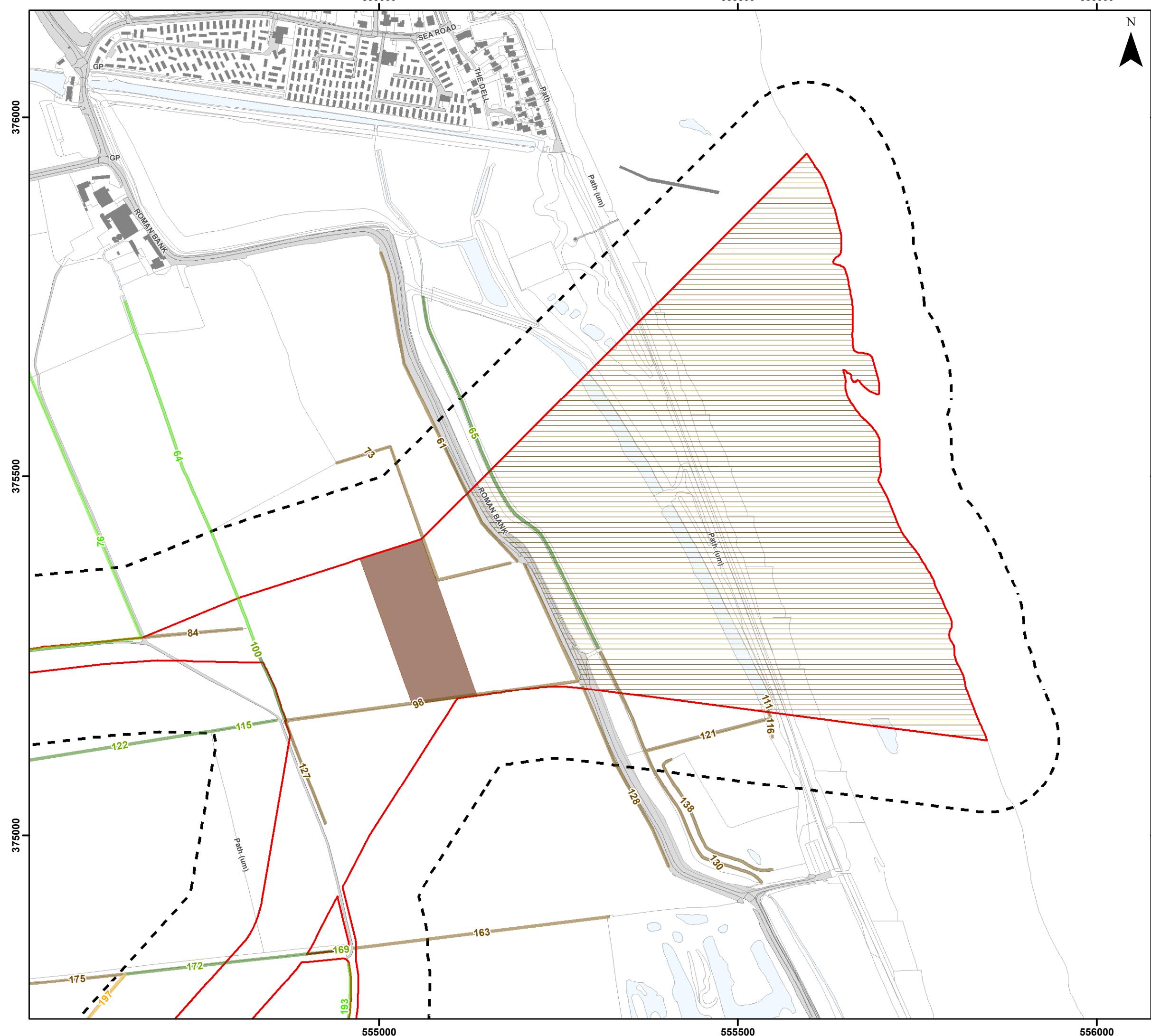
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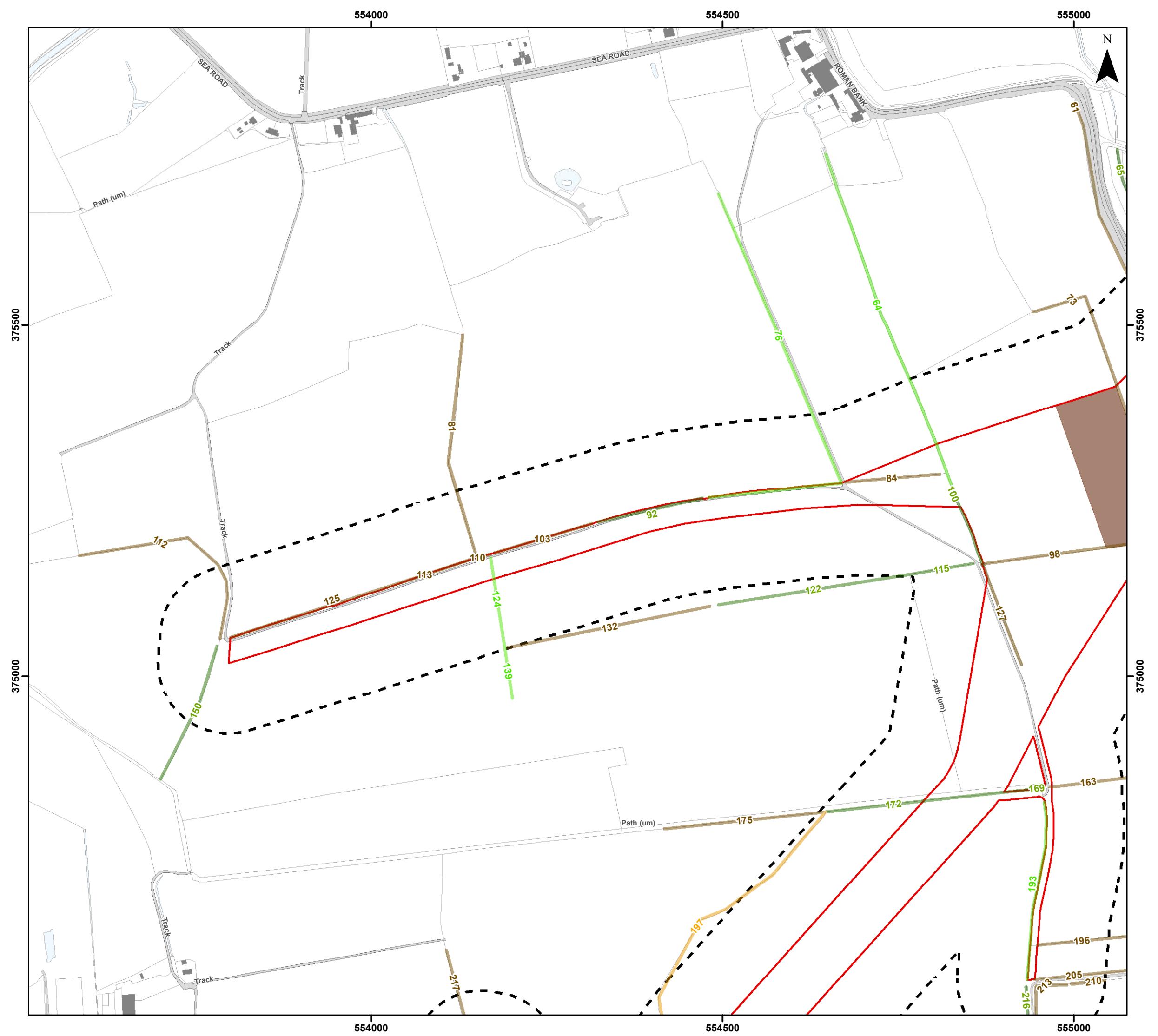
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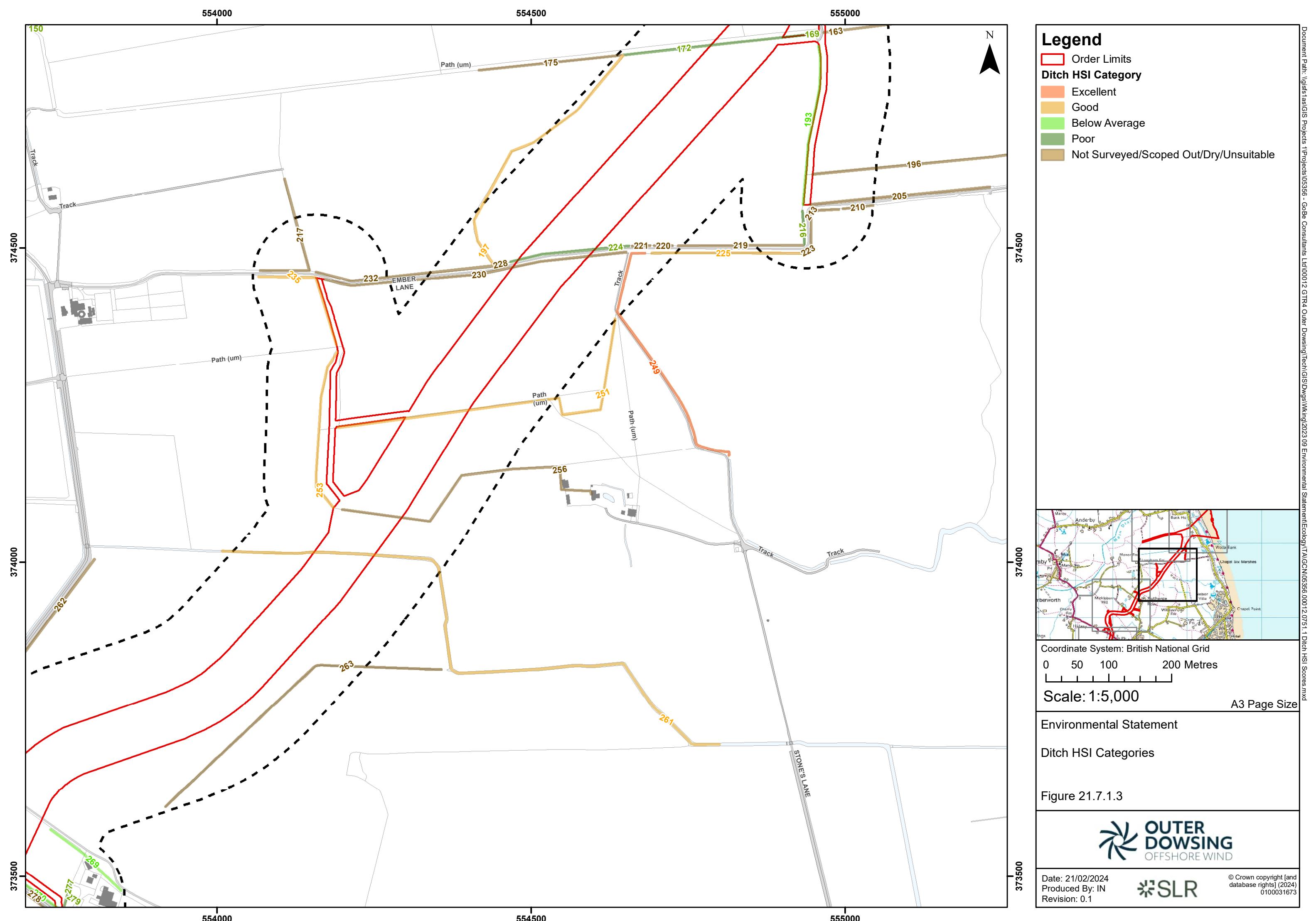
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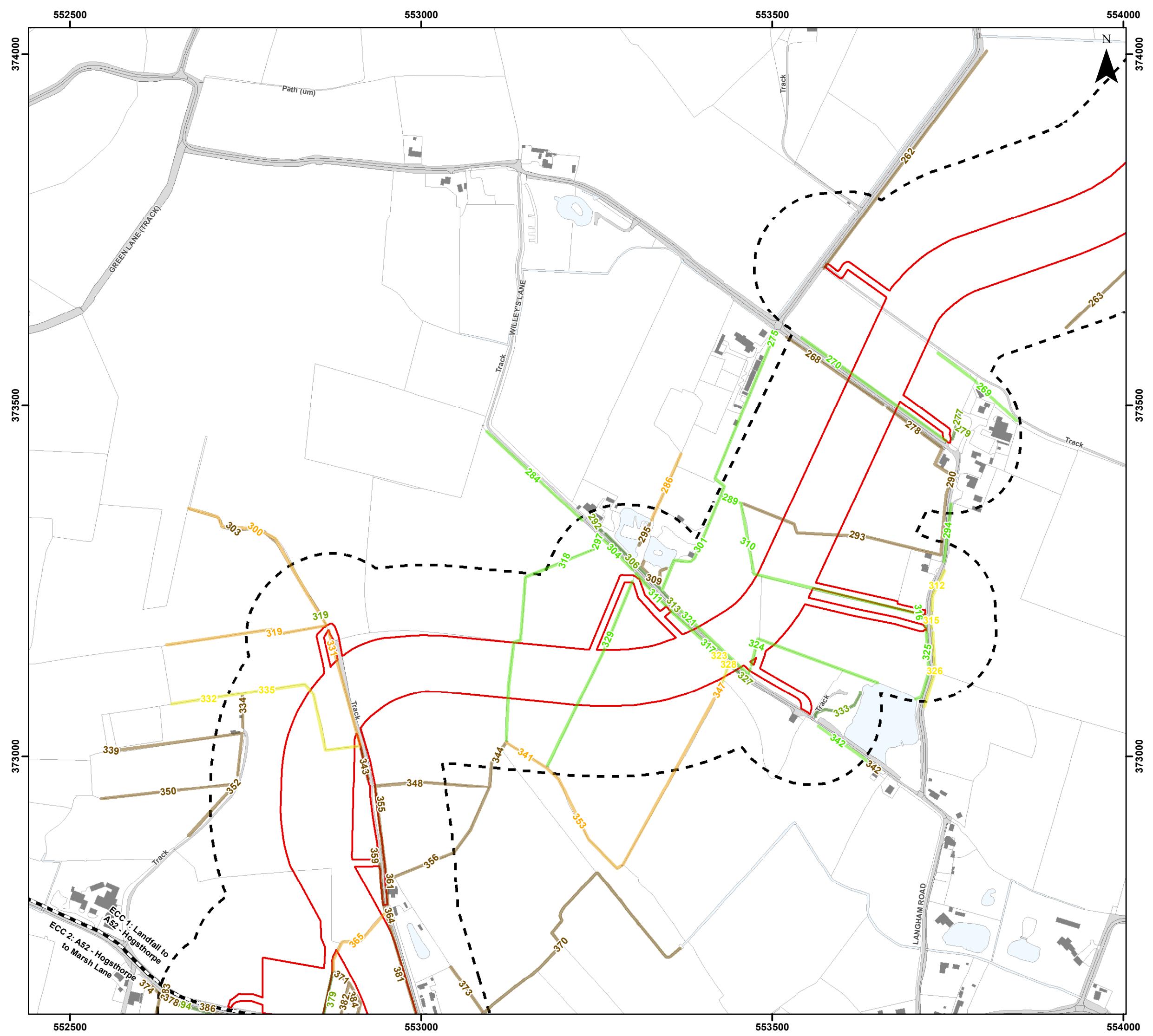






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Legend

- Order Limits
- Onshore Segment Break

Ditch HSI Category

- Good
- Average
- Below Average
- Poor
- Not Surveyed/Scoped Out/Dry/Unsuitable



Coordinate System: British National Grid

0 50 100 200 Metres

Scale: 1:5 000

Scale. 1:5,000

Environmental Statement

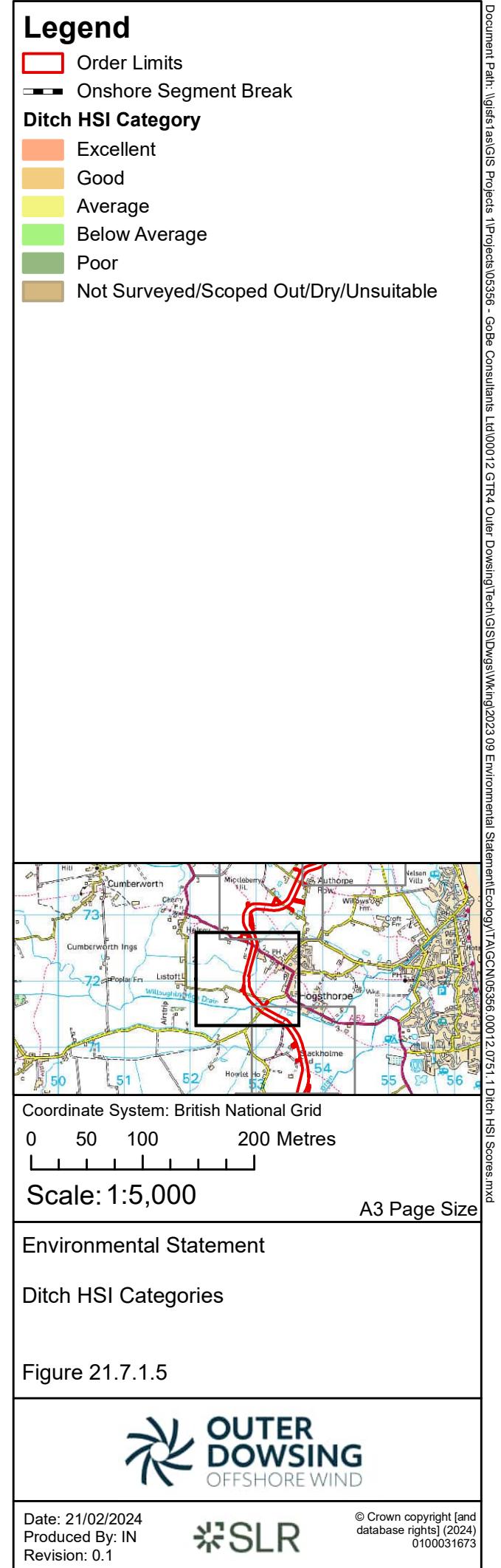
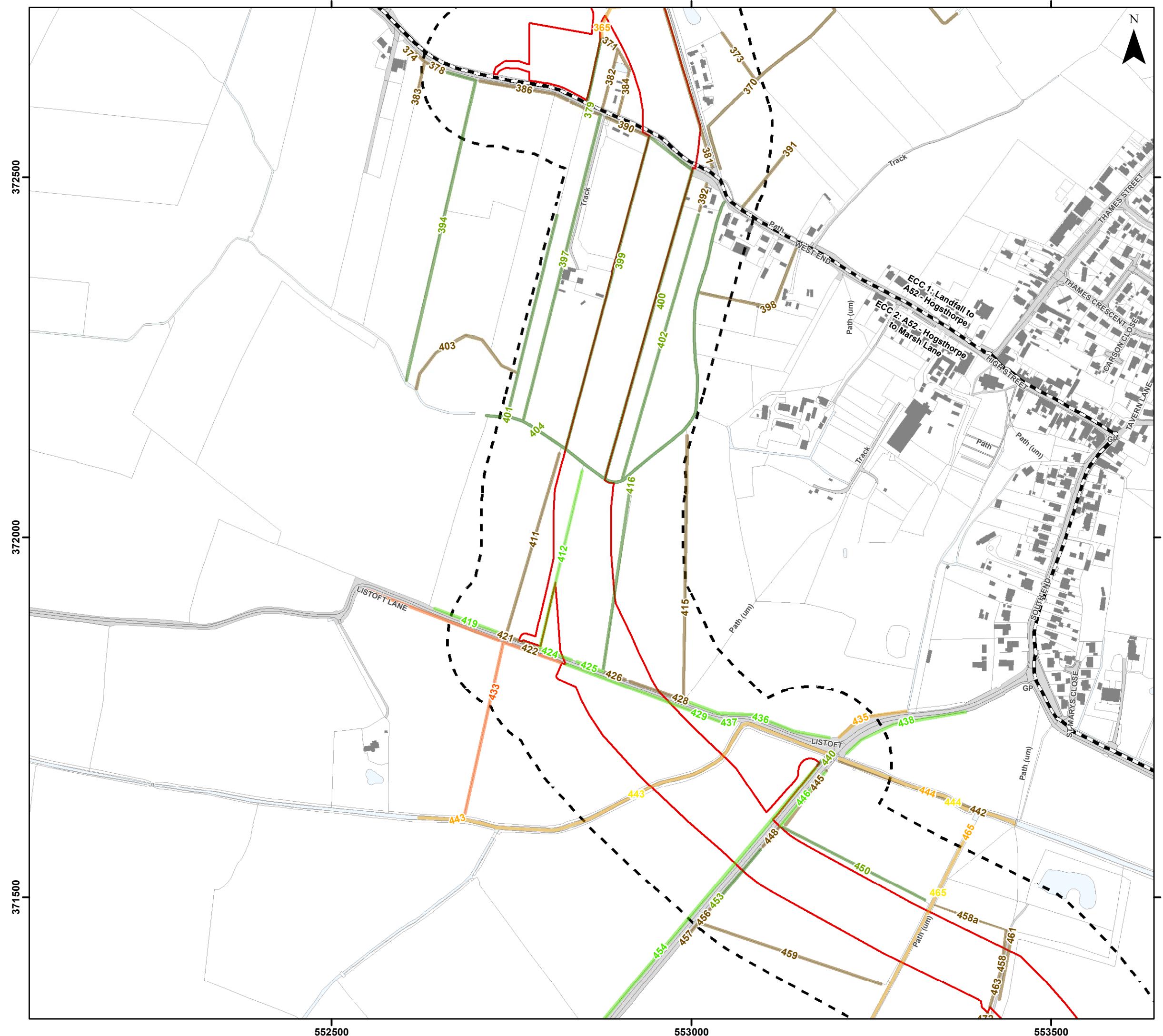
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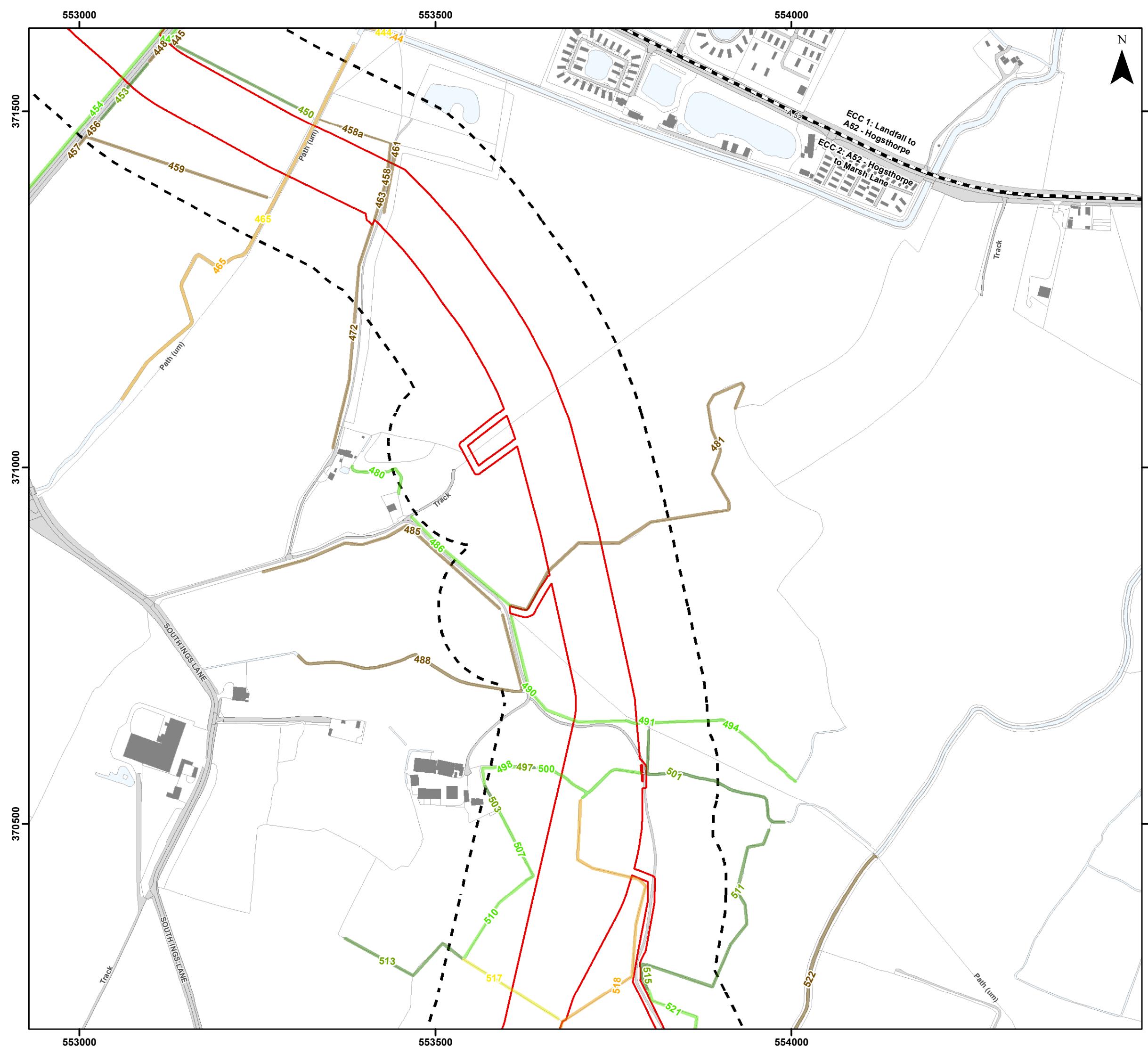
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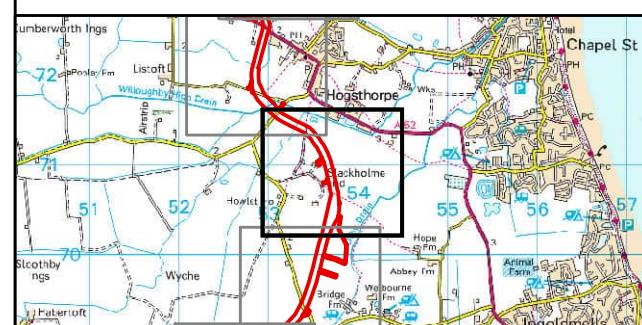
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Legend

- Order Limits
- Onshore Segment Break

Ditch HSI Category

- Good
- Average
- Below Average
- Poor
- Not Surveyed/Scoped Out/Dry/Unsuitable



Coordinate System: British National Grid

0 50 100 200 Metres

Scale 1:5,000

Goals: 115,000

Environmental State

Ditch HSI Category

Newest Categories

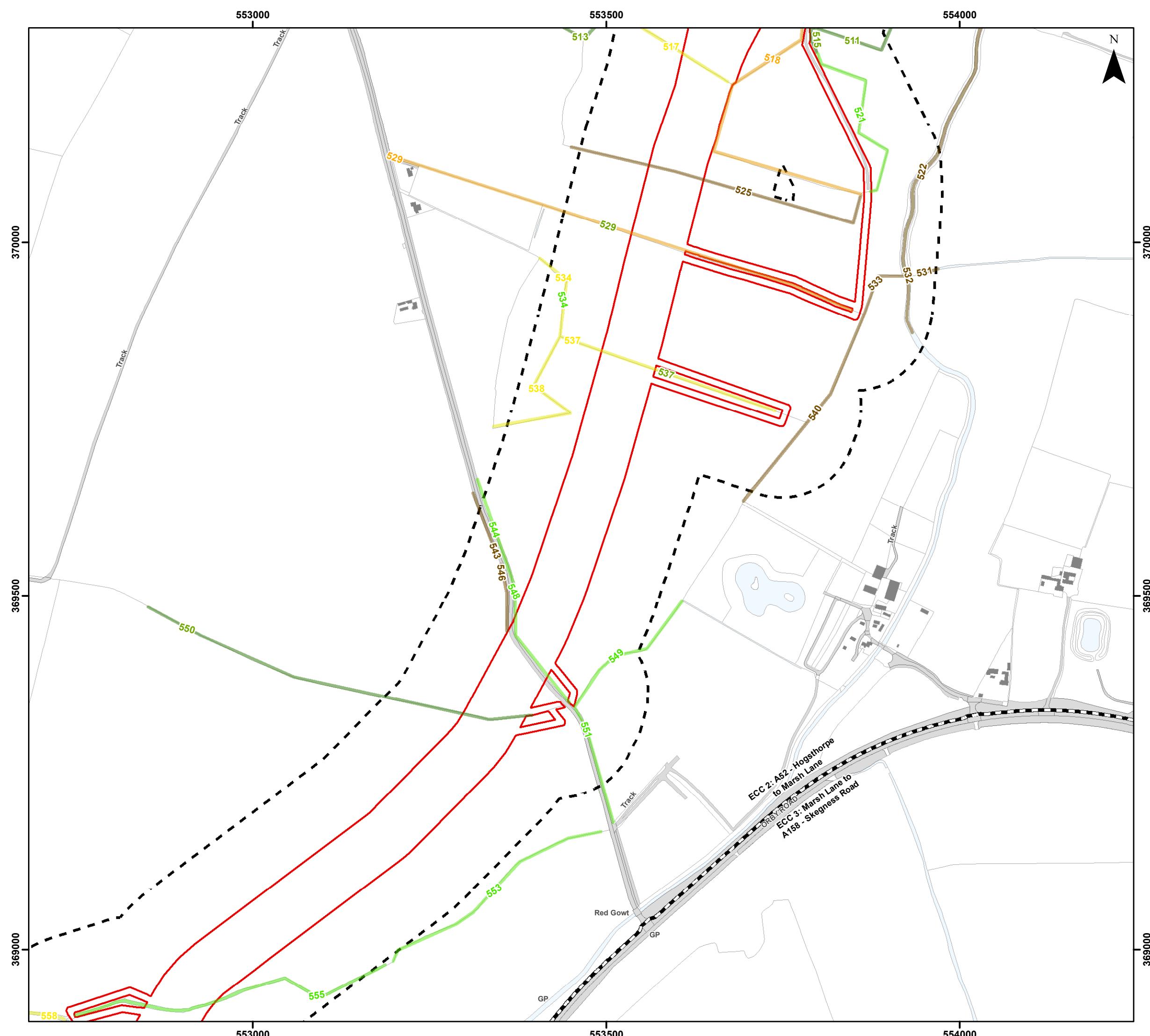
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Figure 21.7.1.6

 OUTER
DOWSING
OFFSHORE WIND

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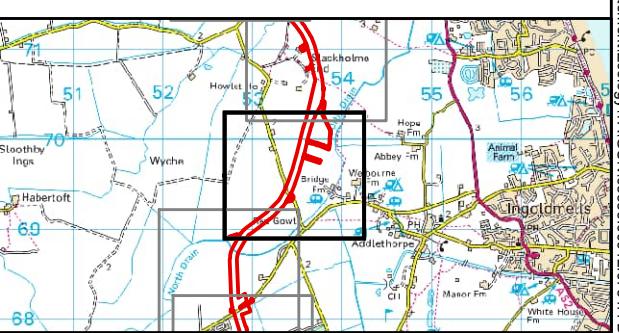


Legend

- Order Limits
- Onshore Segment Break

Ditch HSI Category

- Good
- Average
- Below Average
- Poor
- Not Surveyed/Scoped Out/Dry/Unsuitable



Coordinate System: British National Grid

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Scale: 1:5,000

Environmental Statement

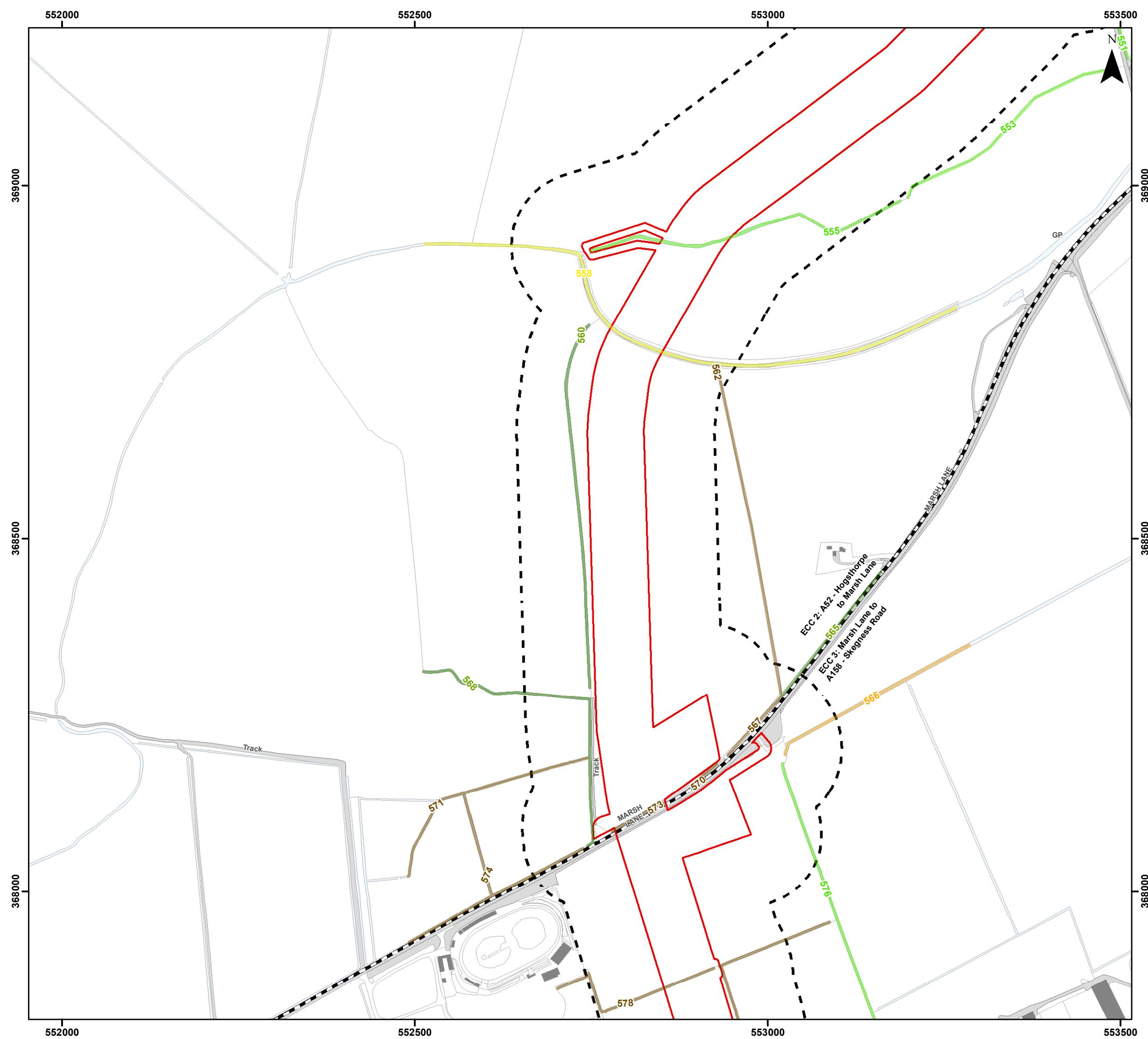
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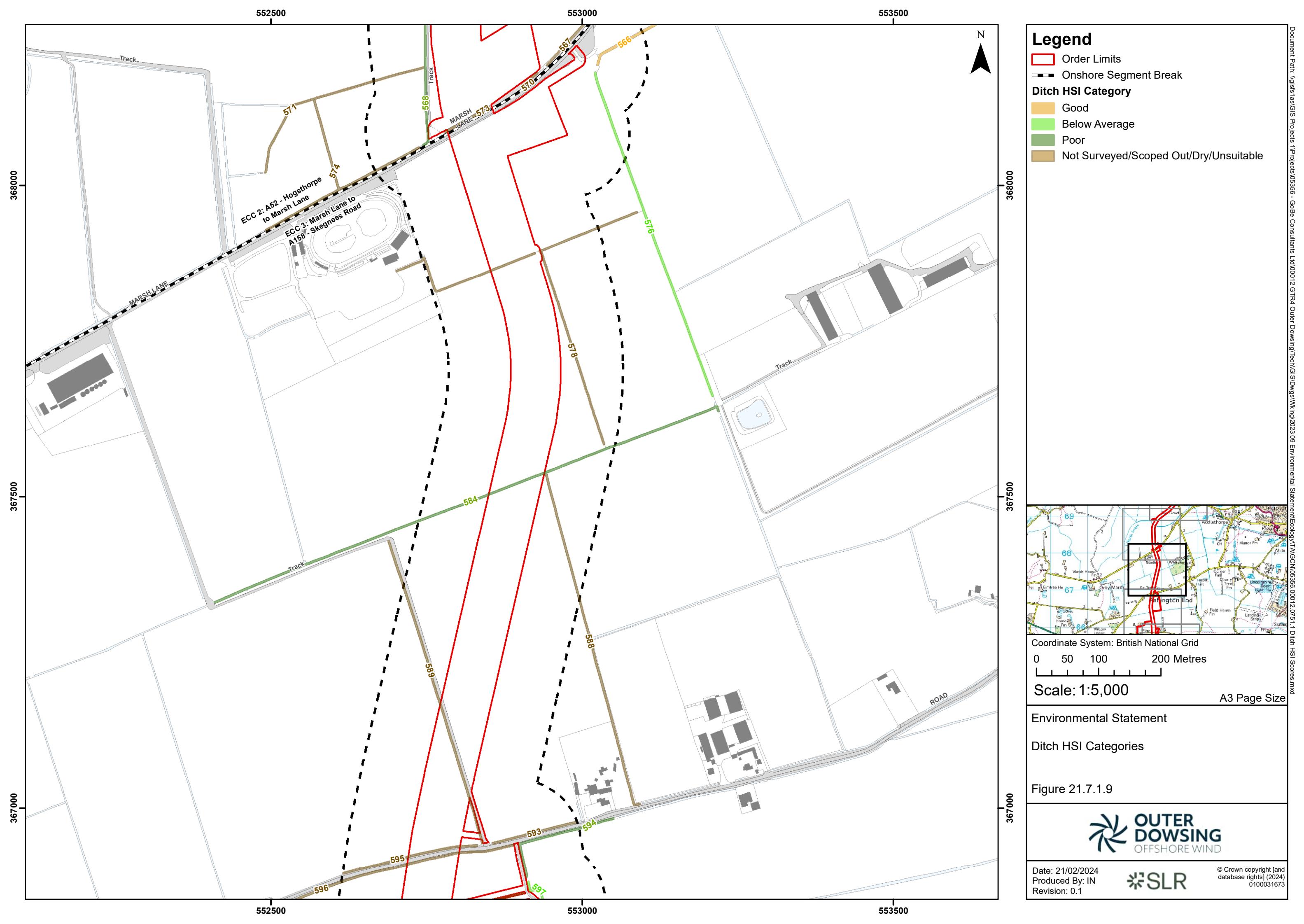


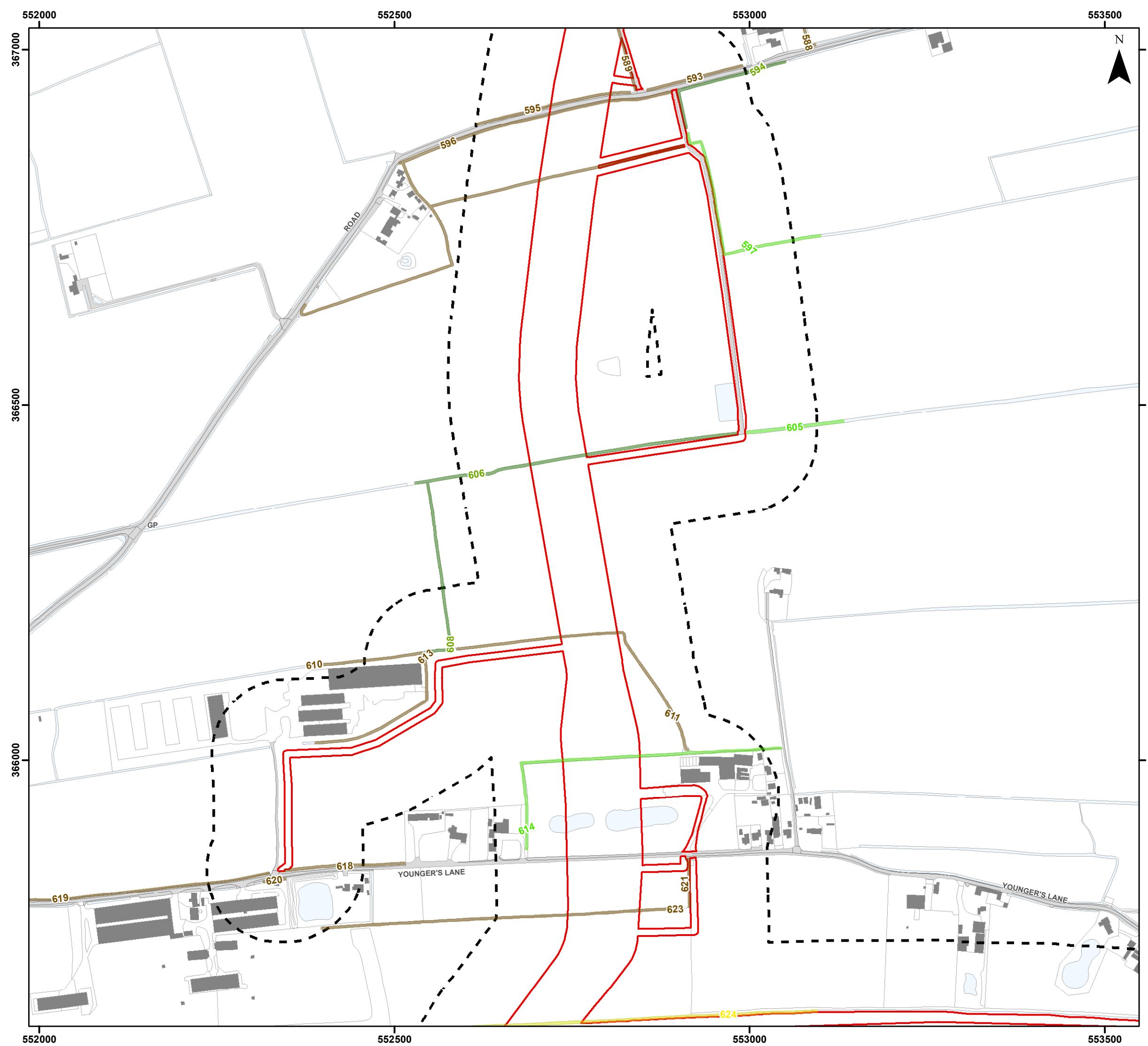
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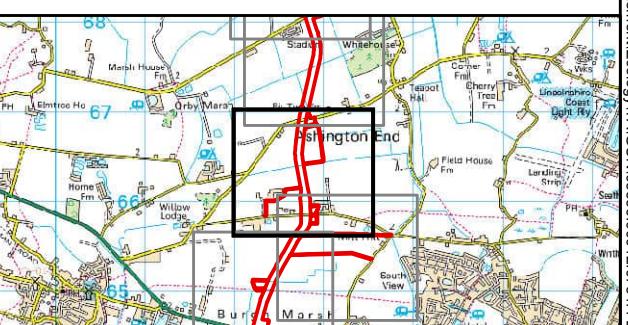
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Legend

- Order Limits
- Ditch HSI Category
 - Average
 - Below Average
 - Poor
 - Not Surveyed/Scouted Out/Dry/Unsuitable



Coordinate System: British National Grid

0 50 100 200 Metres

Scale: 1:5,000

A3 Page Size

Environmental Statement

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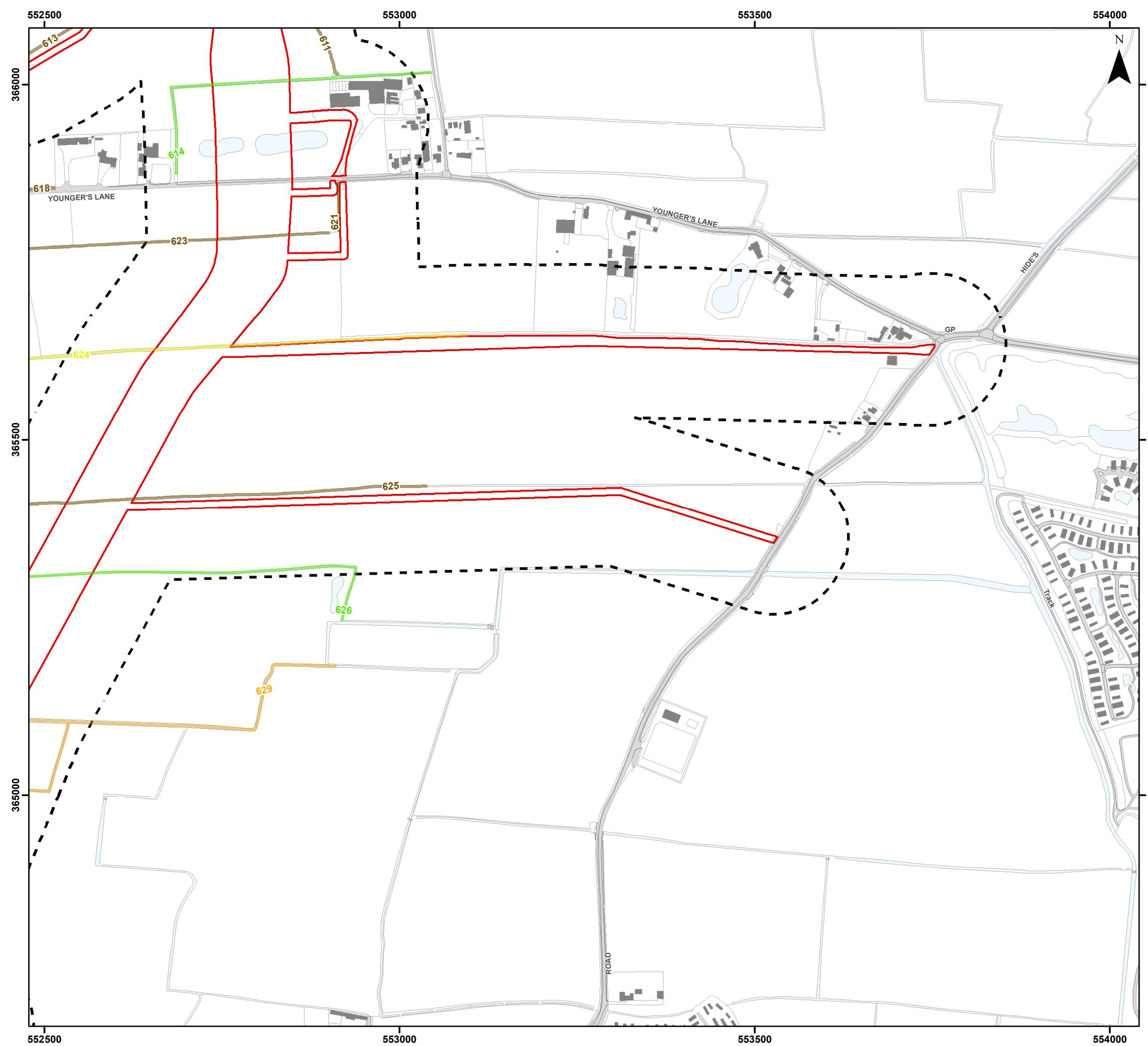
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Legend

- Order Limits (Red Box)
- Ditch HSI Category
- Good (Yellow)
- Average (Green)
- Below Average (Light Green)
- Not Surveyed/Scouted Out/Dry/Unsuitable (Brown)



Coordinate System: British National Grid
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Environmental Statement

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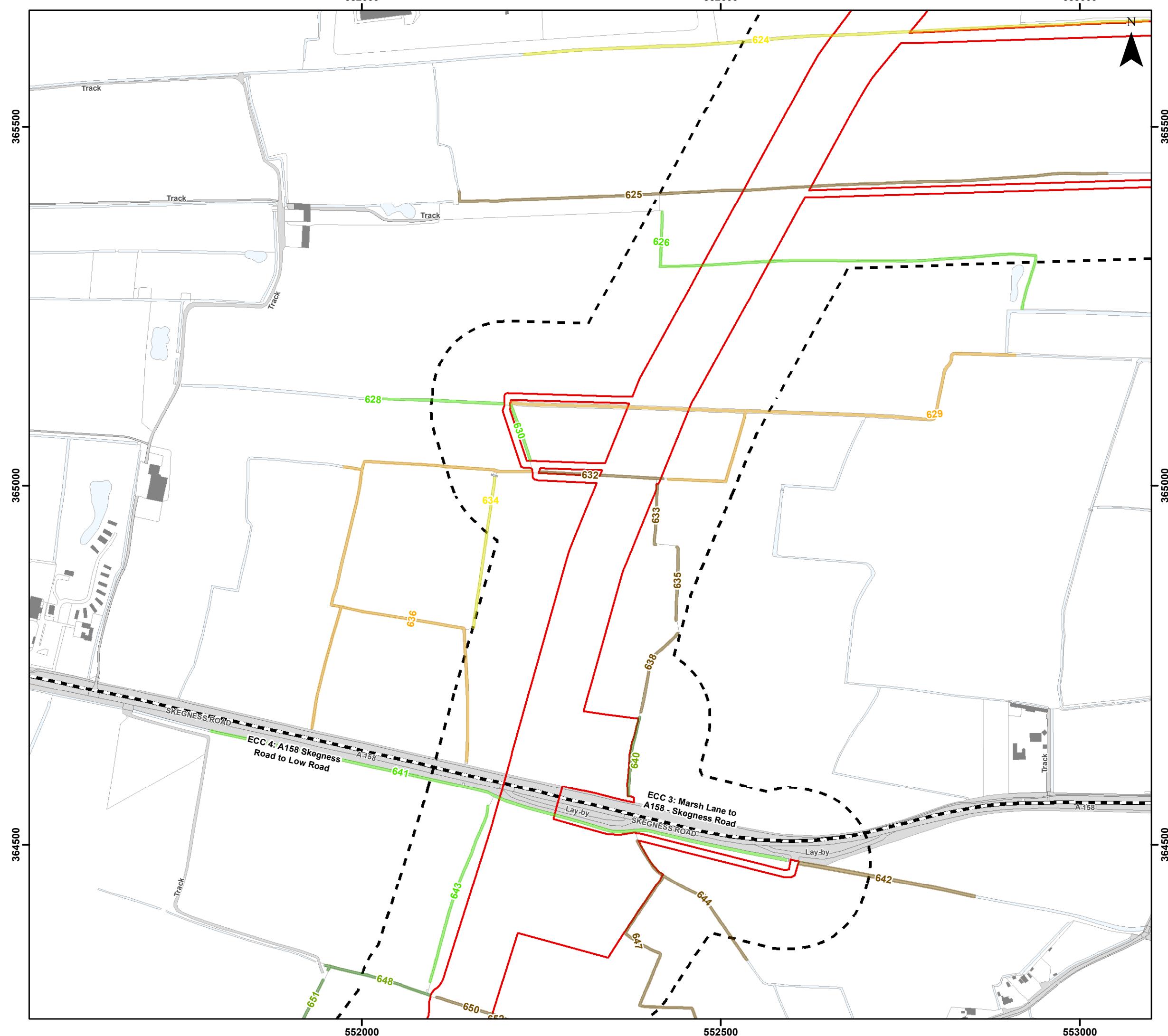
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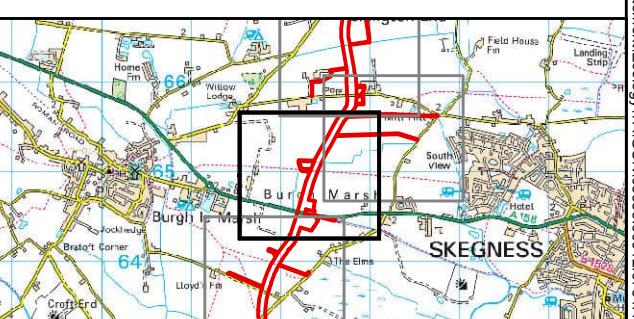
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Legend

- Order Limits
- Onshore Segment Break
- Ditch HSI Category**
- Good
- Average
- Below Average
- Poor
- Not Surveyed/Scouted Out/Dry/Unsuitable



Coordinate System: British National Grid

0 50 100 200 Metres

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Environmental Statement

Ditch HSI Categories

Figure 21.7.1.12



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Legend

	Order Limits
	Ditch HSI Category
	Average
	Below Average
	Poor
	Not Surveyed/Scoped Out/Dry/Unsuitable



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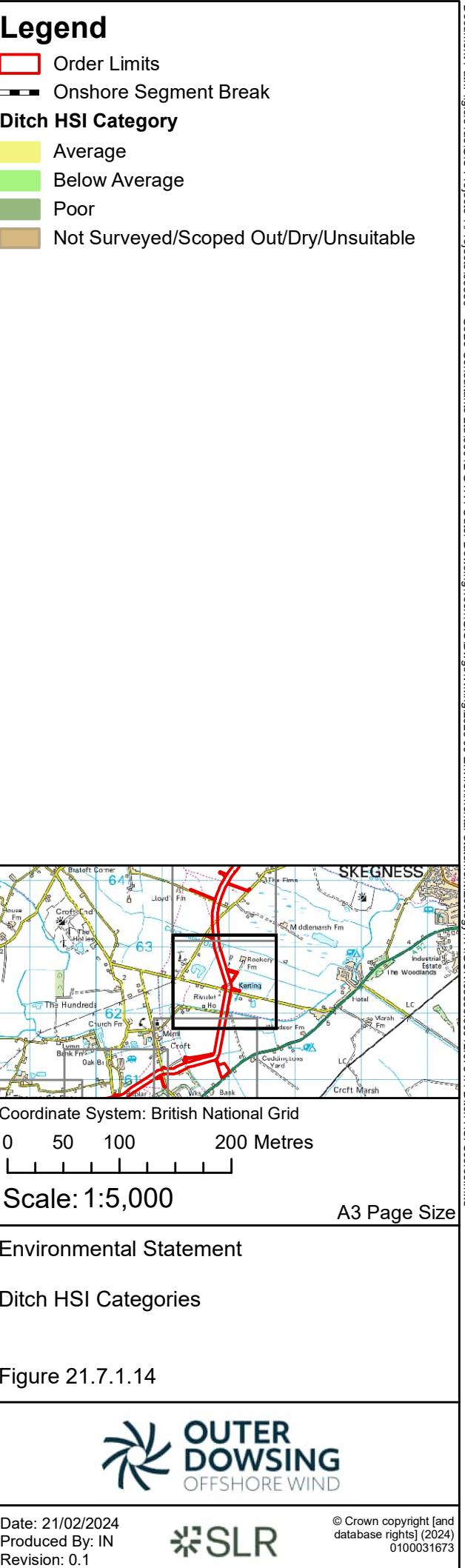
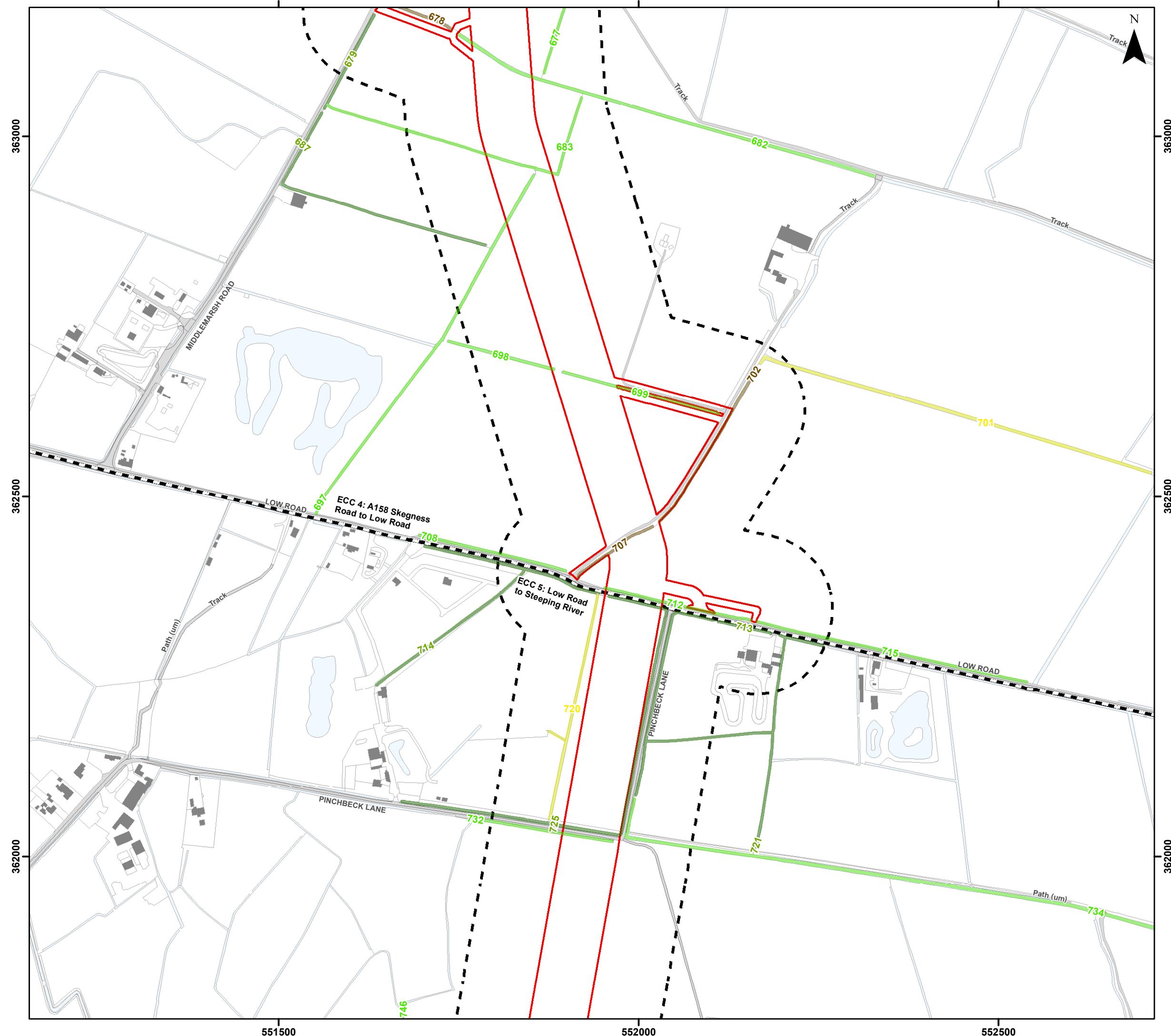
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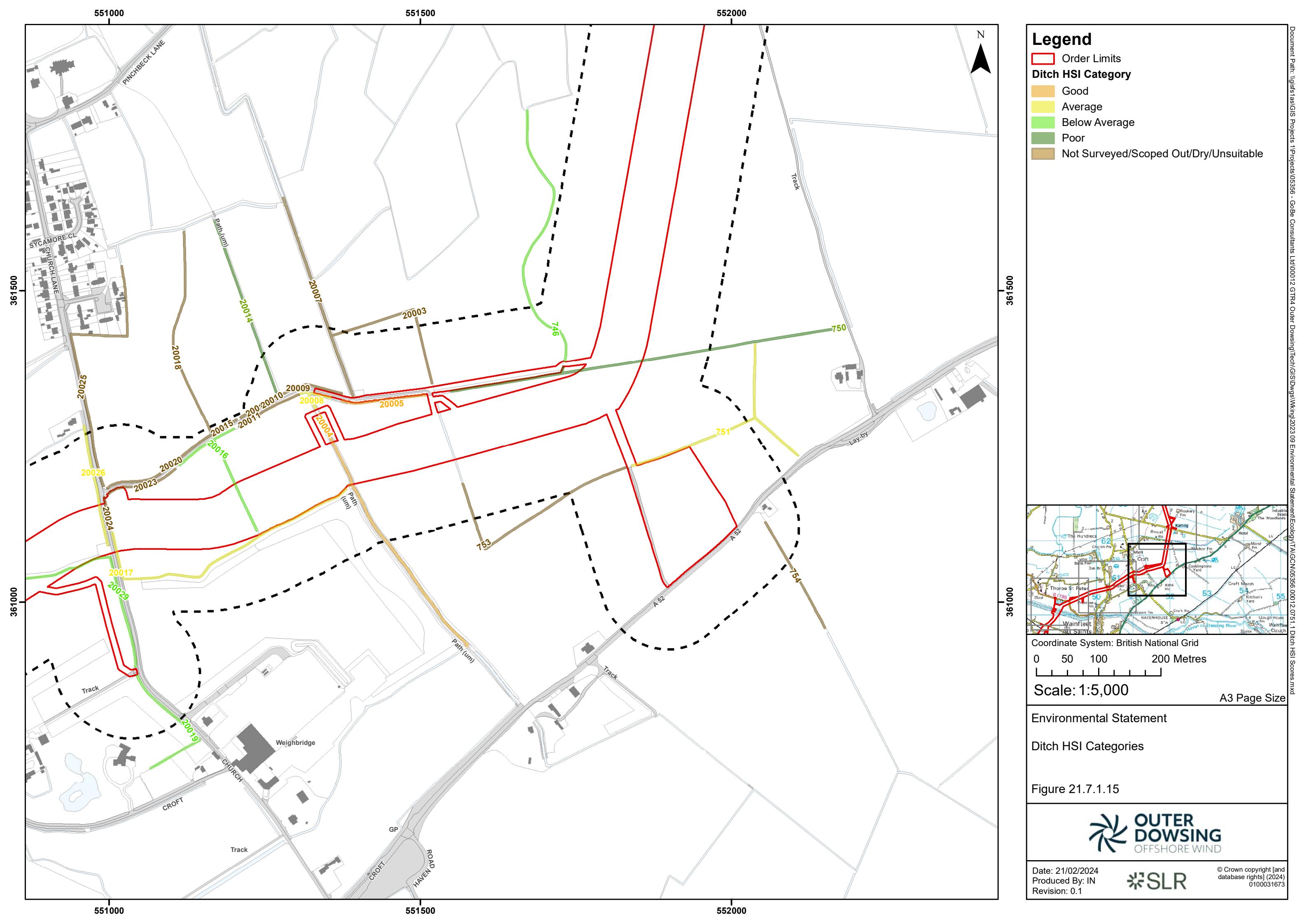
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OFFSHORE WIND

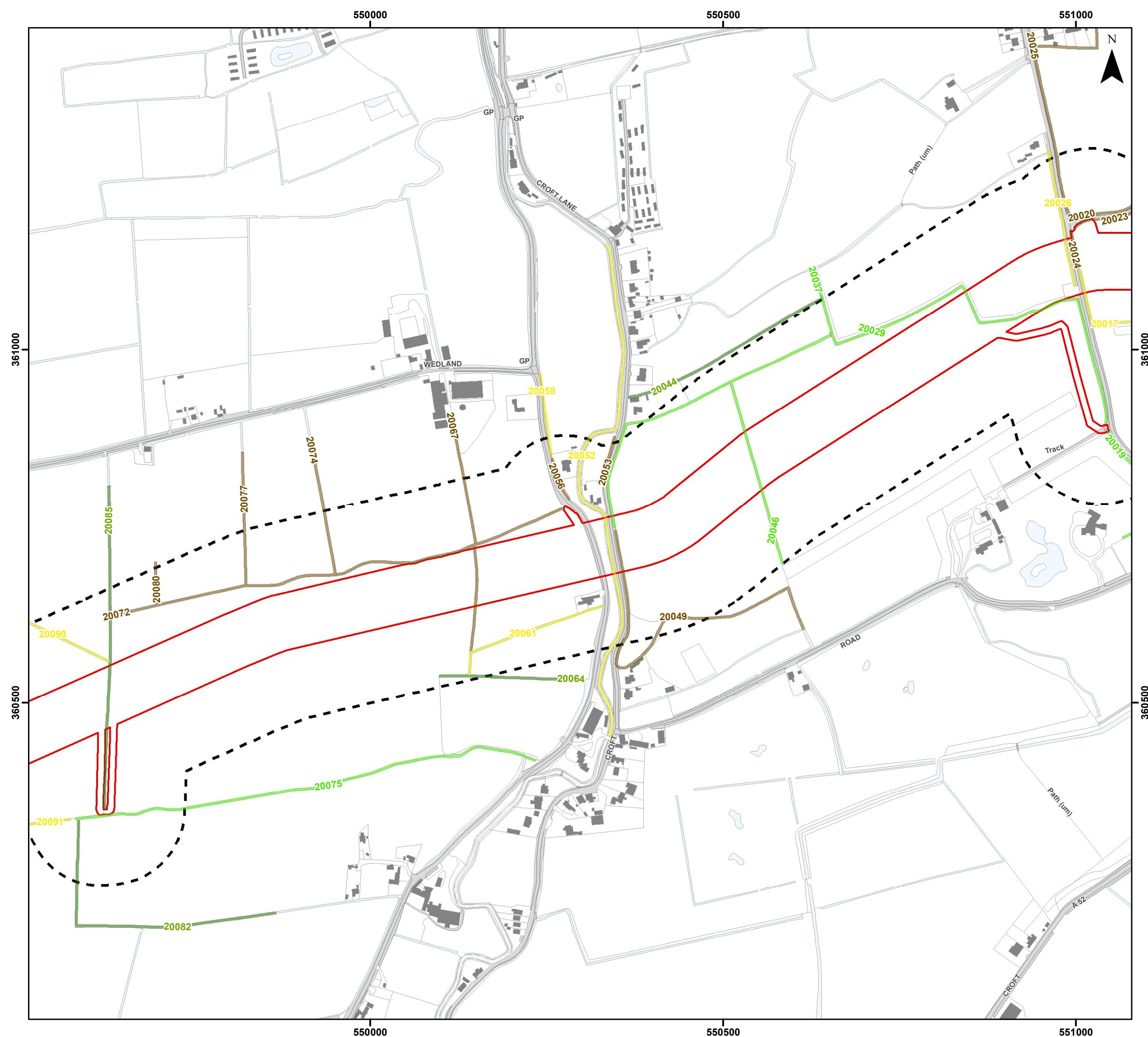
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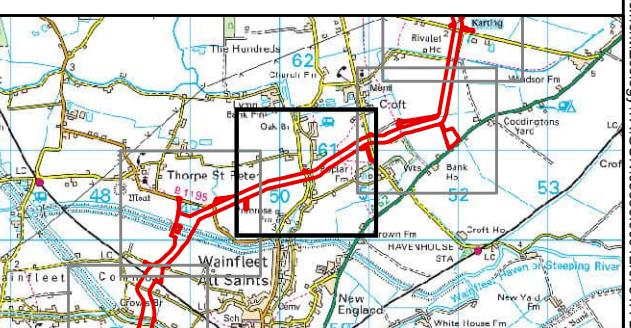
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Order Limits

Ditch HSI Category

Batch No. Category

- Average
- Below Average
- Poor
- Not Surveyed/Scoped Out/Dry/Unsuitable



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Environmental Statement

Environmental Statement

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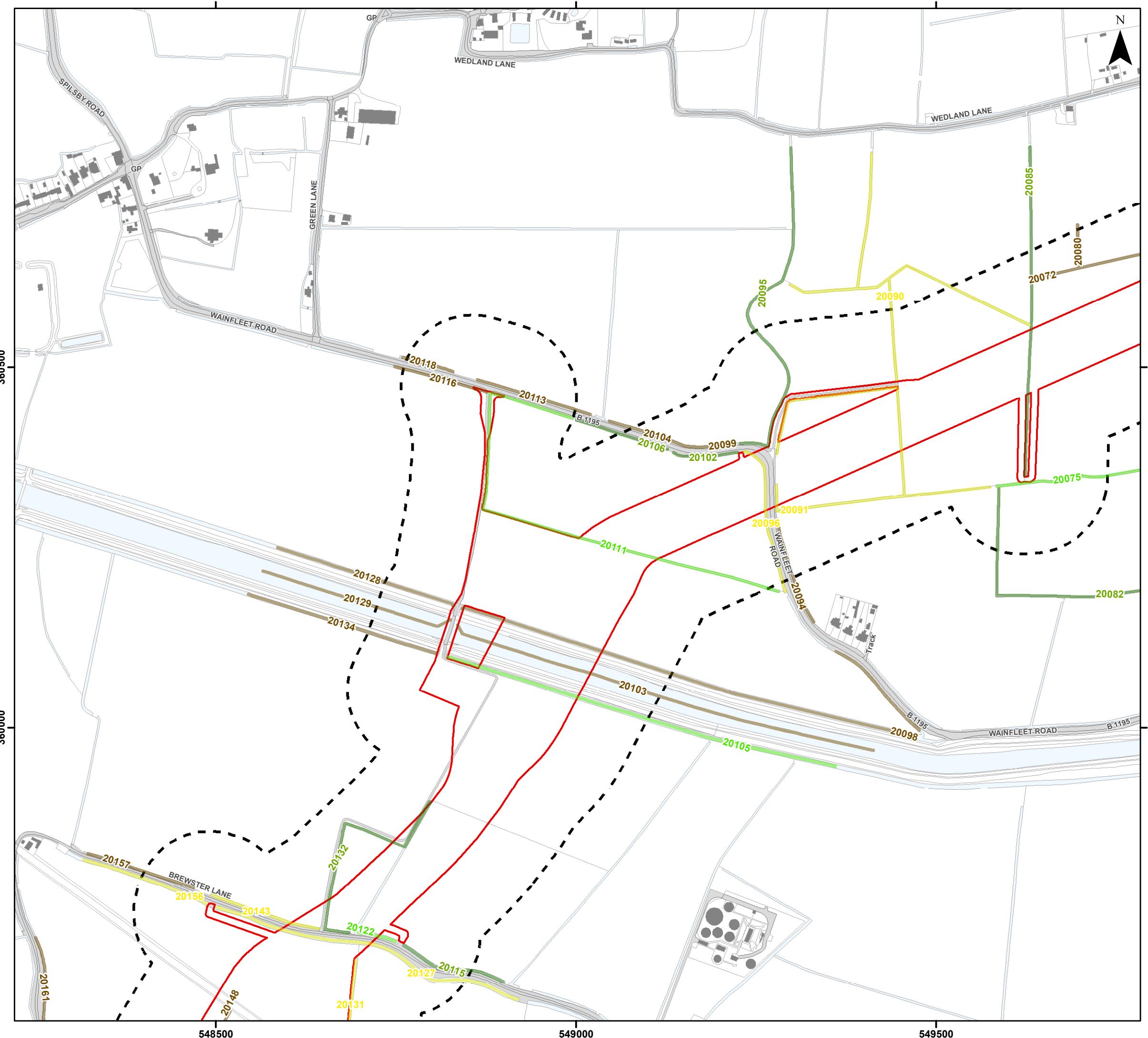
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Figure 21.7.1.16

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Legend

	Order Limits
	Ditch HSI Category
	Average
	Below Average
	Poor
	Not Surveyed/Scouted Out/Dry/Unsuitable



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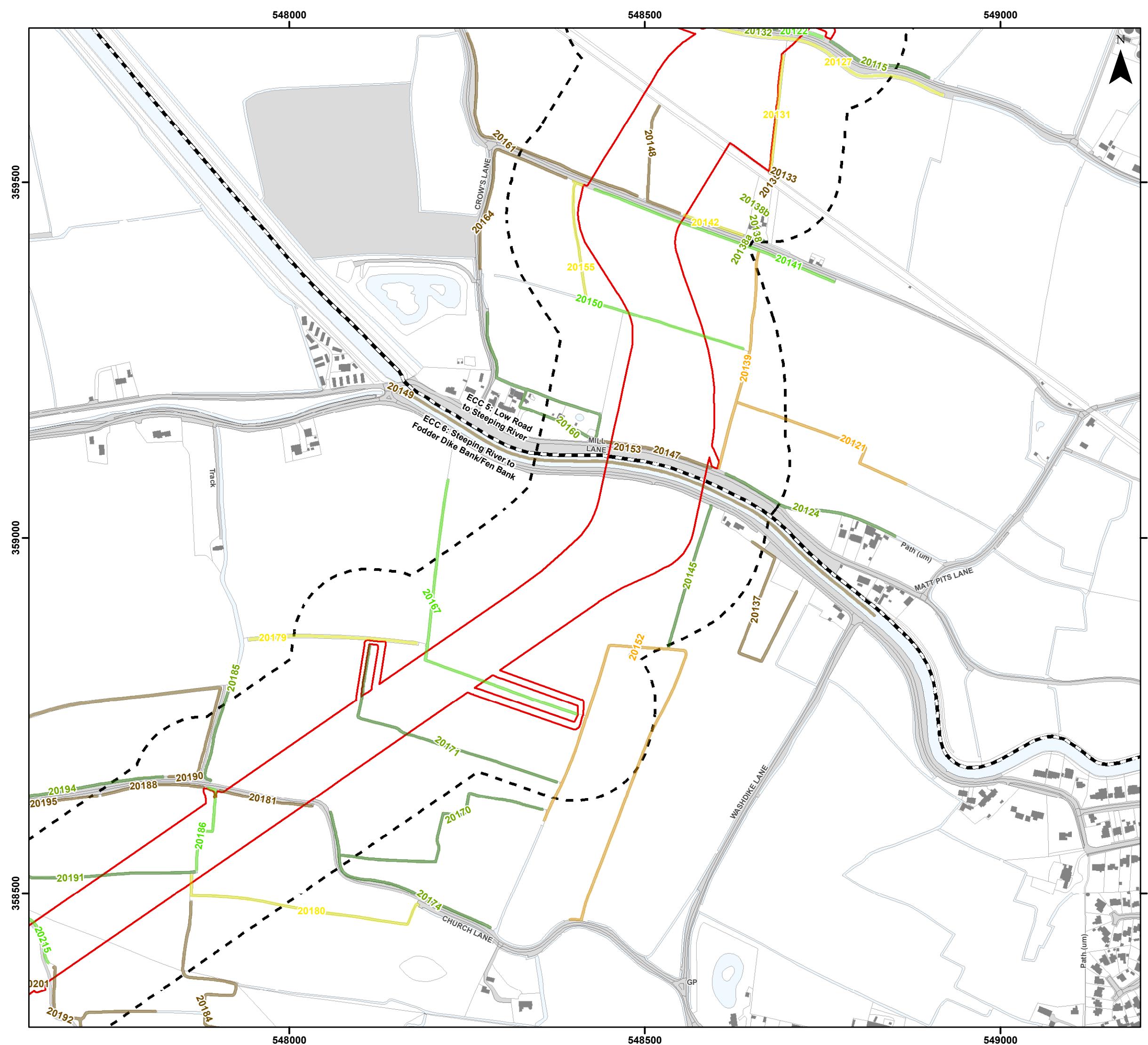
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Legend

- Order Limits
 - Onshore Segment Break

Ditch HSI Category

- Good
 - Average
 - Below Average
 - Poor
 - Not Surveyed/Scoped Out/Dry/Unsuitable



Coordinate System: British National Grid

0 50 100 200 Metres

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Environmental Statement

Environmental Statement

Ditch HSI Categories

Figure 21.7.1.18

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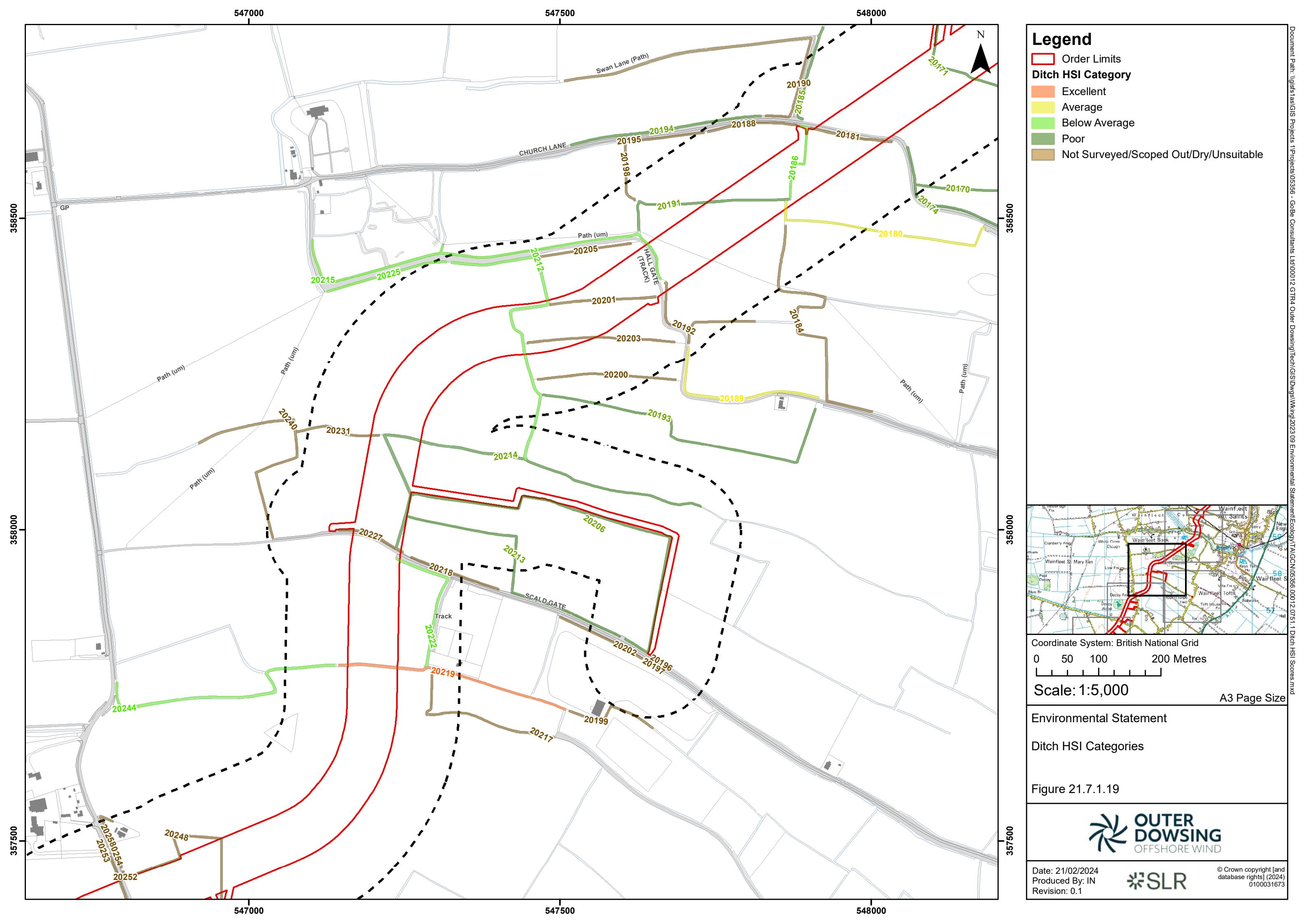
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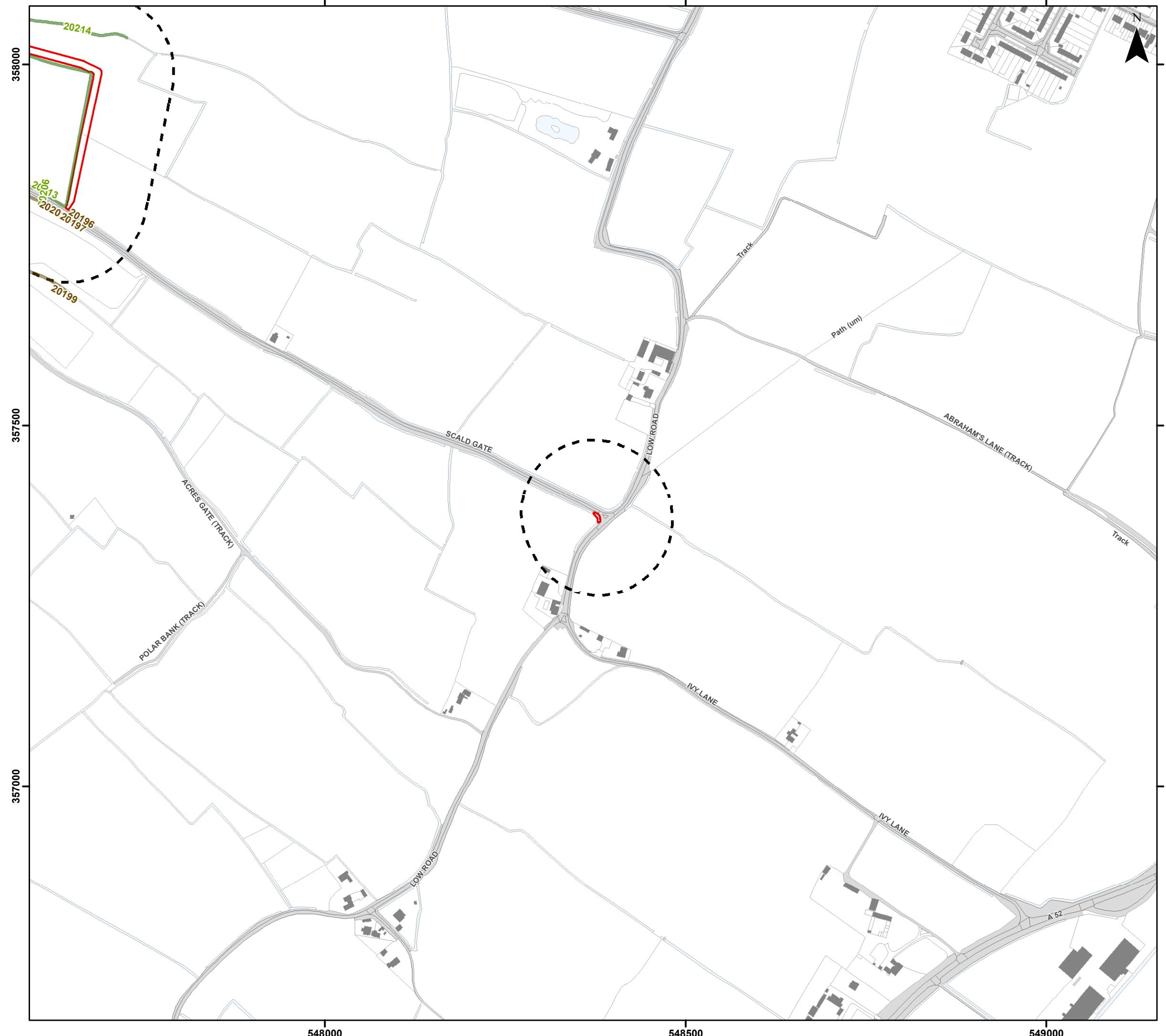
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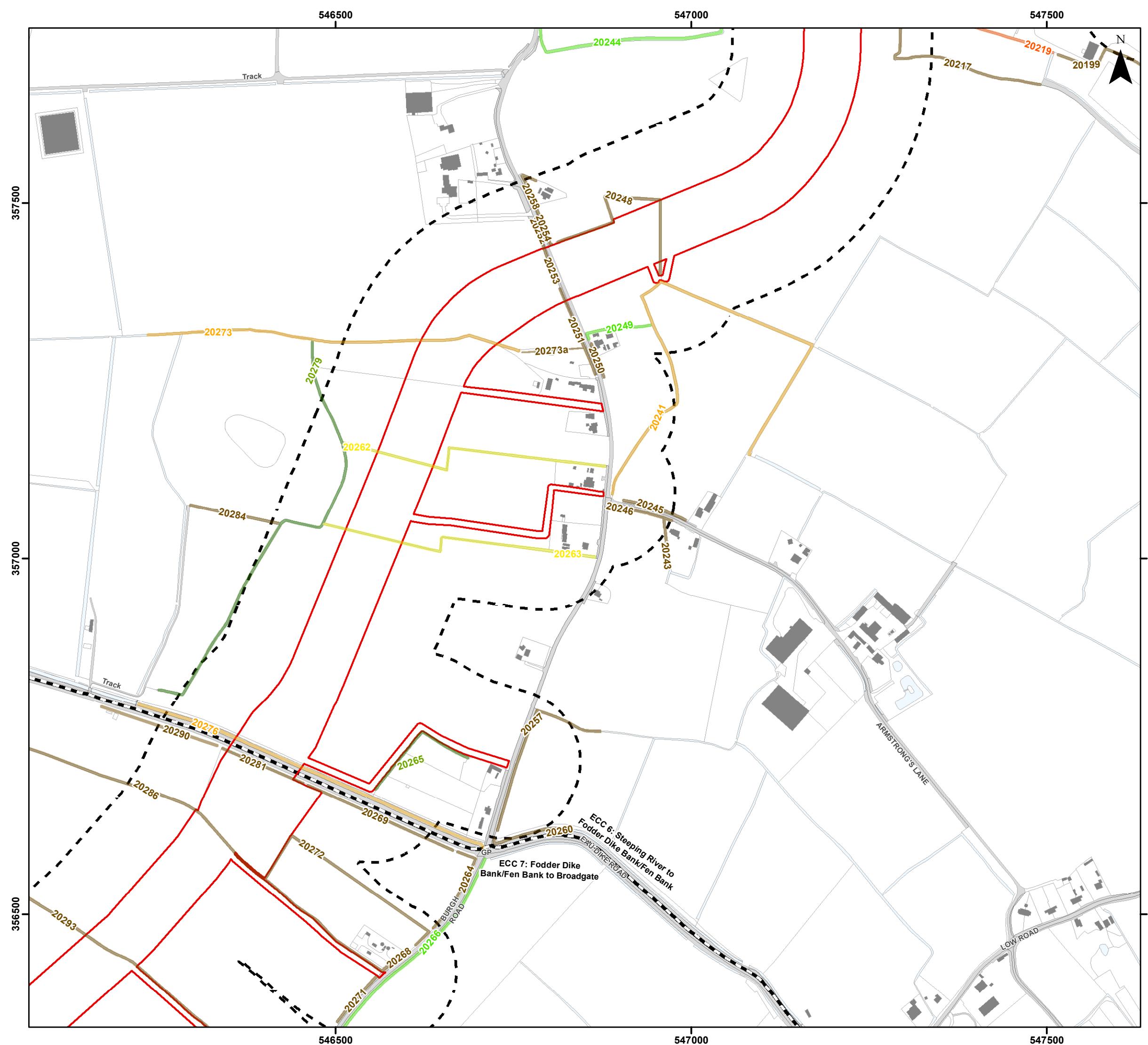
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Poor			
Not Surveyed/Scoped Out/Dry/Unsuitable			
			
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0	50	100	200 Metres
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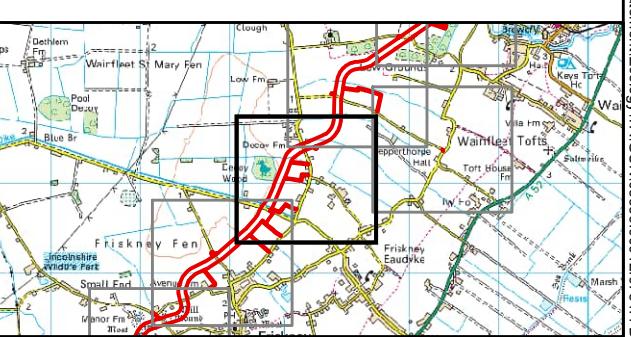
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Legend

- Order Limits
 - Onshore Segment Break

Ditch HSI Category

- Excellent
- Good
- Average
- Below Average
- Poor
- Not Surveyed/Scoped Out/Dry/Unsuitable



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Scale 1:5 000

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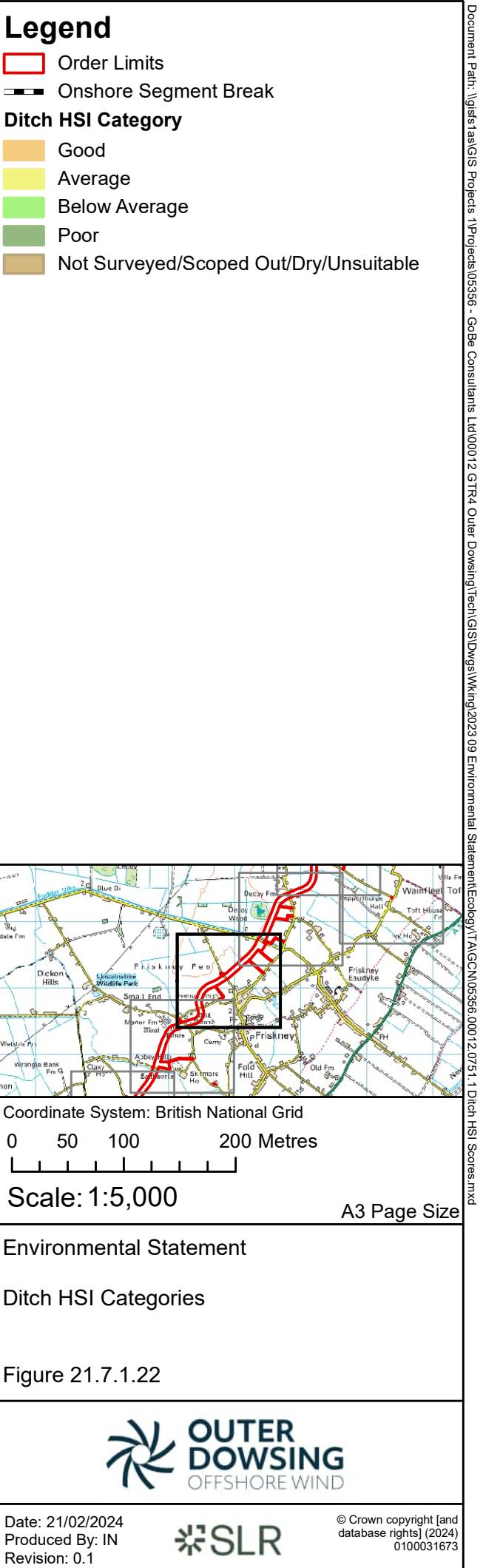
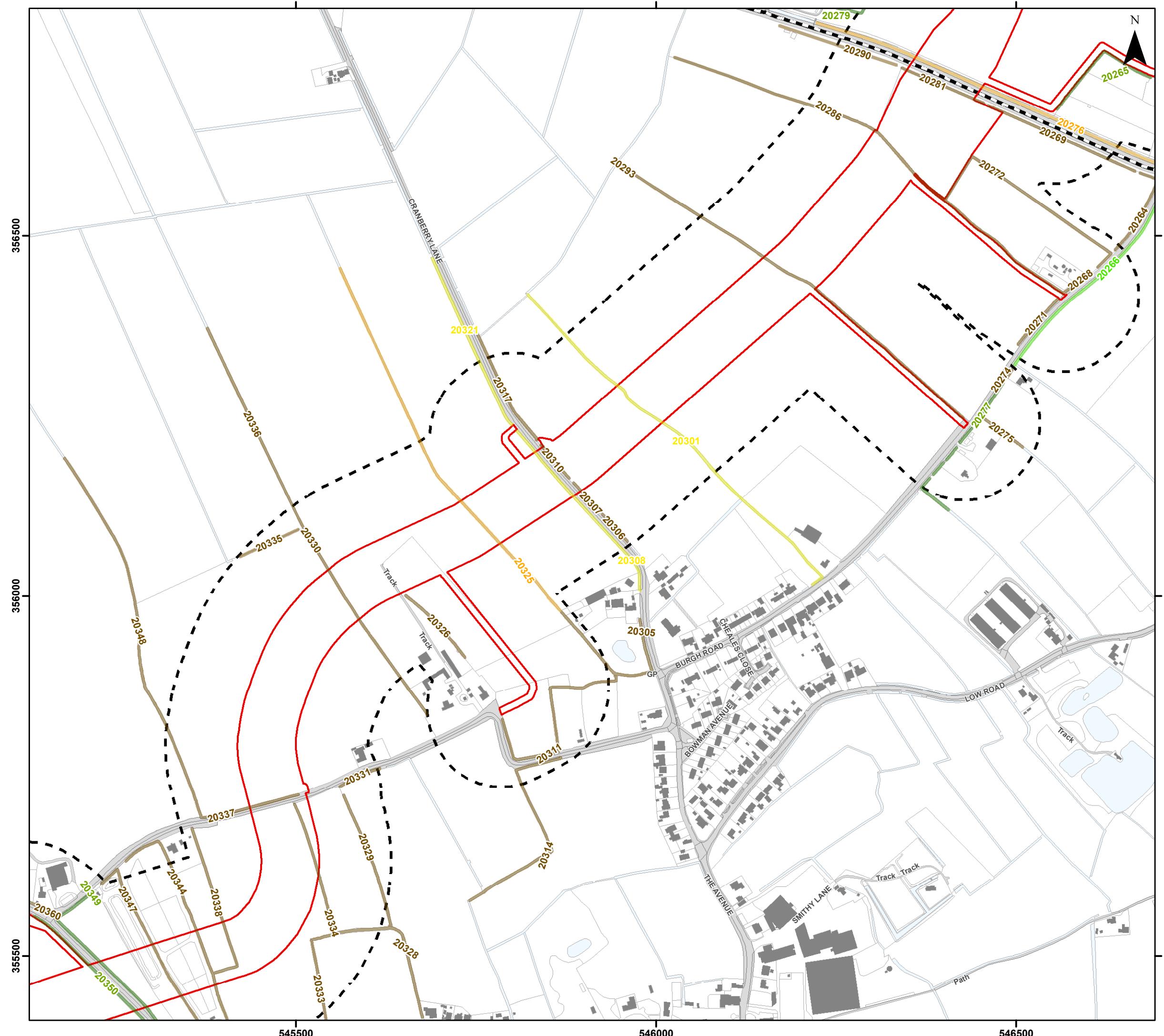
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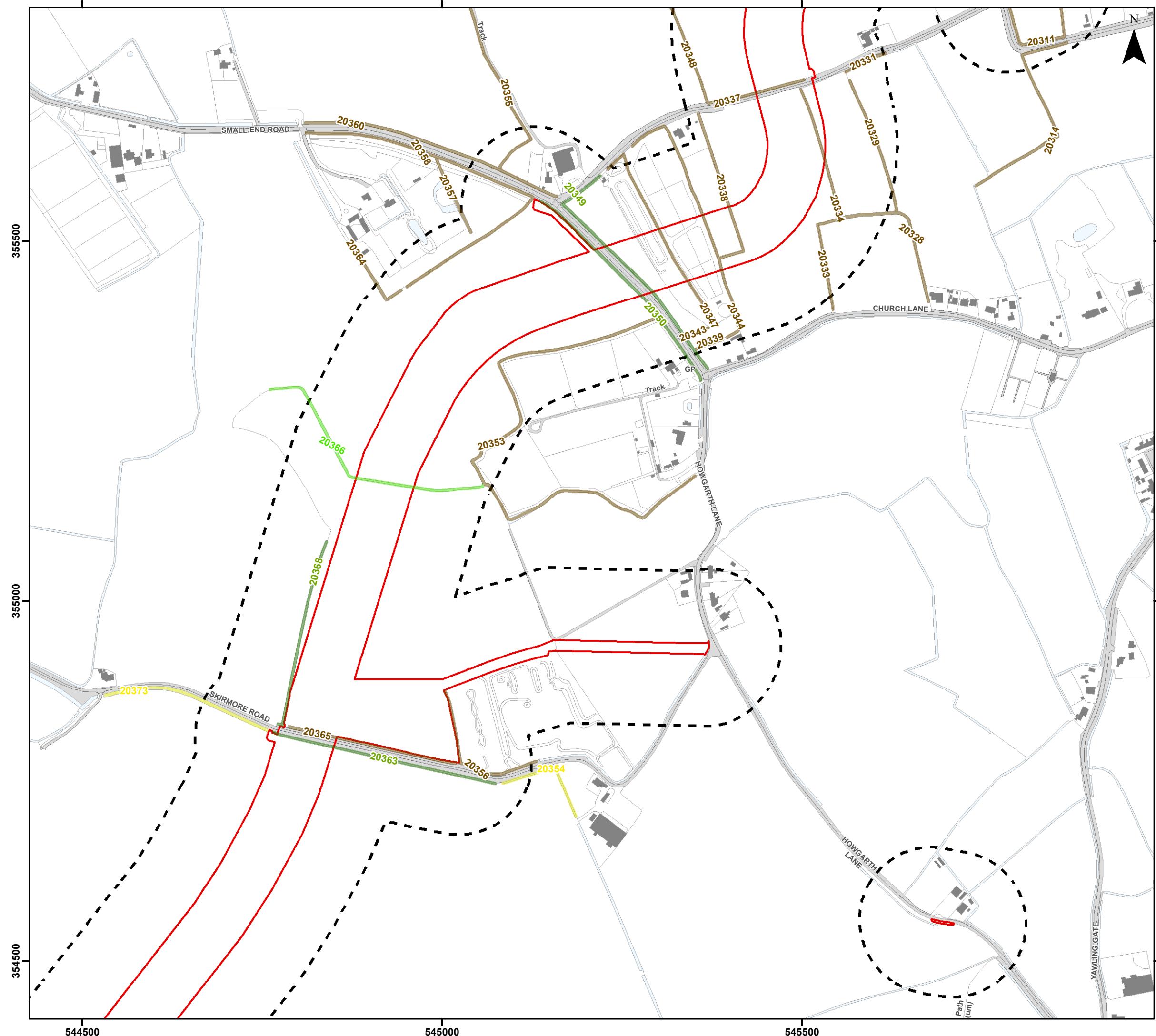
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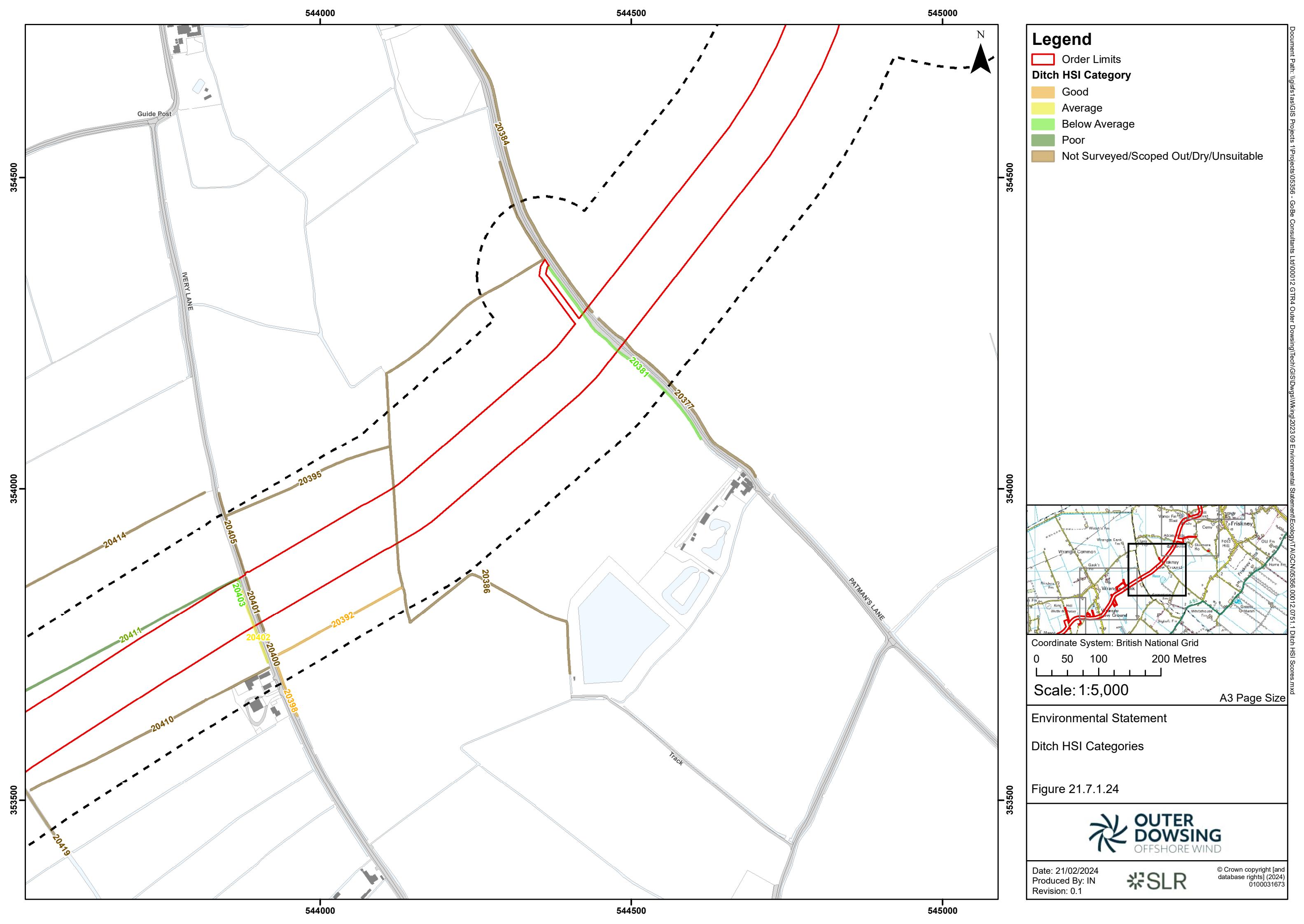
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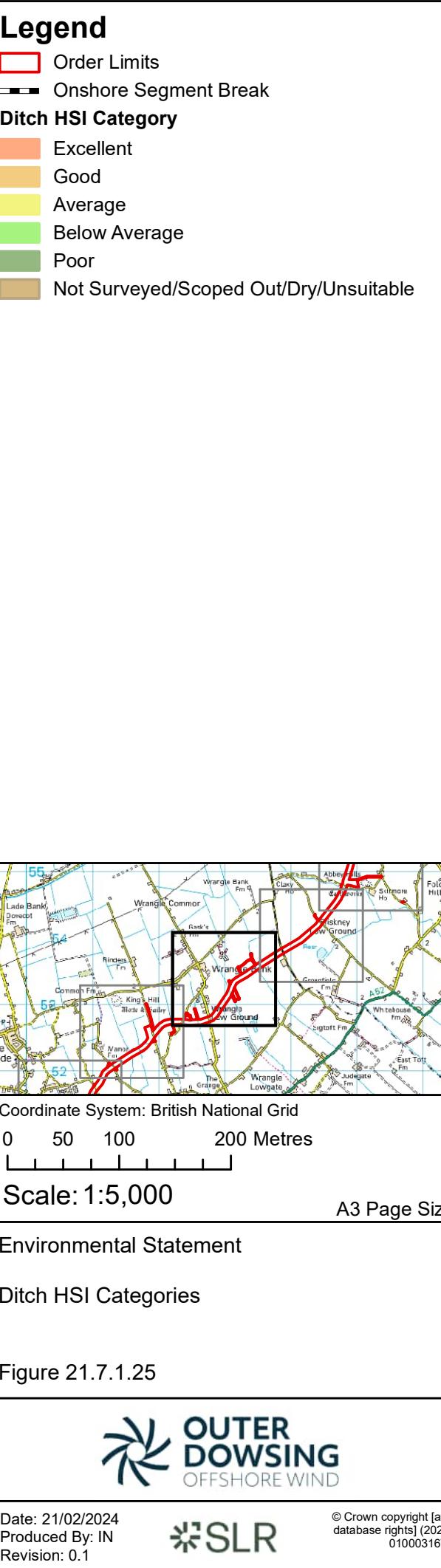
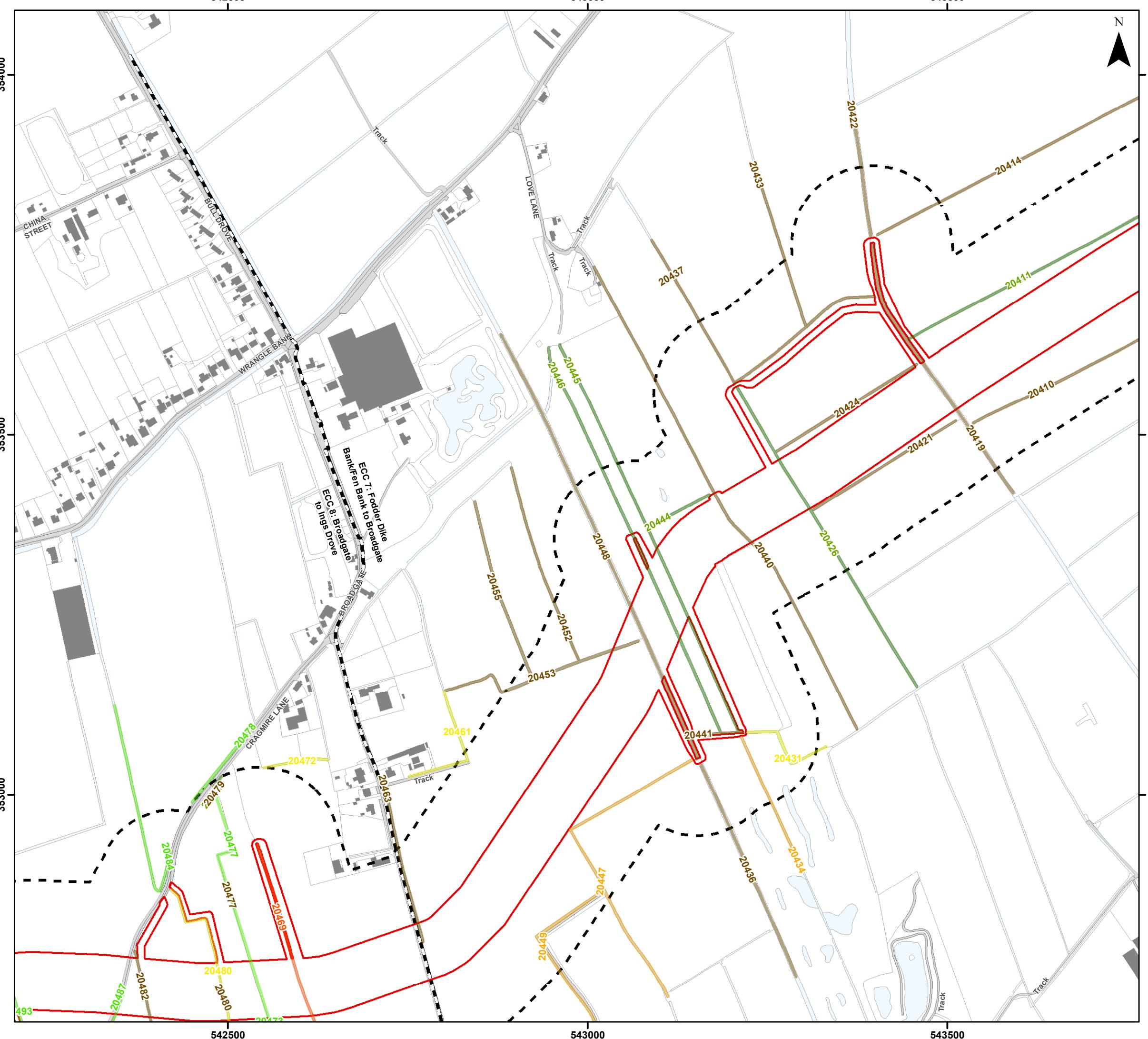
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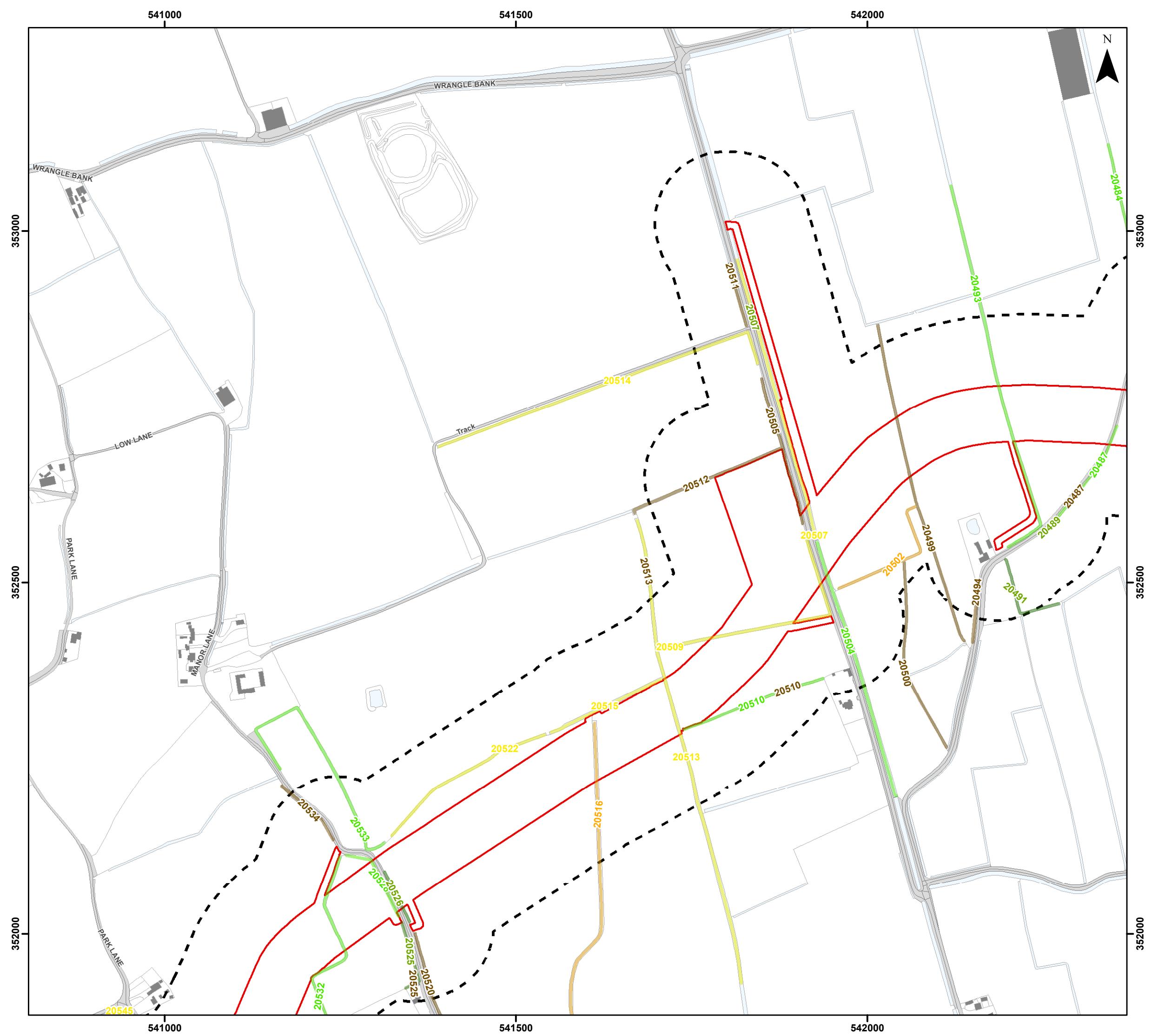




Legend	
	Order Limits
Ditch HSI Category	
	Average
	Below Average
	Poor
	Not Surveyed/Scouted Out/Dry/Unsuitable
	
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Environmental Statement	
Ditch HSI Categories	
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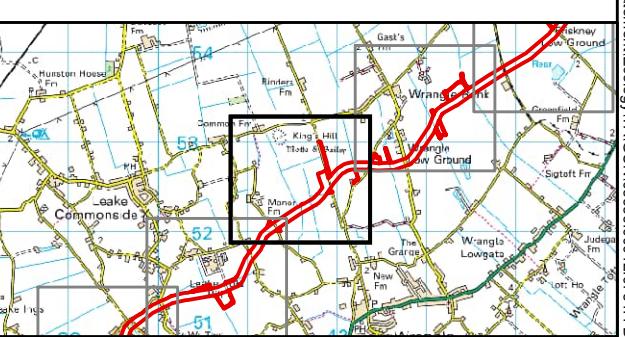




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Legend

- Order Limits
 - Ditch HSI Category
 - Good
 - Average
 - Below Average
 - Poor
 - Not Surveyed/Scoped Out/Dry/Unsuitable



Coordinate System: British National Grid
0 50 100 200 Metres

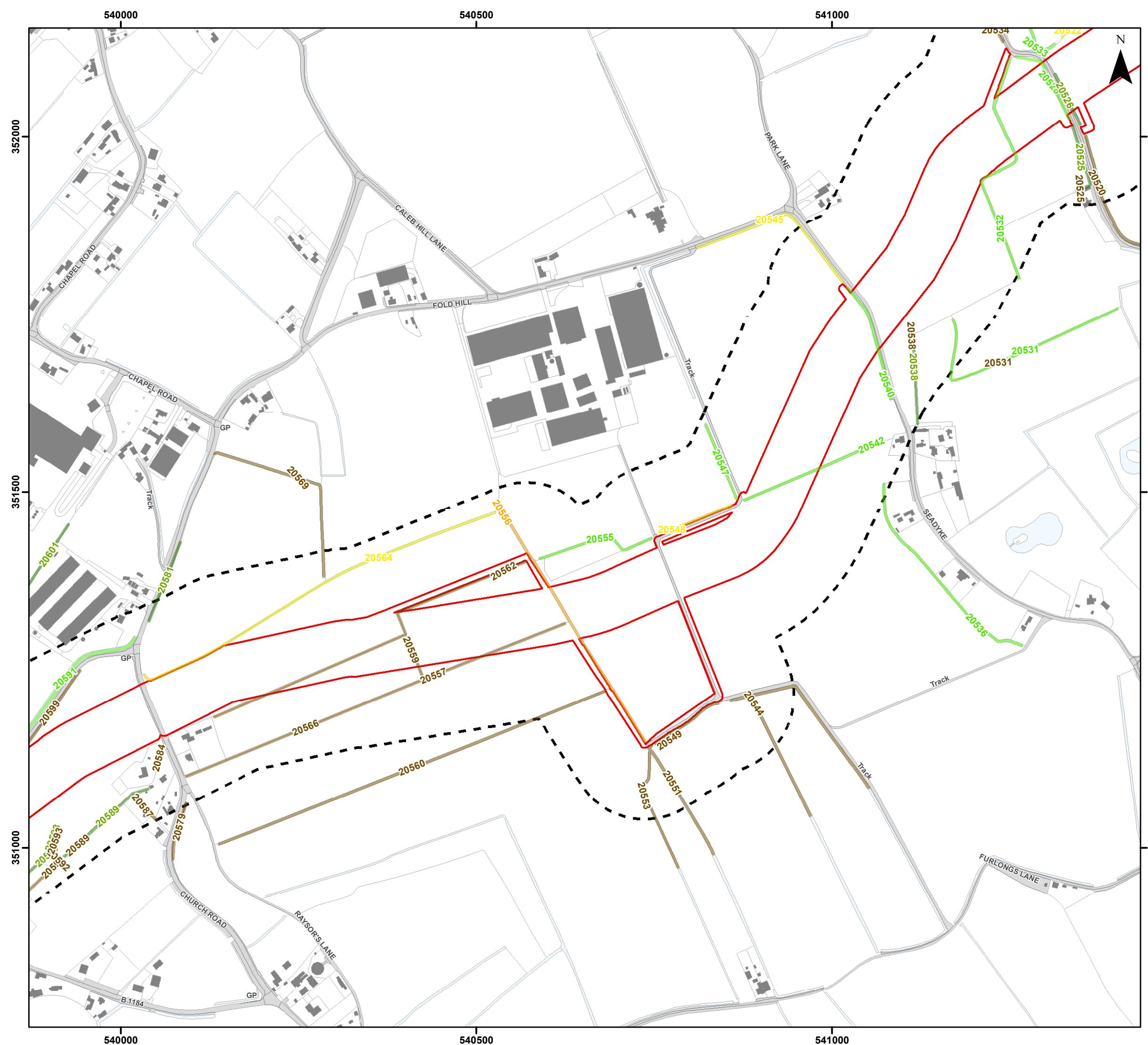
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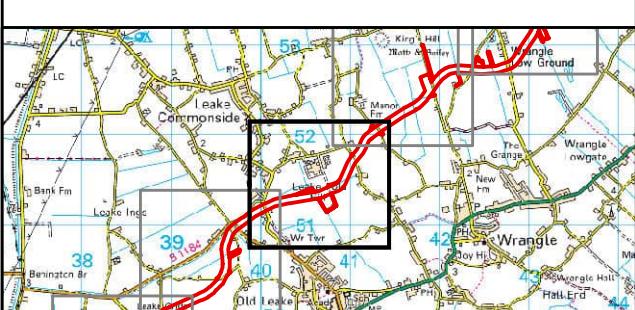
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Legend

- Order Limits
 - Ditch HSI Category**
 - Good
 - Average
 - Below Average
 - Poor
 - Not Surveyed/Scoped Out/Dry/Unsuitable



Coordinate System: British National Grid
0 50 100 200 Metres

Environmental Statement

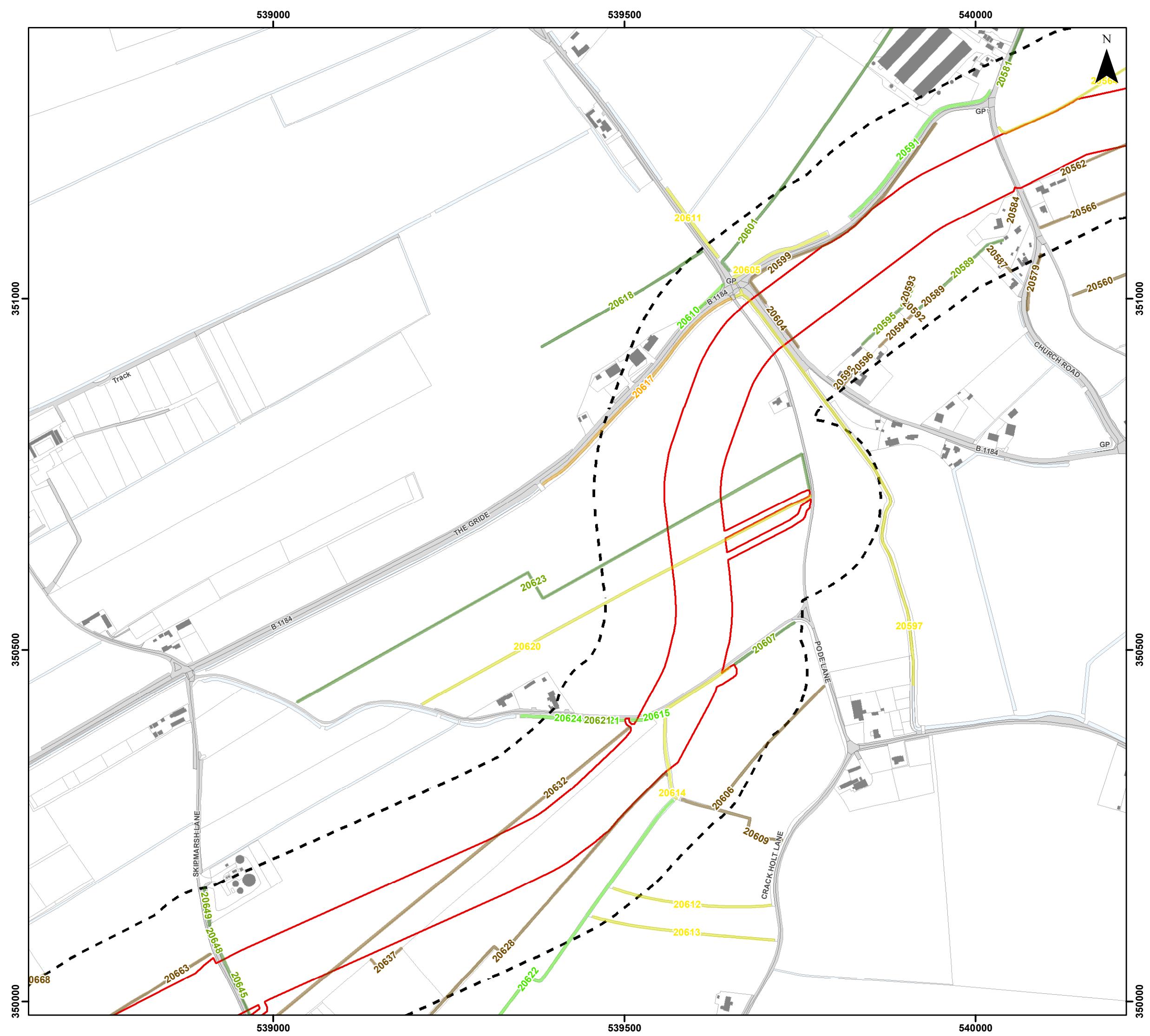
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Figure 21.7.1.27



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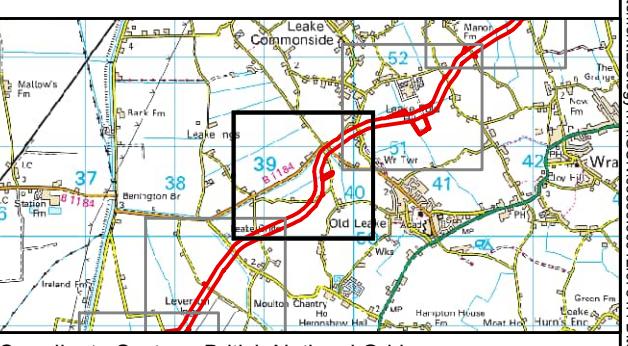
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Ditch HSI Category

Good

Average

- Average
- Below Average
- Poor
- Not Surveyed/Scoped Out/Dry/Unsuitable



Coordinate System: British National Grid

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Scale: 1:5,000

Environ Biol Fish (2011) 92:1–11
DOI 10.1007/s10641-010-9700-1

Environmental Statement

Ditch HSI Categories

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Figure 21.7.1.28

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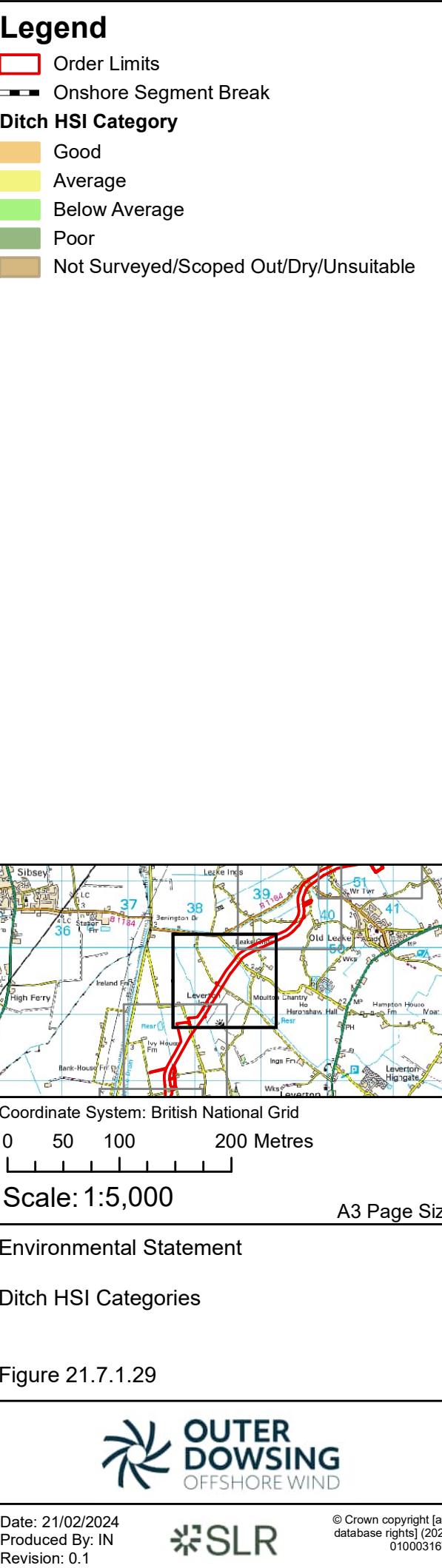
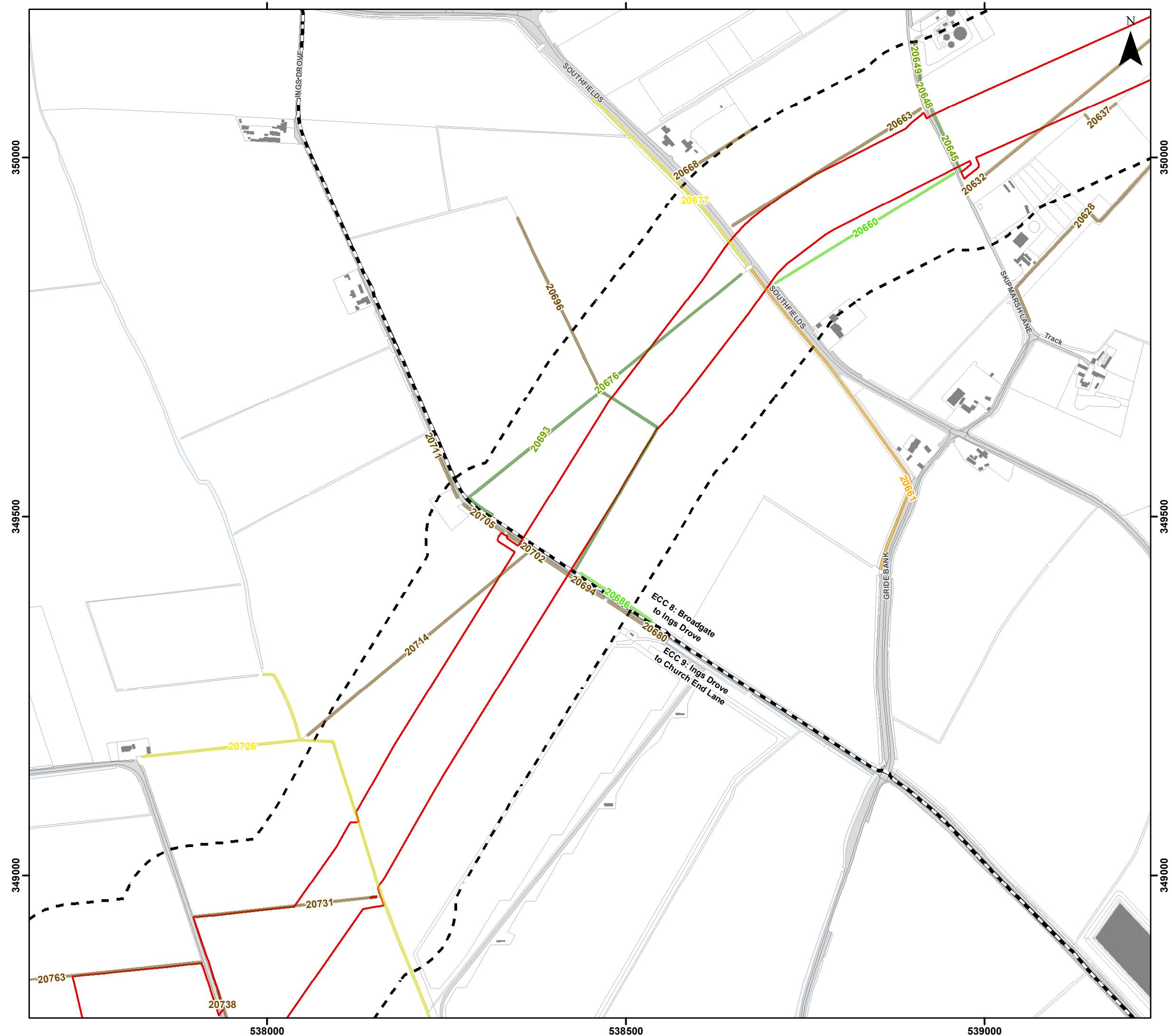
 DOWSING
OFFSHORE WIND

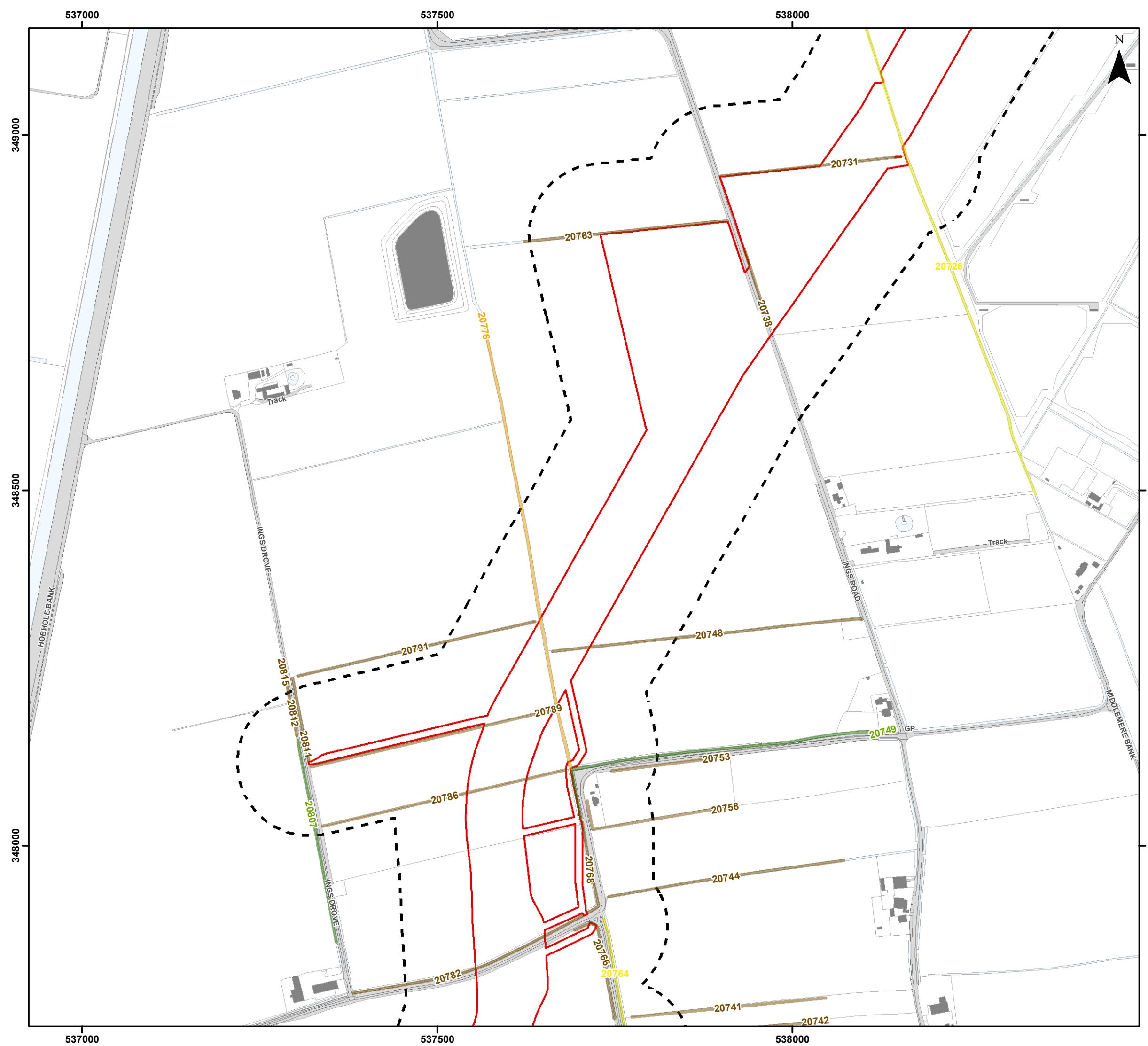
OFFSHORE WIND

Date: 21/02/2024
Produced By: IN

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Revision: 0.1

Digitized by srujanika@gmail.com





Legend

- Order Limits (Red Box)
- Ditch HSI Category
 - Good (Yellow)
 - Average (Green)
 - Poor (Dark Green)
 - Not Surveyed/Scouted Out/Dry/Unsuitable (Brown)



Coordinate System: British National Grid
0 50 100 200 Metres
Scale: 1:5,000

A3 Page Size

Environmental Statement

Ditch HSI Categories

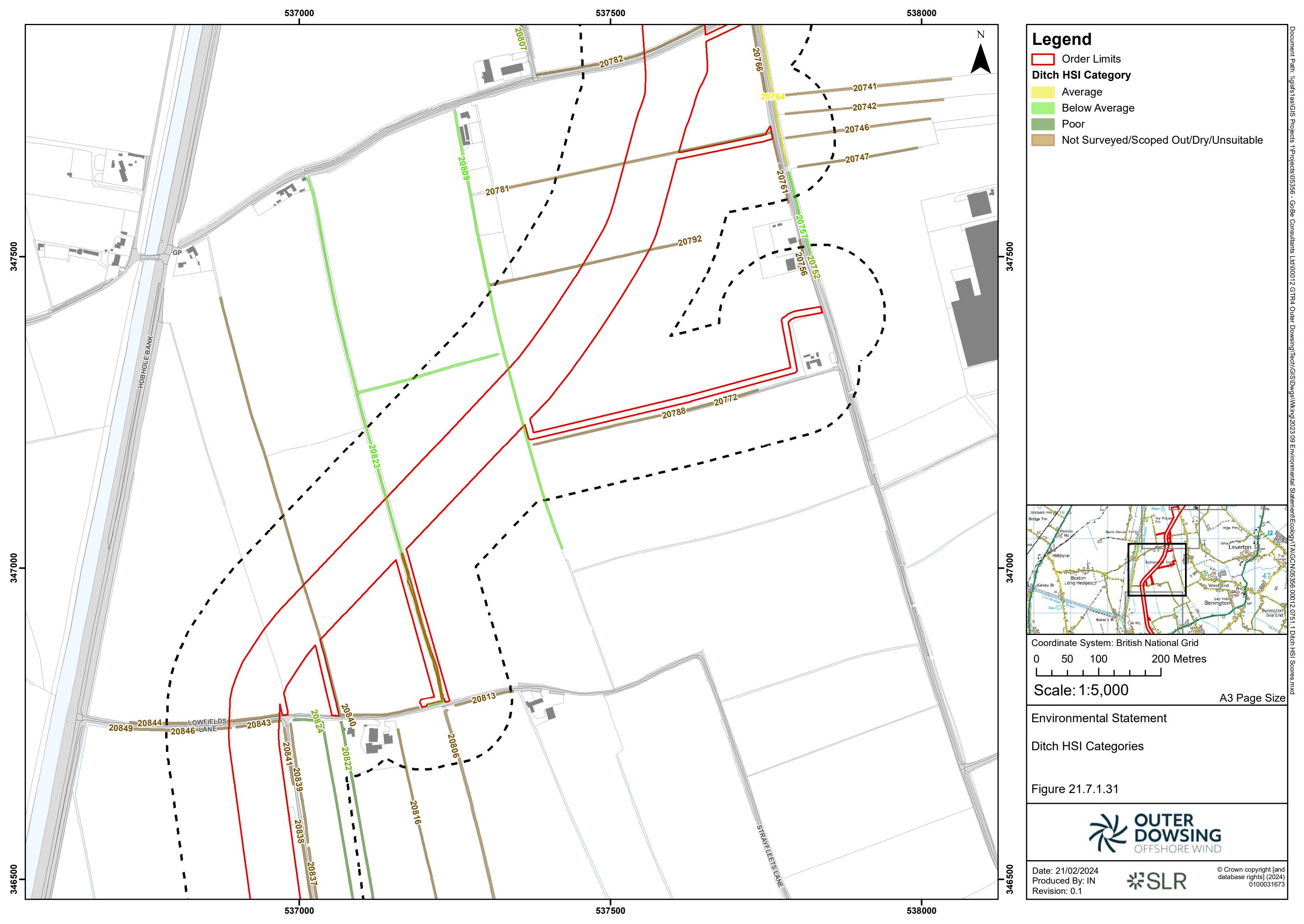
Figure 21.7.1.30

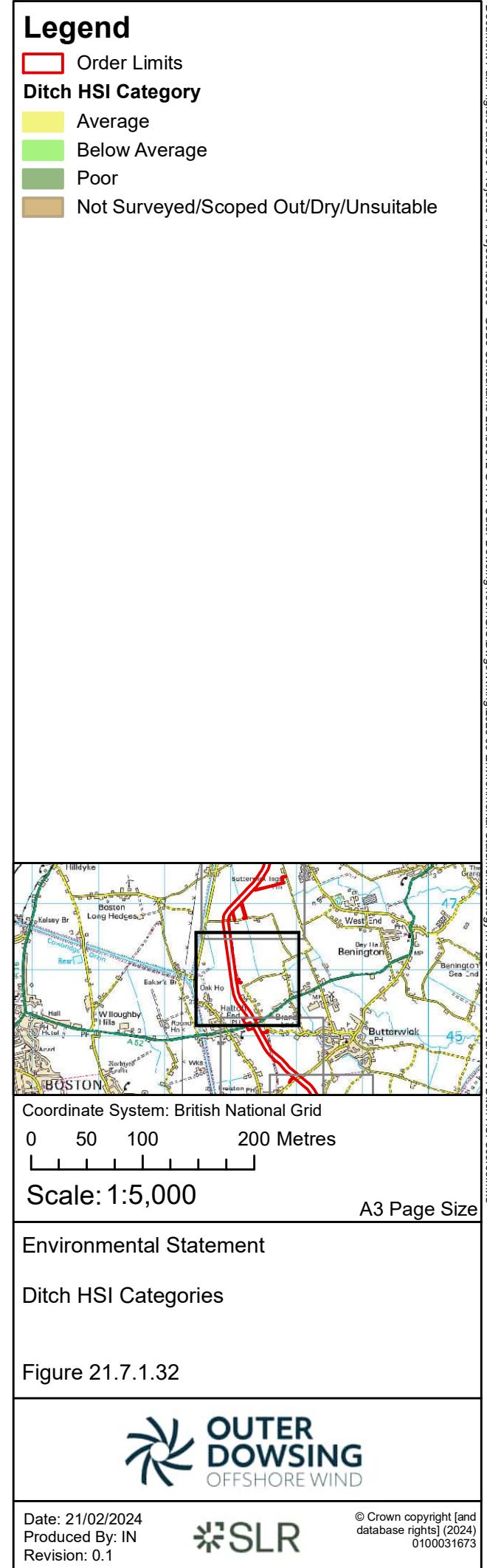
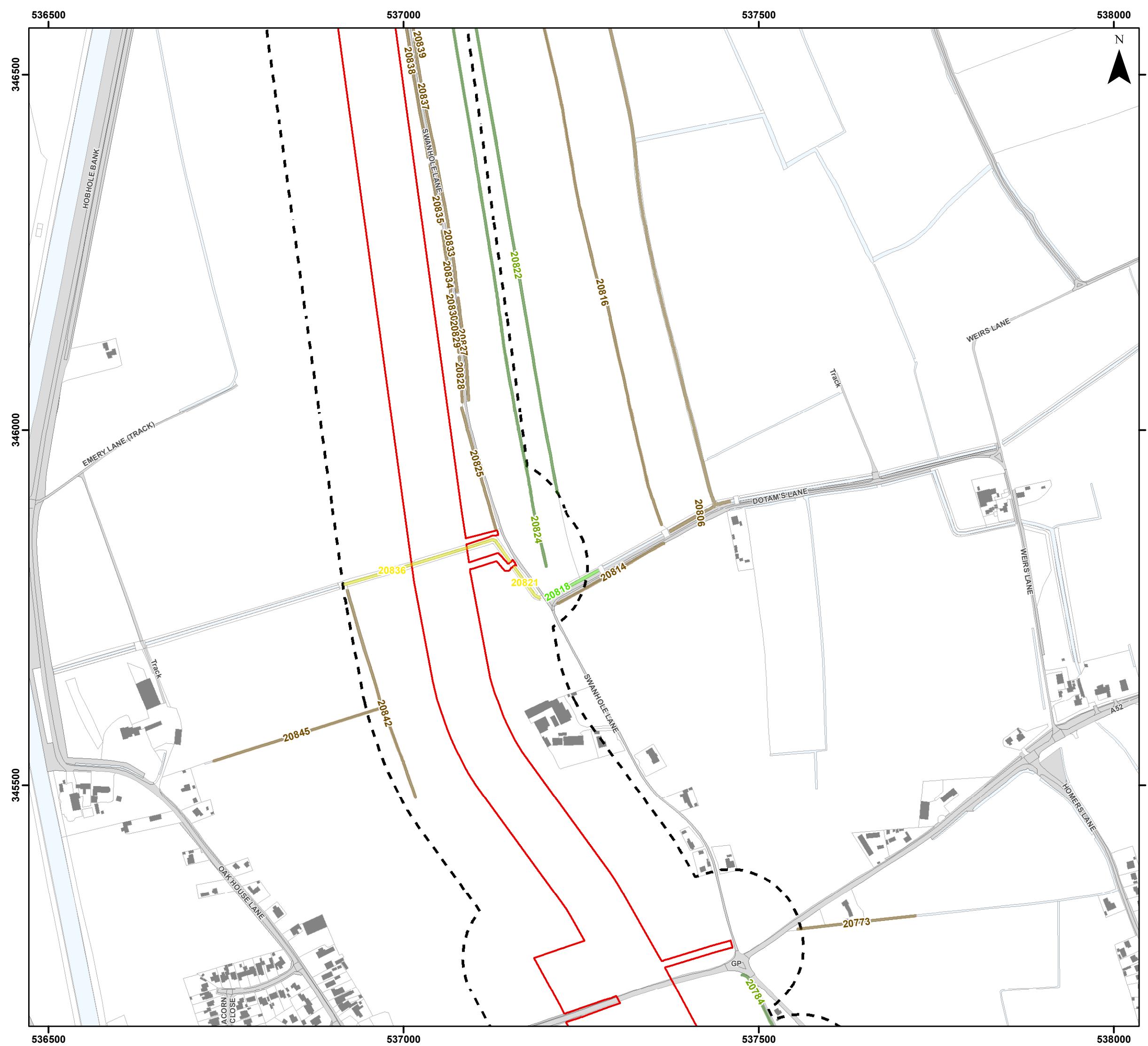
 **OUTER DOWSING**
OFFSHORE WIND

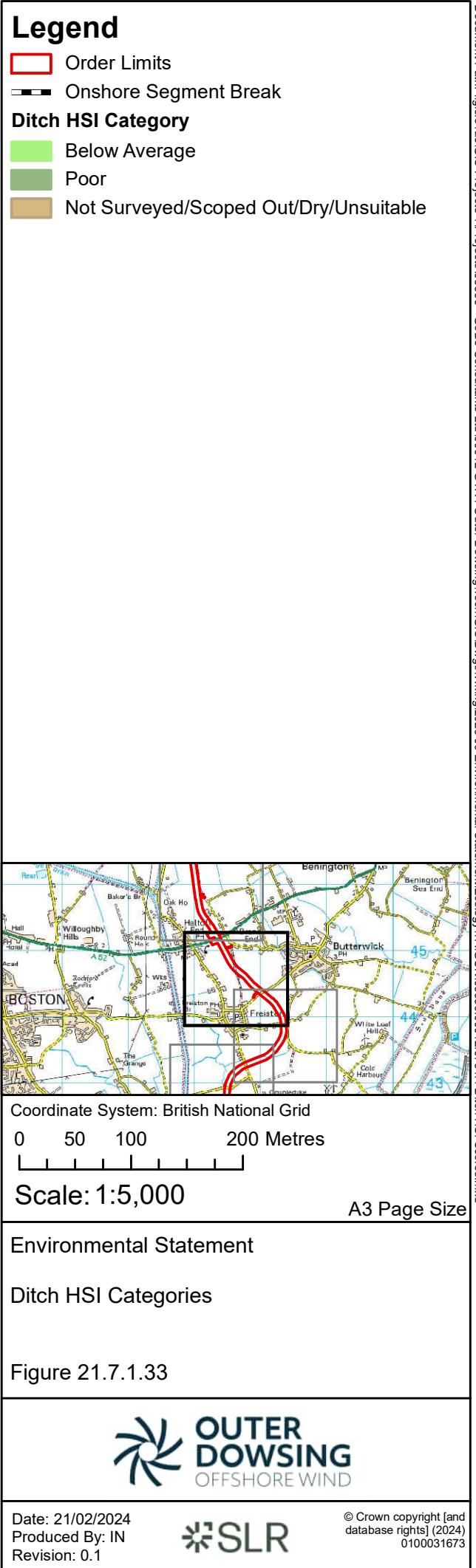
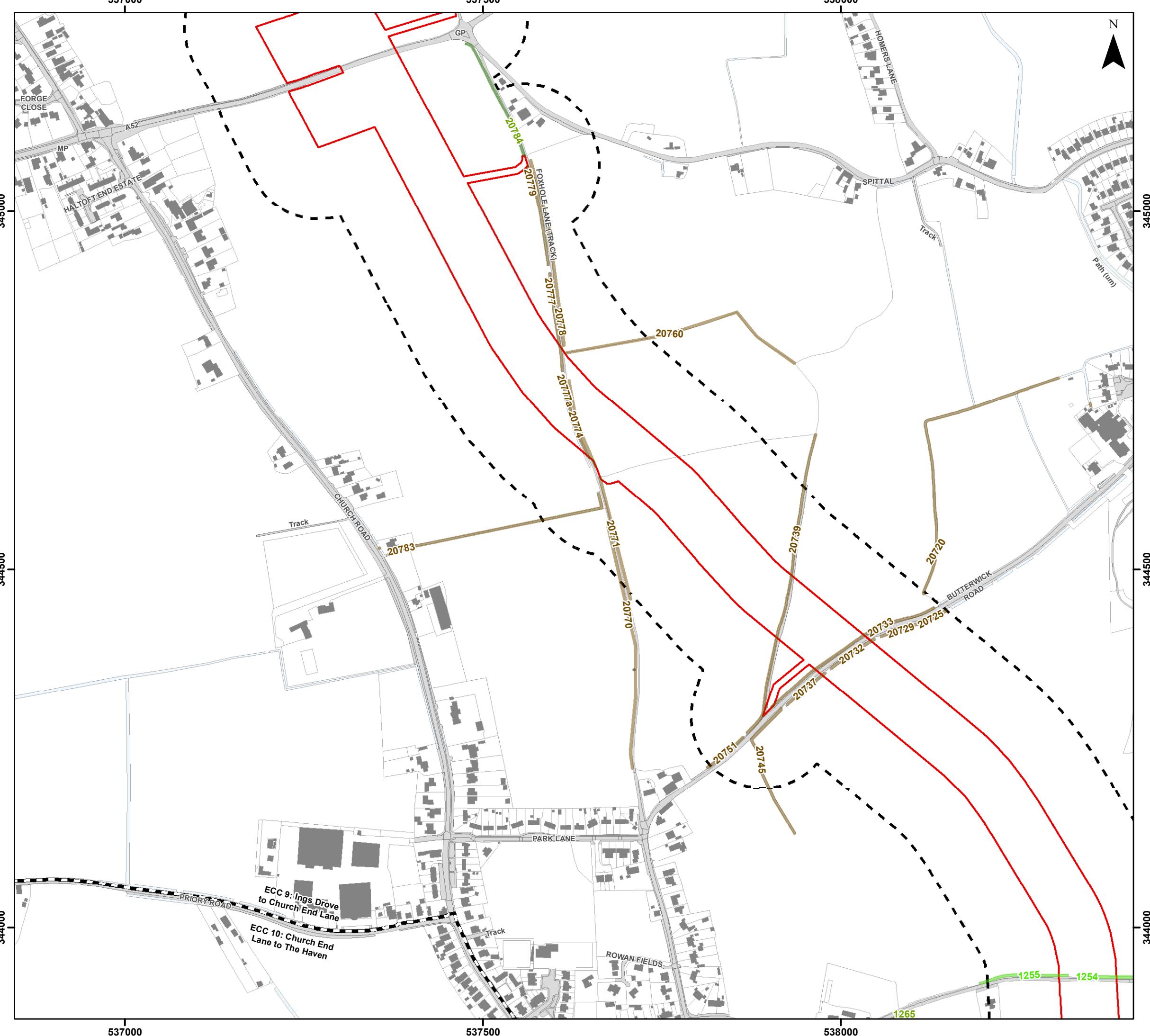
Date: 21/02/2024
Produced By: IN
Revision: 0.1

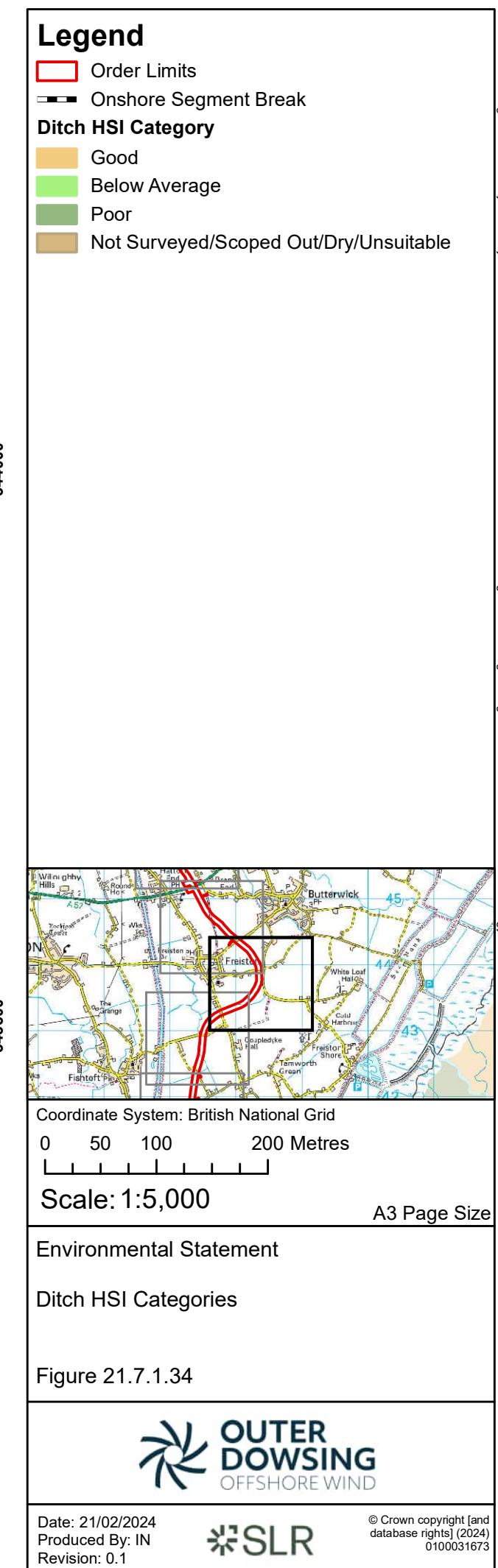
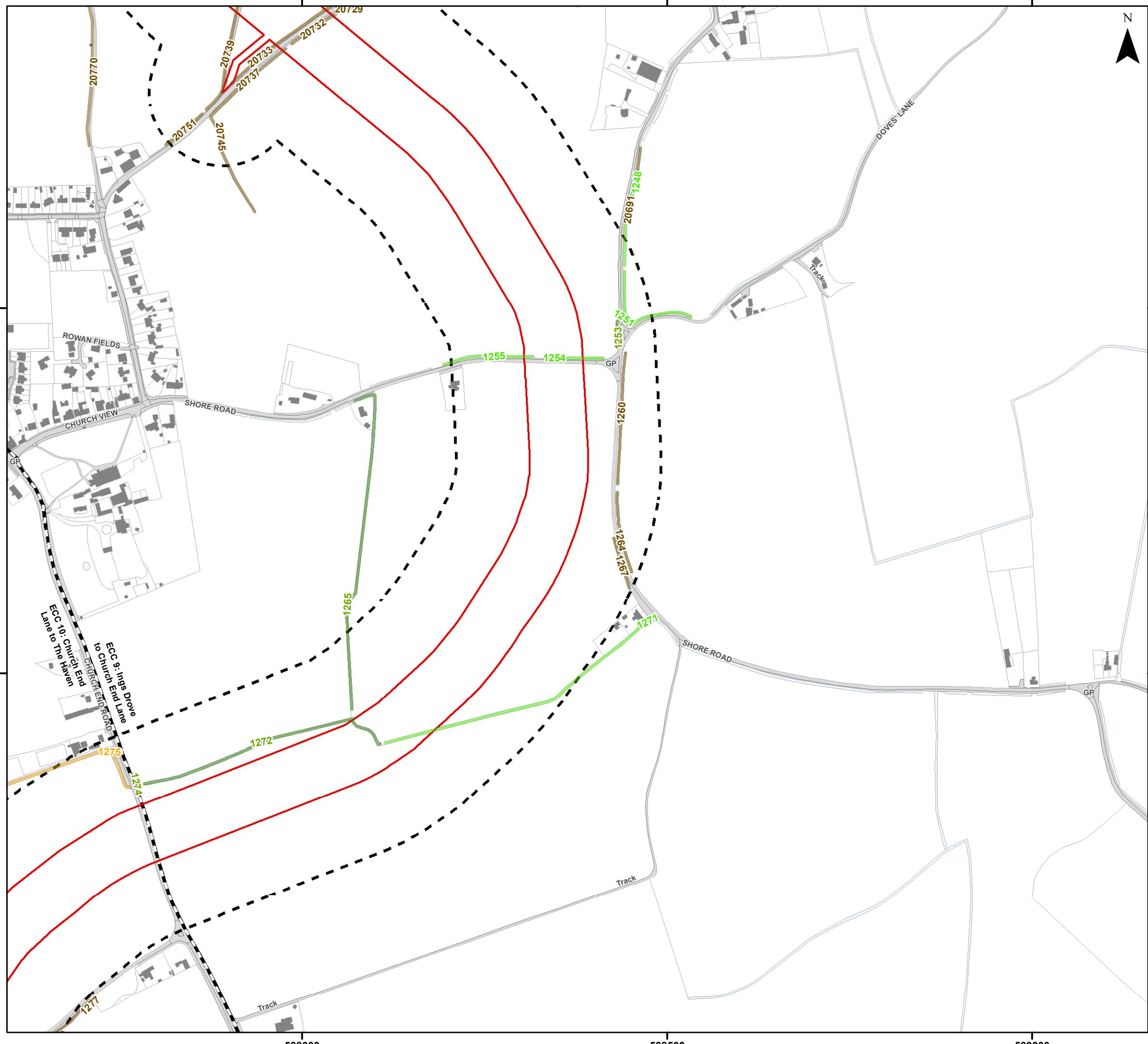
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0100031673

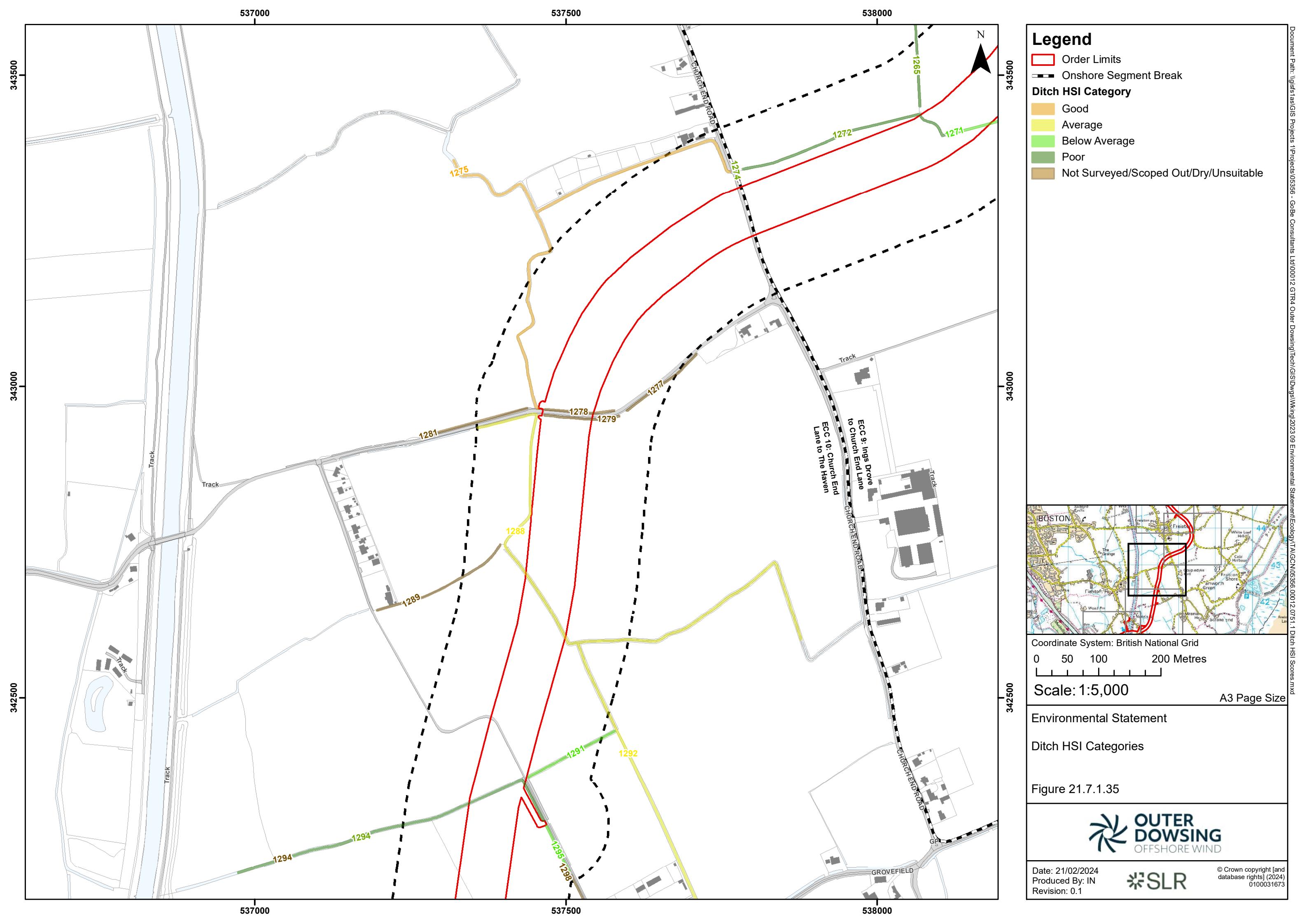


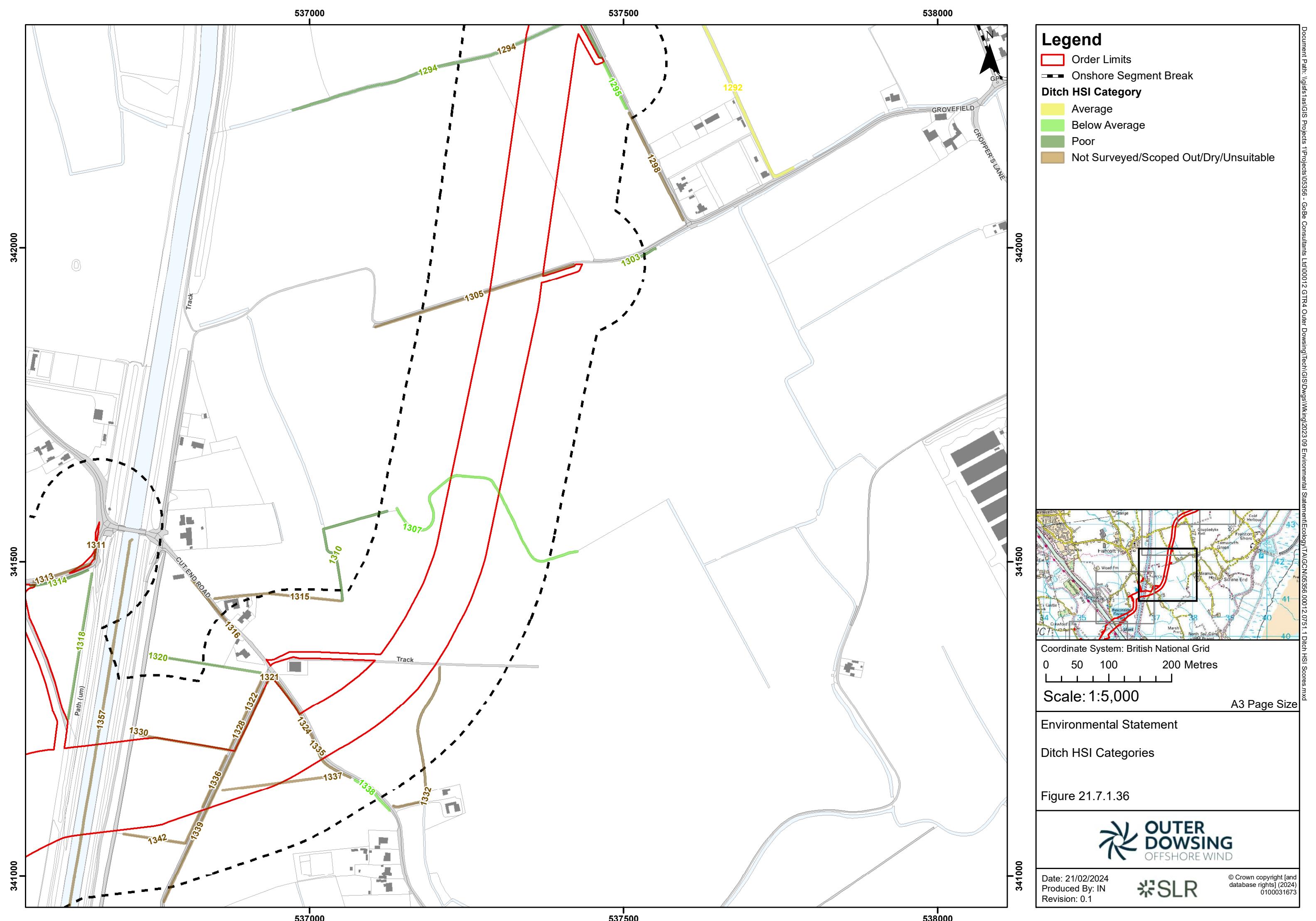


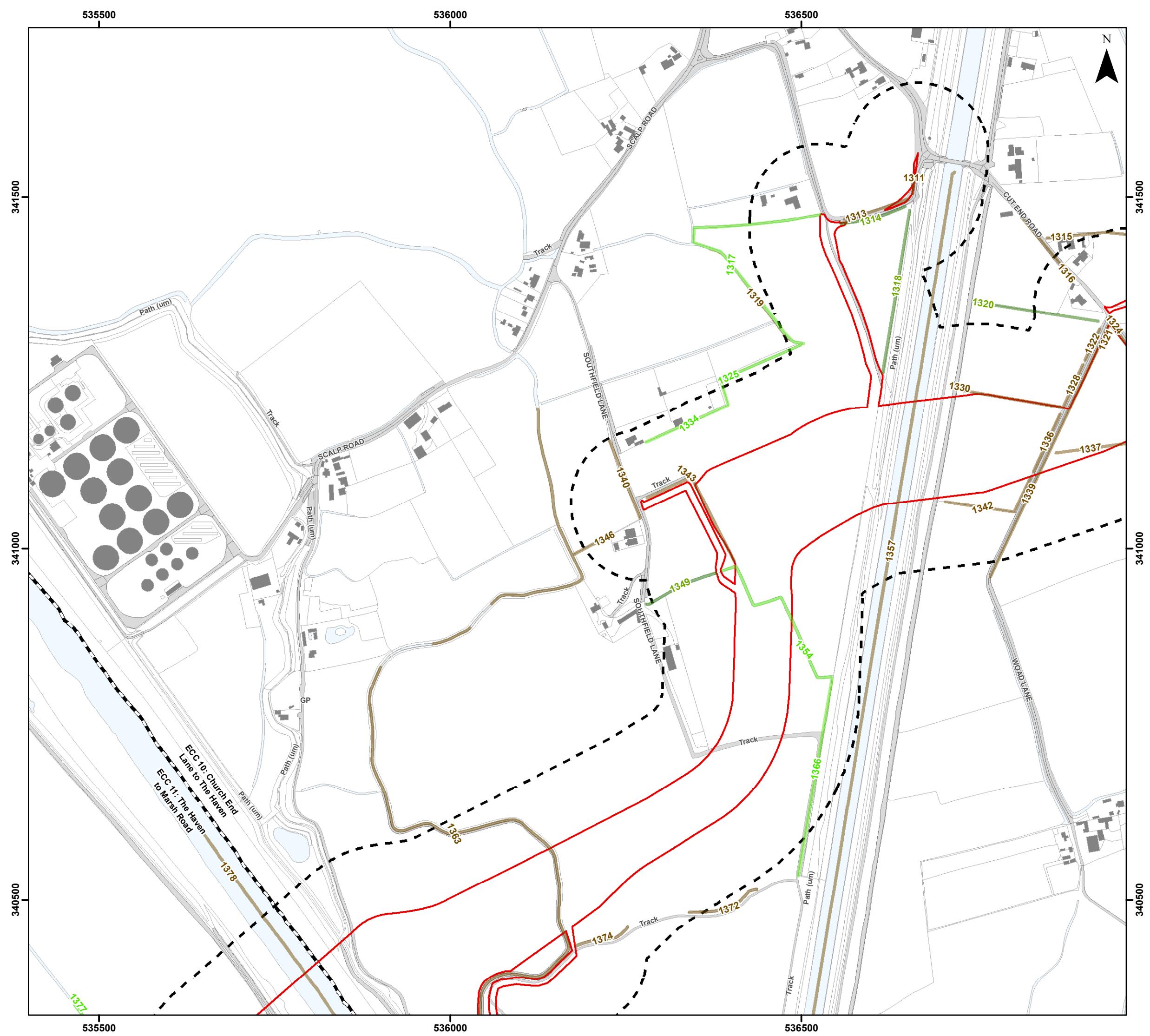












Legend

Order Limits

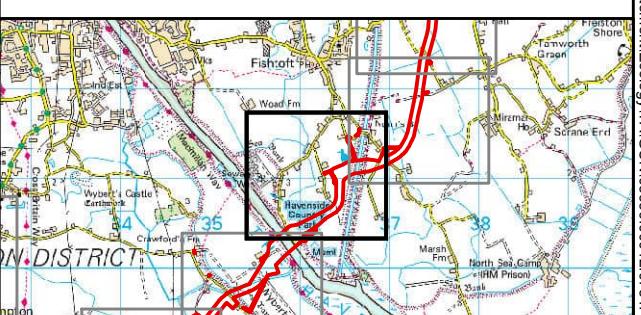
— Onshore Segment Break

Ditch HSI Category

Below Average

Poor

Not Surveyed/Scoped Out/Dry/Unsuitable



Coordinate System: British National Grid

Coordinate System: British National Grid
0 50 100 200 Metres

Scale: 1:5 000

Environmental Statement

Ditch HSI Categories

Figure 21.7.1.37

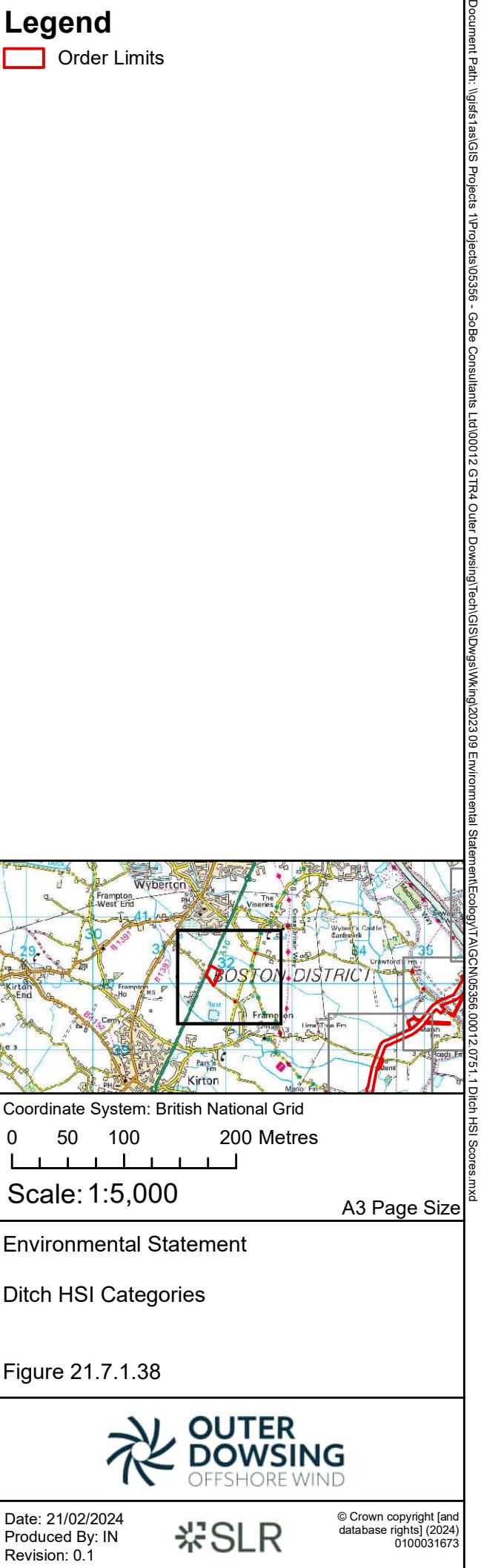
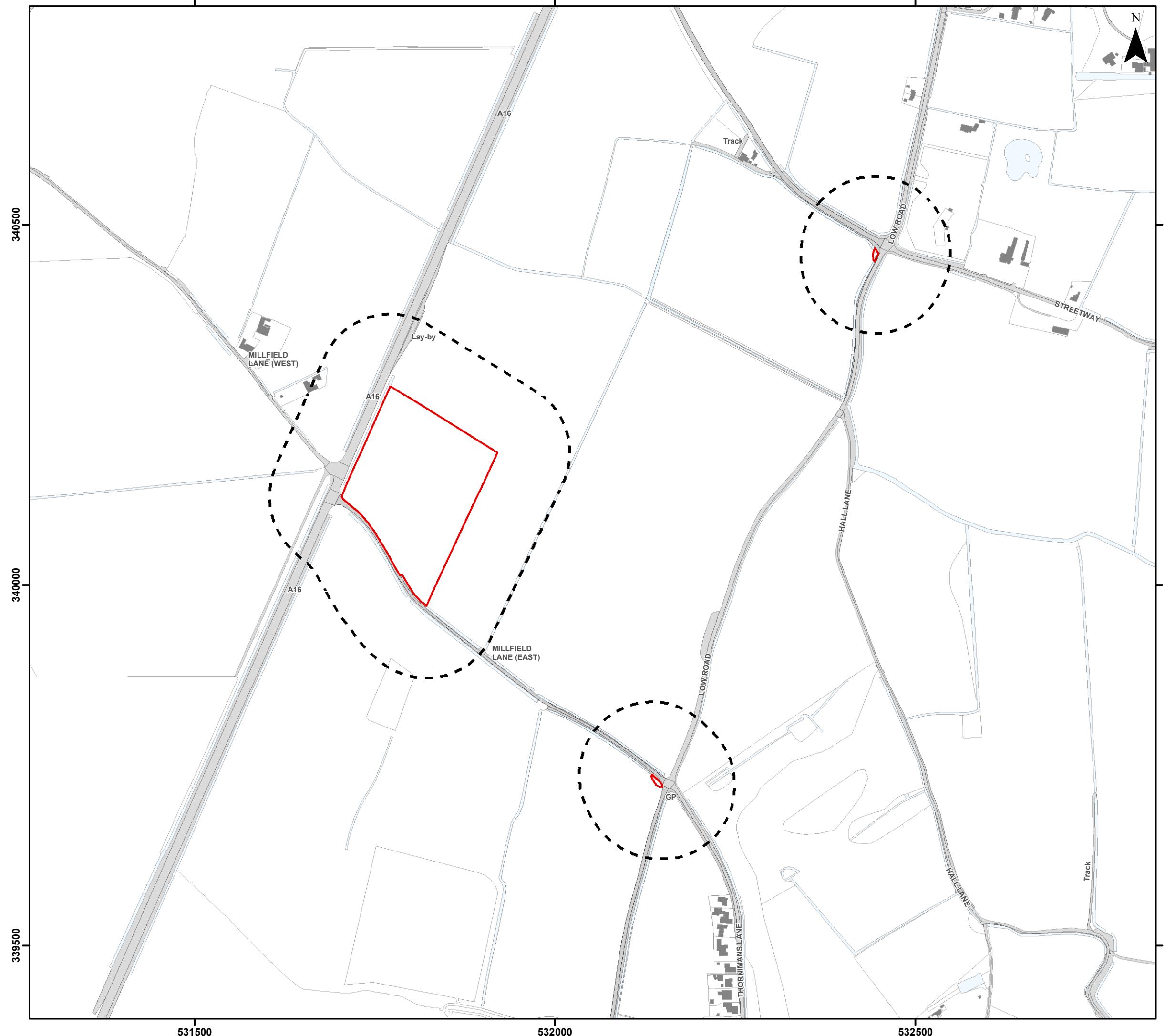


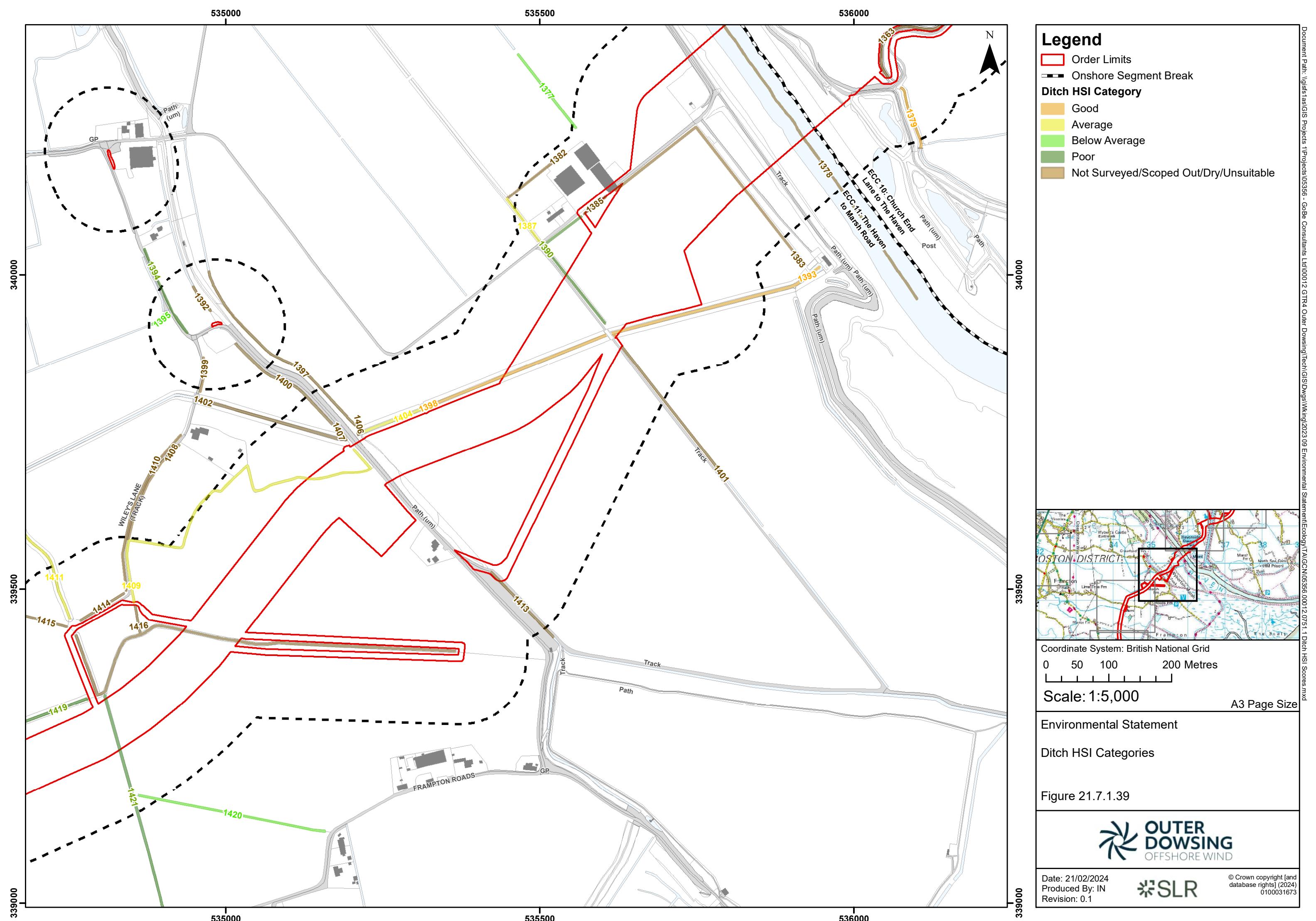
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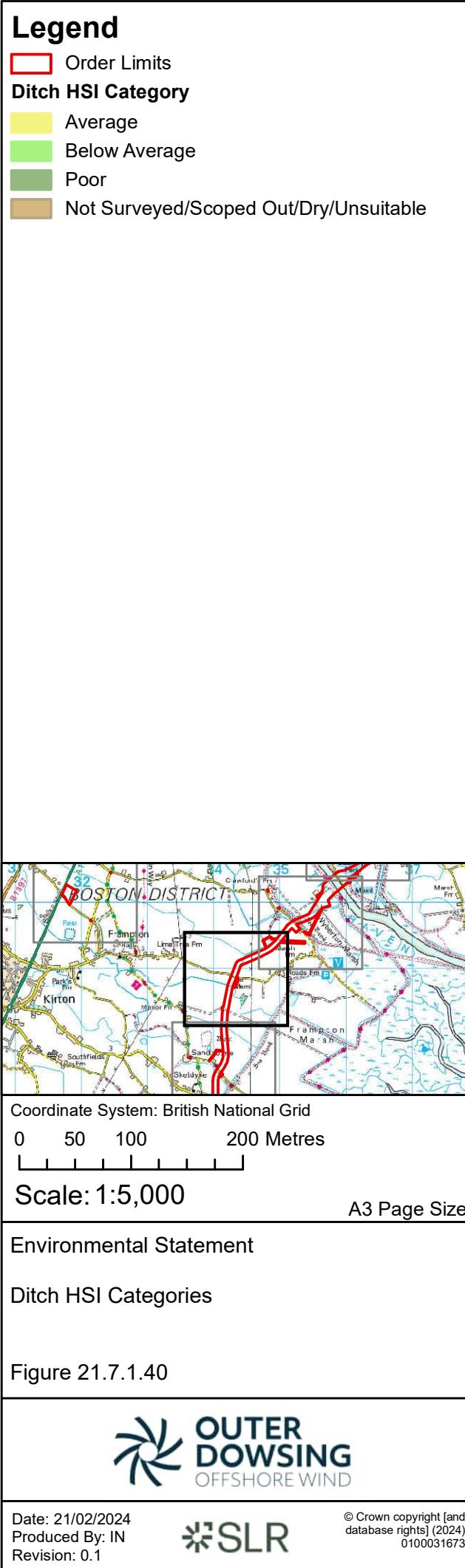
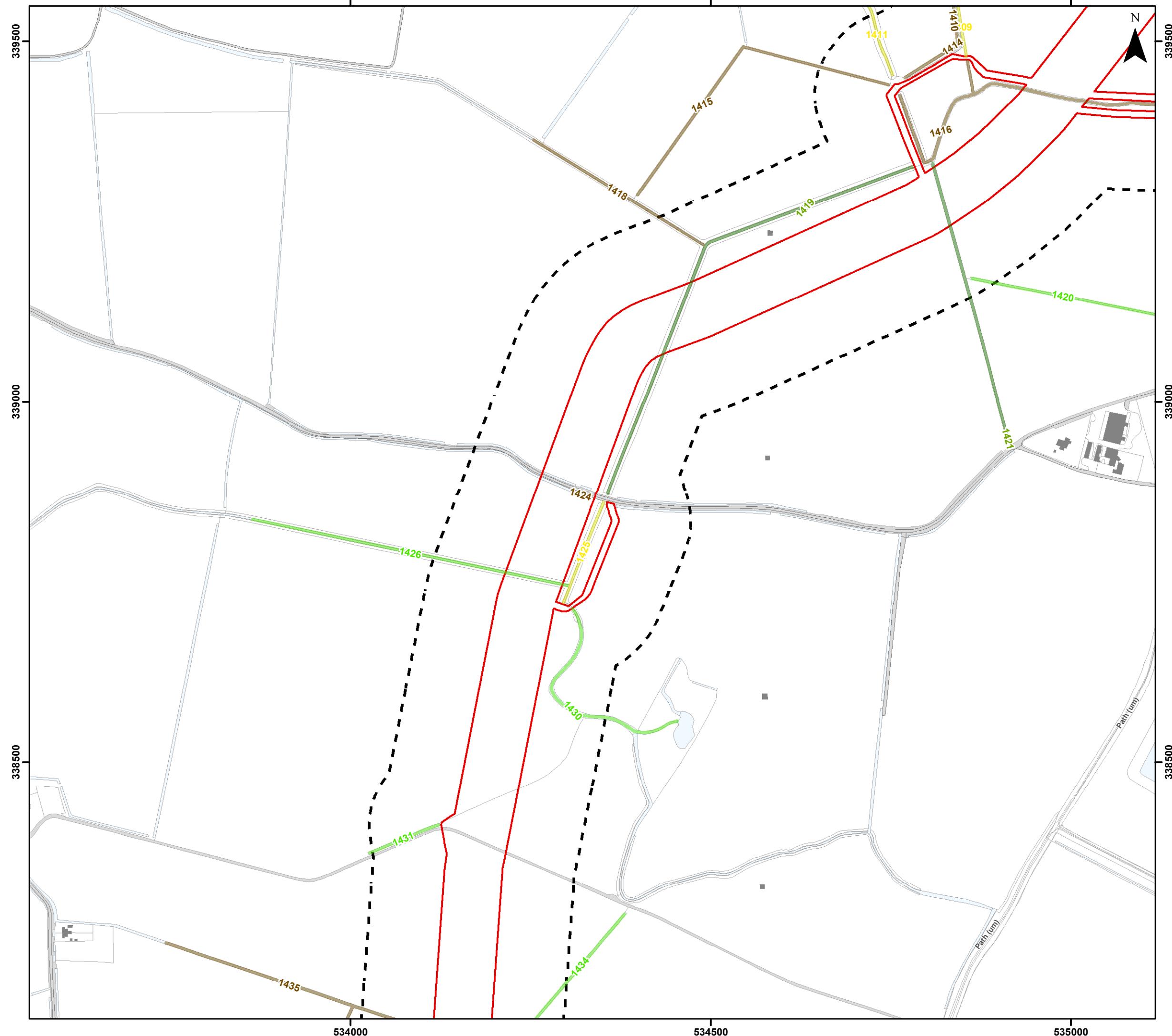
Produced By: IN

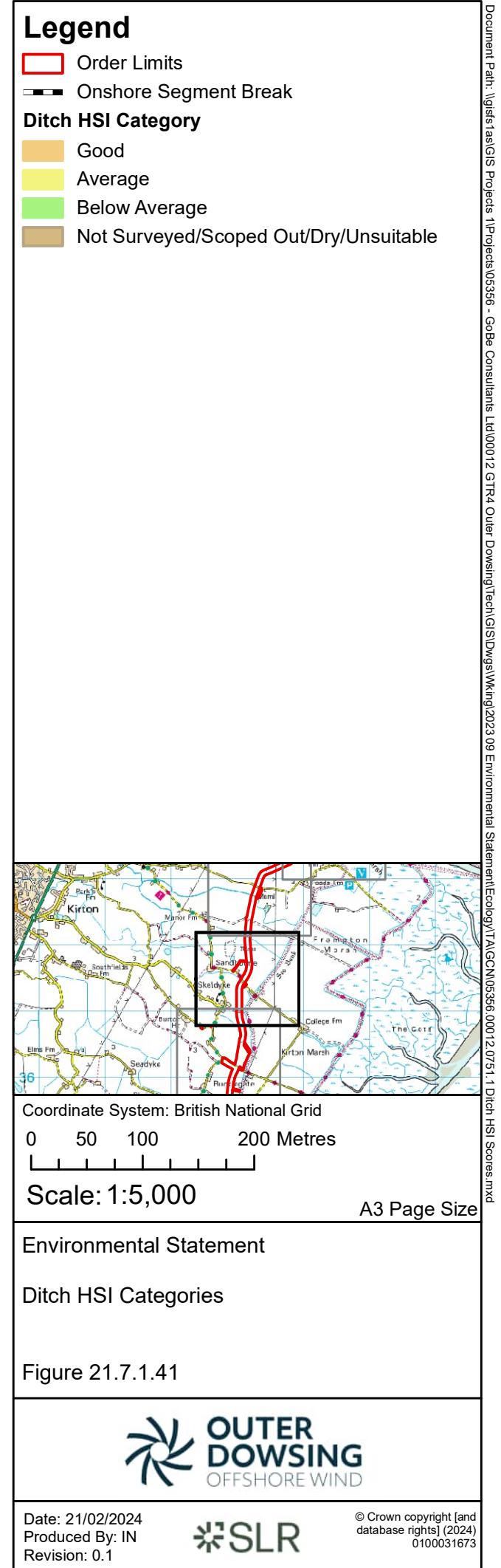
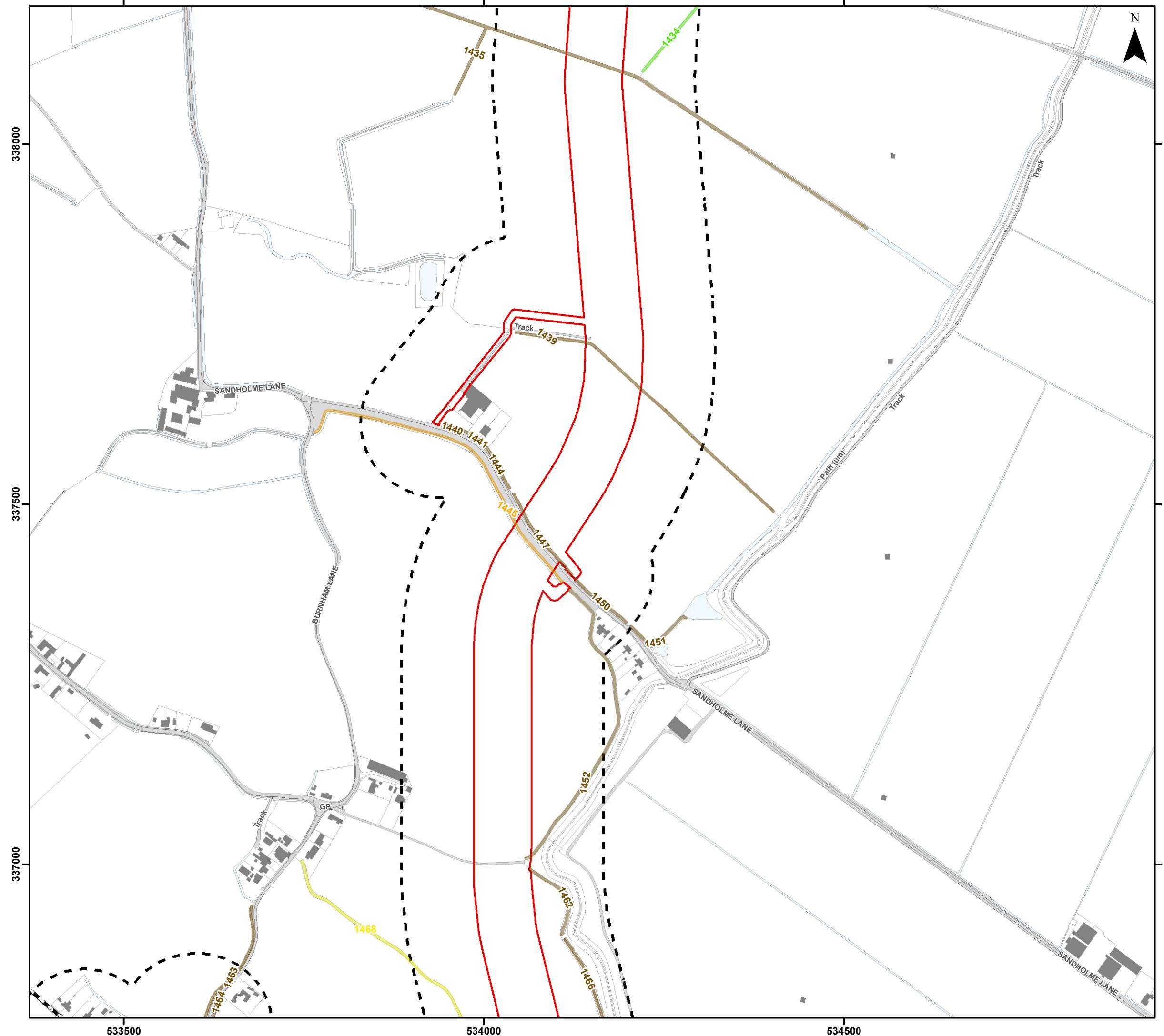
Revision: 0.1

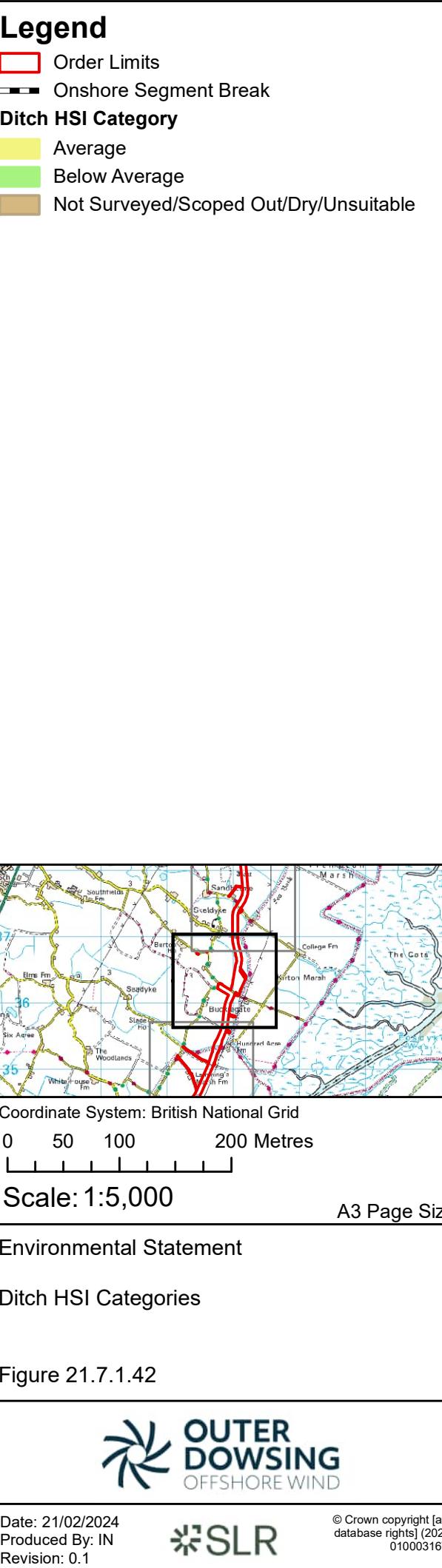
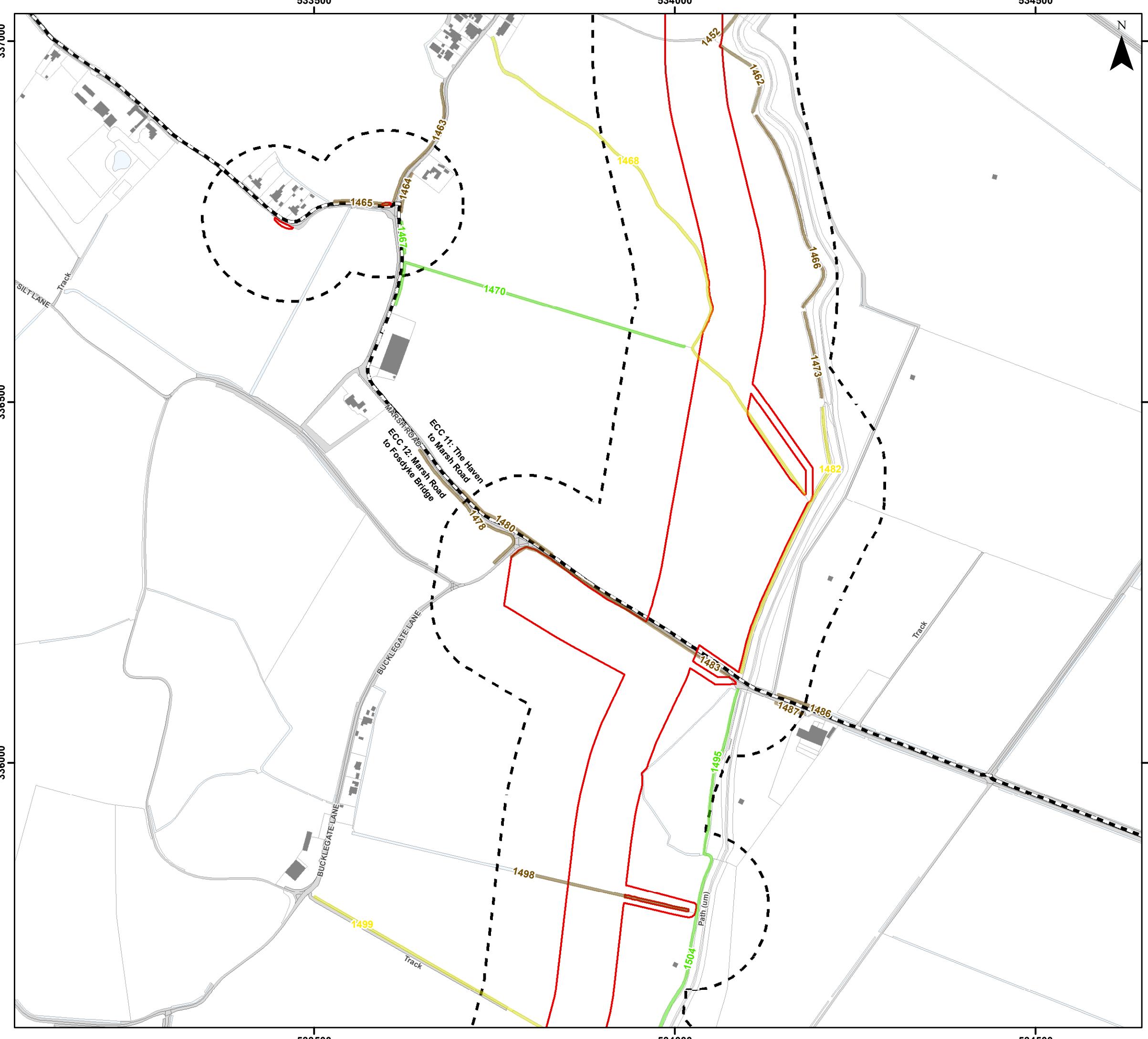
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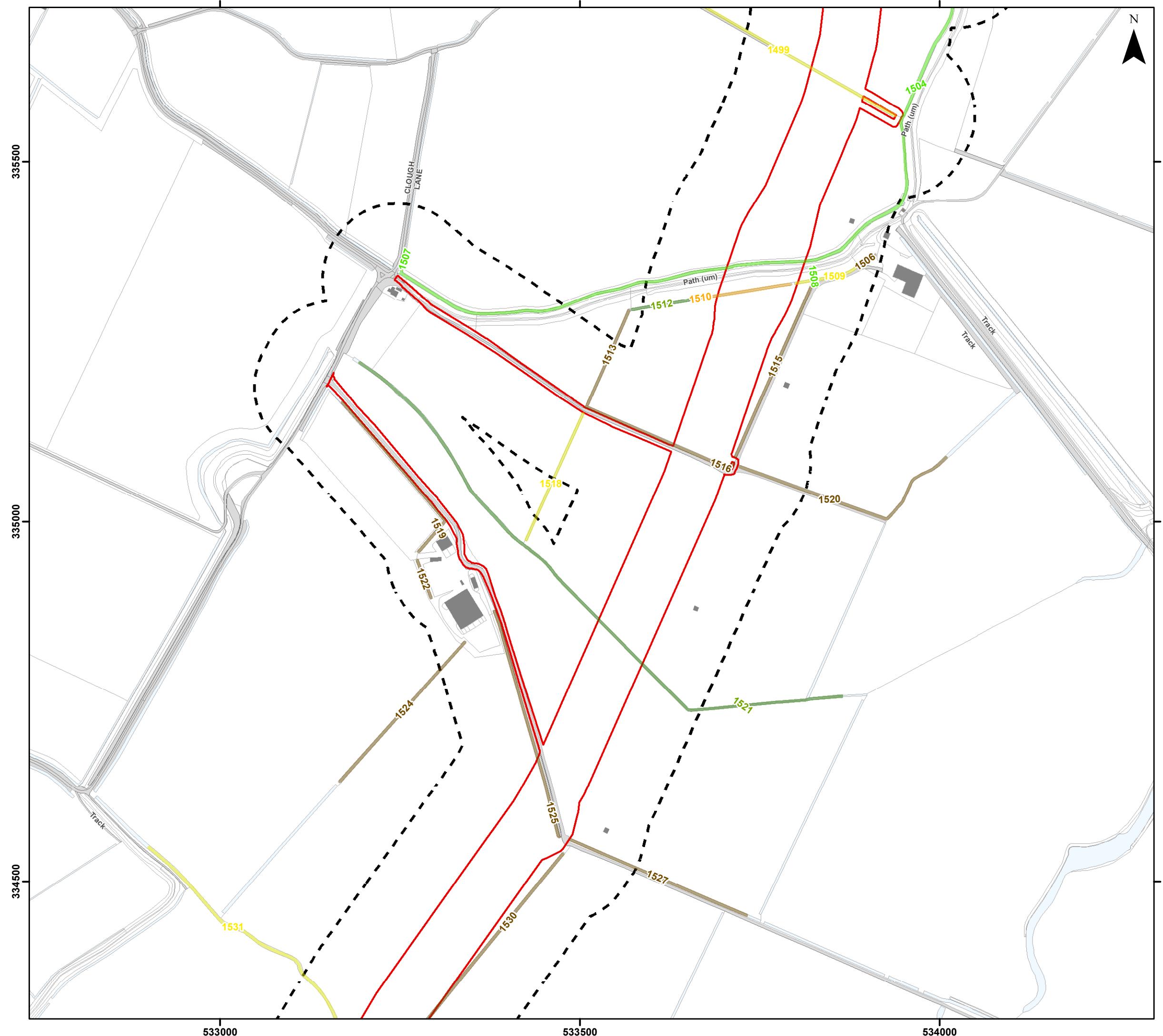












Legend

	Order Limits
	Ditch HSI Category
	Good
	Average
	Below Average
	Poor
	Not Surveyed/Scouted Out/Dry/Unsuitable



Coordinate System: British National Grid
0 50 100 200 Metres
Scale: 1:5,000

A3 Page Size

Environmental Statement

Ditch HSI Categories

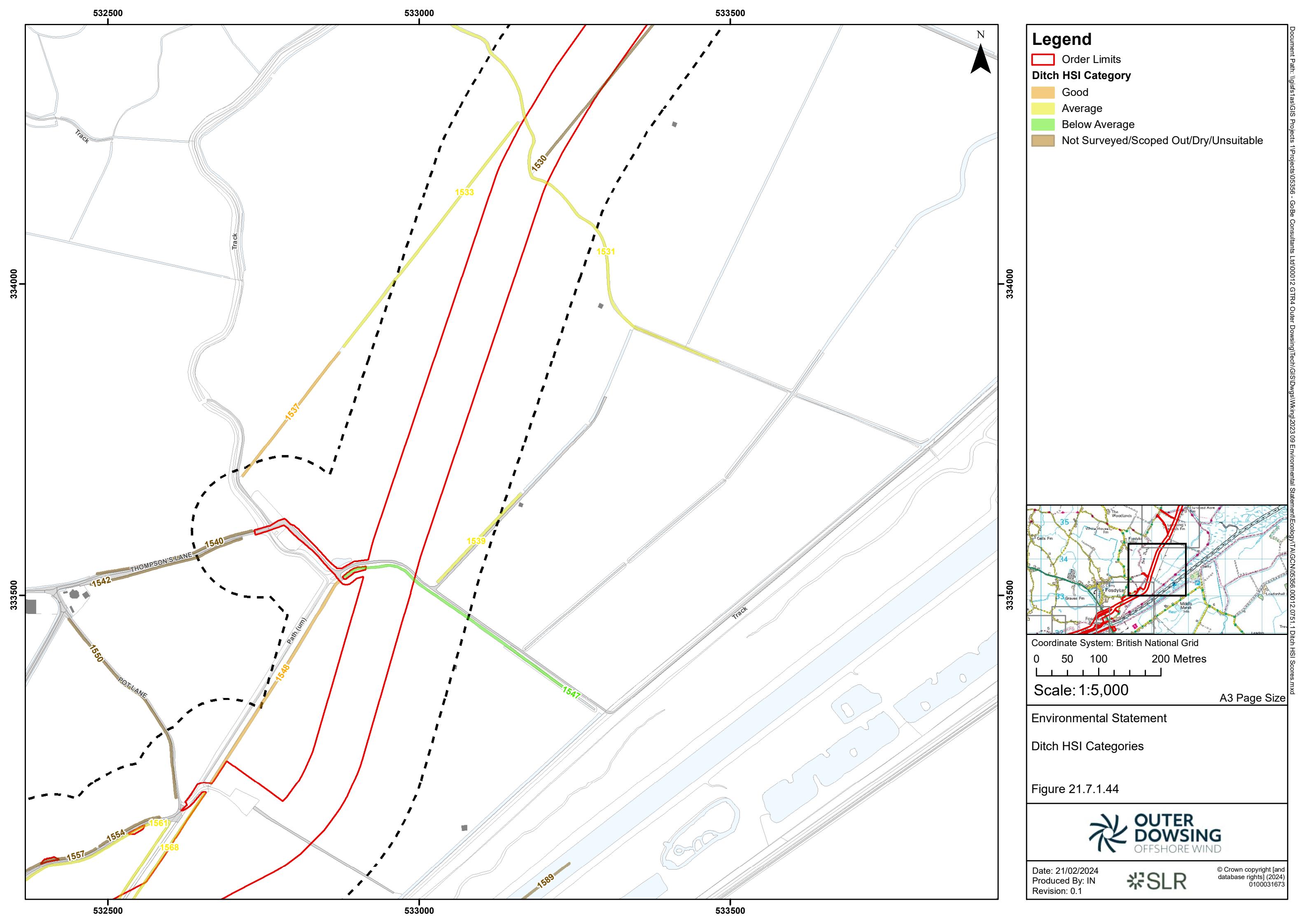
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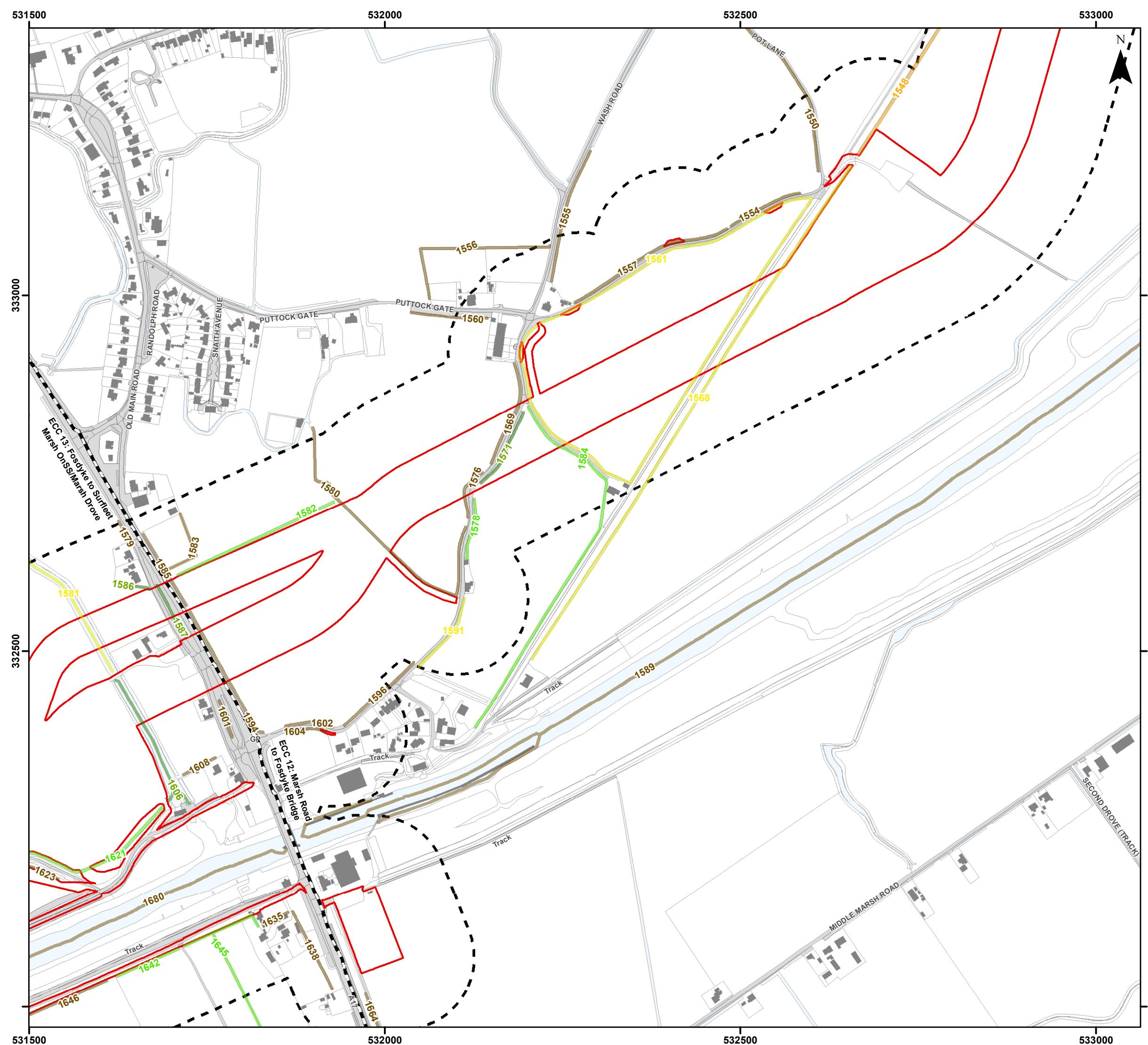


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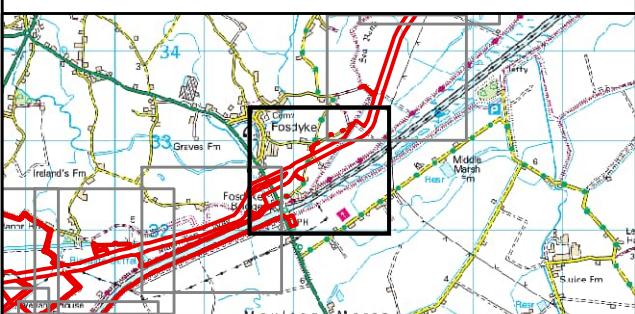


Legend

- Order Limits
- Onshore Segment Break

Ditch HSI Category

- Good
- Average
- Below Average
- Poor
- Not Surveyed/Scoped Out/Dry/Unsuitable



Coordinate System: British National Grid

Coordinate System: British National Grid
0 50 100 200 Metres

Scale 1:5 000

Environmental Statement

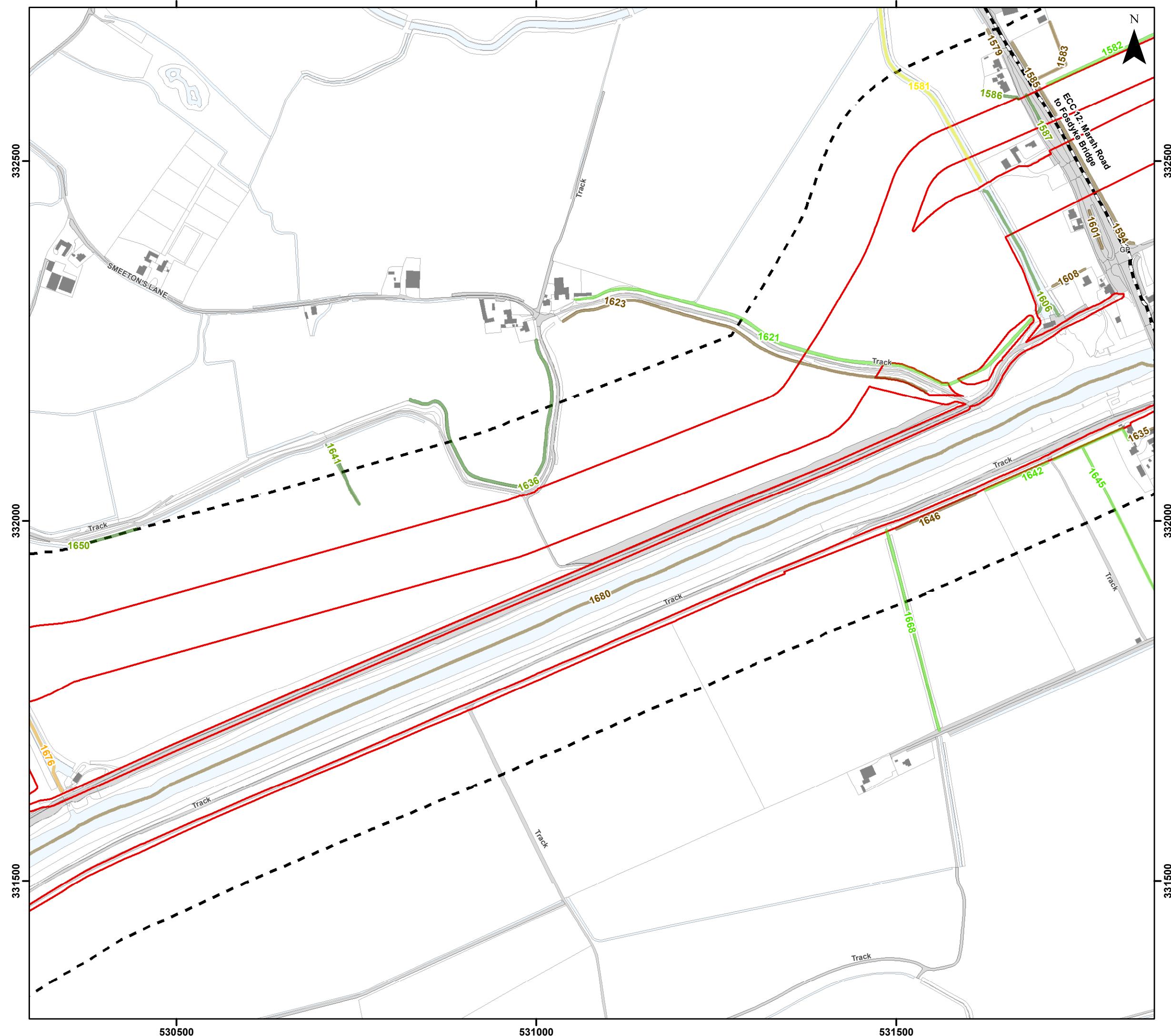
Ditch HSI Categories

Figure 21.7.1.45



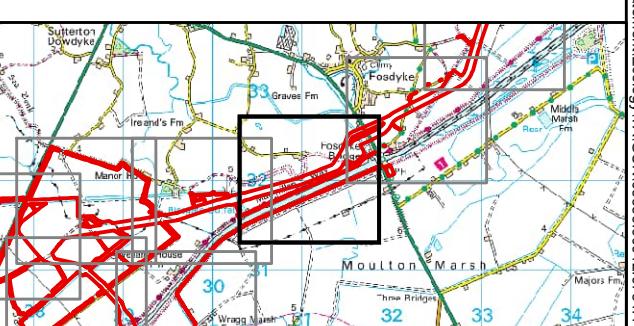
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Legend

	Order Limits
	Onshore Segment Break
Ditch HSI Category	
	Good
	Average
	Below Average
	Poor
	Not Surveyed/Scoped Out/Dry/Unsuitable



Coordinate System: British National Grid

0 50 100 200 Metres

Scale: 1:5,000

A3 Page Size

Environmental Statement

Ditch HSI Categories

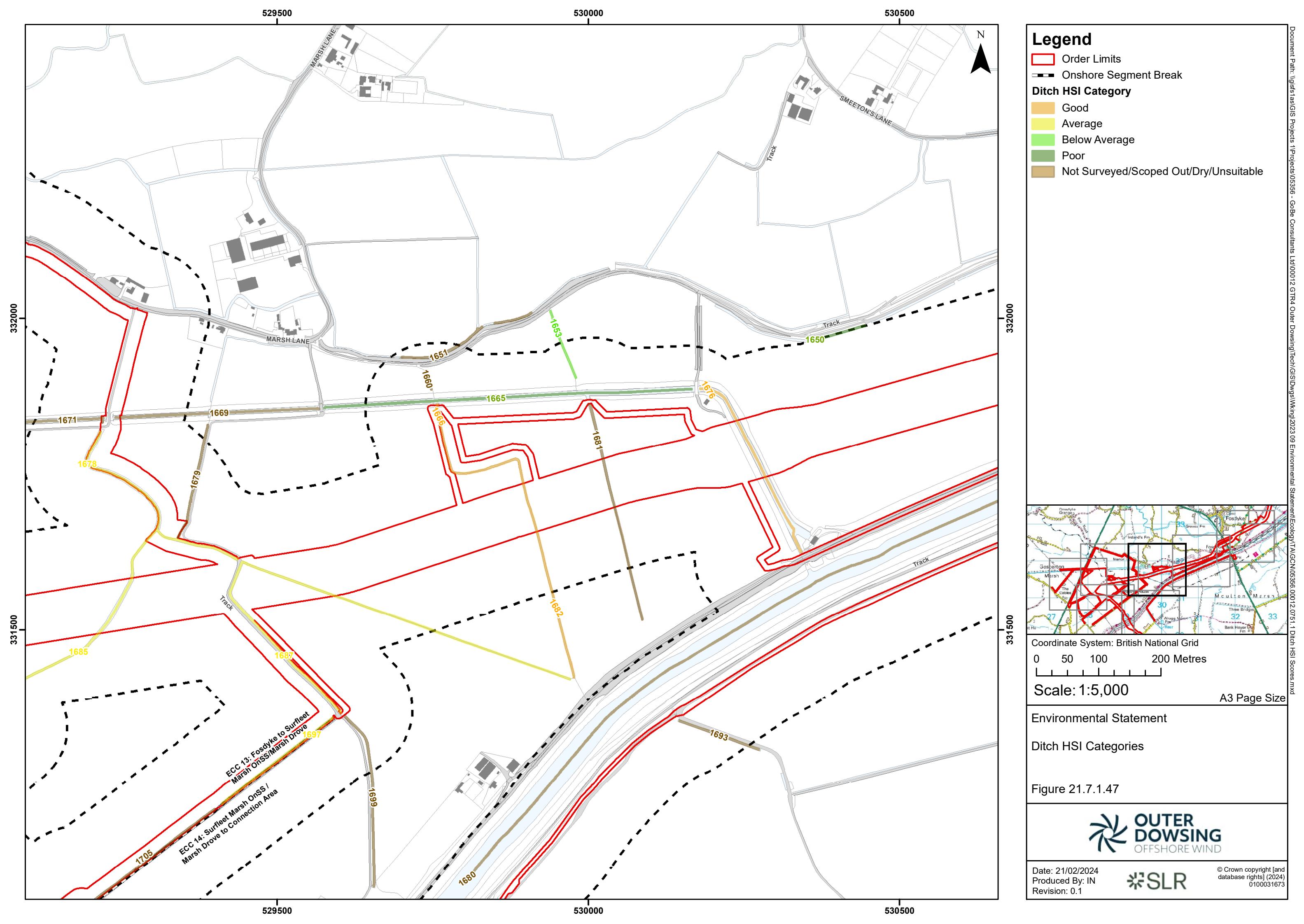
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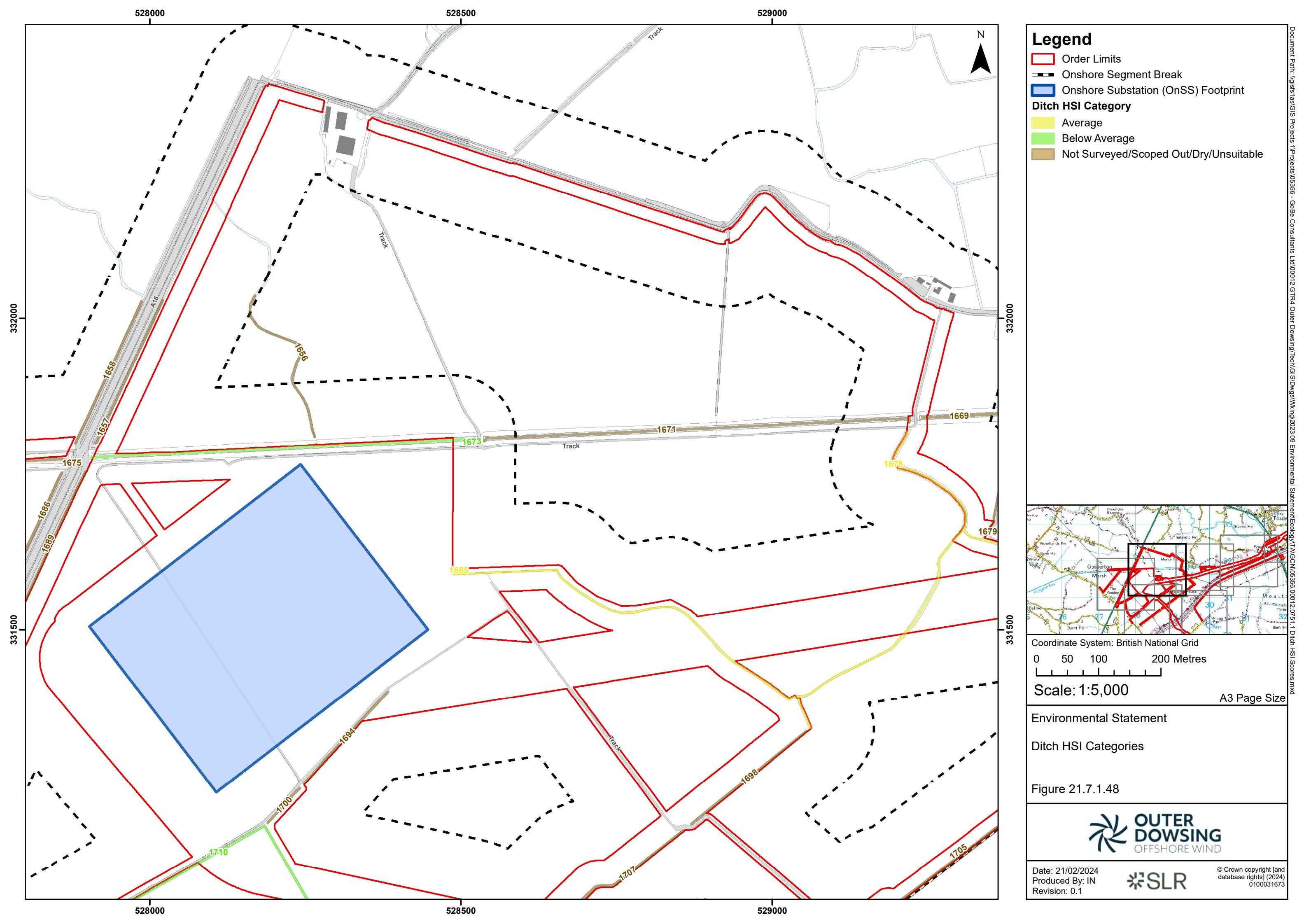


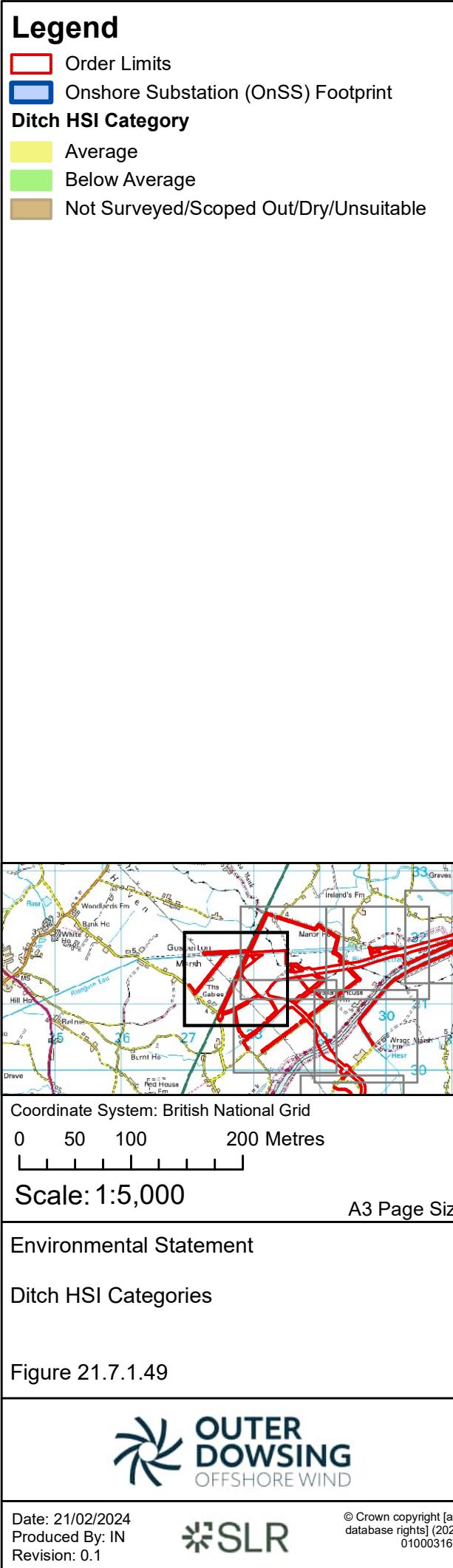
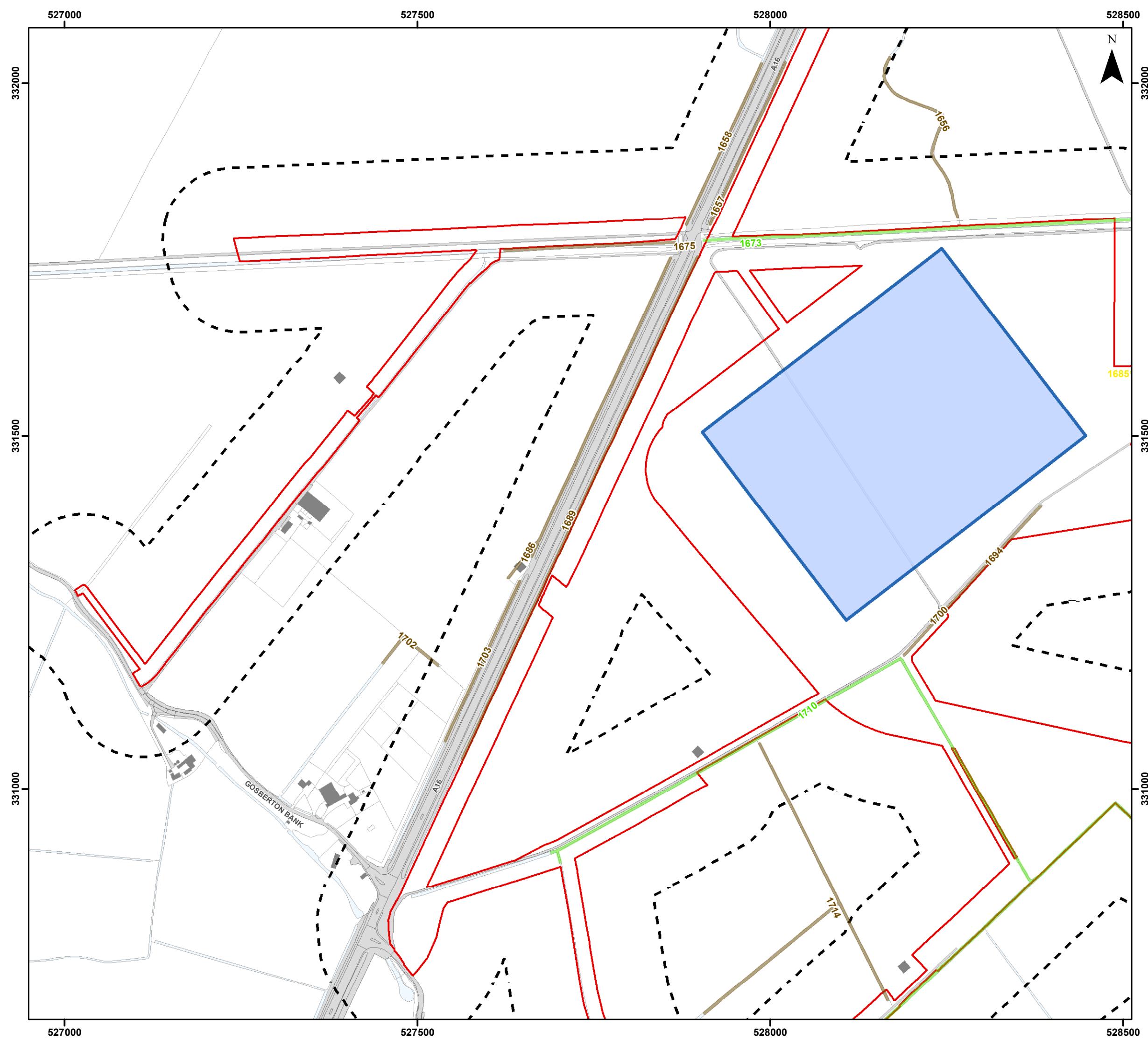
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Revision: 0.1

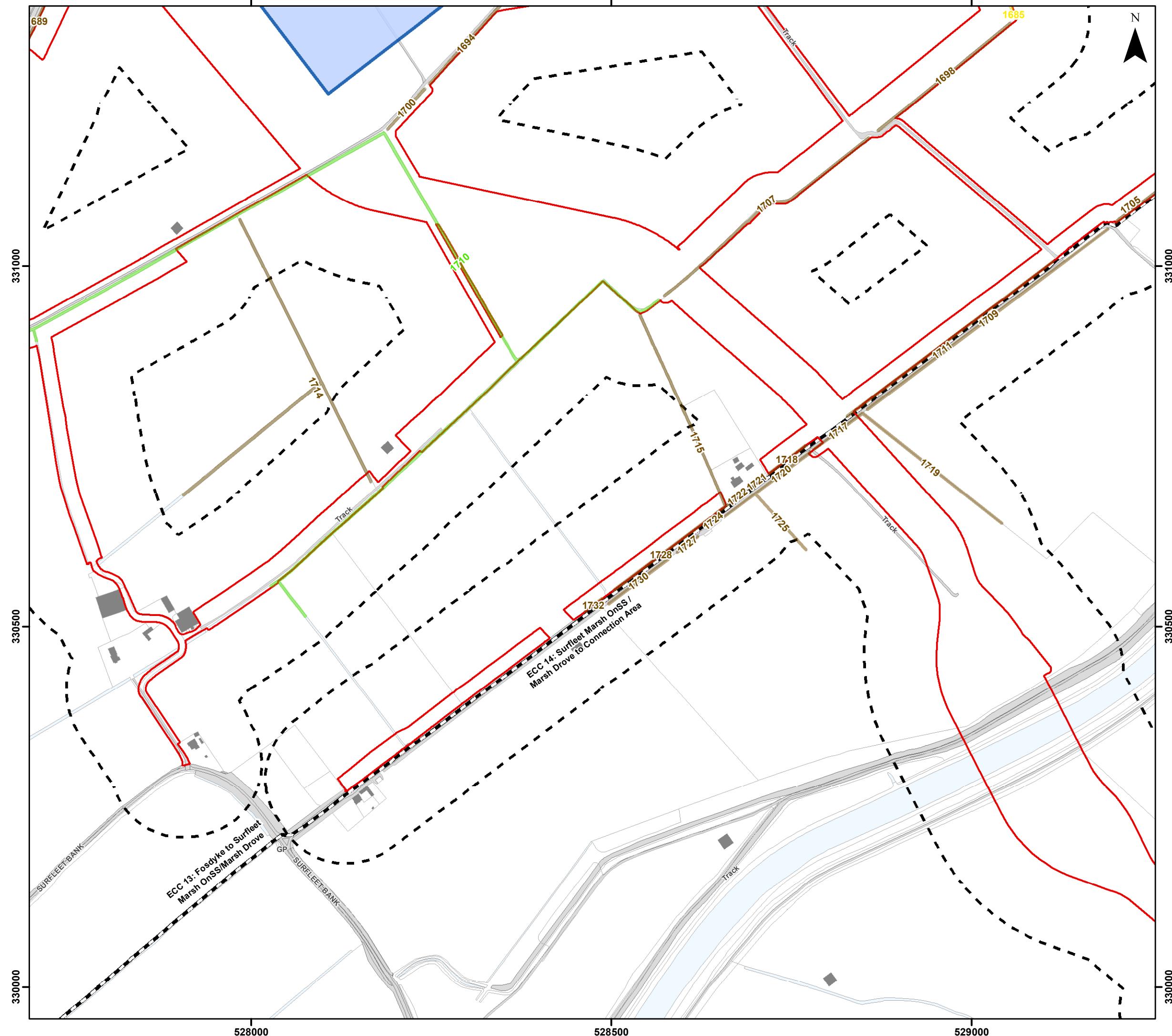
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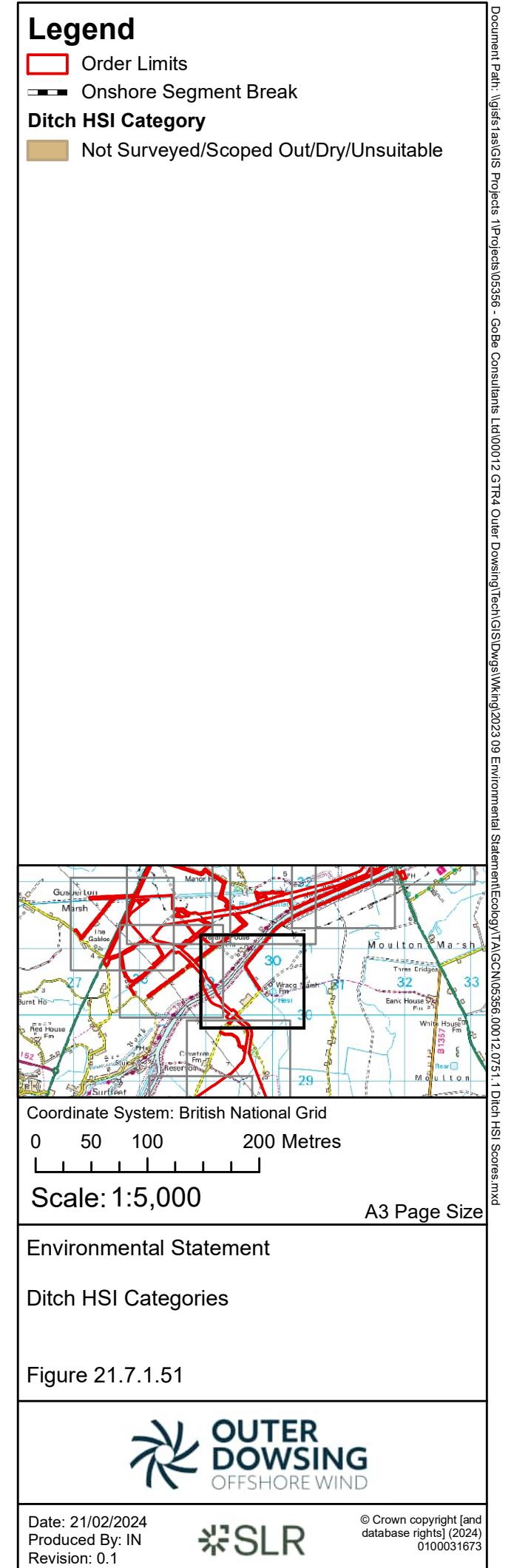
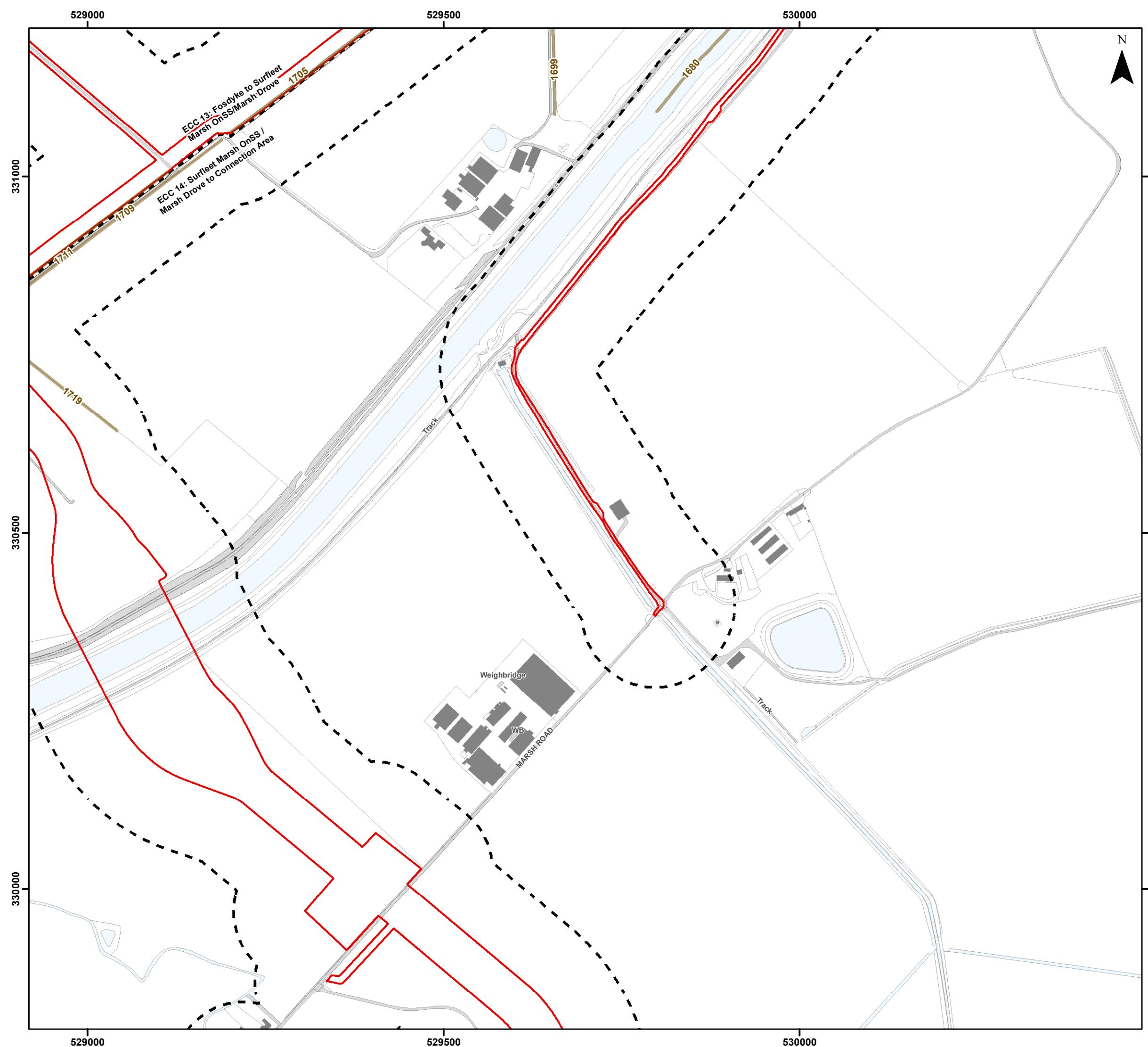


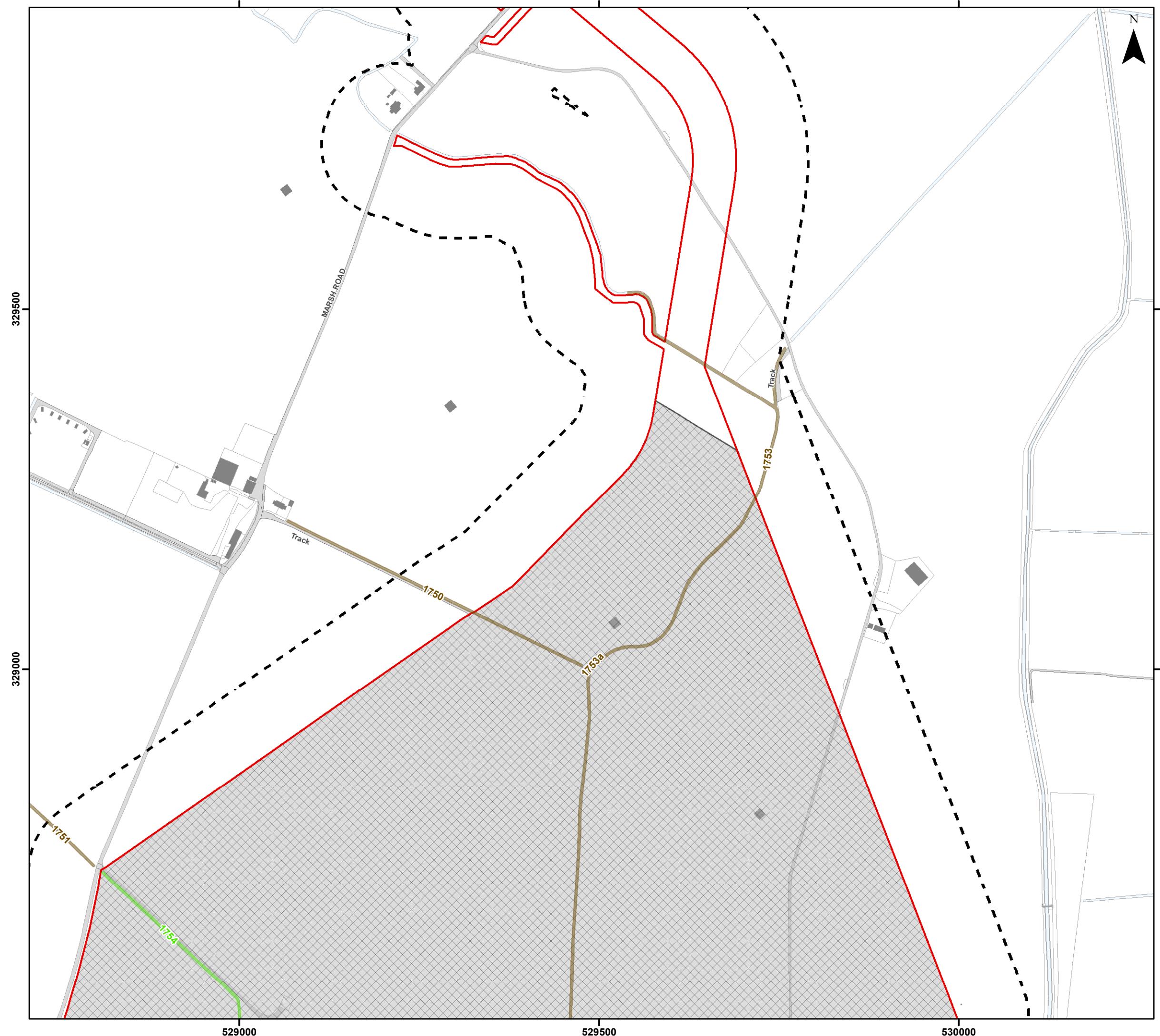






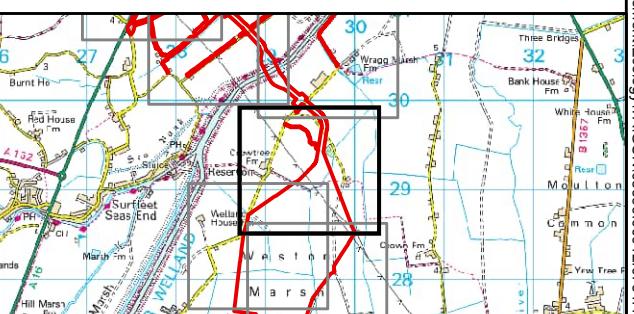






Legend

- Order Limits (Red Box)
- Connection Area (Grey Hatched)
- Ditch HSI Category
 - Below Average (Green)
 - Not Surveyed/Scoped Out/Dry/Unsuitable (Brown)



Coordinate System: British National Grid

0 50 100 200 Metres

Scale: 1:5,000

A3 Page Size

Environmental Statement

Ditch HSI Categories

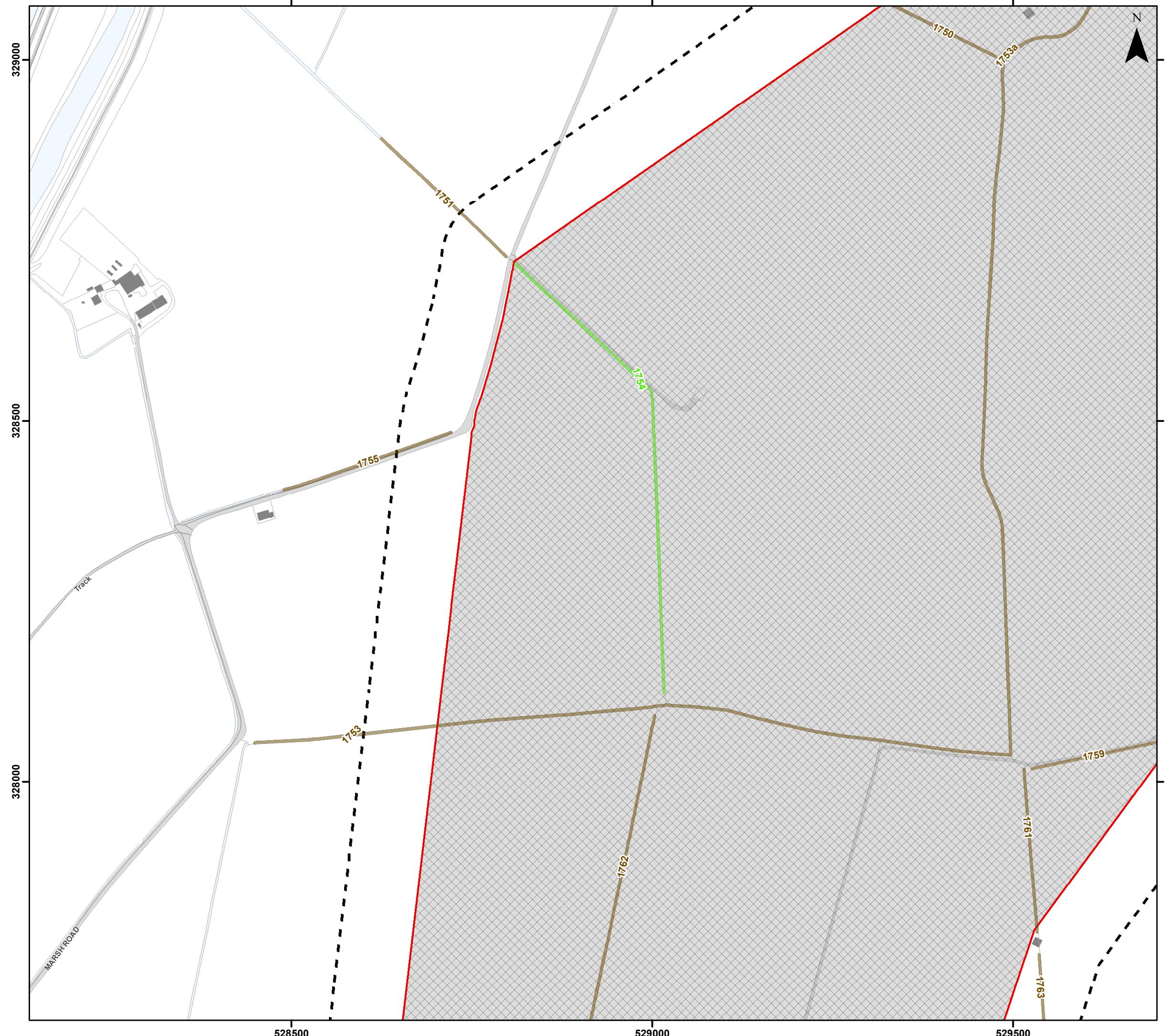
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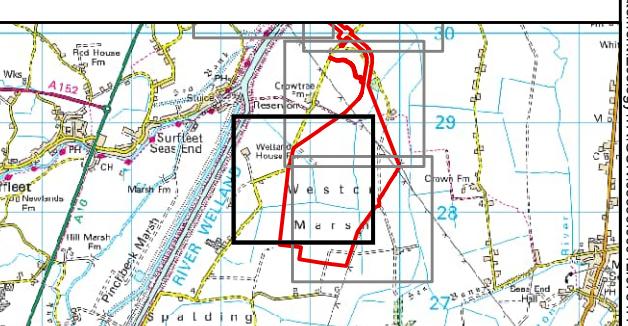
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Legend

- Order Limits (Red Box)
- Connection Area (Grey Hatched)
- Ditch HSI Category
 - Below Average (Green)
 - Not Surveyed/Scoped Out/Dry/Unsuitable (Brown)



Environmental Statement

Ditch HSI Categories

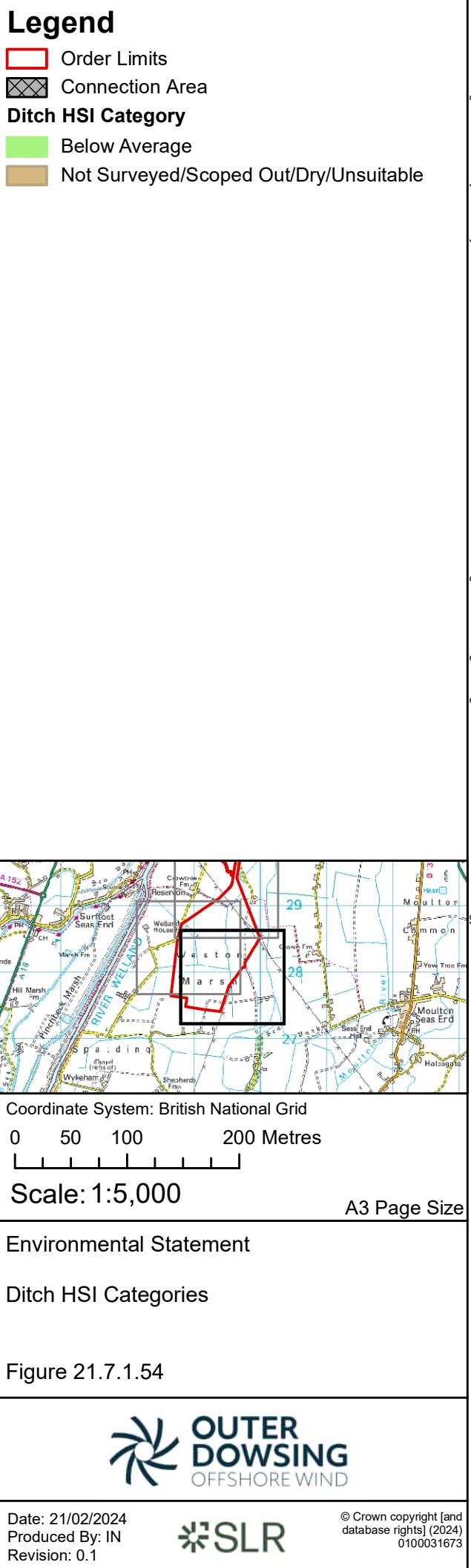
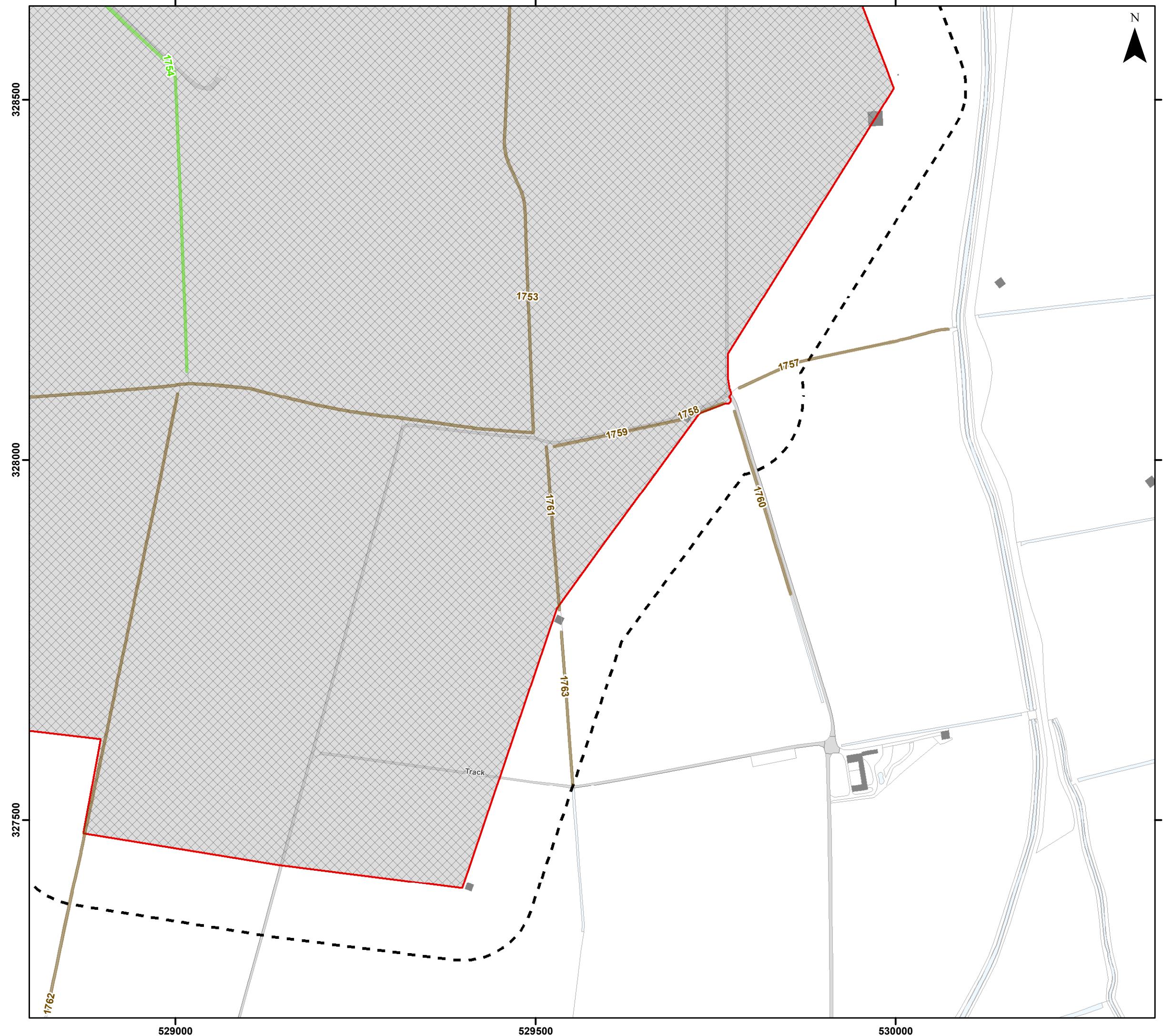
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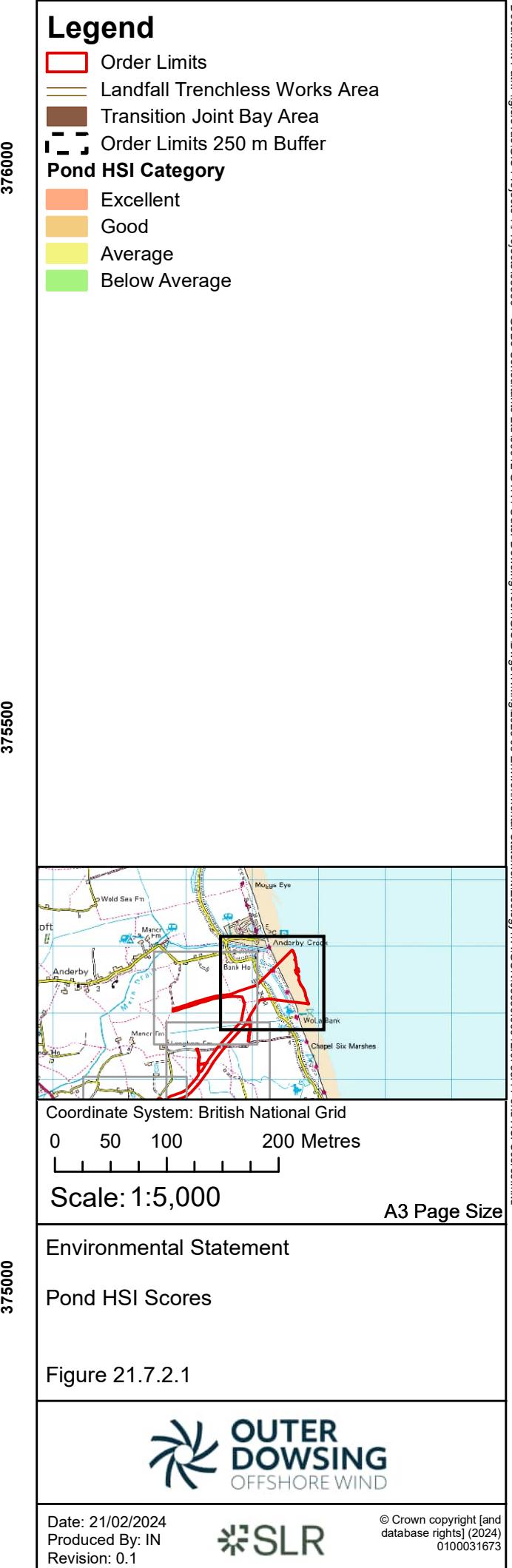
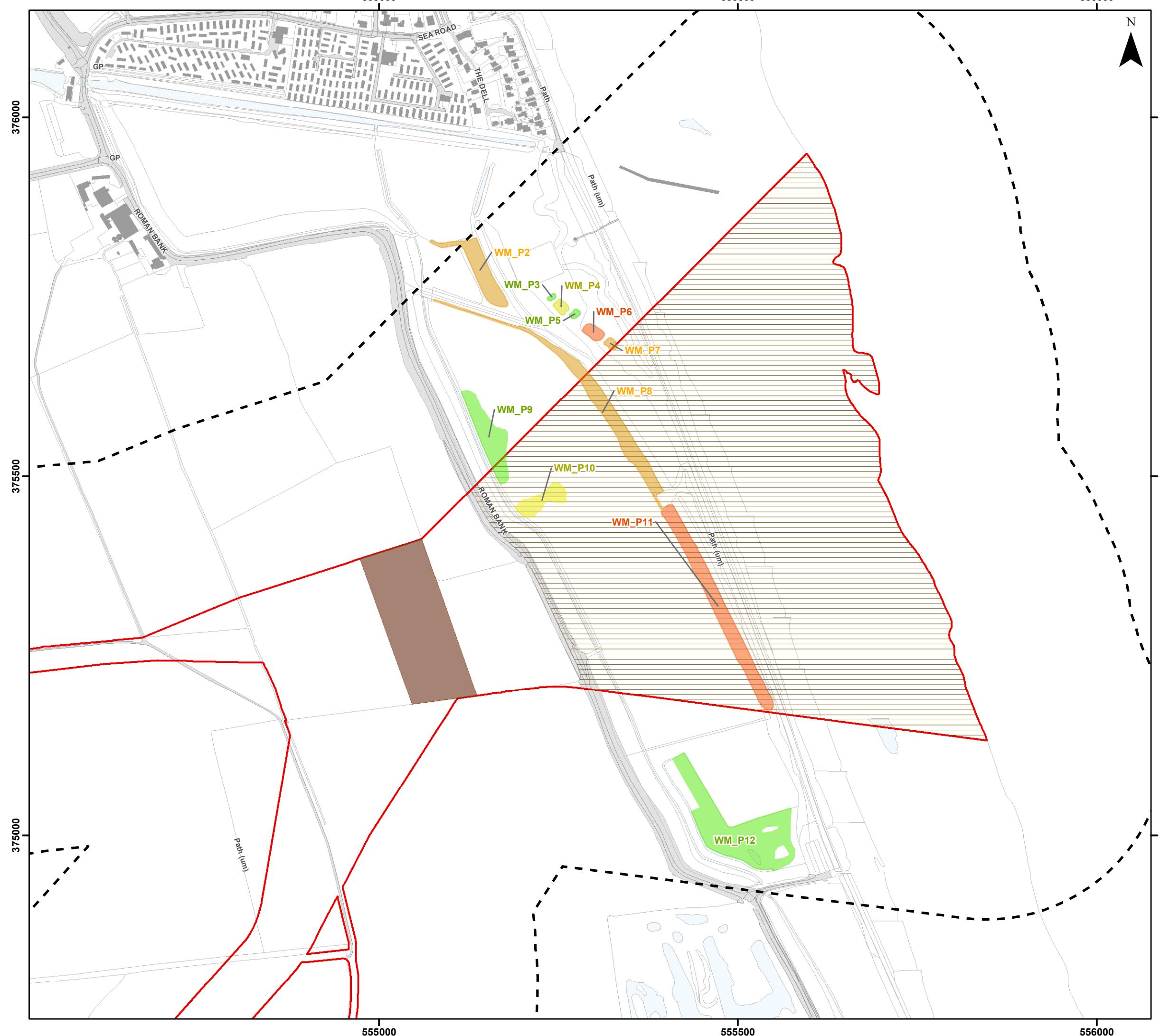


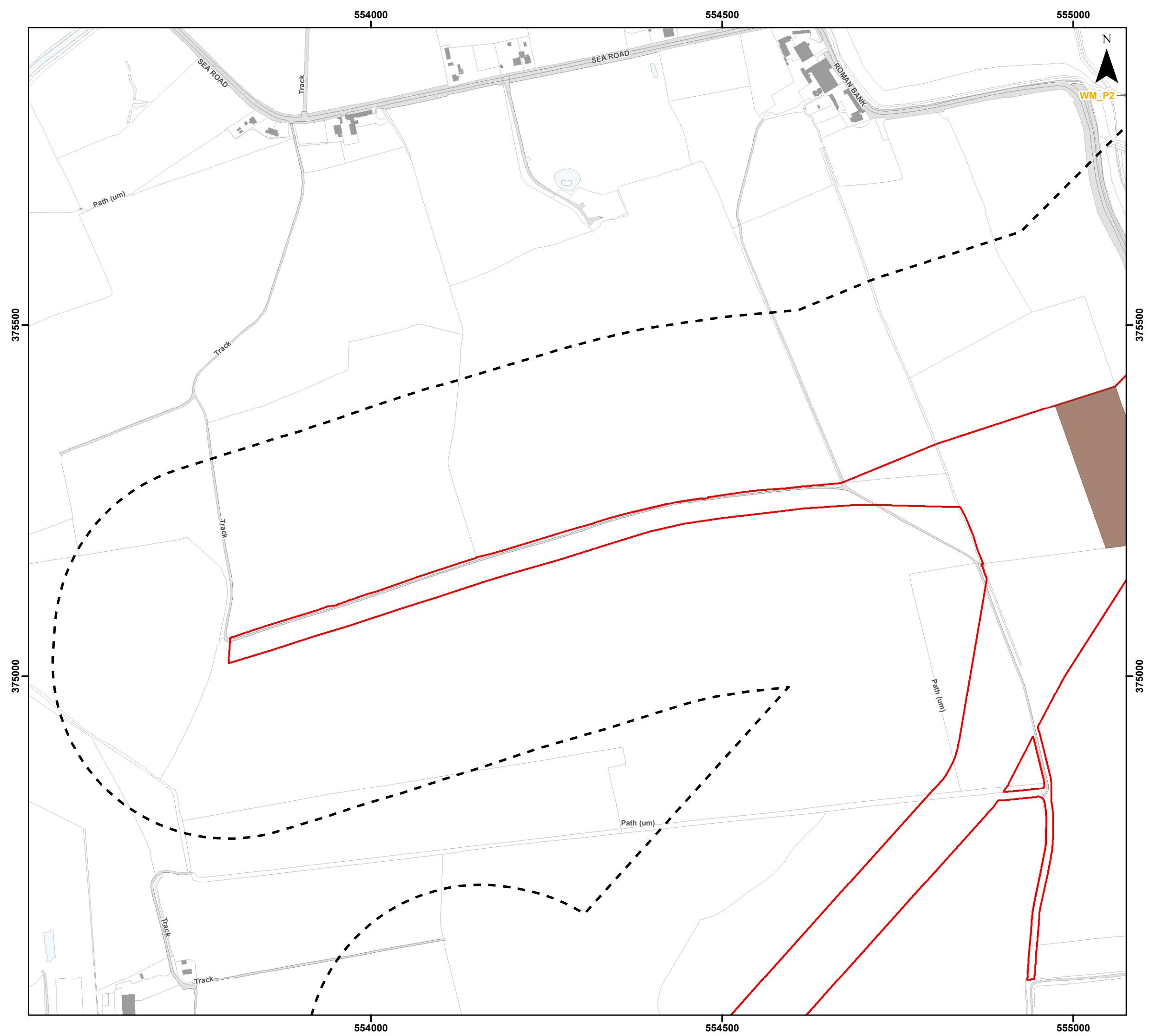
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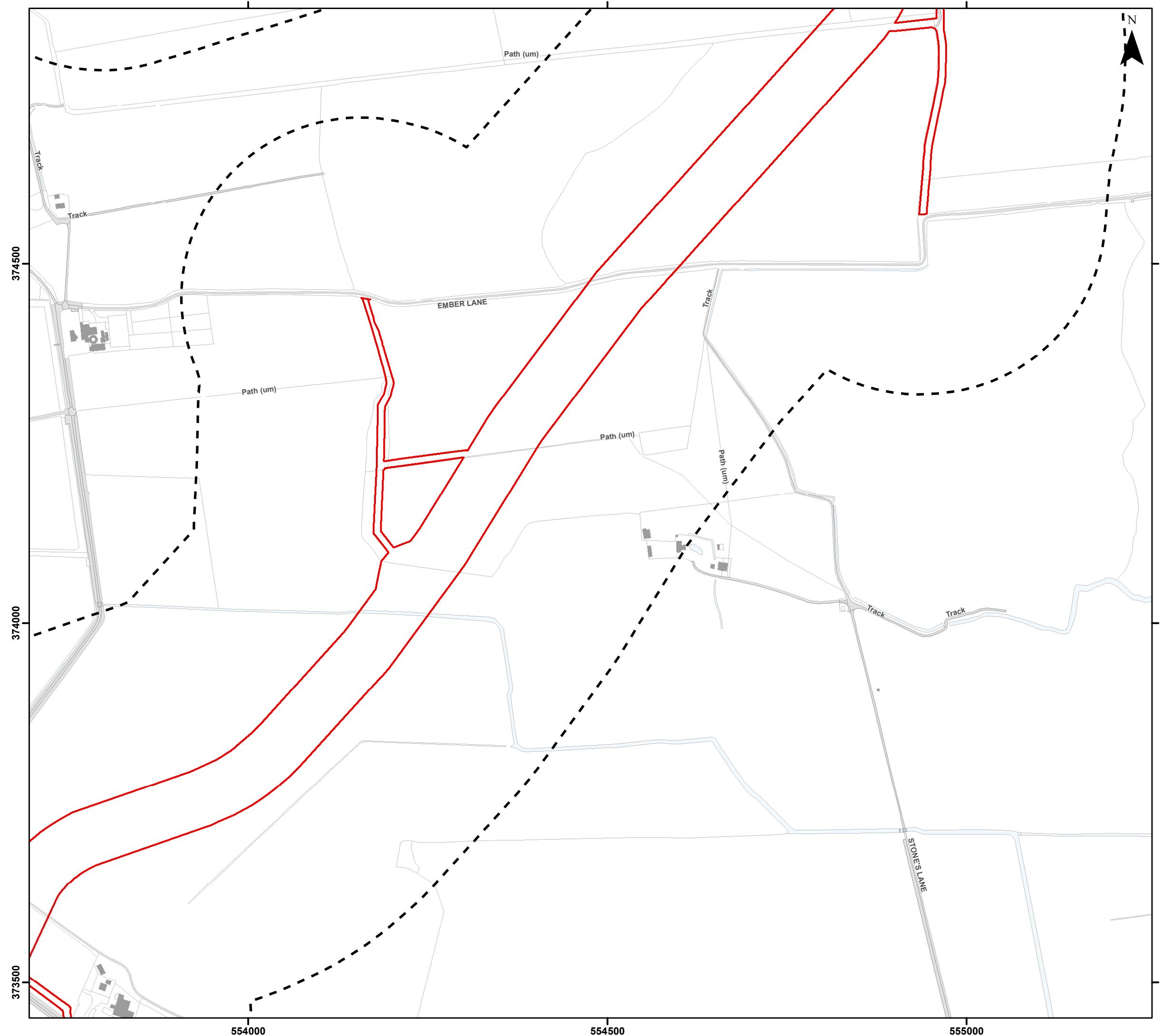








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Legend

- Order Limits
- Order Limits 250 m Buffer



Coordinate System: British National Grid
0 50 100 200 Metres
Scale: 1:5,000

A3 Page Size

Environmental Statement

Pond HSI Scores

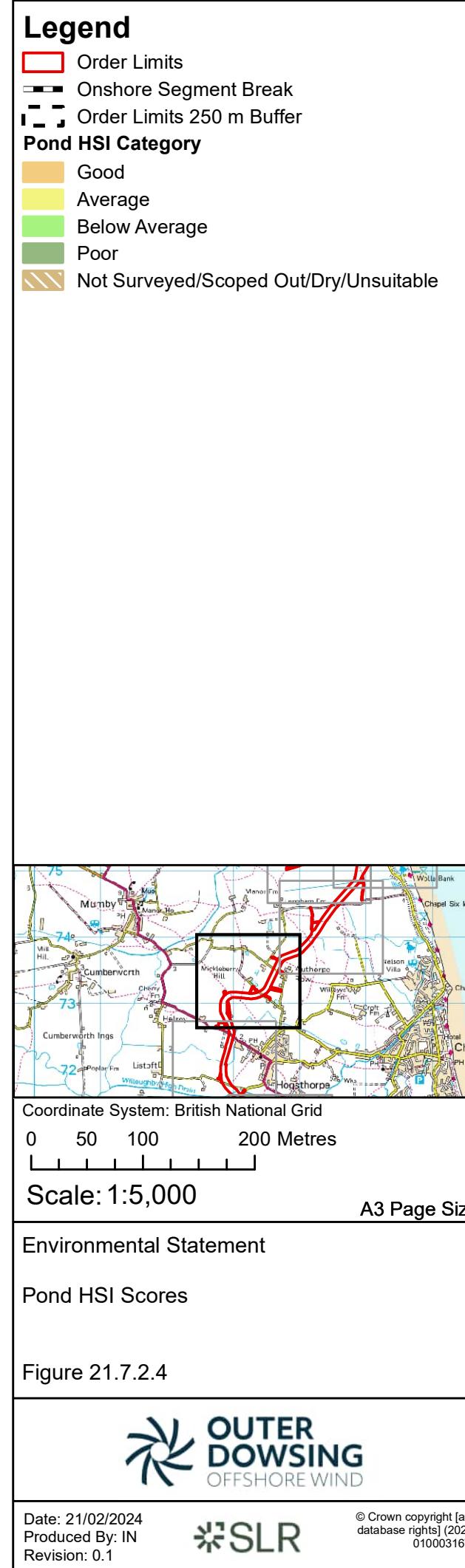
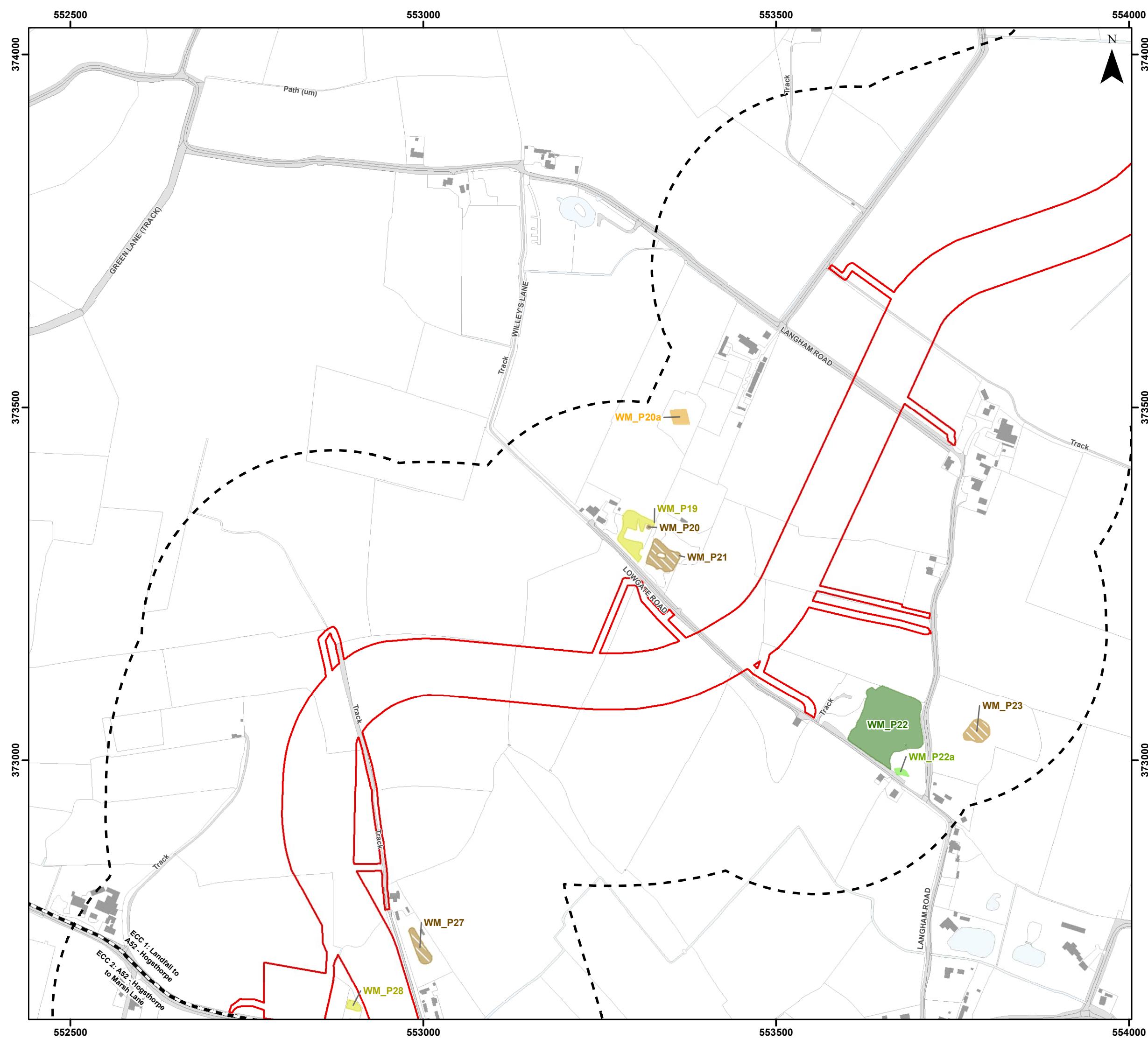
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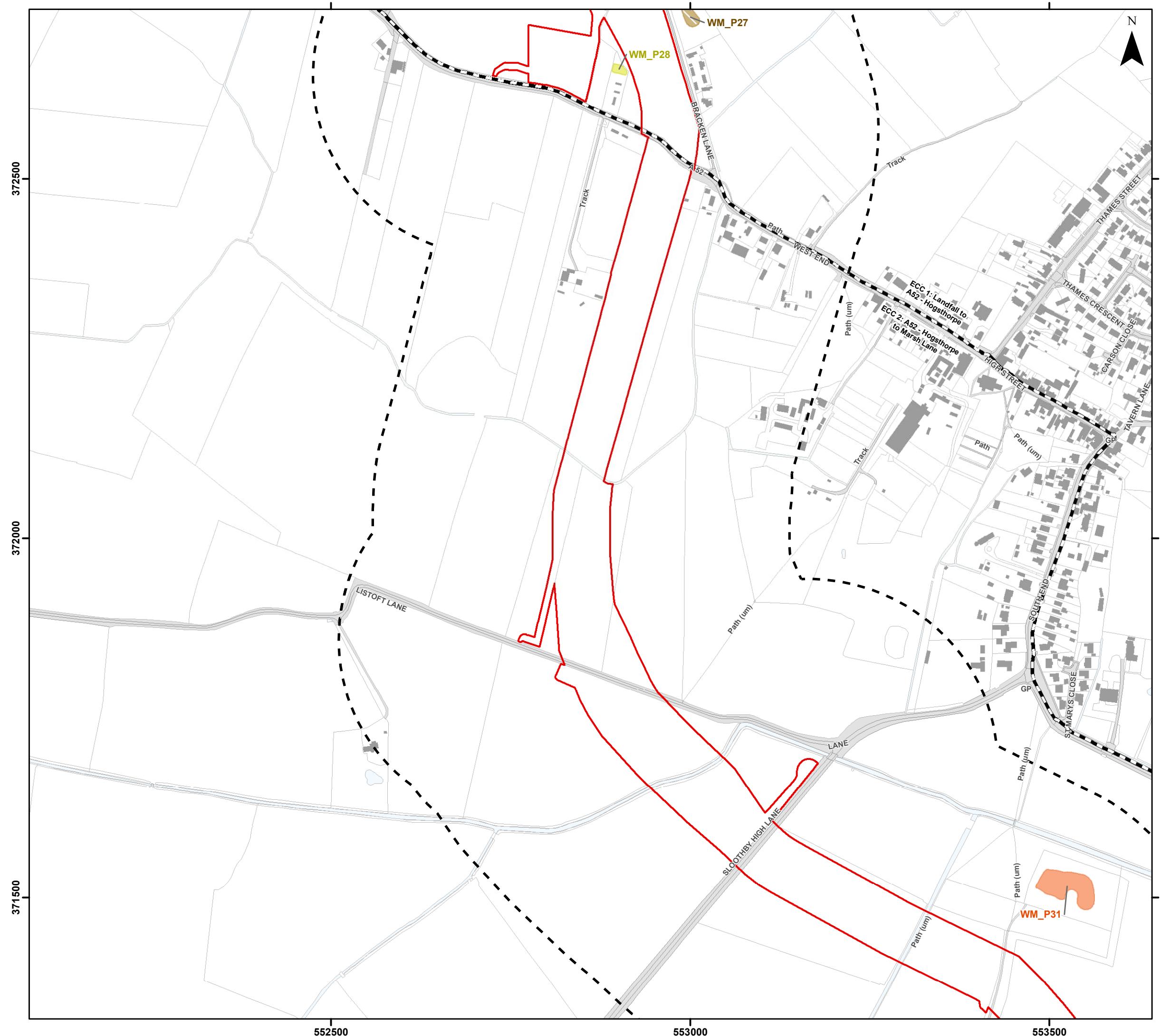
OUTER DOWSING
OFFSHORE WIND

Date: 21/02/2024
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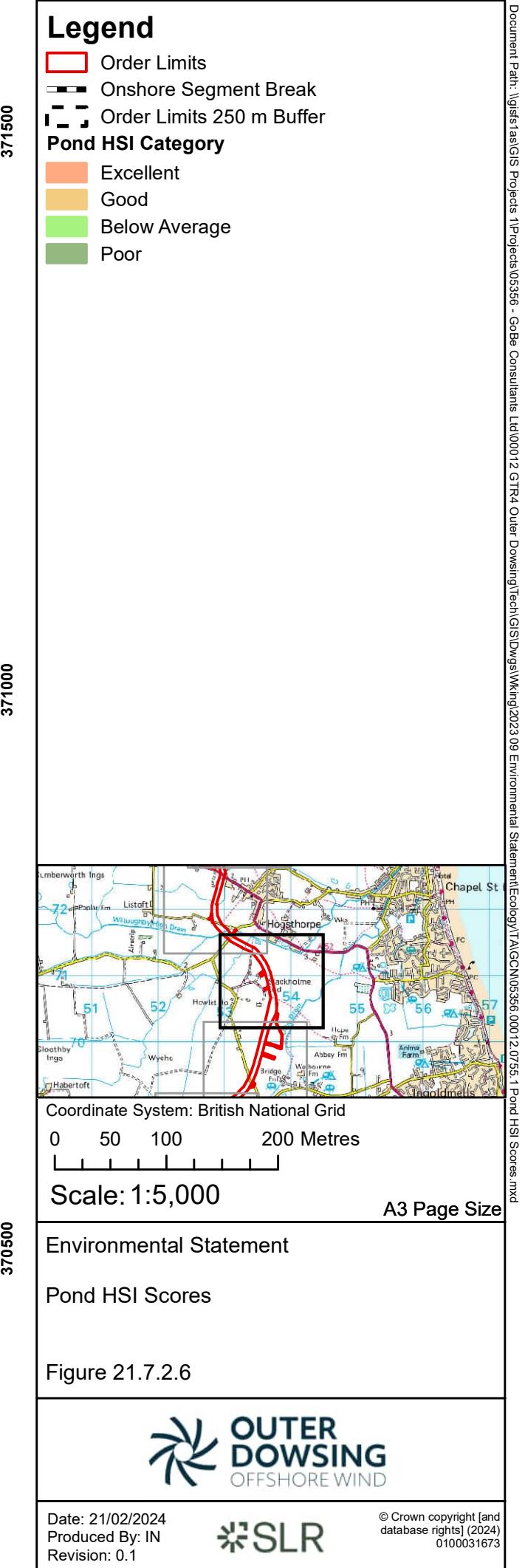
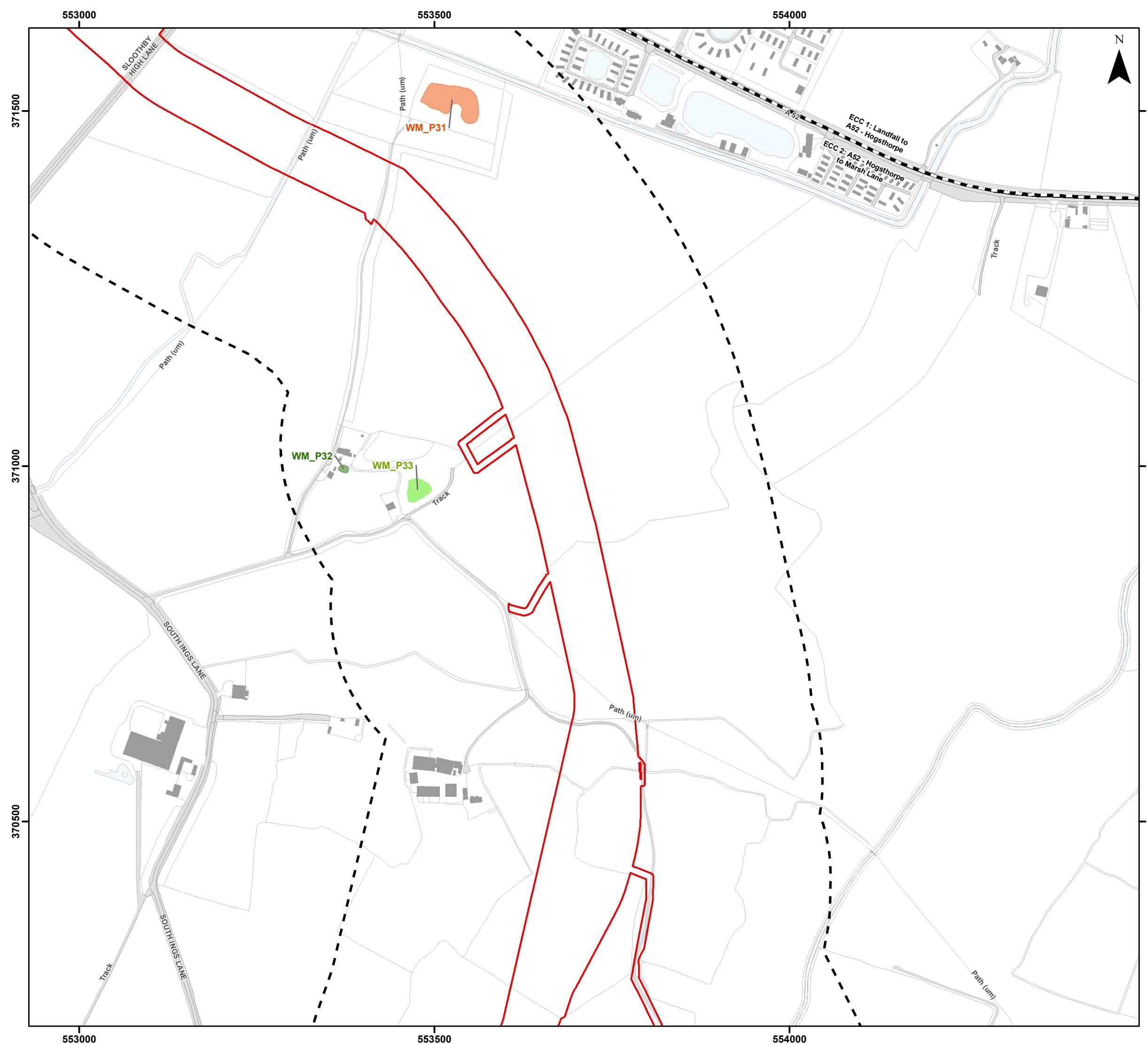
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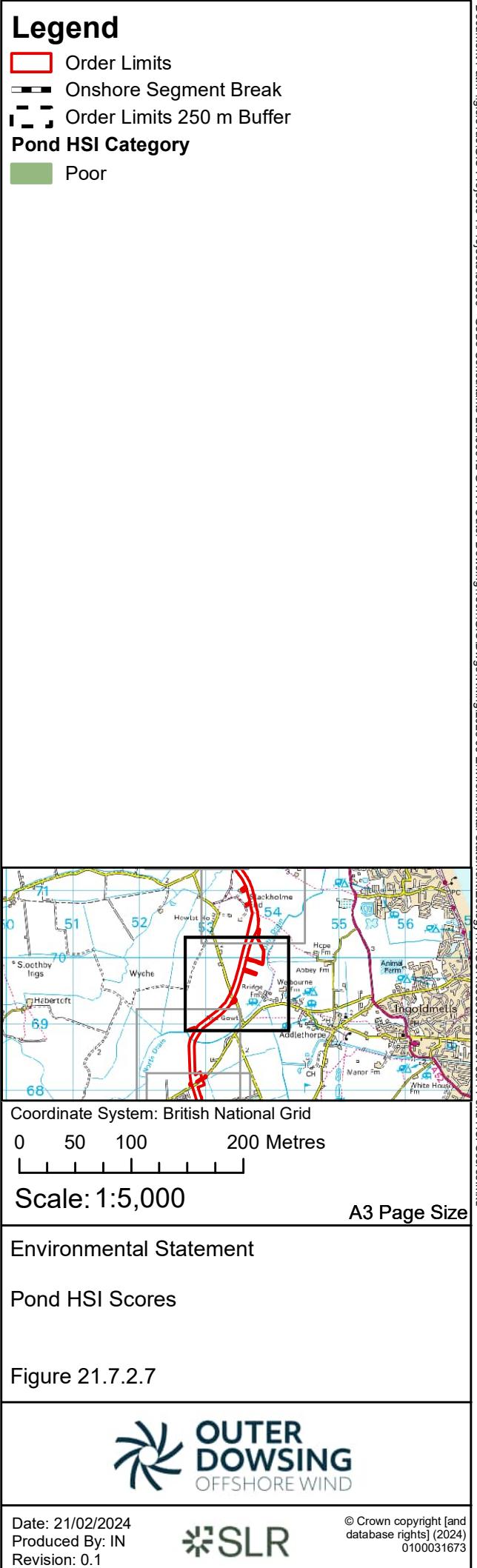
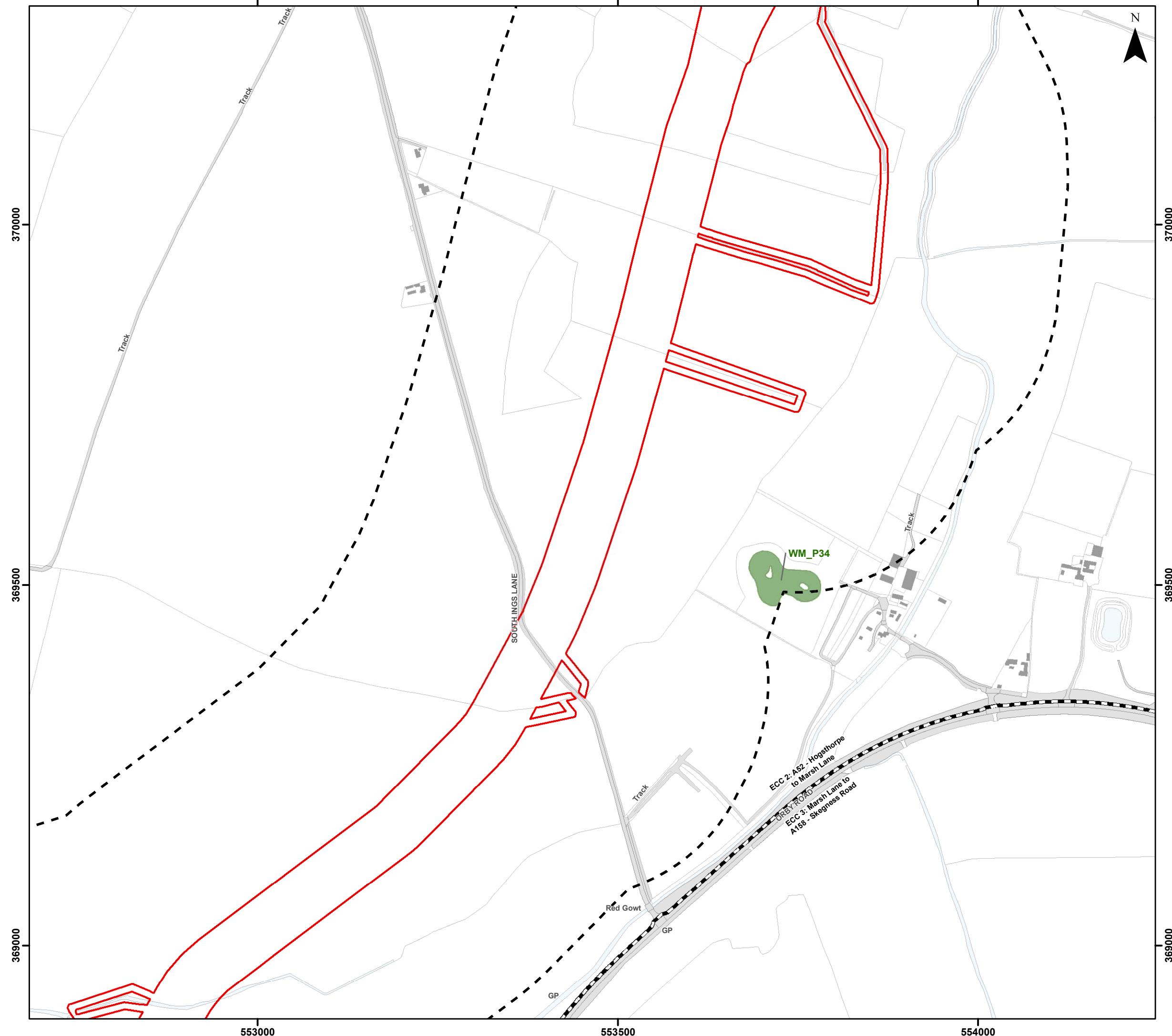
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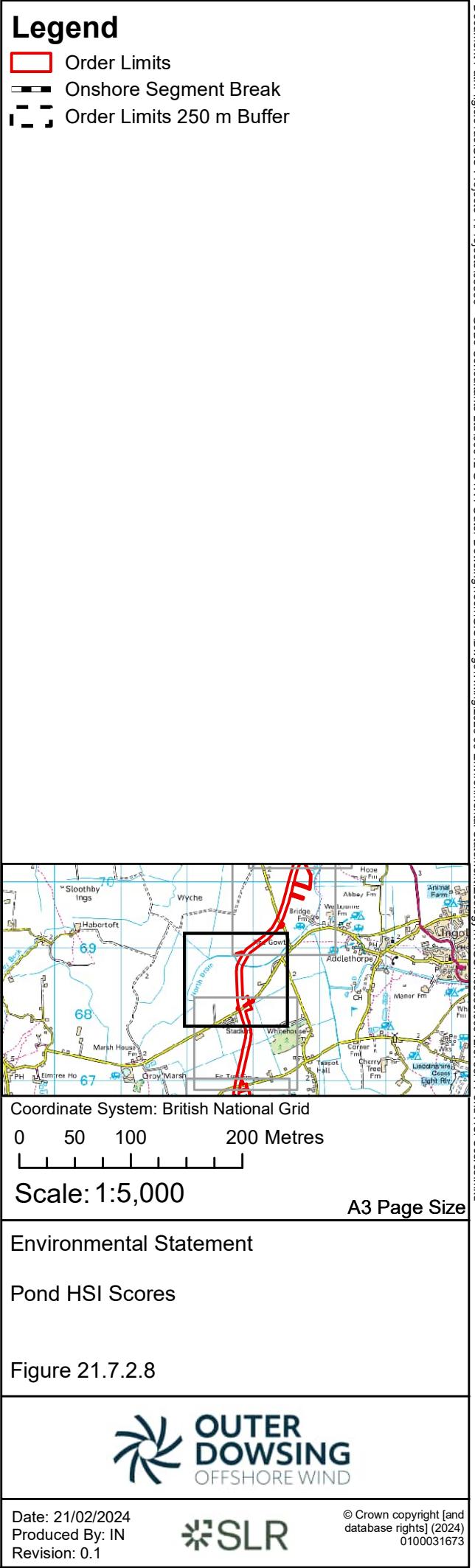
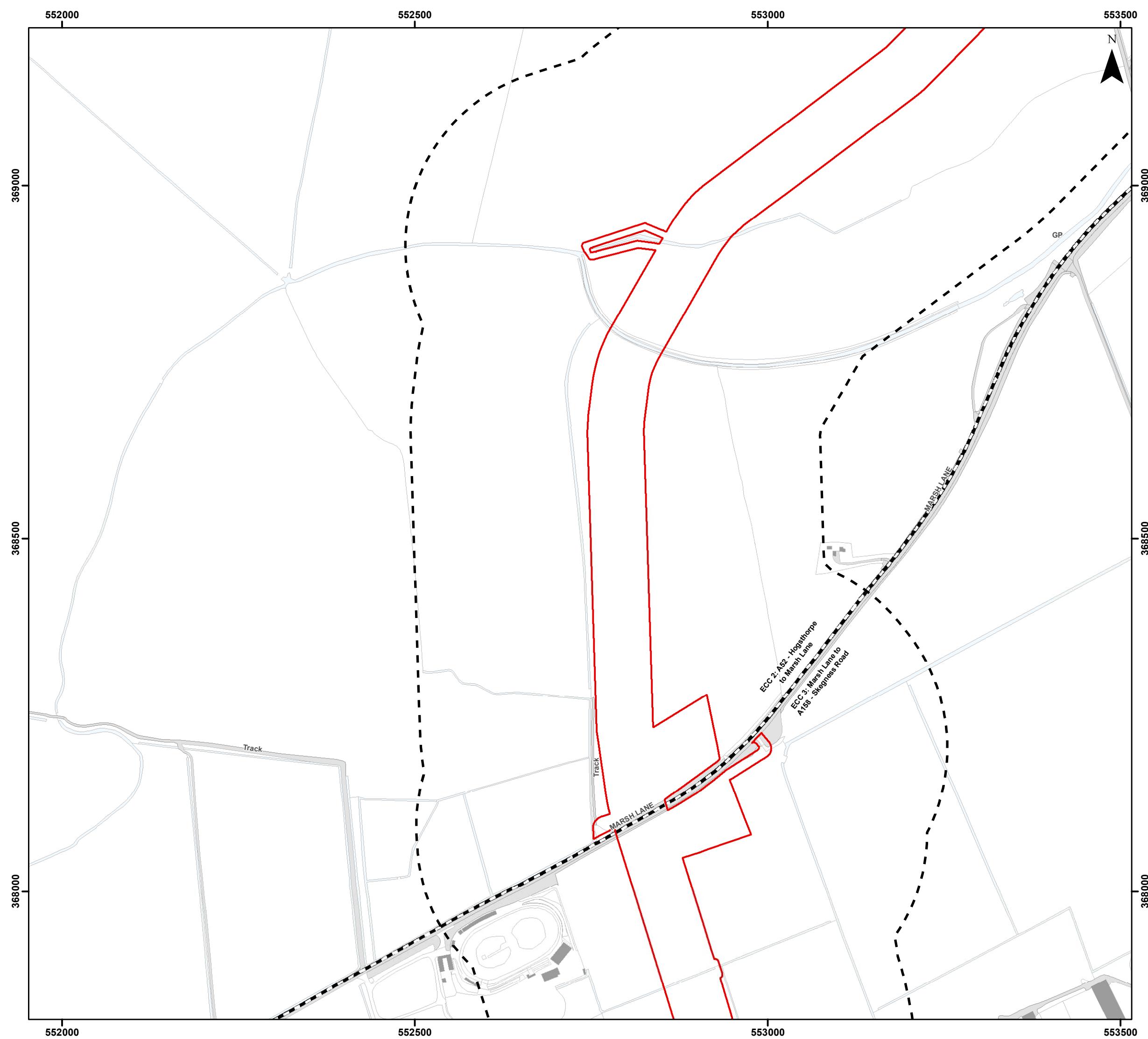


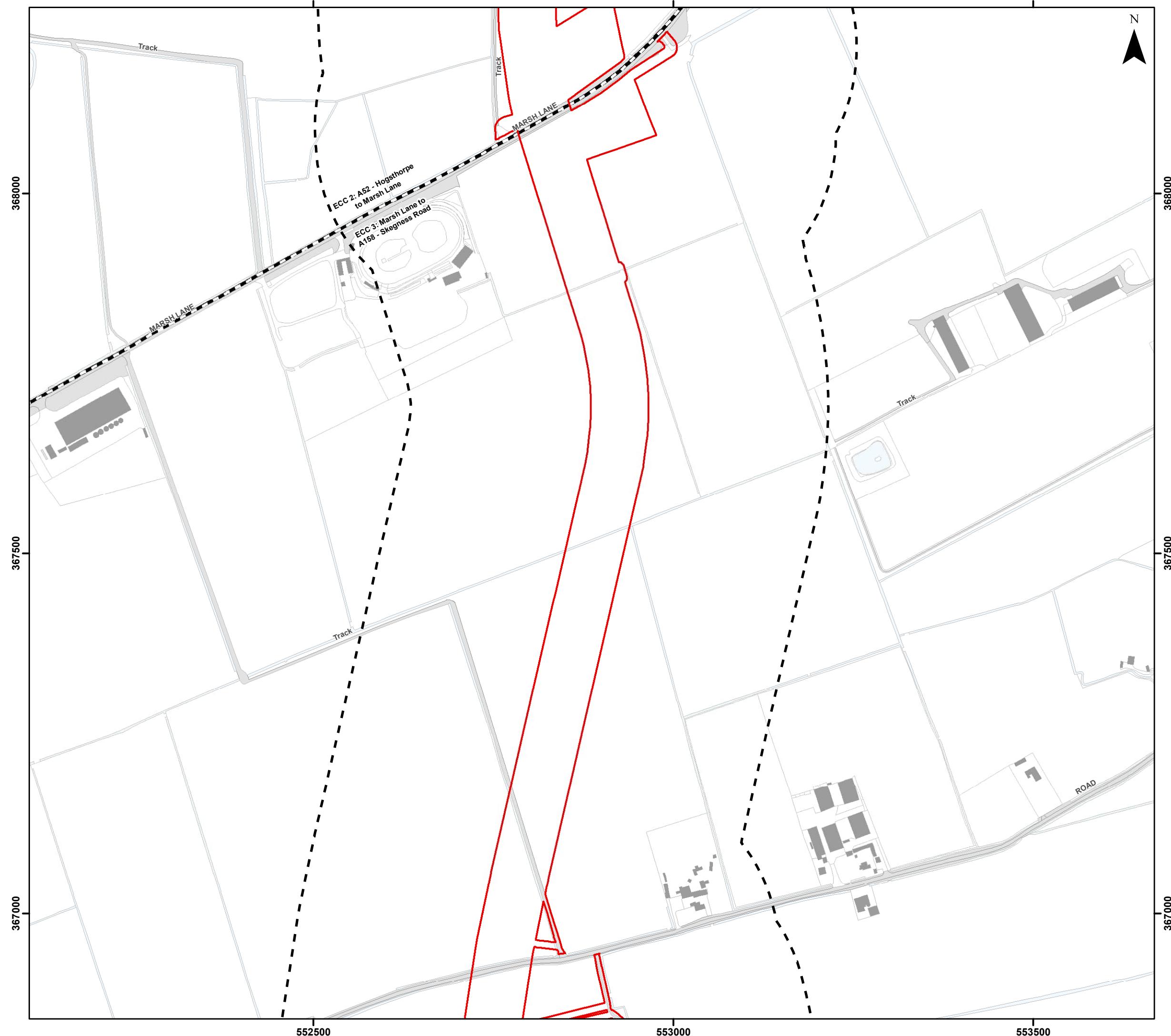


<p>Coordinate System: British National Grid 0 50 100 200 Metres</p>
Scale: 1:5,000
A3 Page Size
Environmental Statement
Pond HSI Scores
Figure 21.7.2.5
<p>Outer Dowsing Offshore Wind</p>
Date: 21/02/2024 Produced By: IN Revision: 0.1
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Legend

- Order Limits
- Onshore Segment Break
- Order Limits 250 m Buffer



Scale: 1:5,000
A3 Page Size

Environmental Statement

Pond HSI Scores

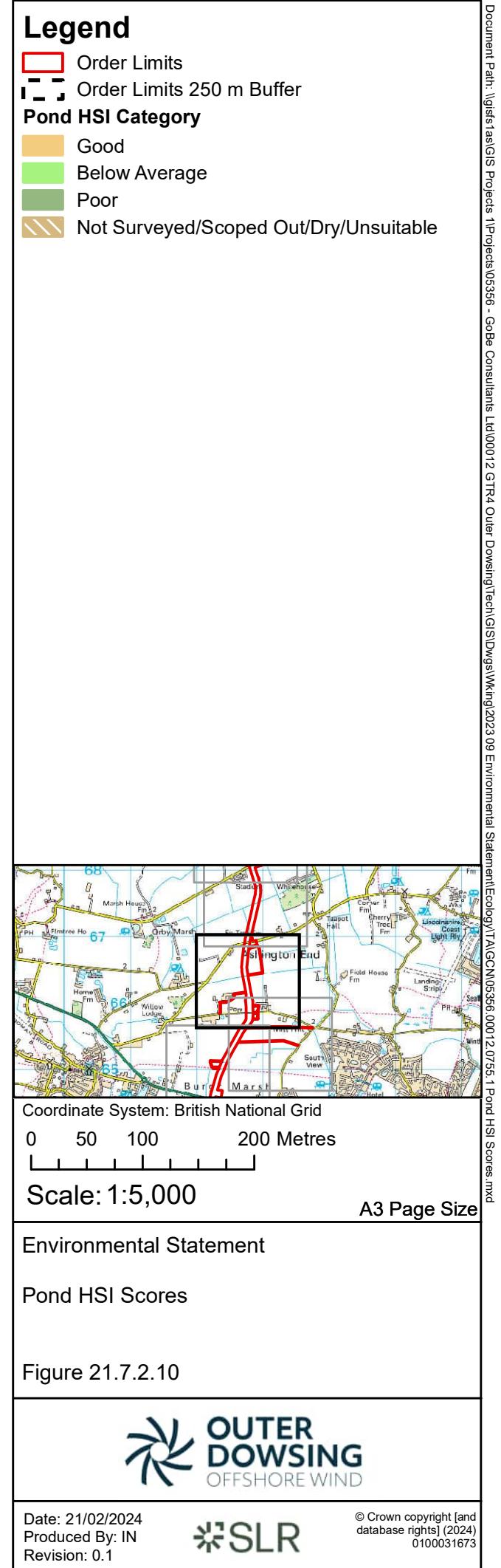
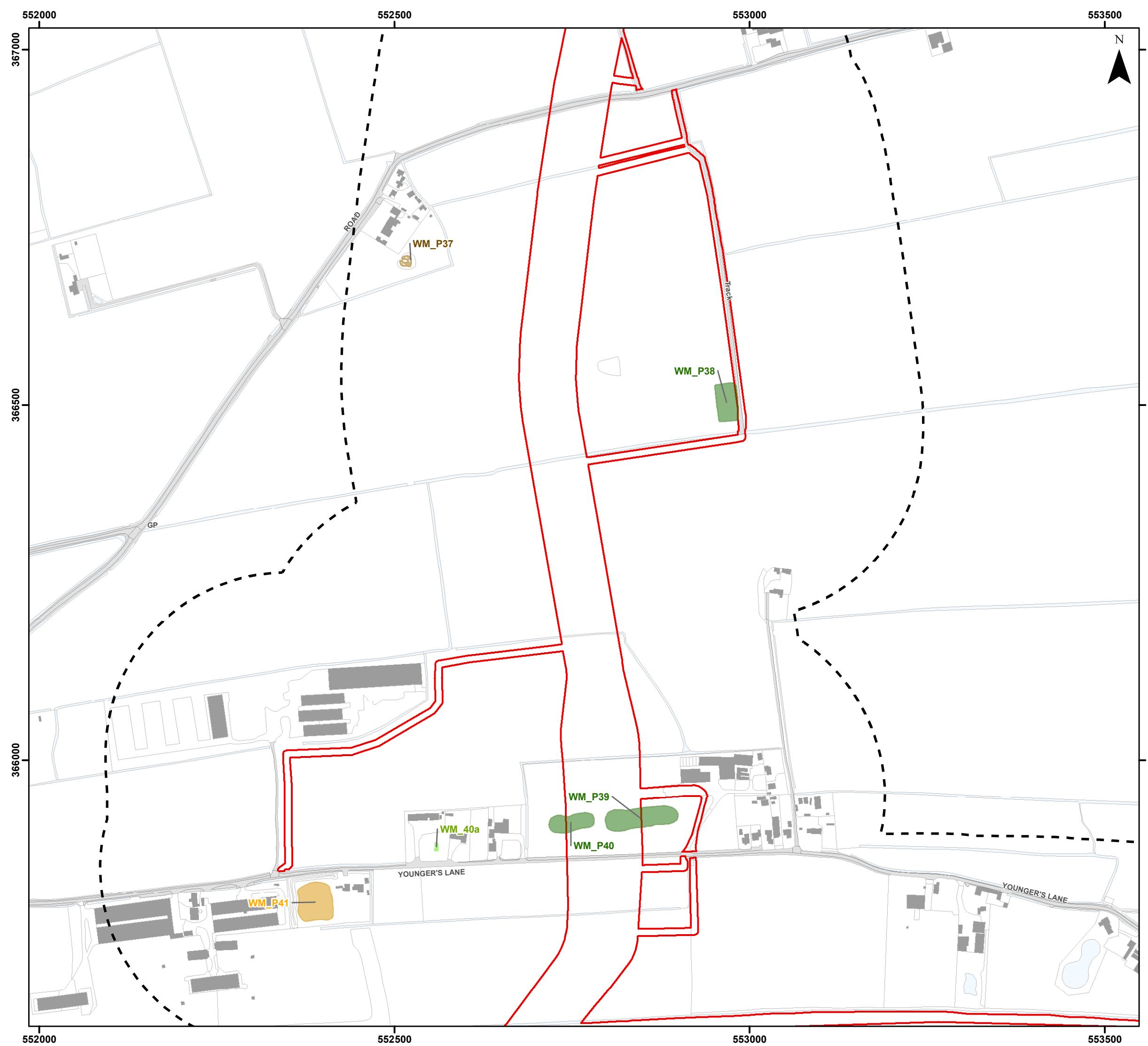
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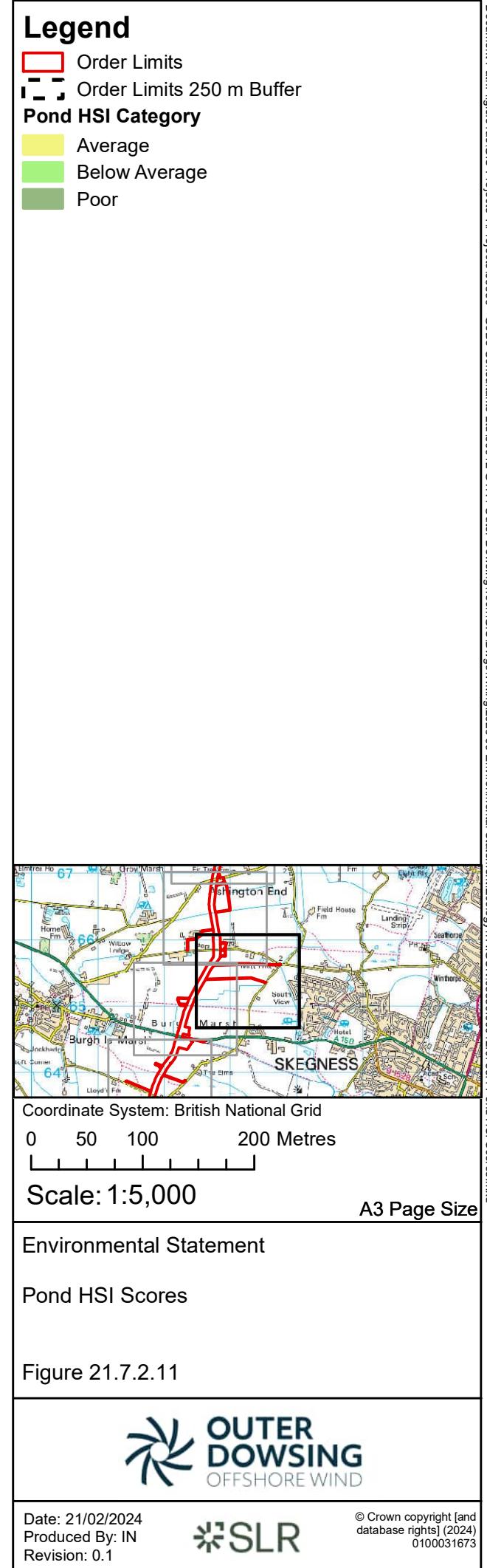
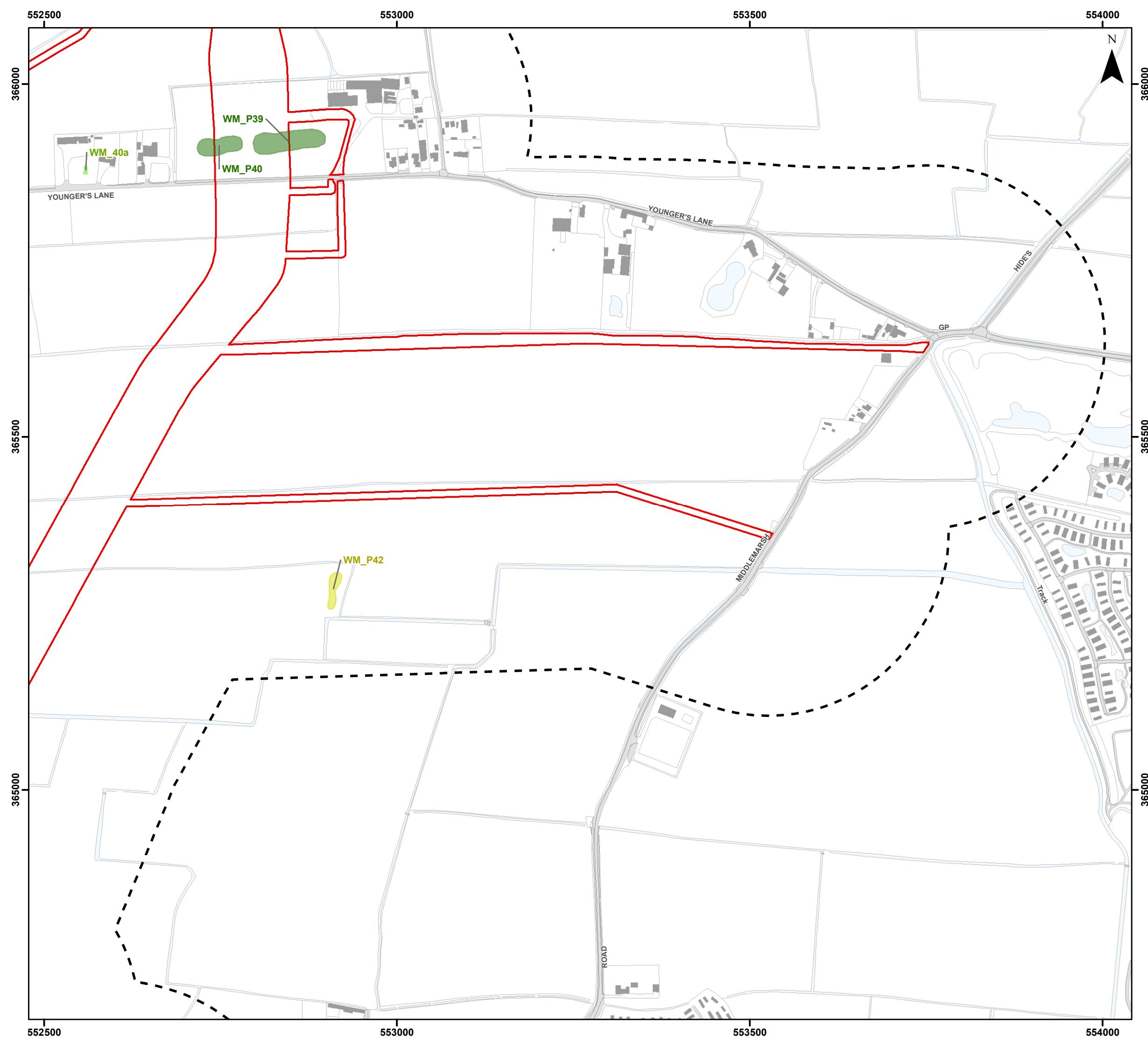


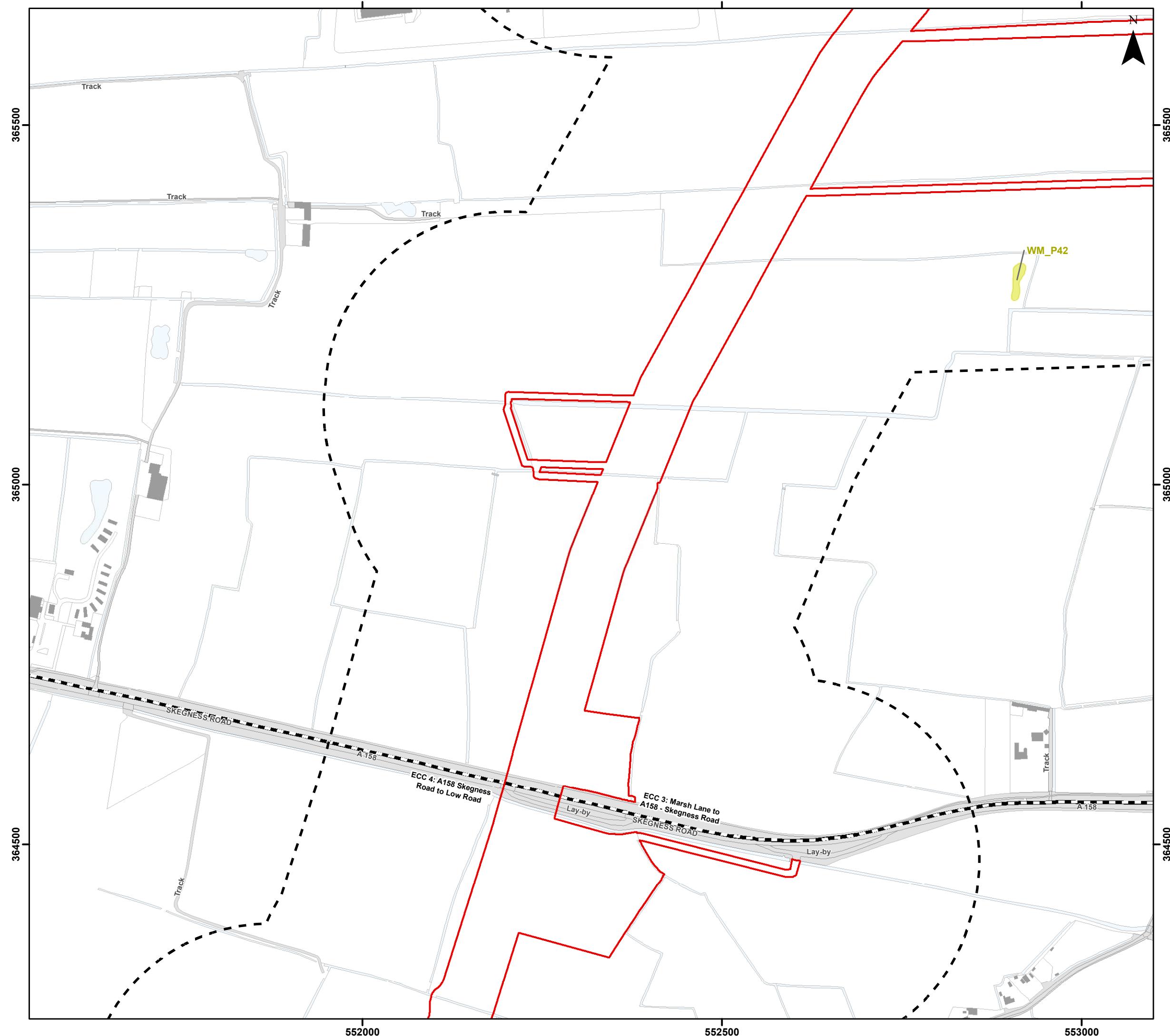
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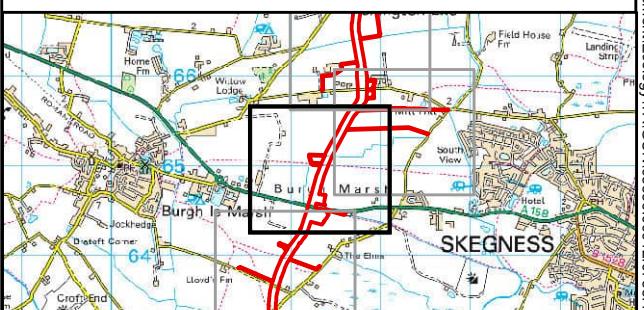






Legend

- Order Limits
- Onshore Segment Break
- Order Limits 250 m Buffer
- Pond HSI Category**
- Average



Coordinate System: British National Grid
0 50 100 200 Metres

Scale: 1:5,000
A3 Page Size

Environmental Statement

Pond HSI Scores

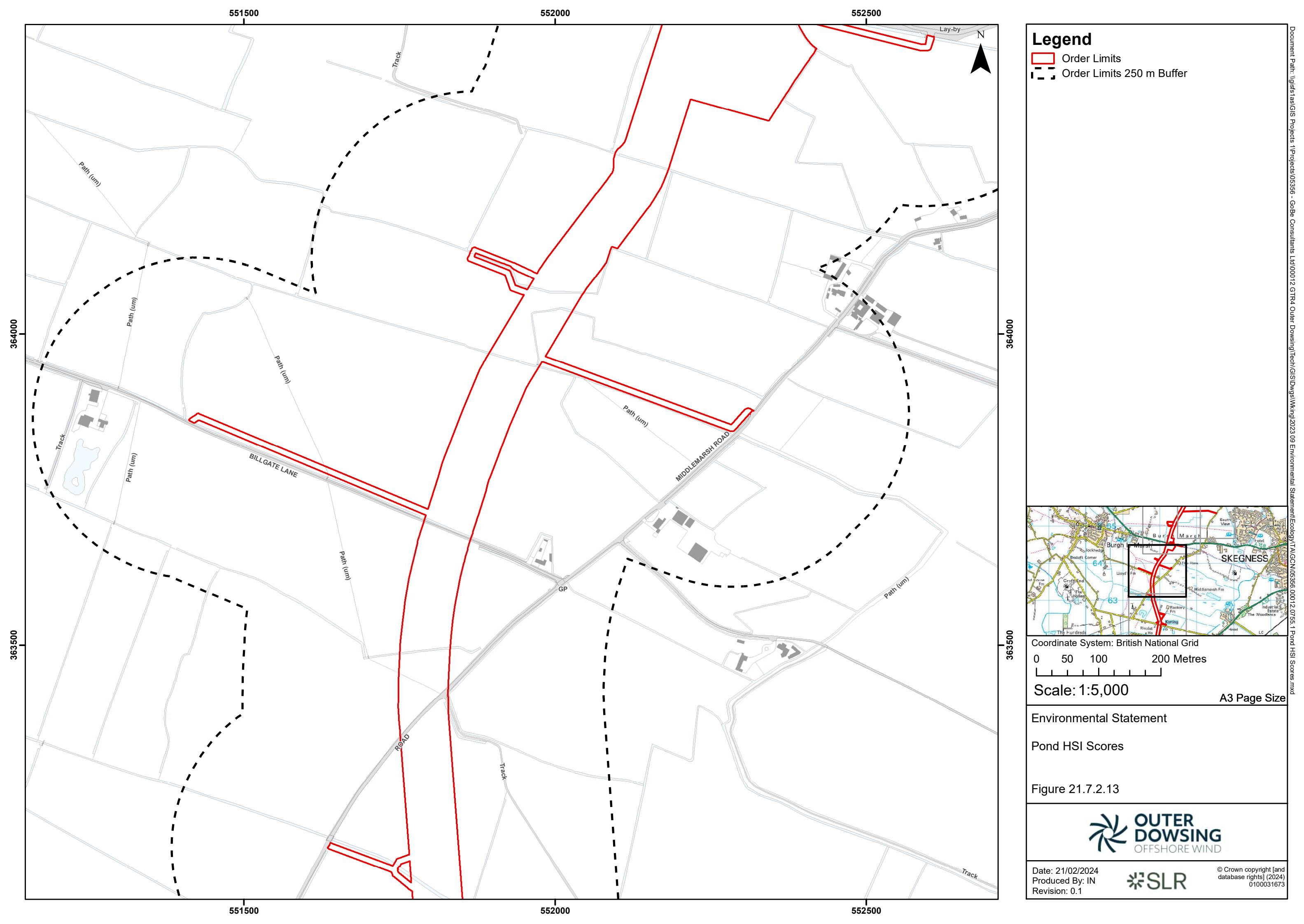
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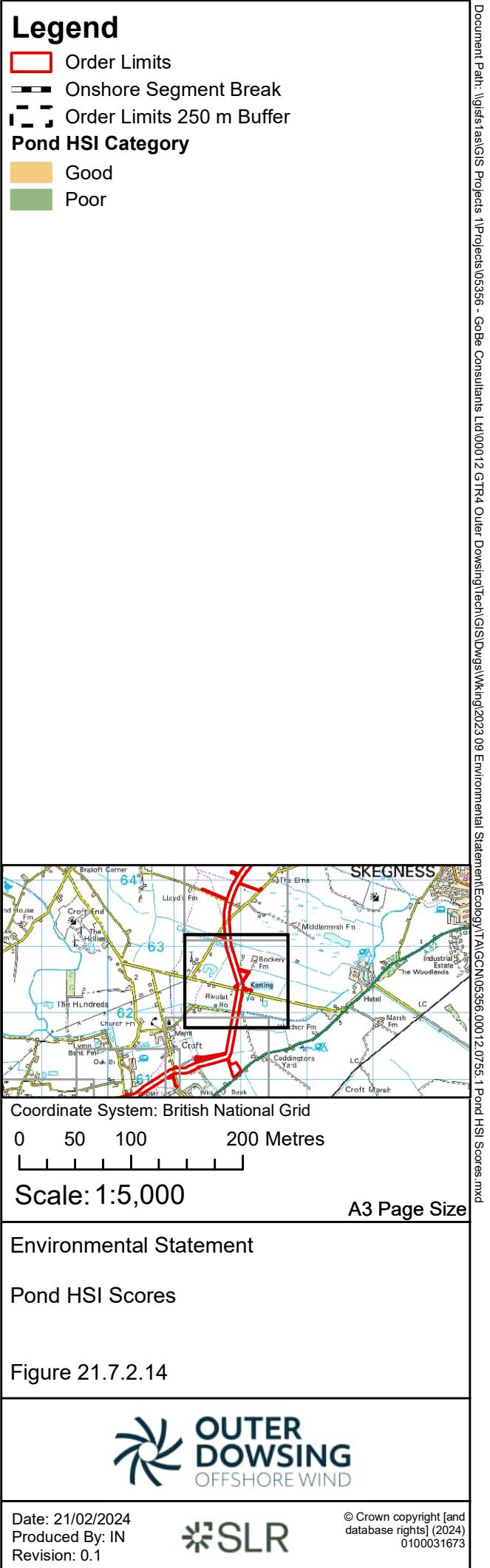
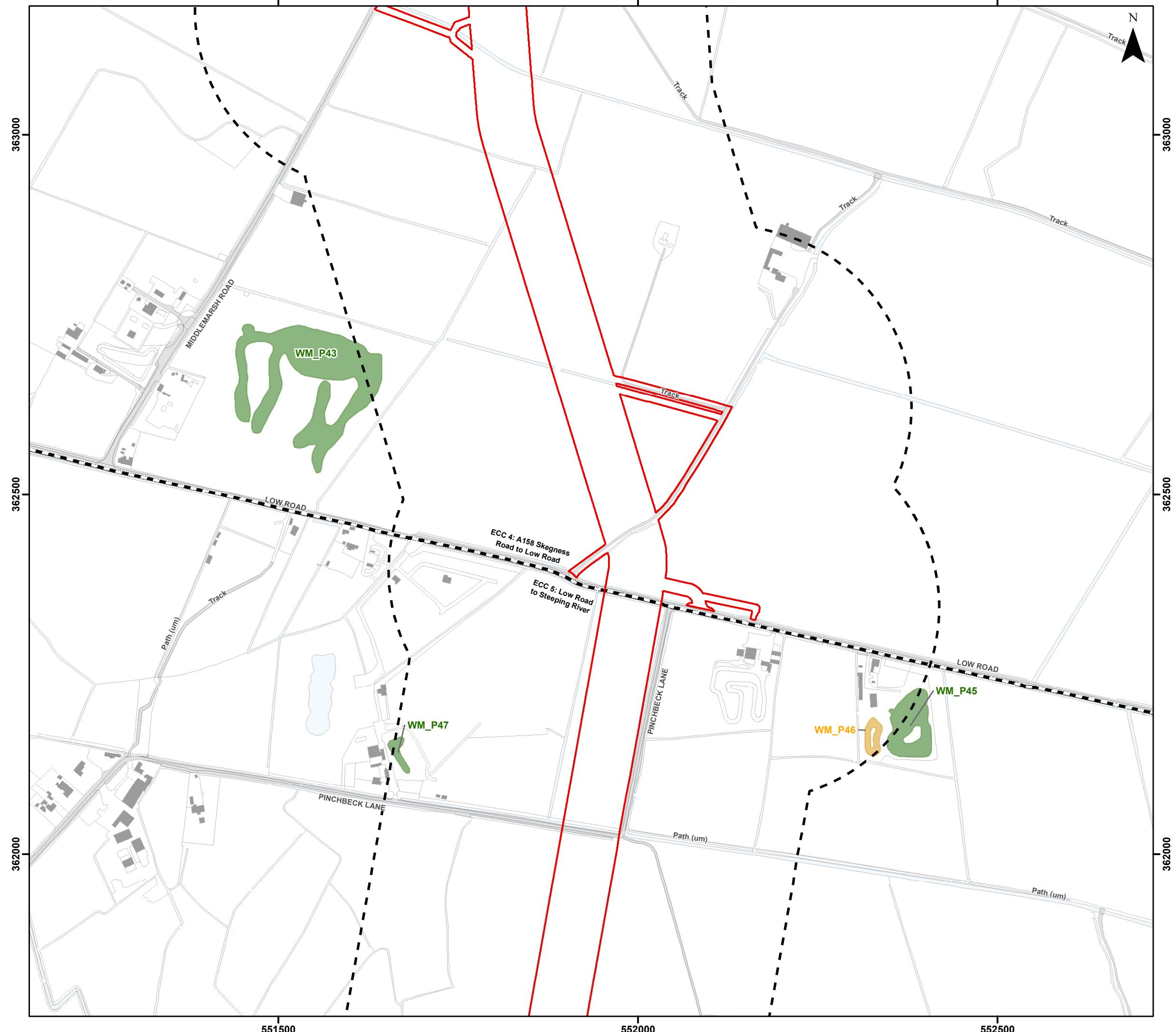
**OUTER
DOWNSING**
OFFSHORE WIND

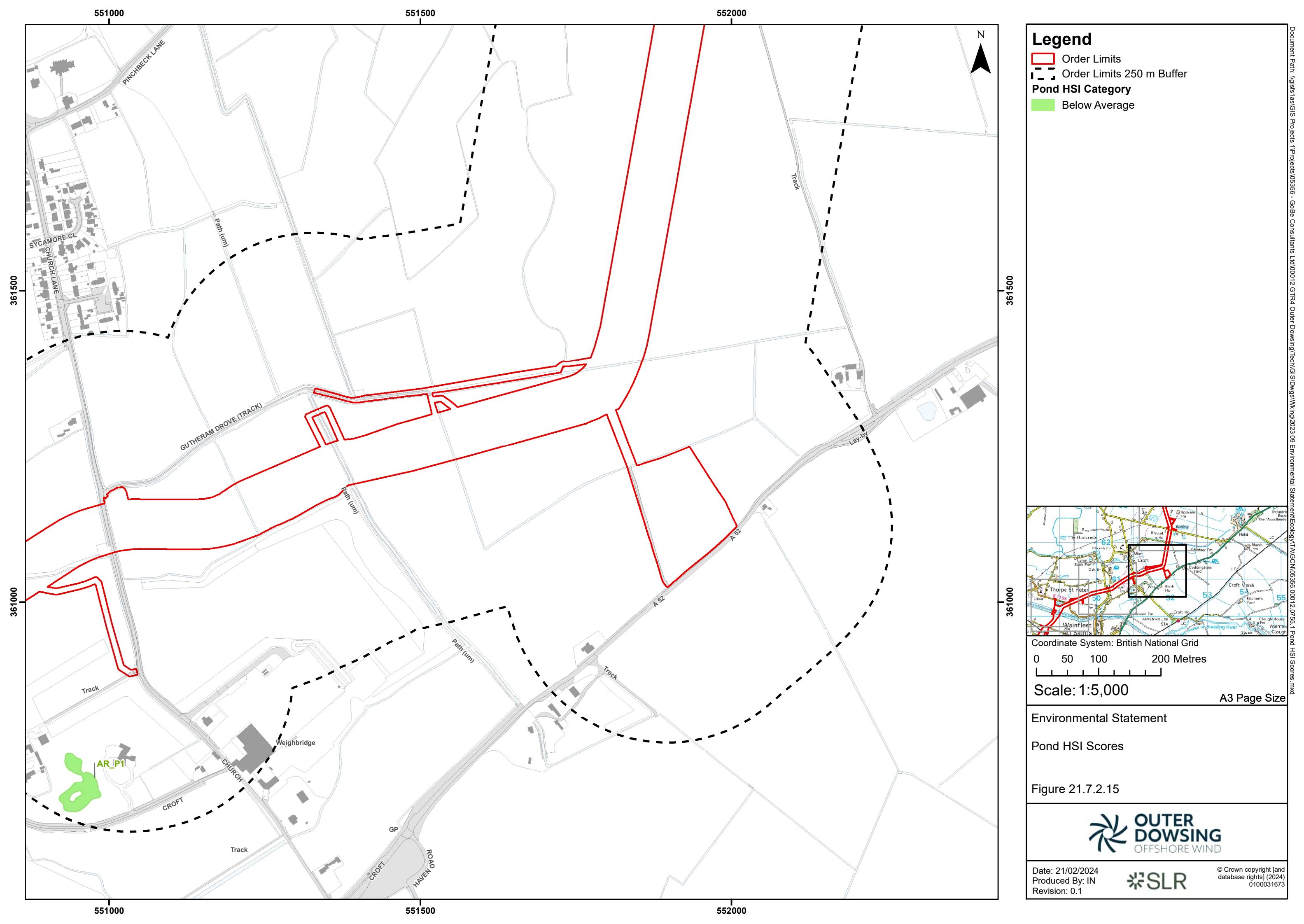
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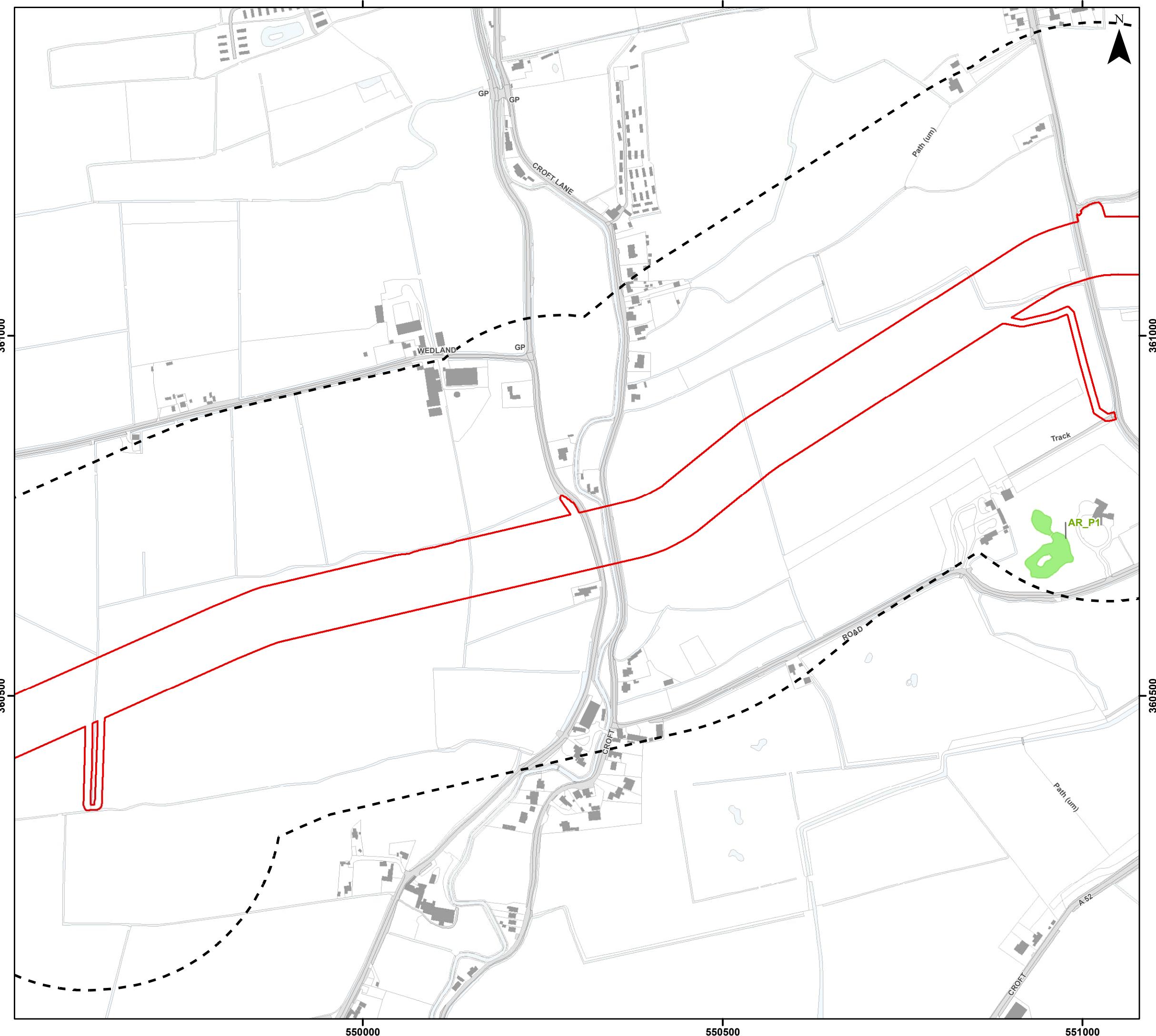
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SLR



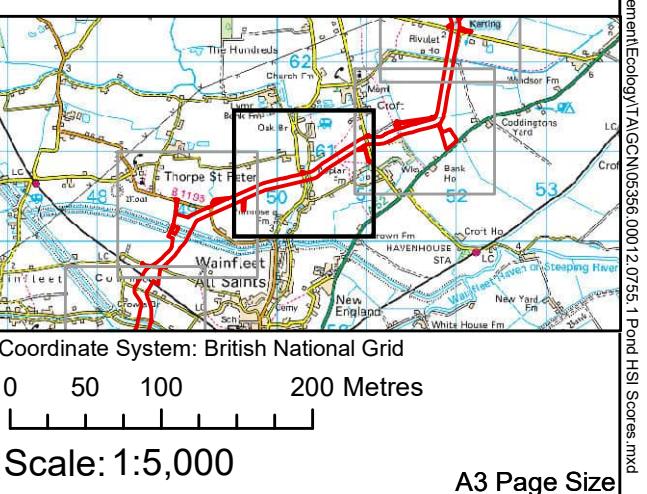






Legend

- Order Limits
- Order Limits 250 m Buffer
- Pond HSI Category
- Below Average



Environmental Statement

Pond HSI Scores

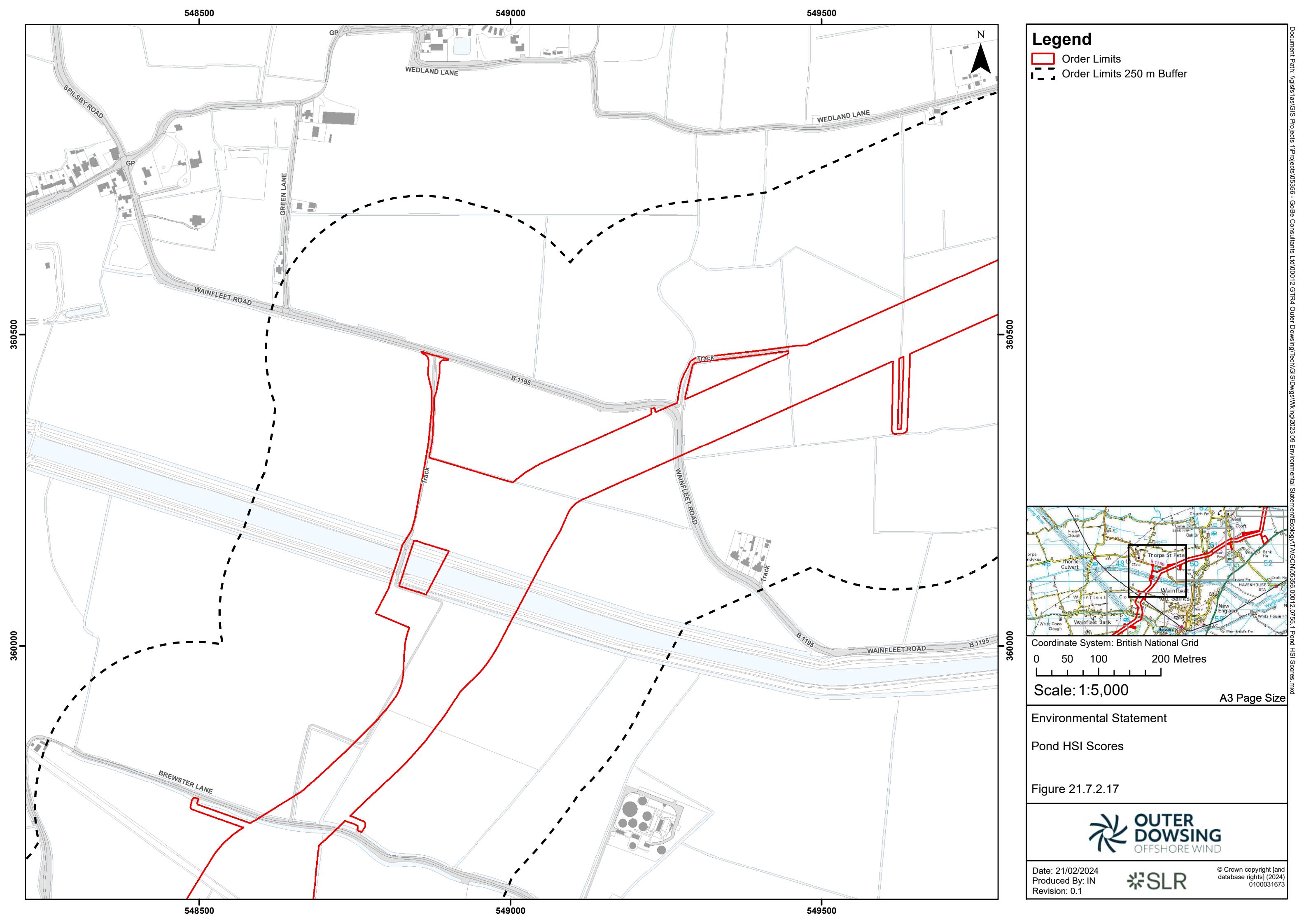
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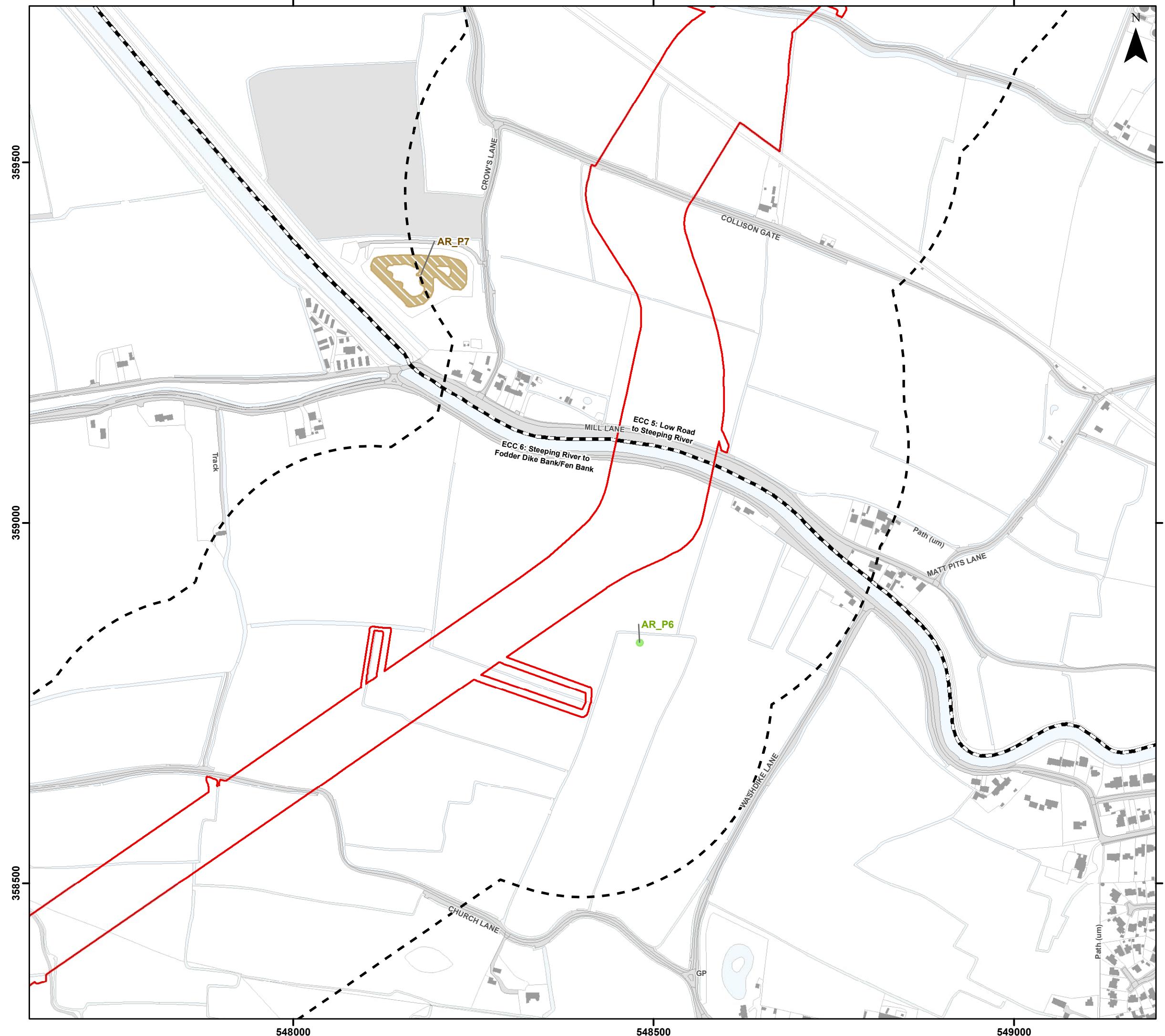


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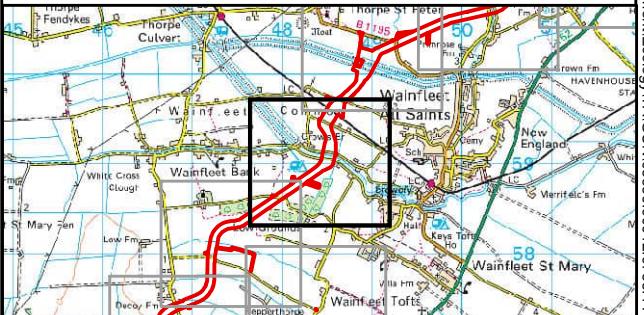
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Legend
Order Limits
Onshore Segment Break
Order Limits 250 m Buffer
Pond HSI Category
Below Average
Not Surveyed/Scoped Out/Dry/Unsuitable



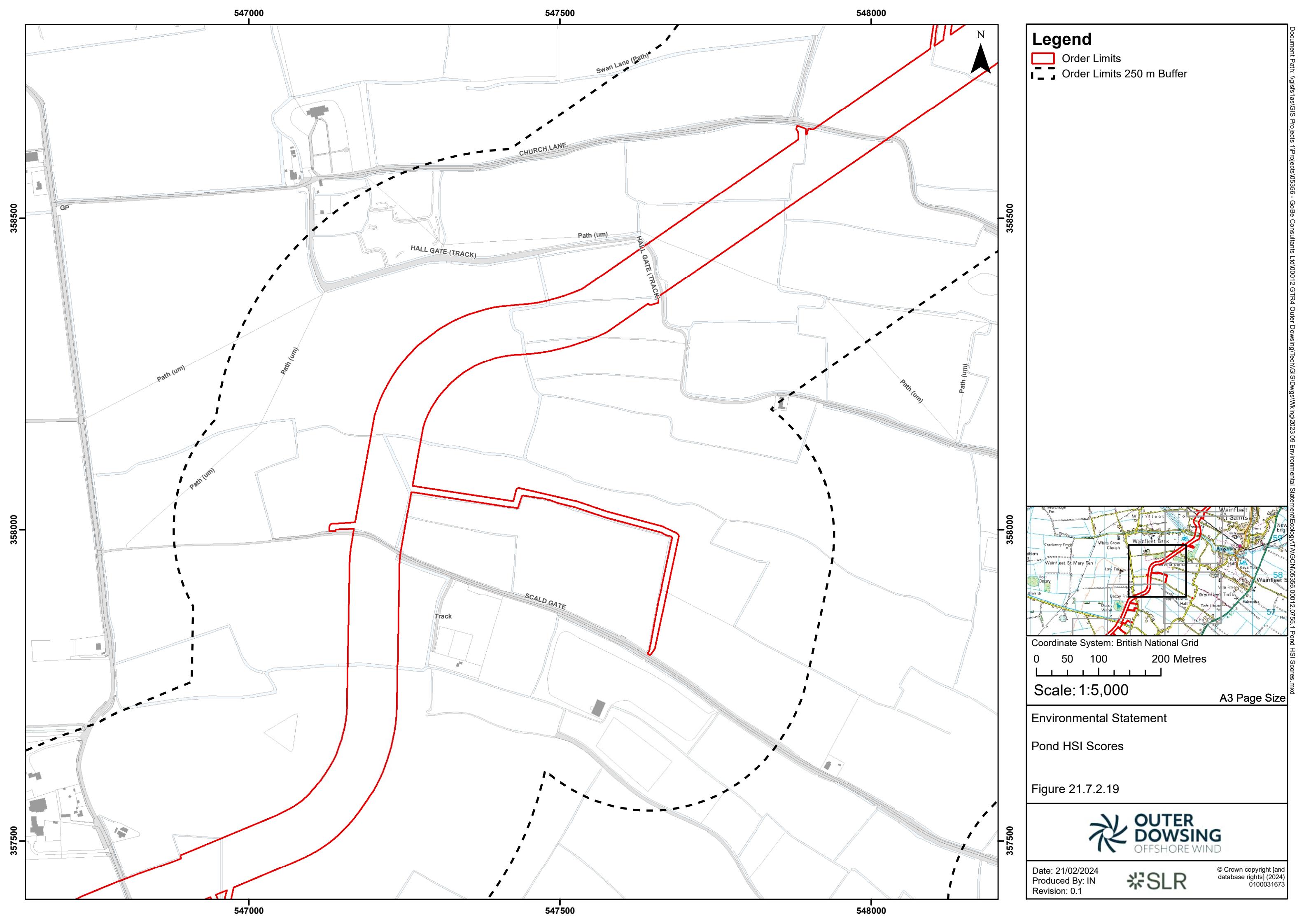
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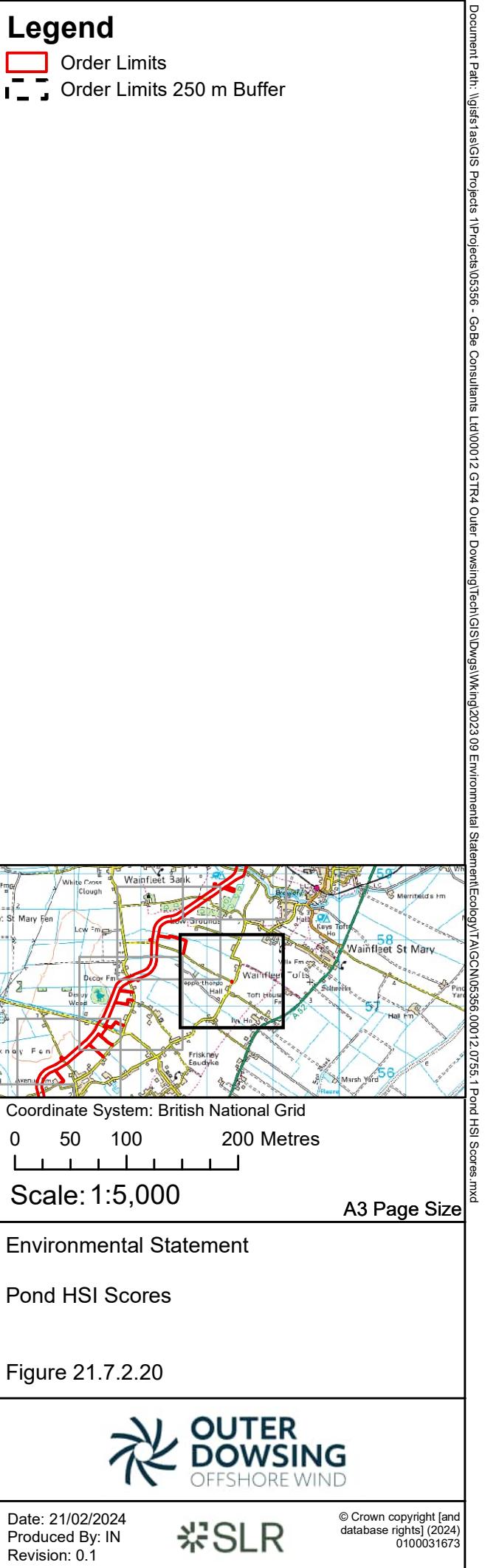
Environmental Statement
Pond HSI Scores
Figure 21.7.2.18

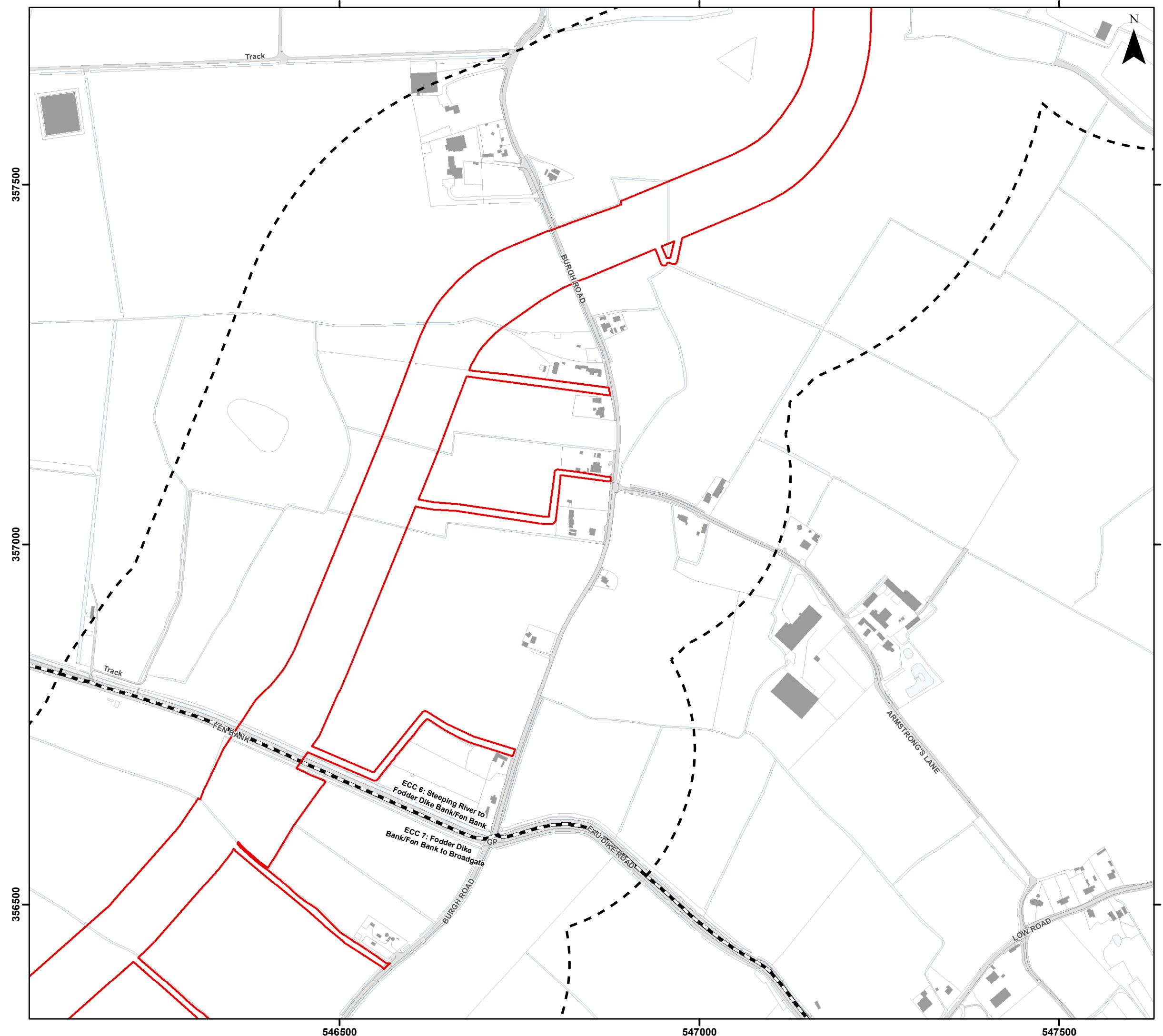
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Outer Dowsing Offshore Wind

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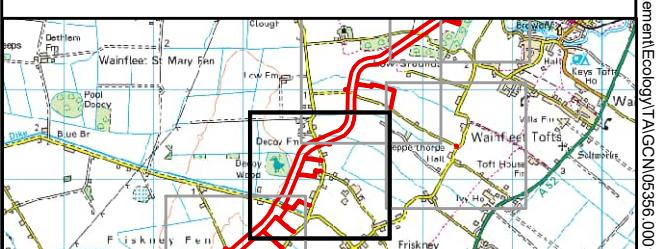






Legend

- Order Limits (Red Box)
- Onshore Segment Break (Solid Black Line)
- Order Limits 250 m Buffer (Dashed Black Line)



Coordinate System: British National Grid
0 50 100 200 Metres

Scale: 1:5,000

A3 Page Size

Environmental Statement

Pond HSI Scores

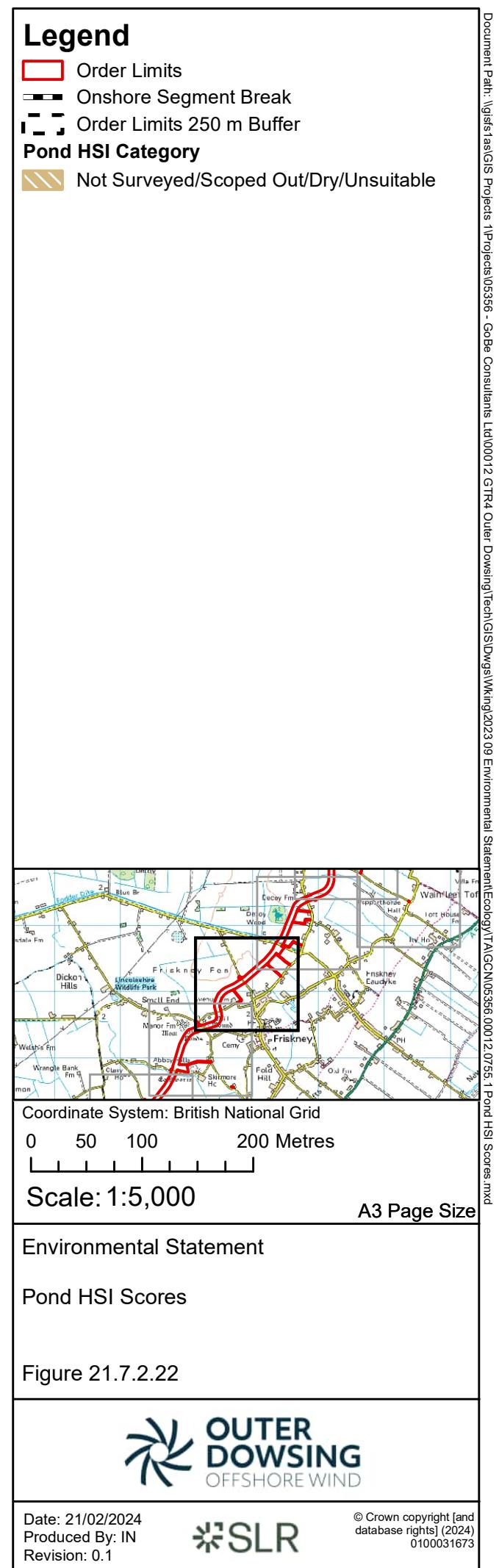
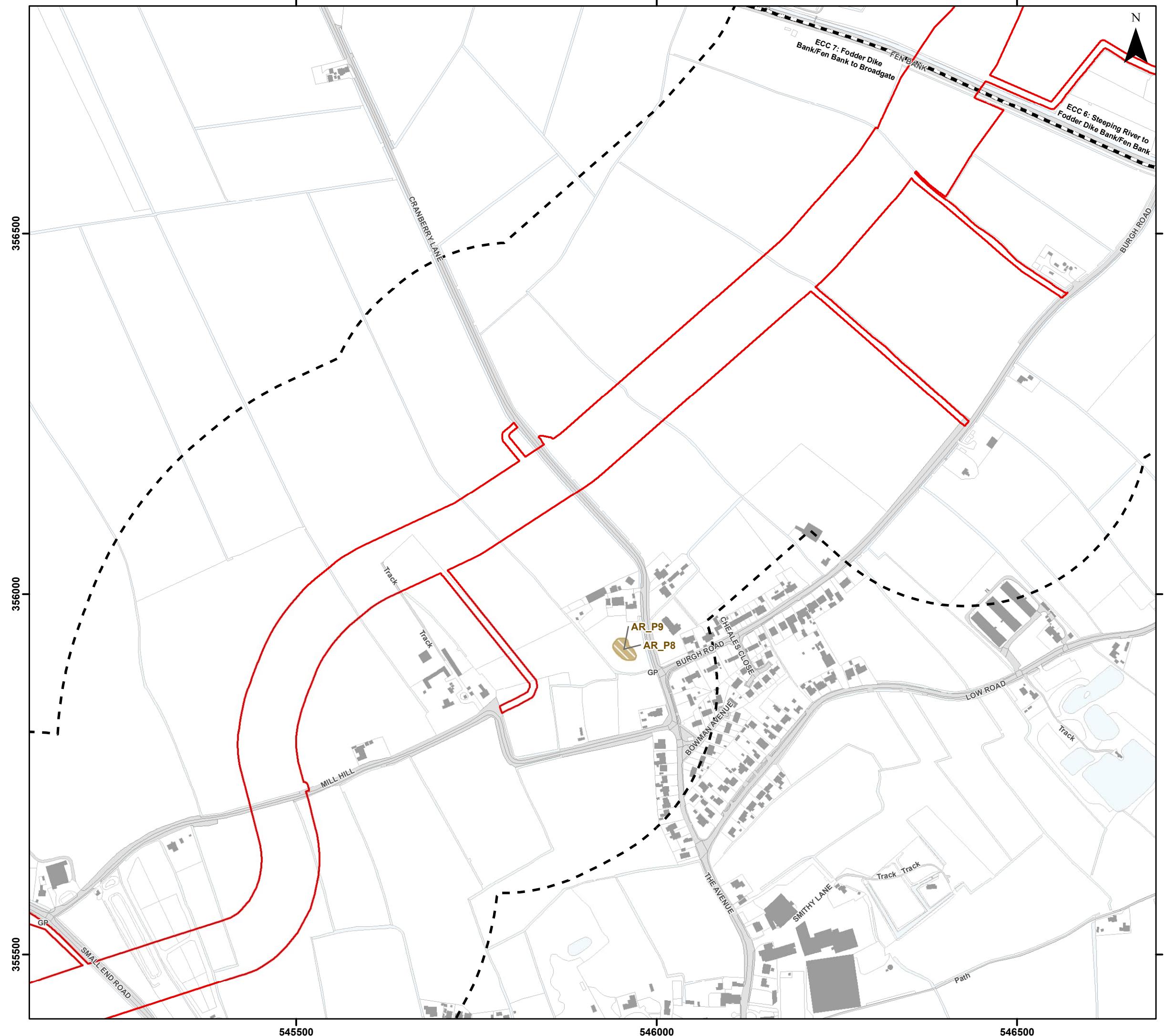
Figure 21.7.2.21

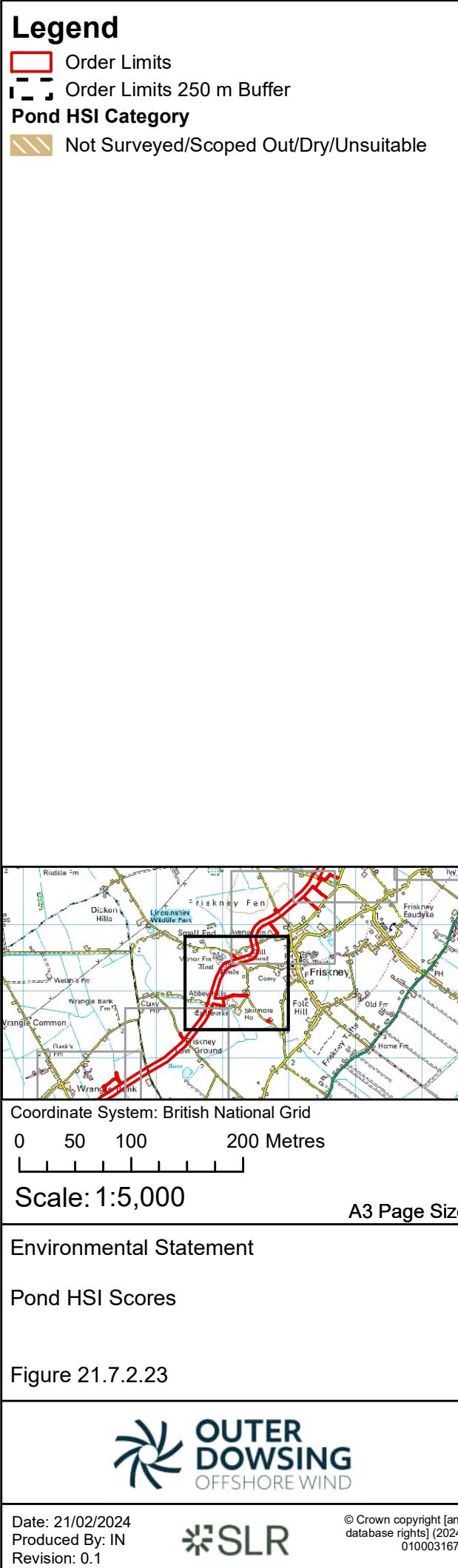
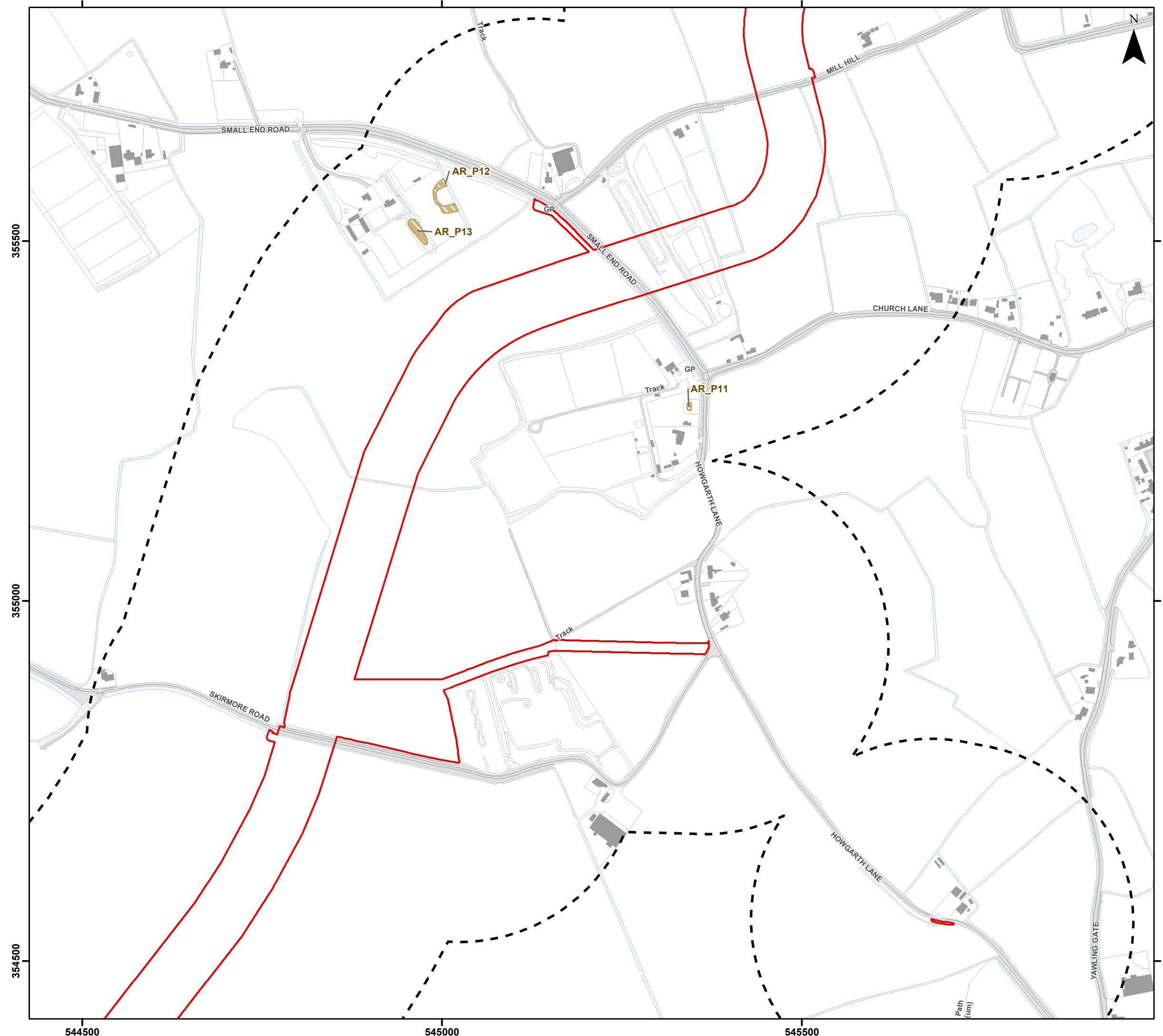


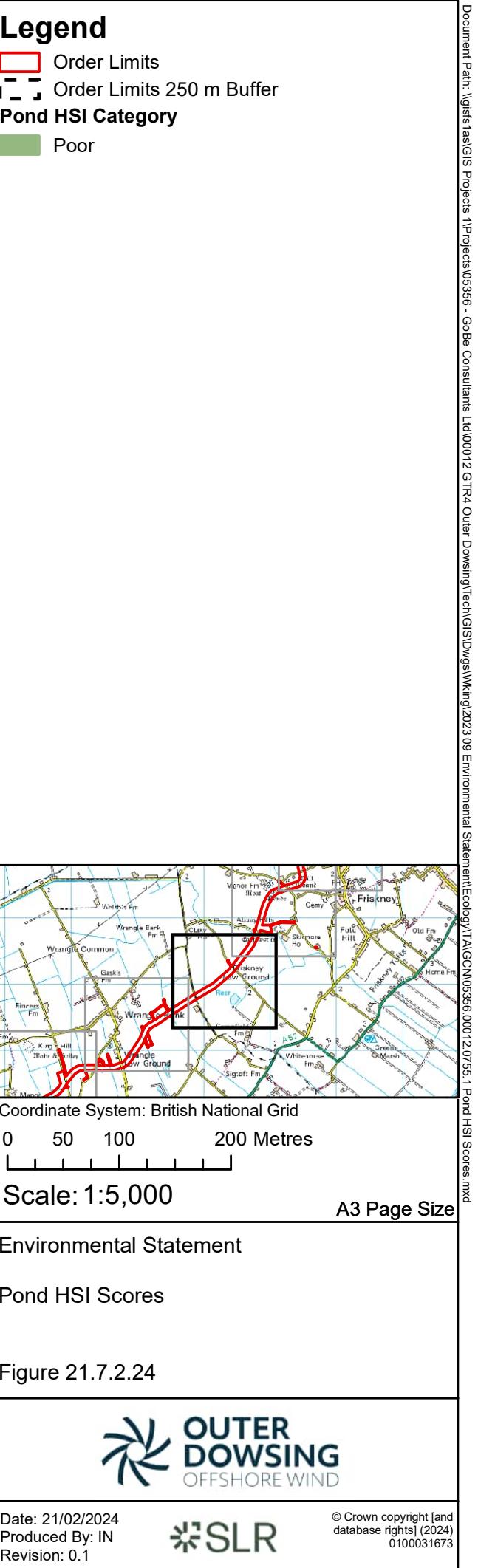
Date: 21/02/2024
Produced By: IN
Revision: 0.1

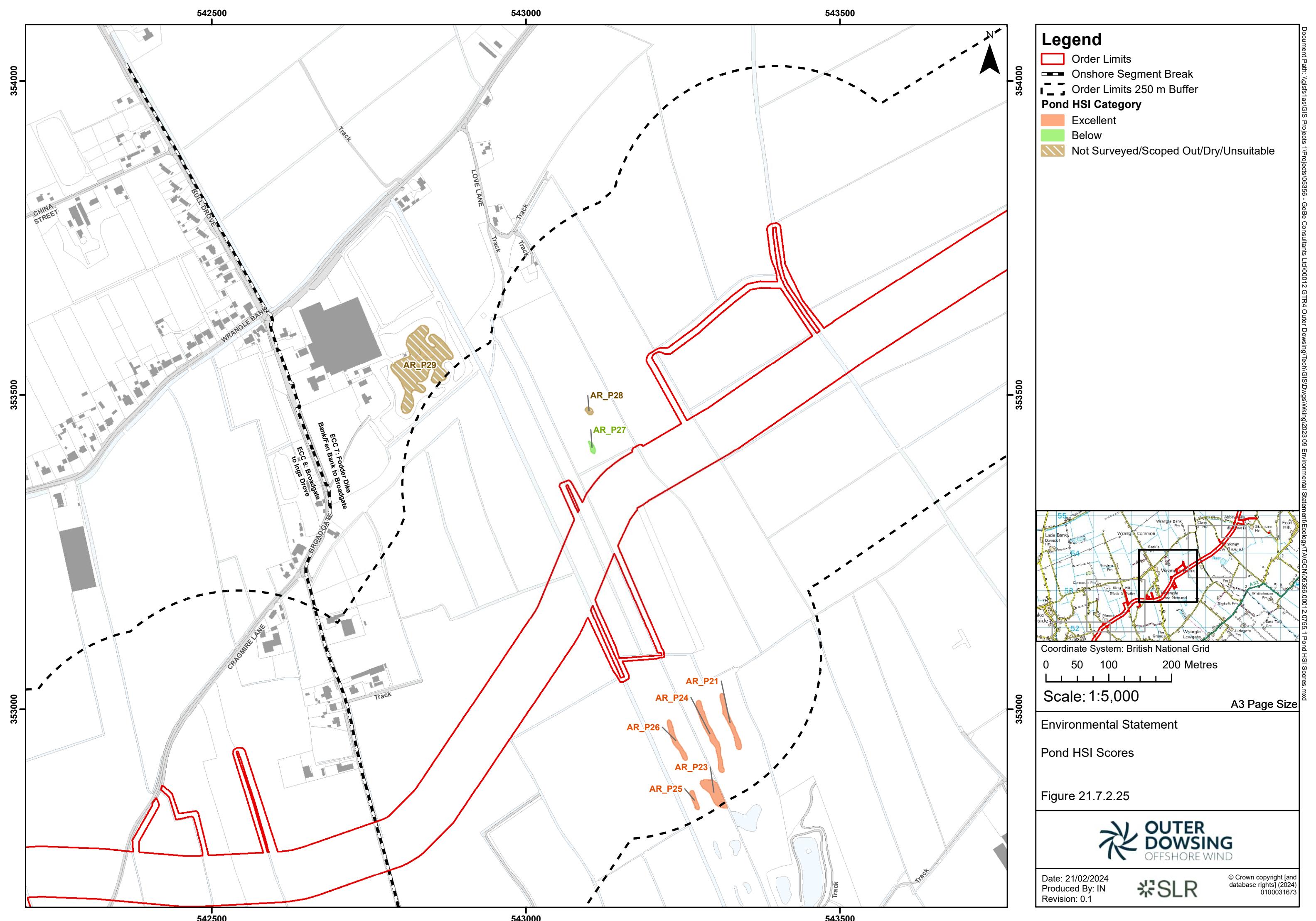
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0100031673

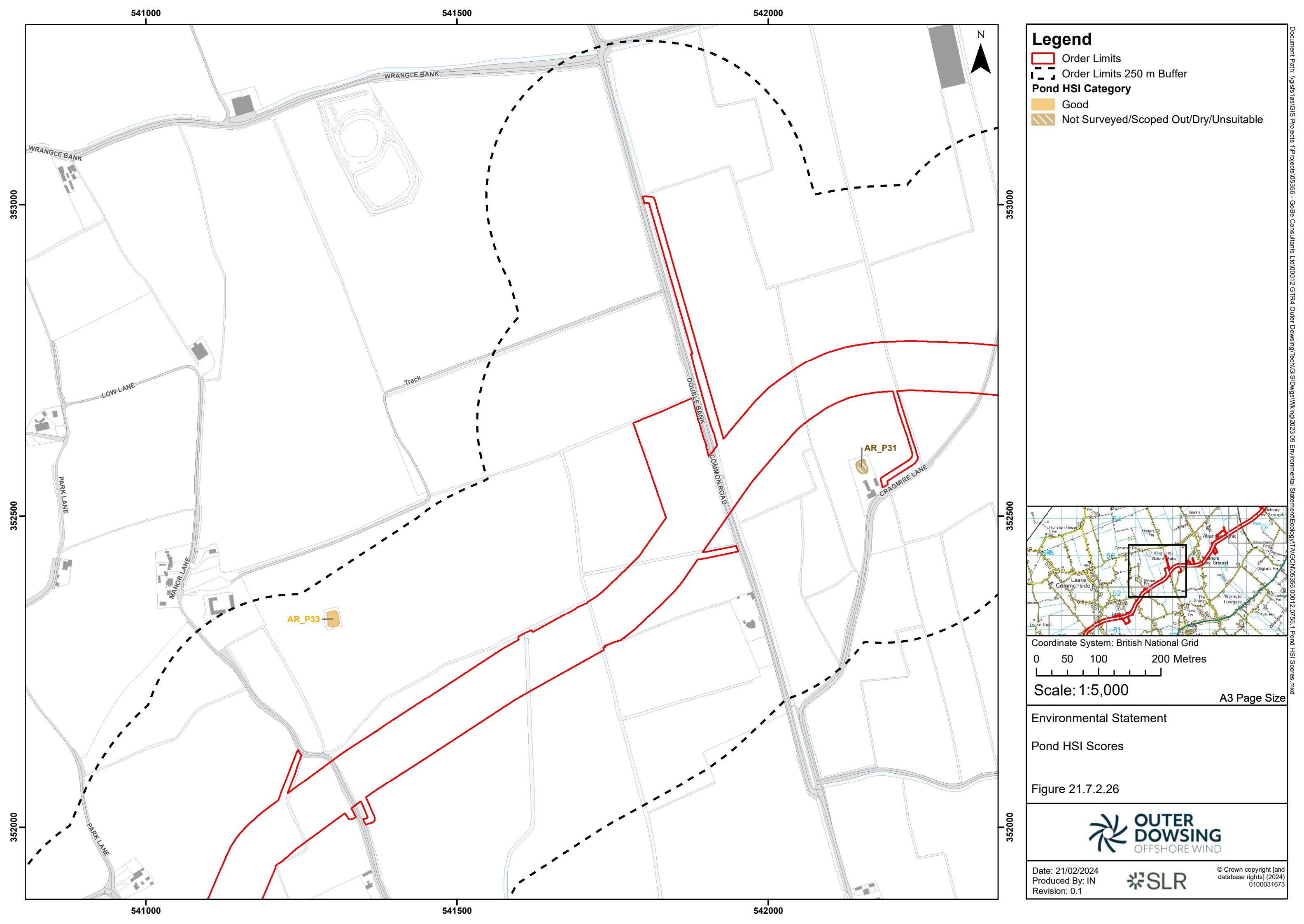


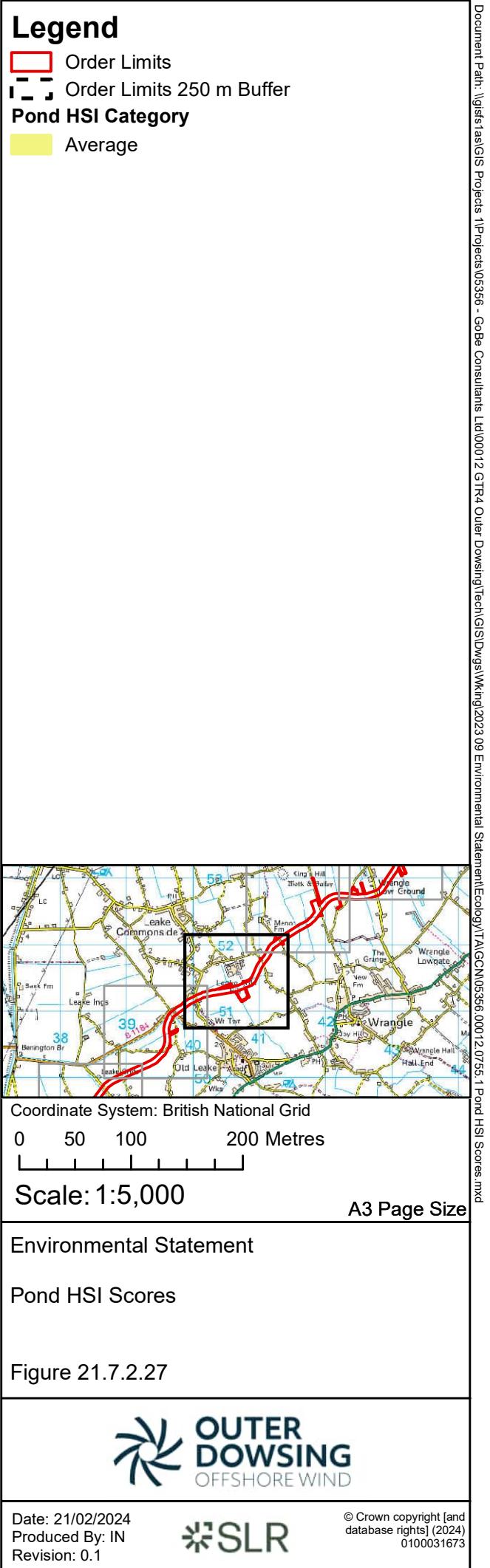
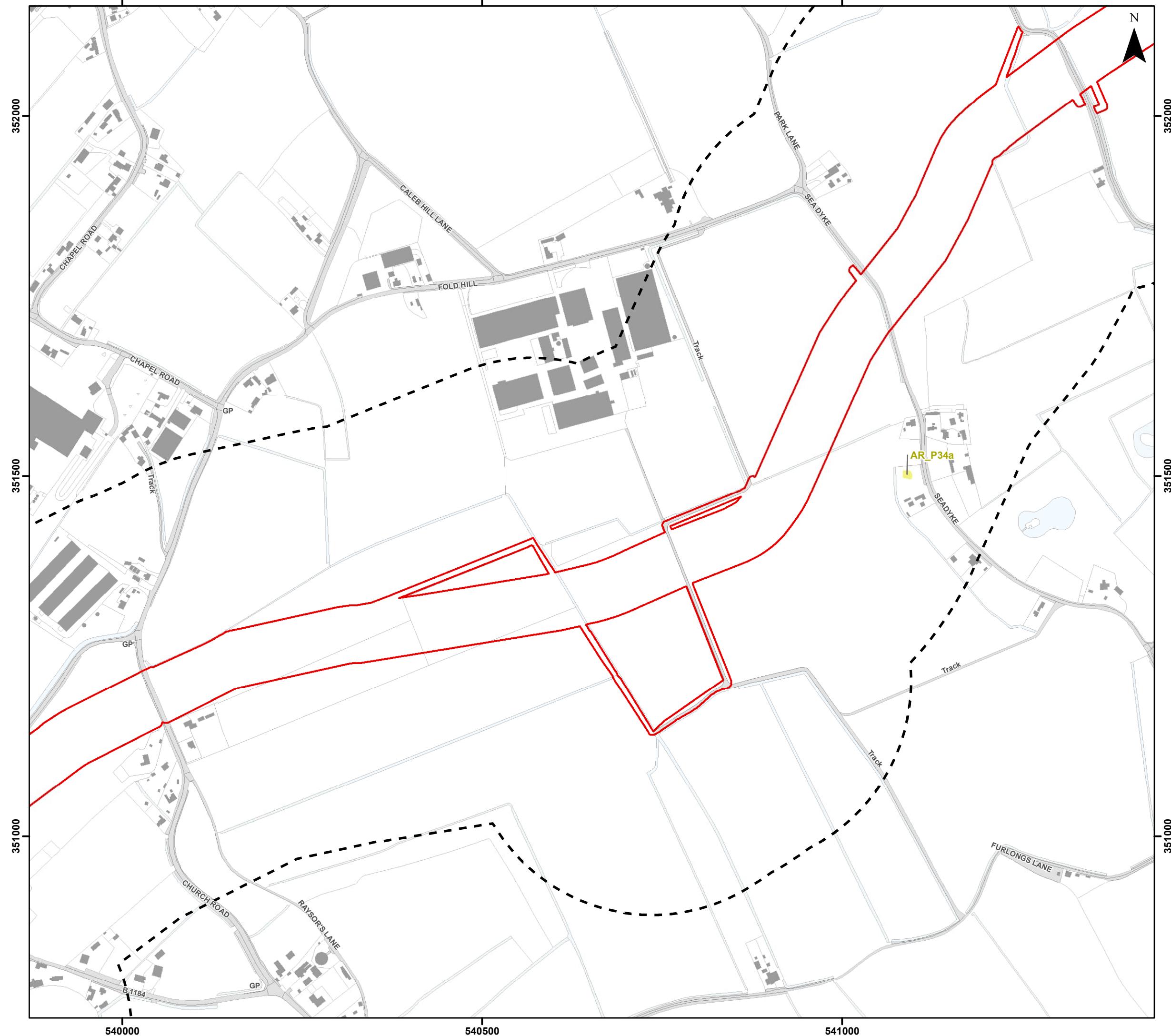


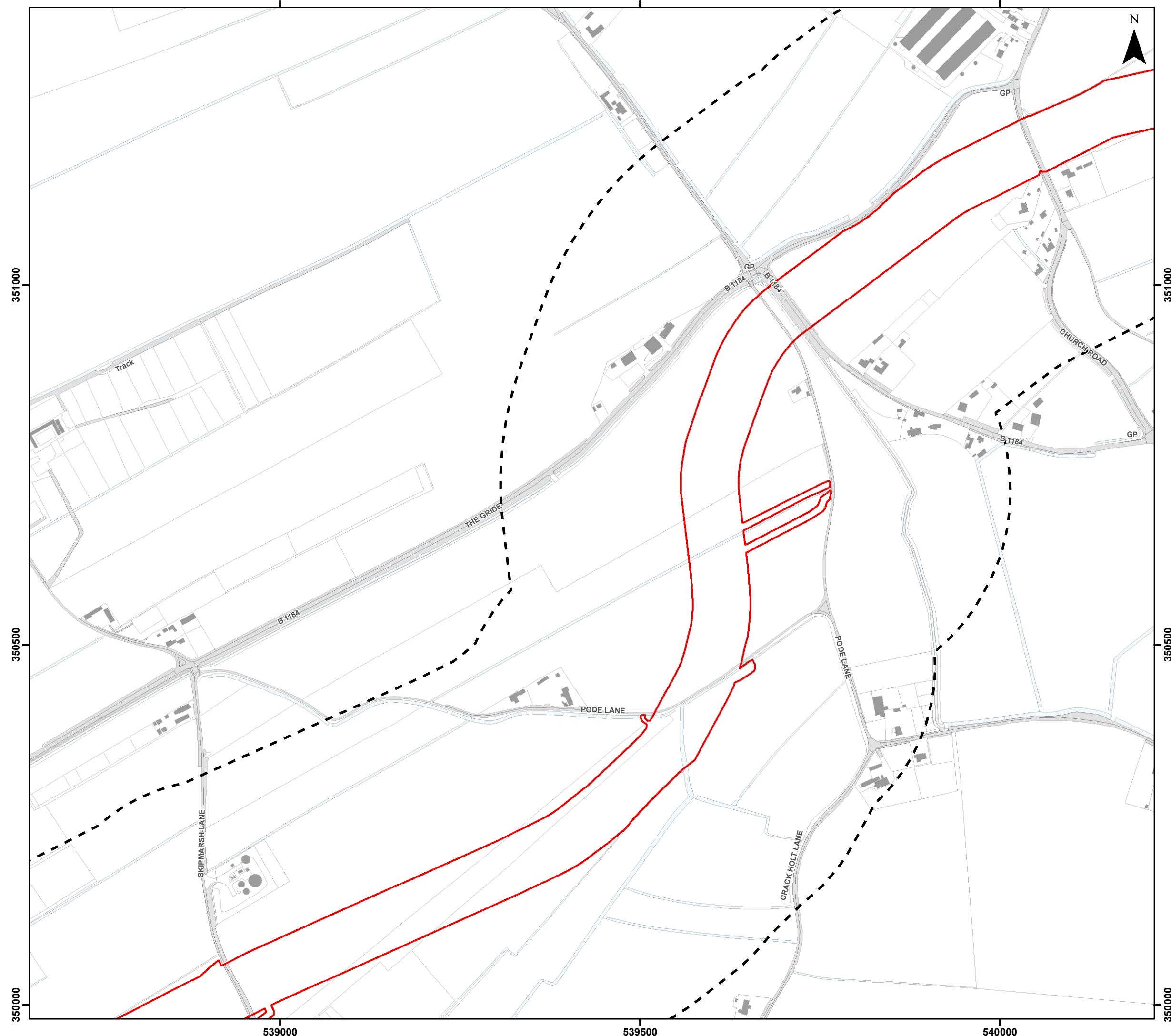






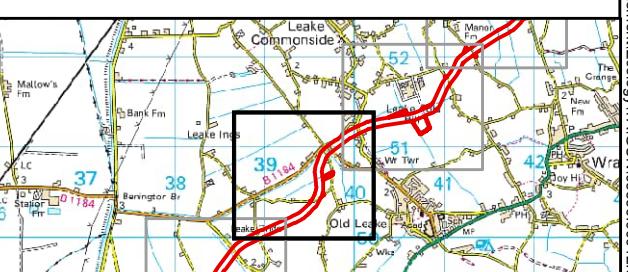






Legend

- Order Limits (Red solid line)
- Order Limits 250 m Buffer (Dashed black line)



Coordinate System: British National Grid
0 50 100 200 Metres
Scale: 1:5,000
A3 Page Size

Environmental Statement

Pond HSI Scores

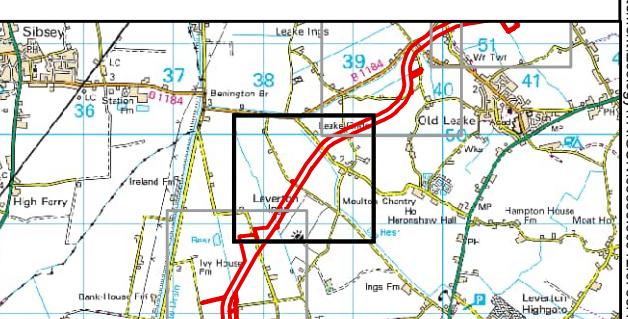
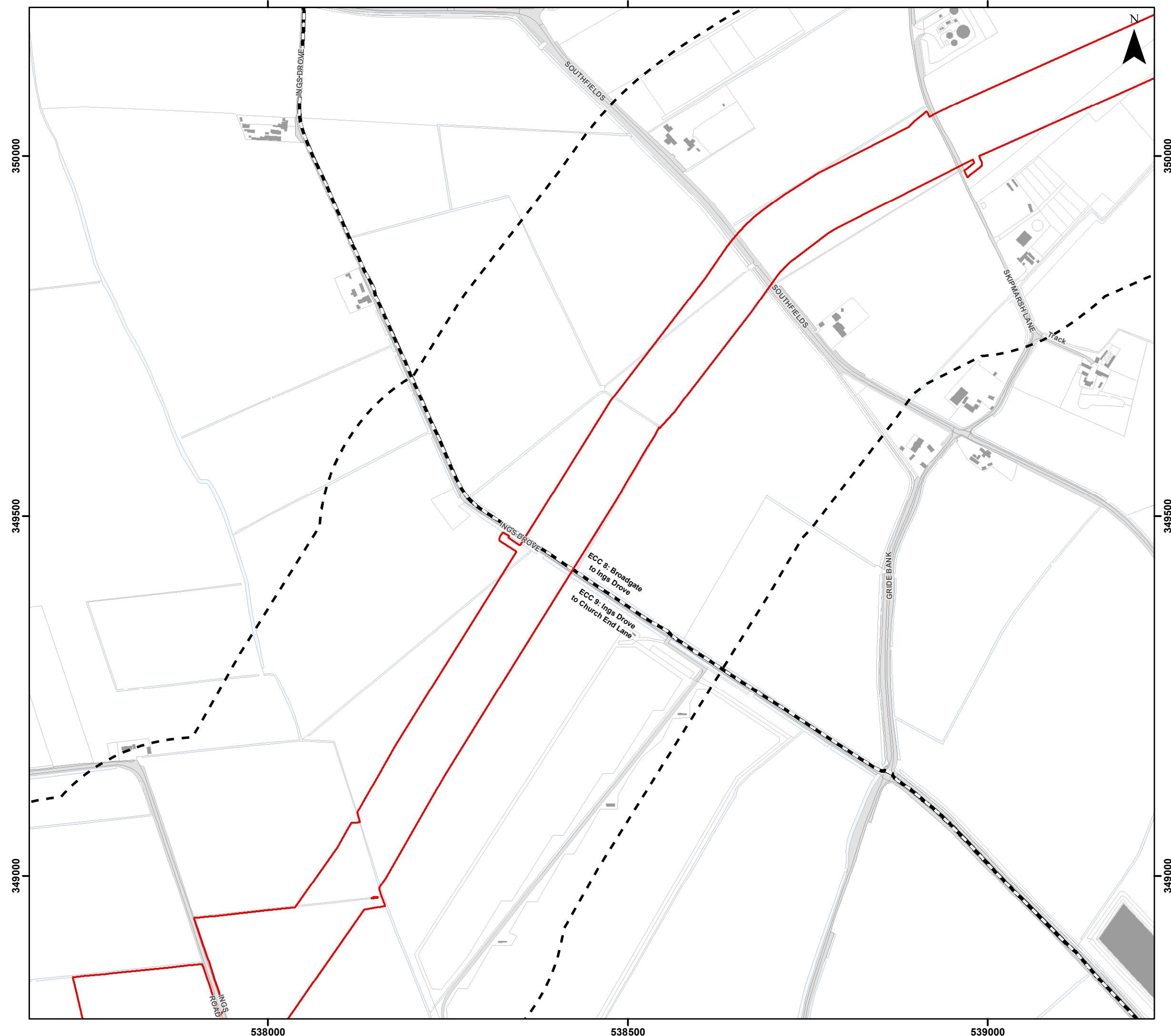
Figure 21.7.2.28



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Revision: 0.1

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Coordinate System: British National Grid
0 50 100 200 Metres

Scale: 1:5,000

A3 Page Size

Environmental Statement

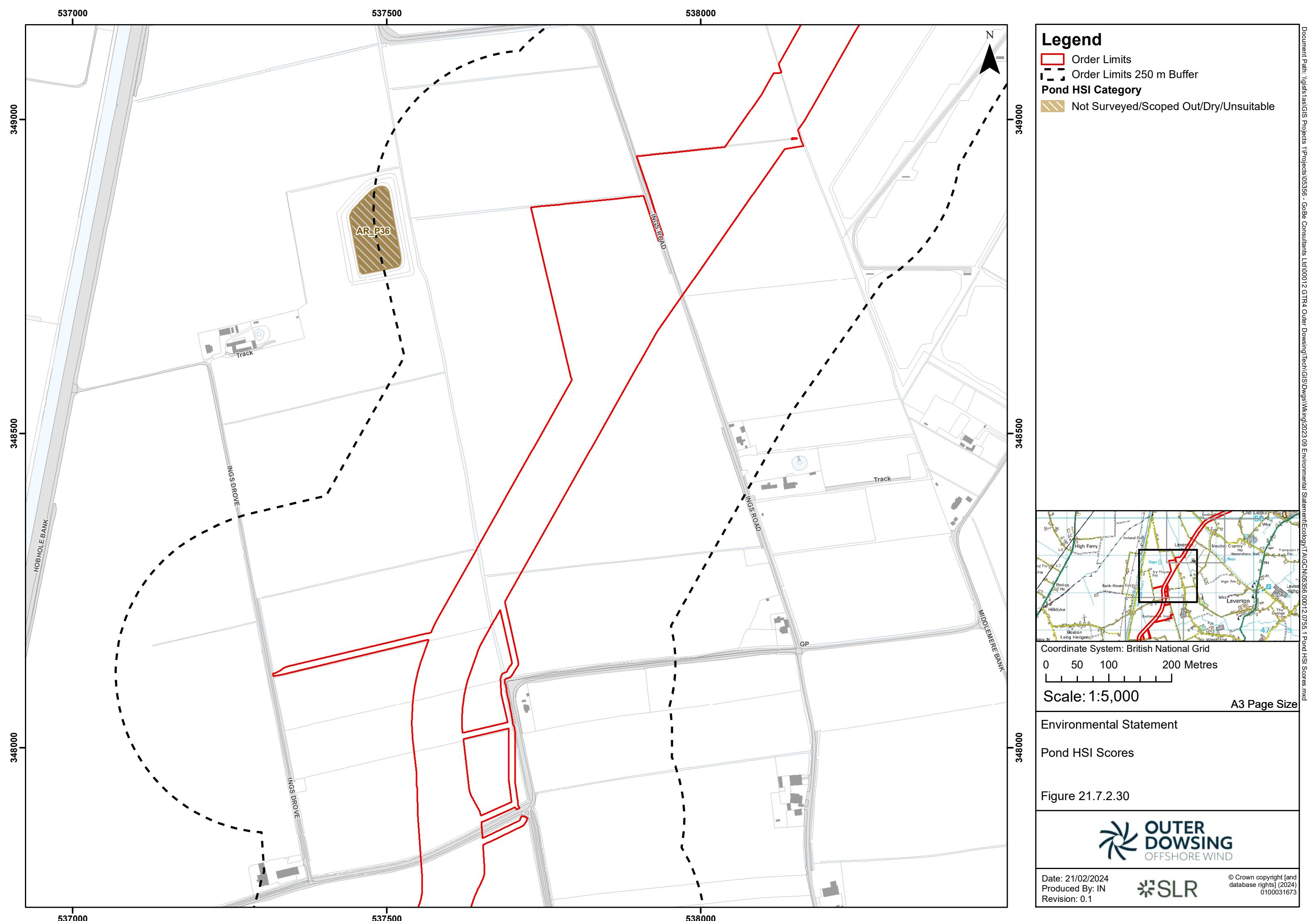
Pond HSI Scores

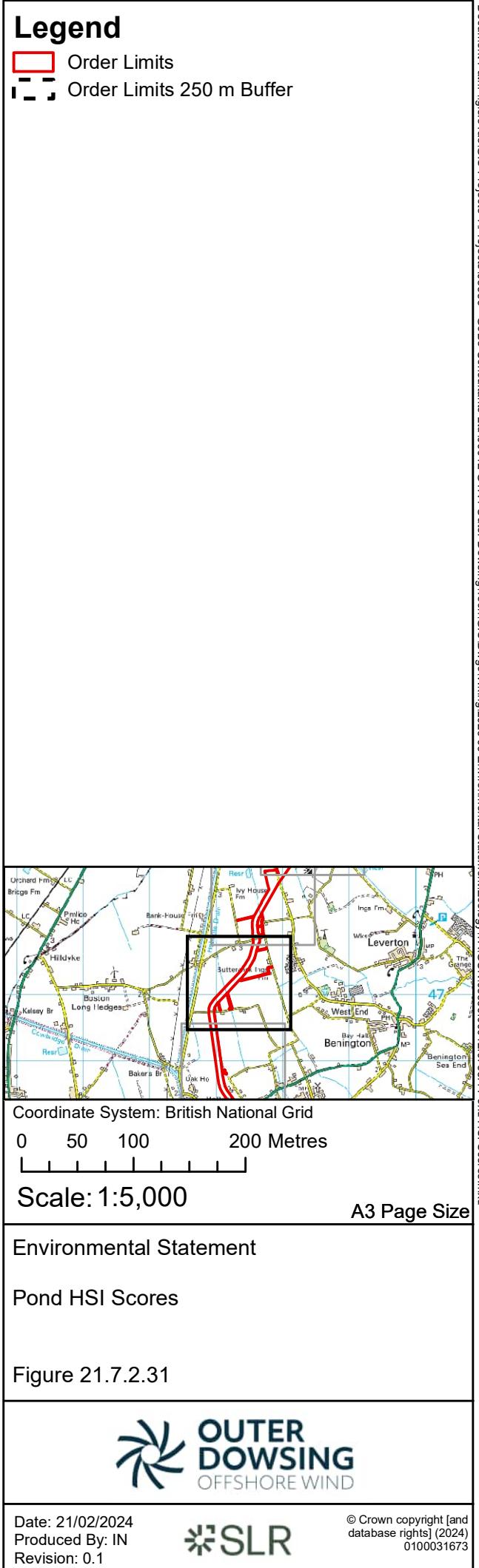
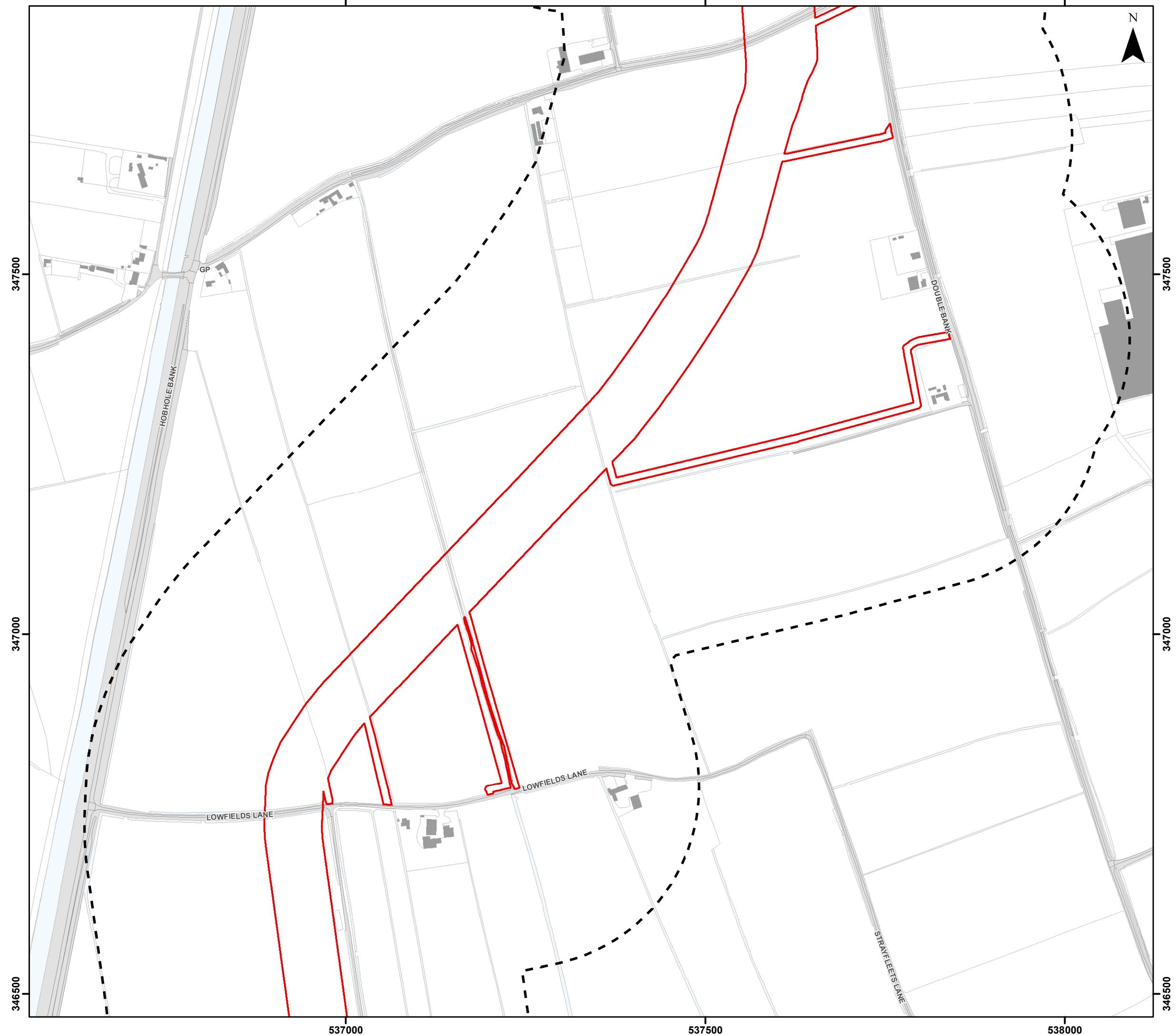
Figure 21.7.2.29

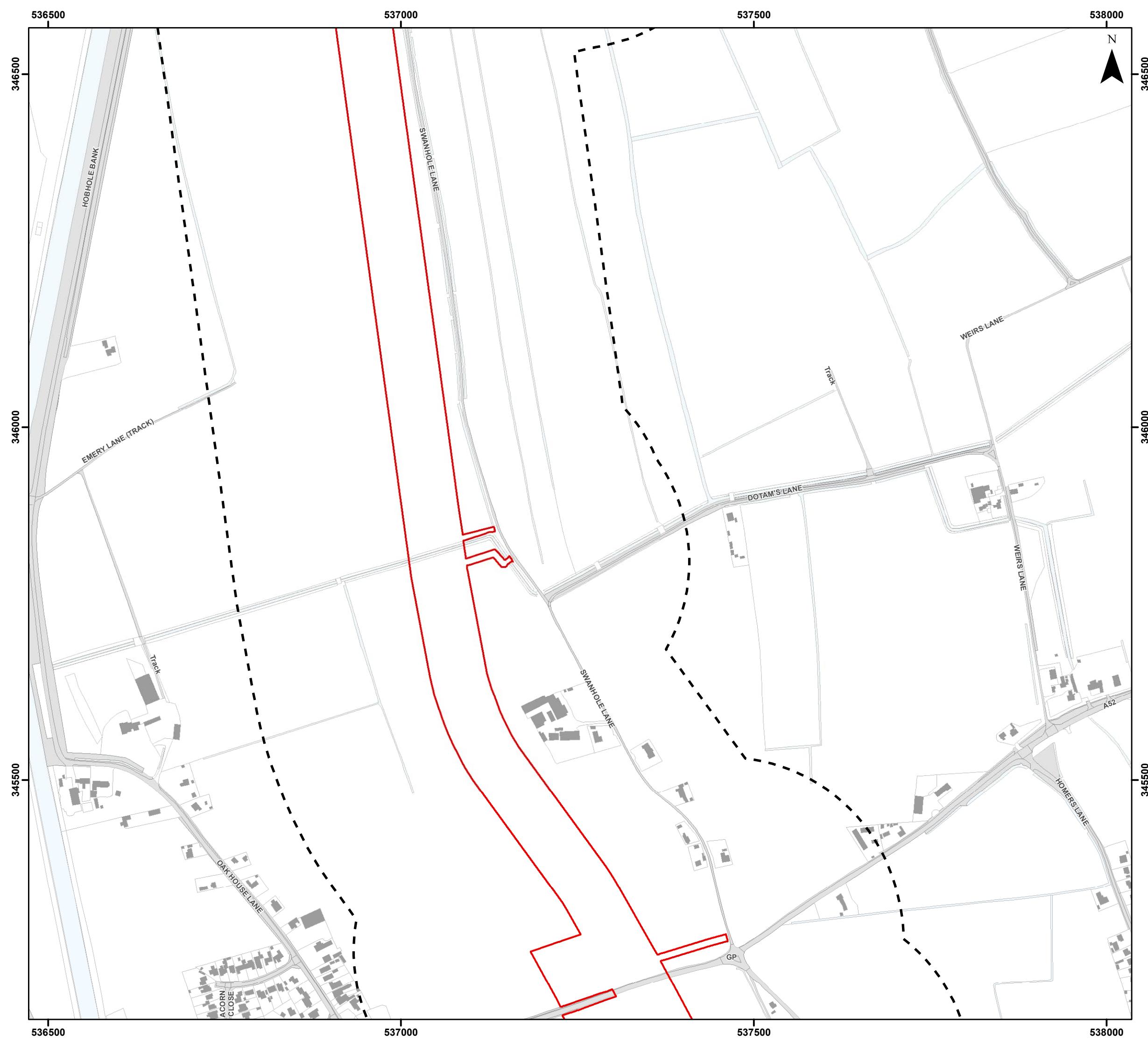
Outer Dowsing Offshore Wind

Date: 21/02/2024
Produced By: IN
Revision: 0.1

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0100031673

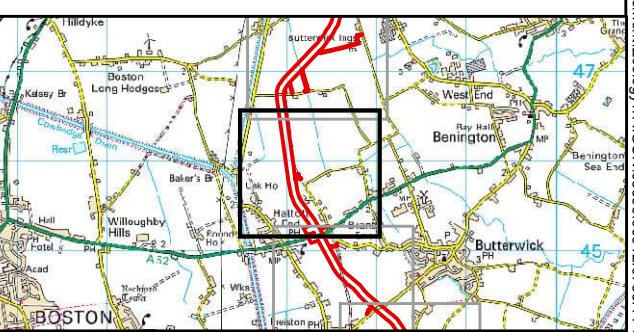






Legend

- Order Limits
- Order Limits 250 m Buffer



Coordinate System: British National Grid
0 50 100 200 Metres
Scale: 1:5,000

A3 Page Size

Environmental Statement

Pond HSI Scores

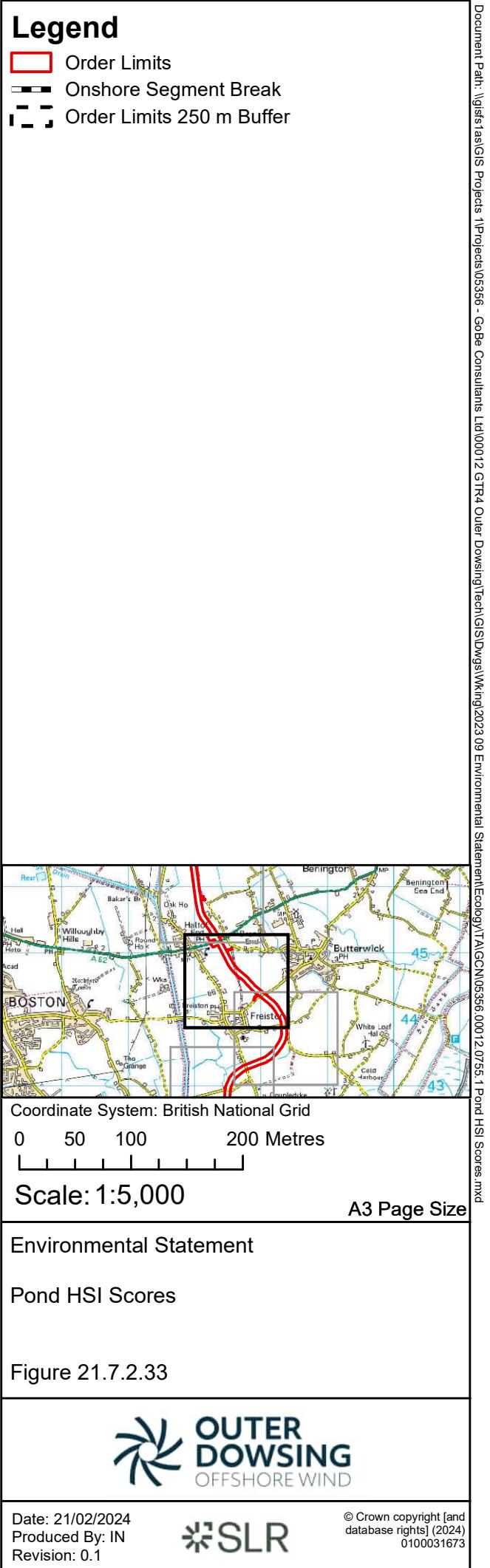
Figure 21.7.2.32

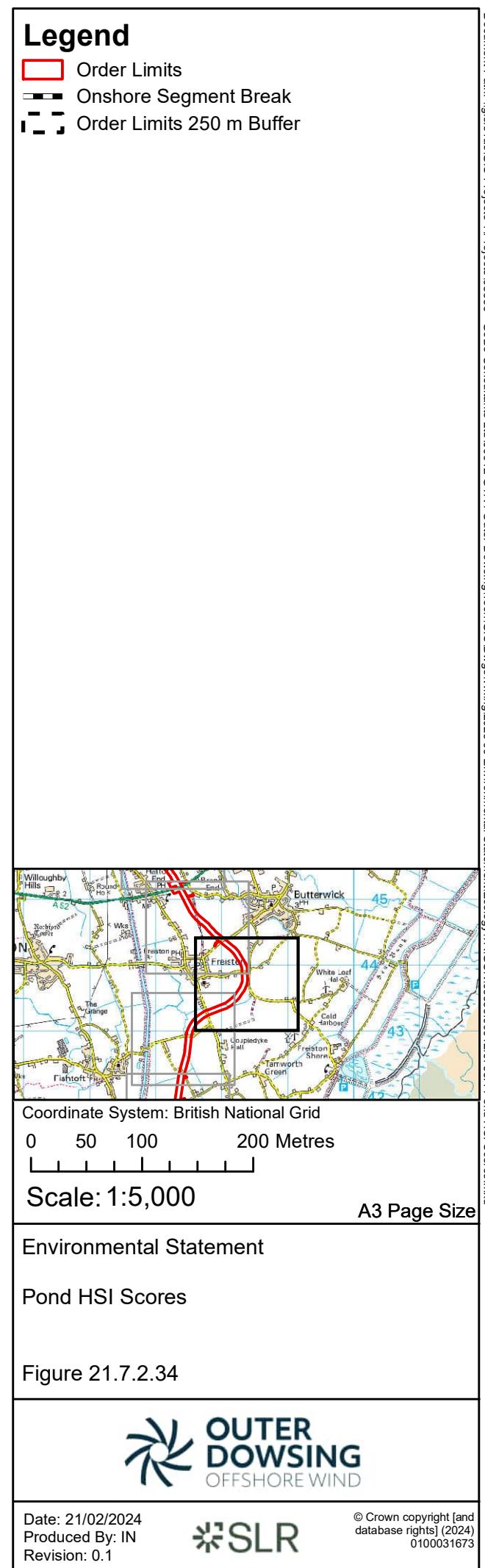
**OUTER
DOWSING**
OFFSHORE WIND

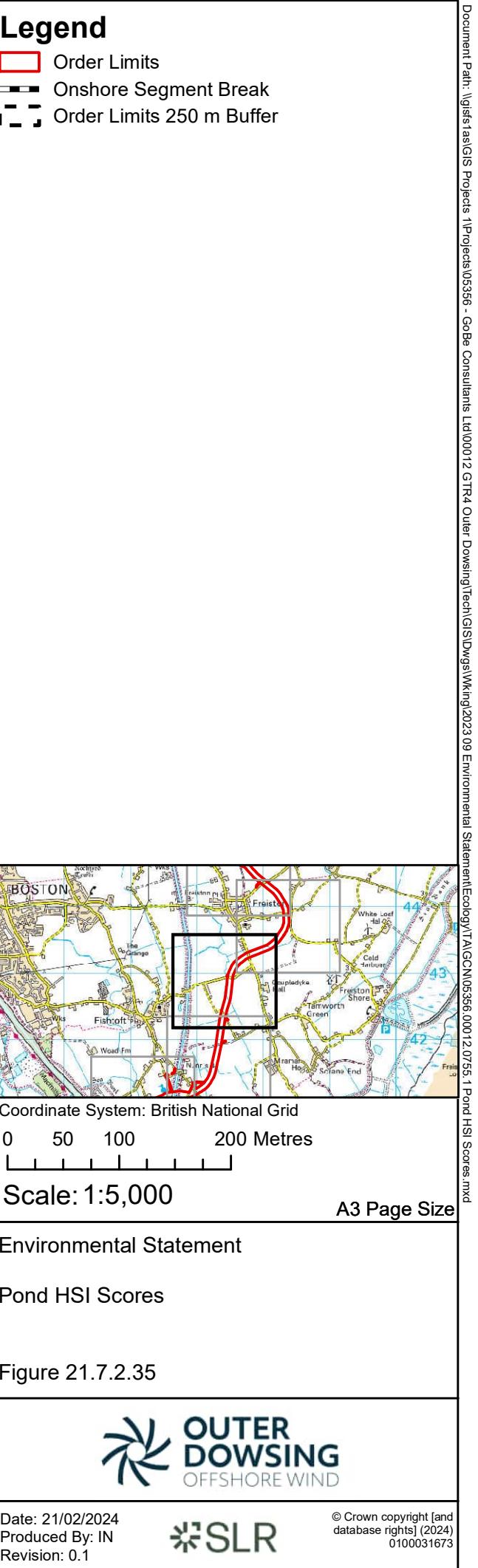
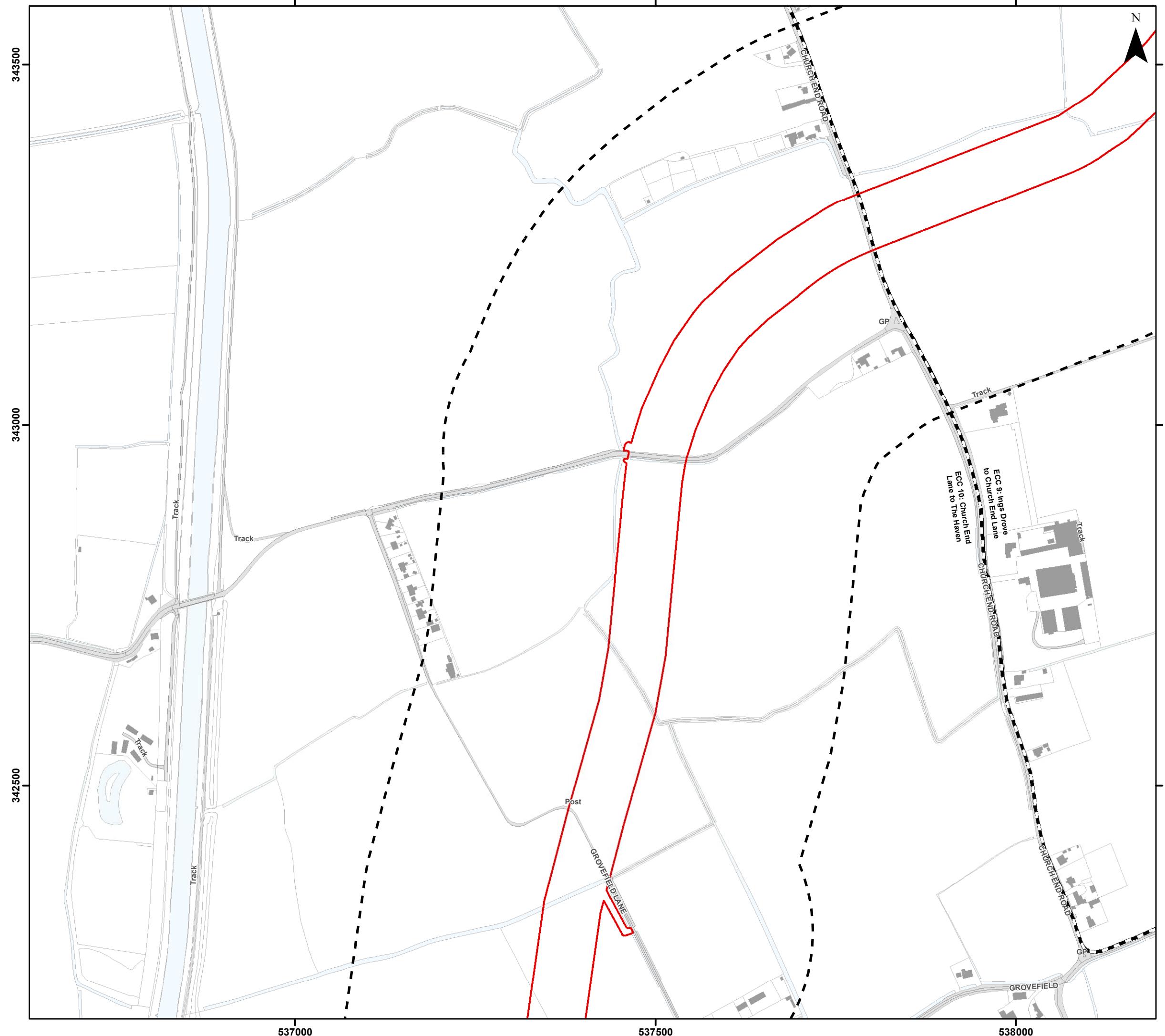
Date: 21/02/2024
Produced By: IN
Revision: 0.1

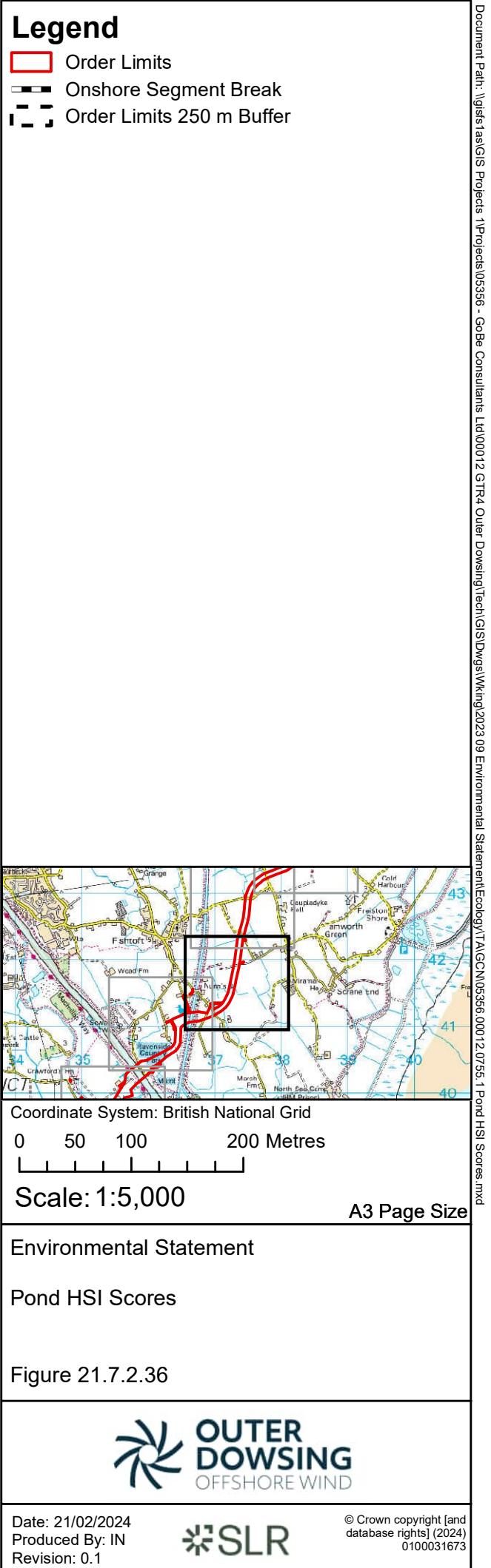
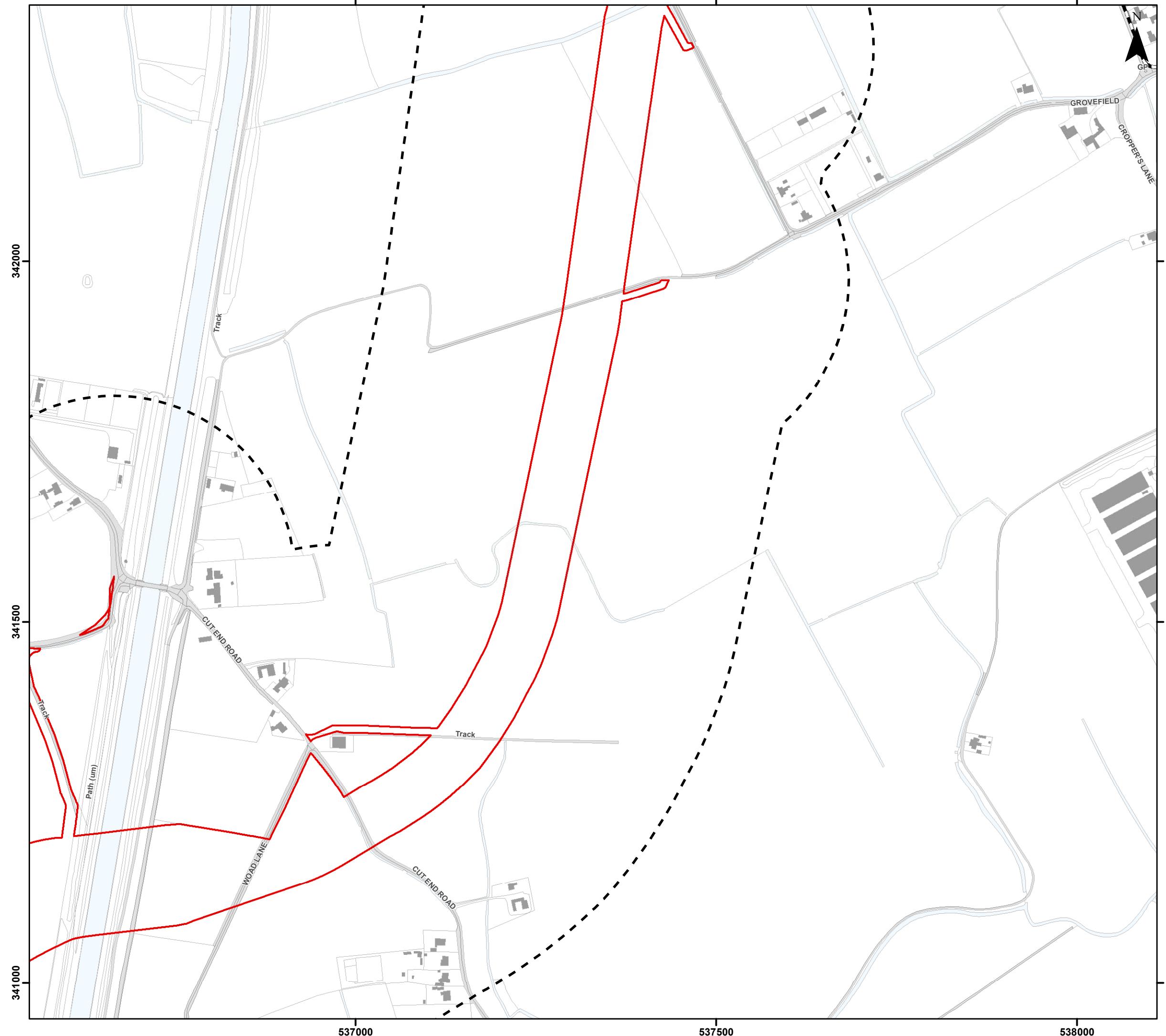
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0100031673

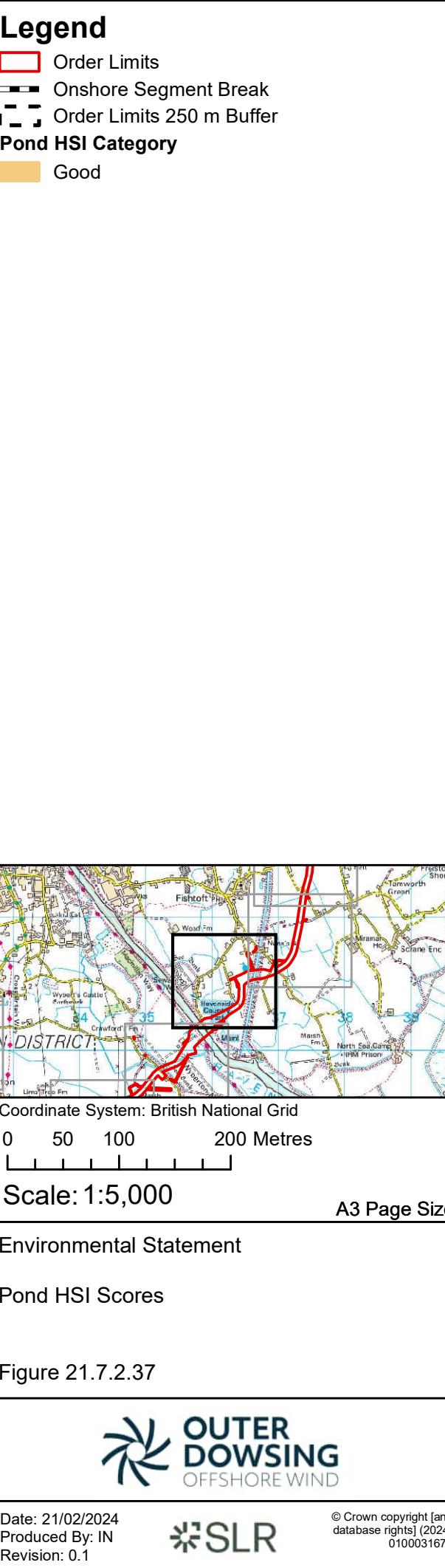
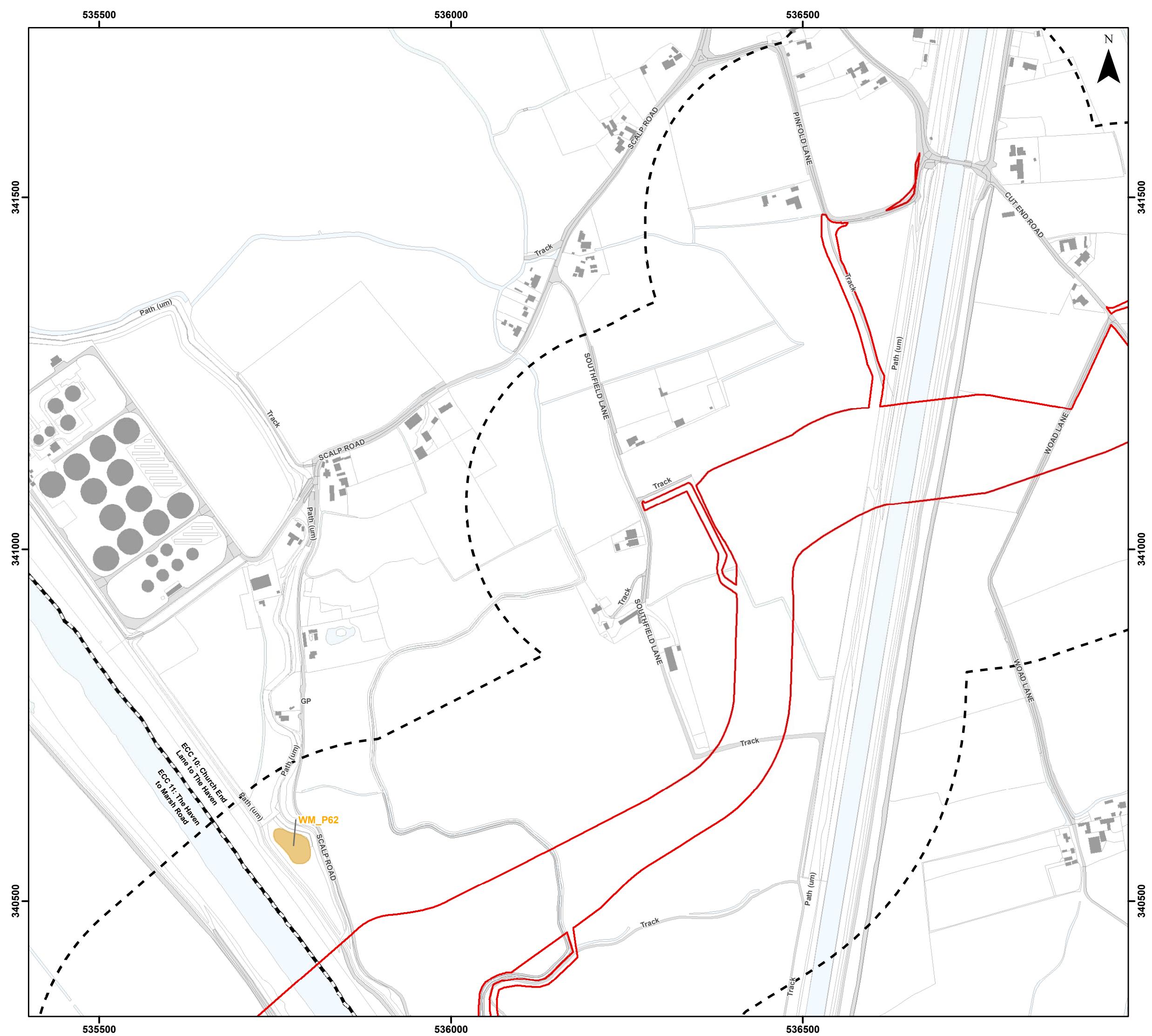
SLR













Legend

- Order Limits (Red Box)
- Order Limits 250 m Buffer (Dashed Line)



Coordinate System: British National Grid

0 50 100 200 Metres

Scale: 1:5,000

A3 Page Size

Environmental Statement

Pond HSI Scores

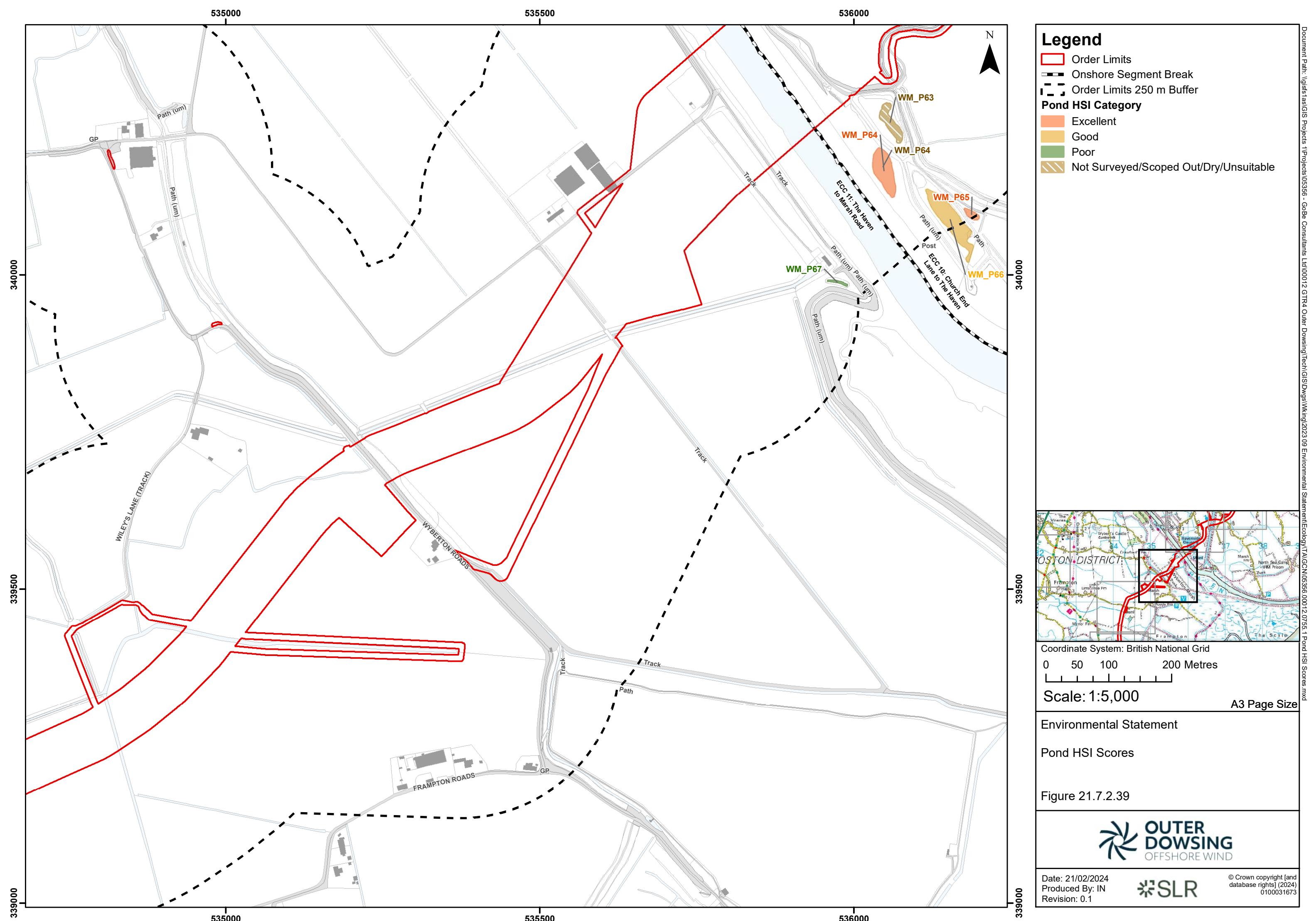
Figure 21.7.2.38

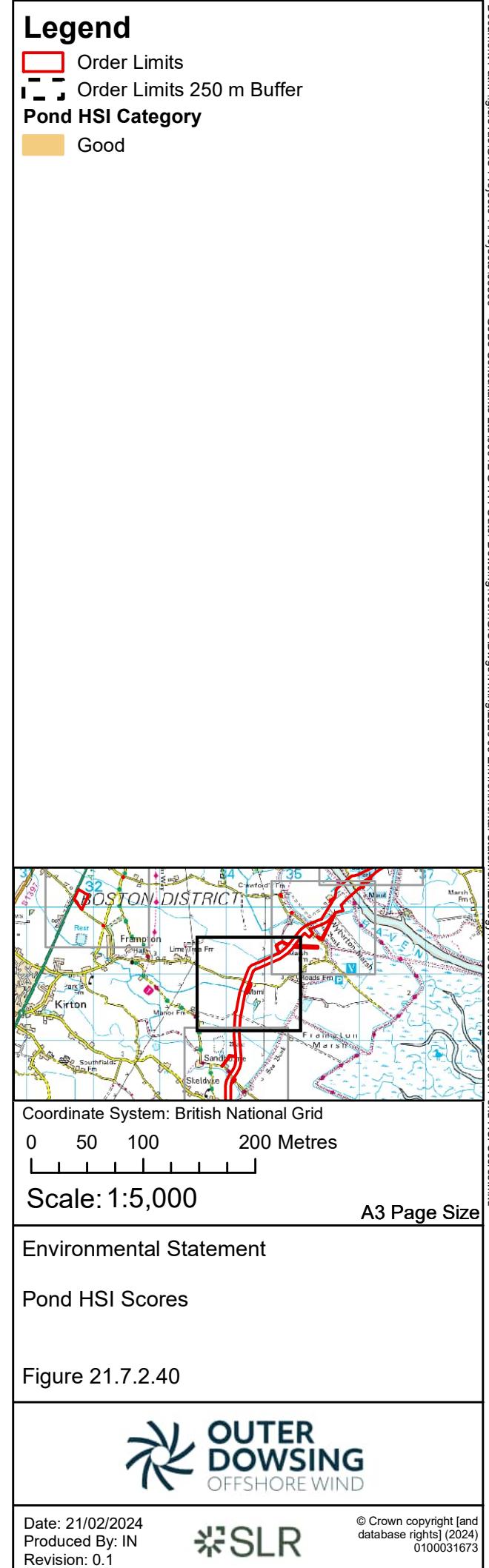
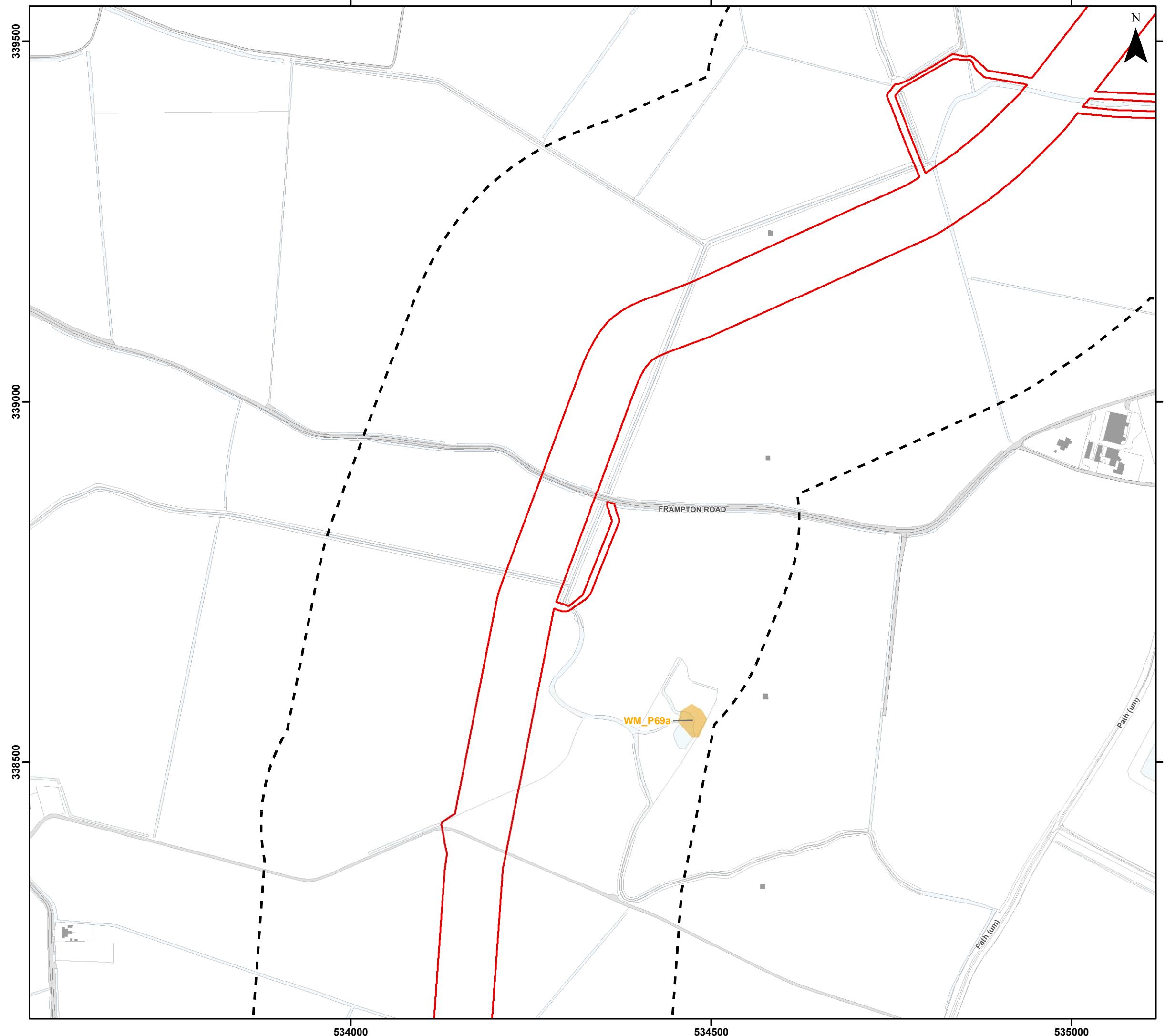
 **OUTER
DOWSING**
OFFSHORE WIND

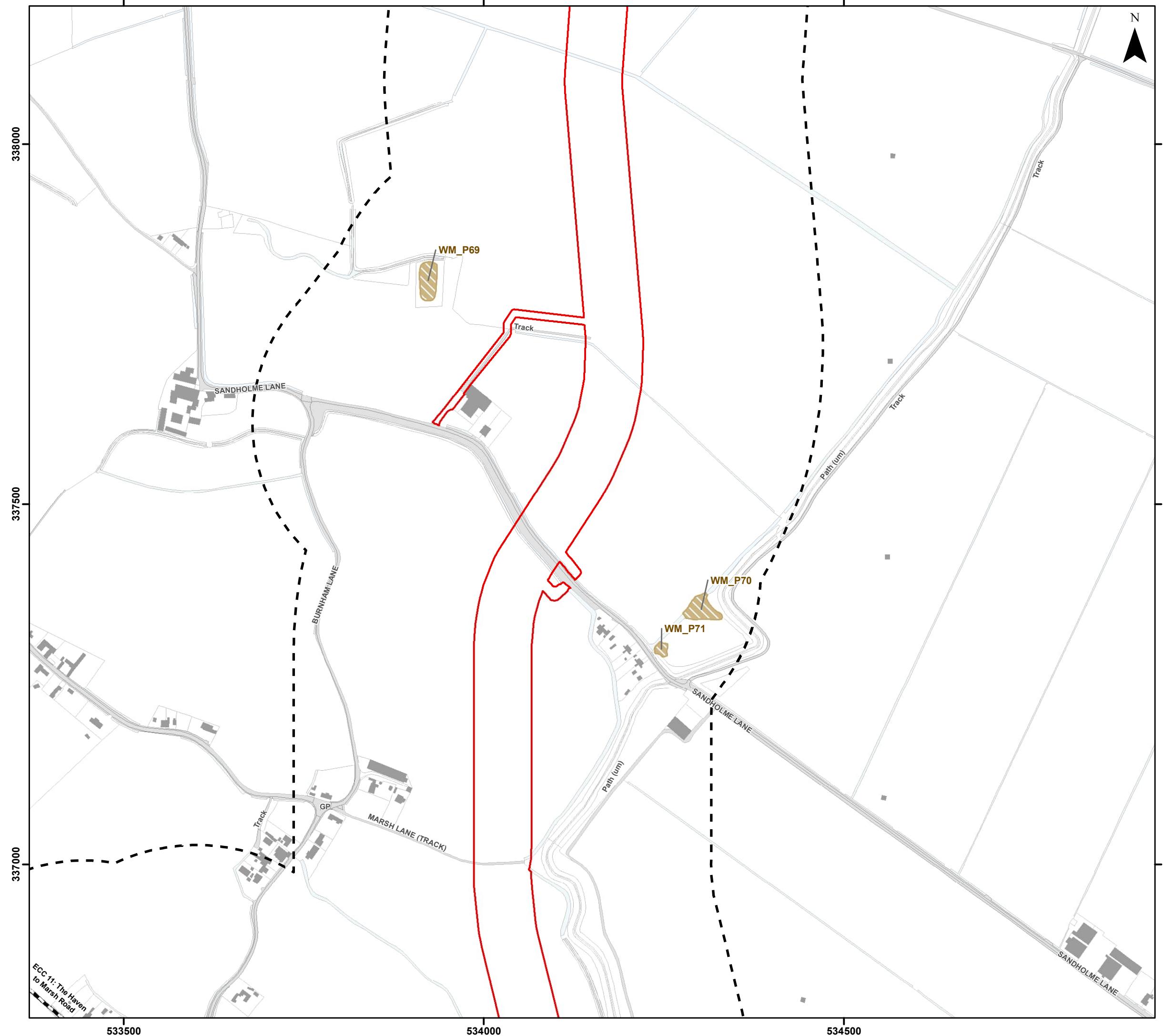
Date: 21/02/2024
Produced By: IN
Revision: 0.1

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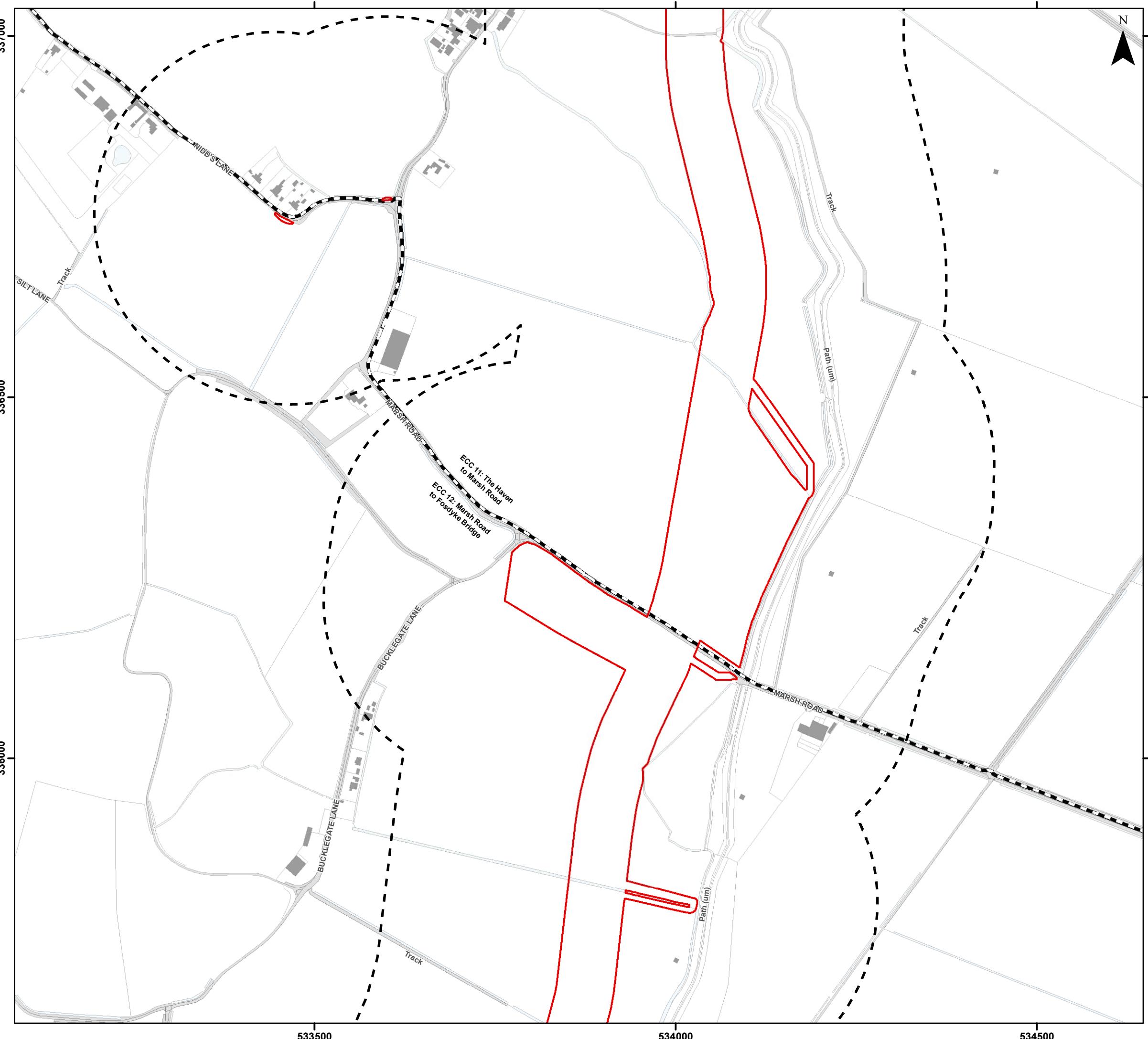






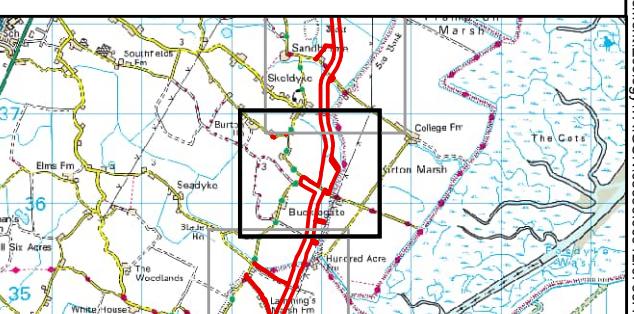


Legend
Order Limits
Onshore Segment Break
Order Limits 250 m Buffer
Pond HSI Category
Not Surveyed/Scoped Out/Dry/Unsuitable
Coordinate System: British National Grid
0 50 100 200 Metres
Scale: 1:5,000
A3 Page Size
Environmental Statement
Pond HSI Scores
Figure 21.7.2.41
 OUTER DOWSING OFFSHORE WIND
Date: 21/02/2024
Produced By: IN
Revision: 0.1
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SLR



Legend

- Order Limits
- Onshore Segment Break
- Order Limits 250 m Buffer



Coordinate System: British National Grid

0 50 100 200 Metres

Scale: 1:5,000

A3 Page Size

Environmental Statement

Pond HSI Scores

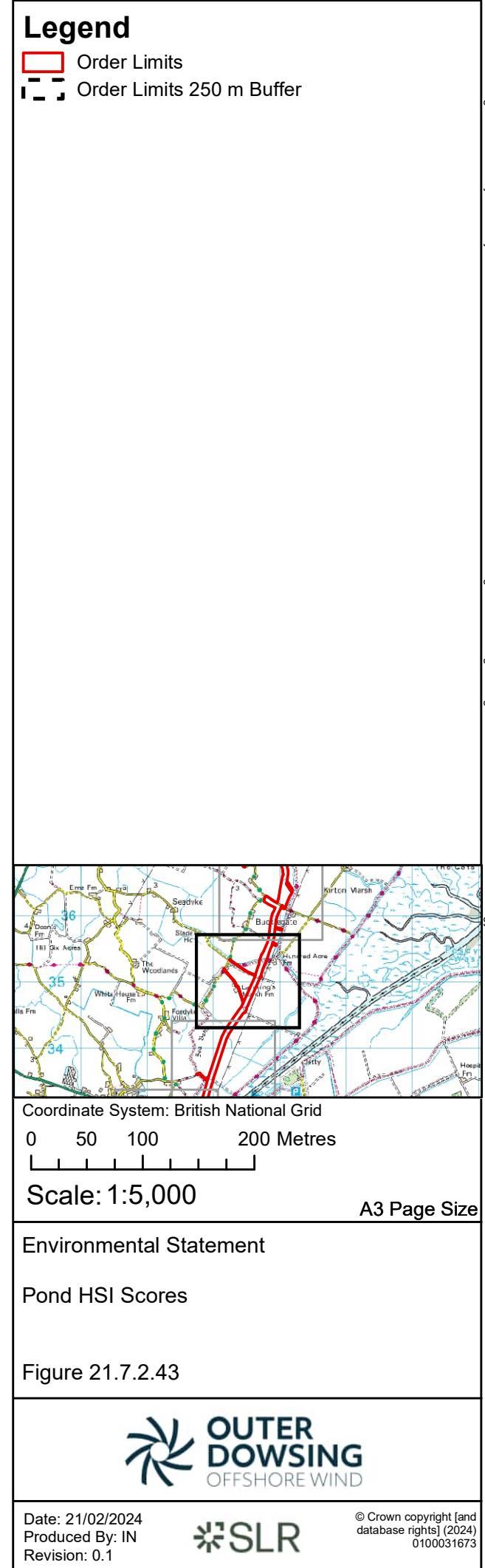
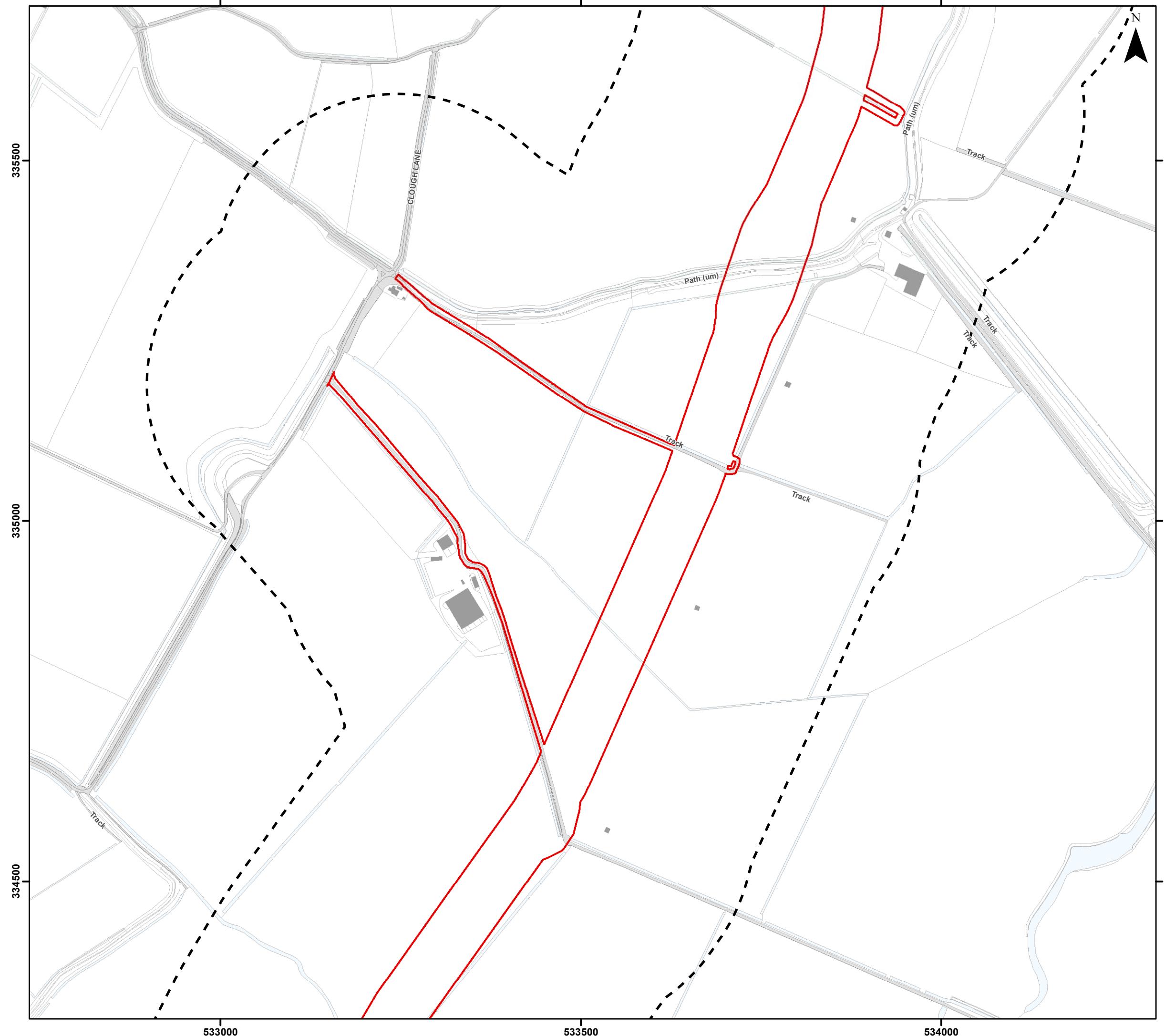
Figure 21.7.2.42

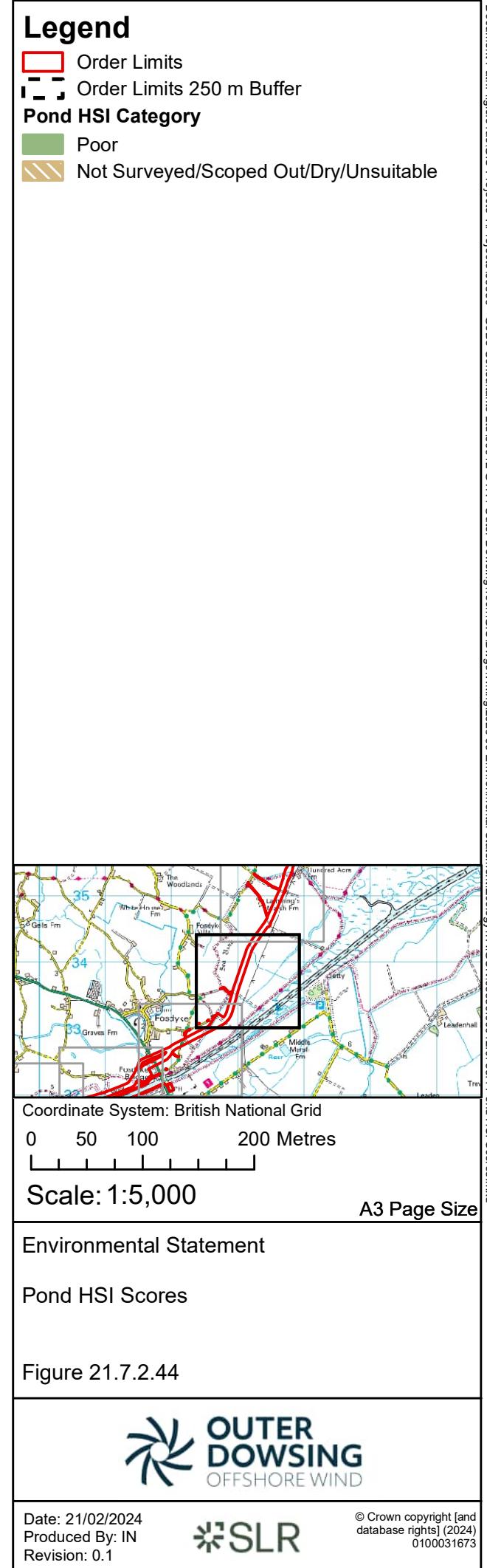
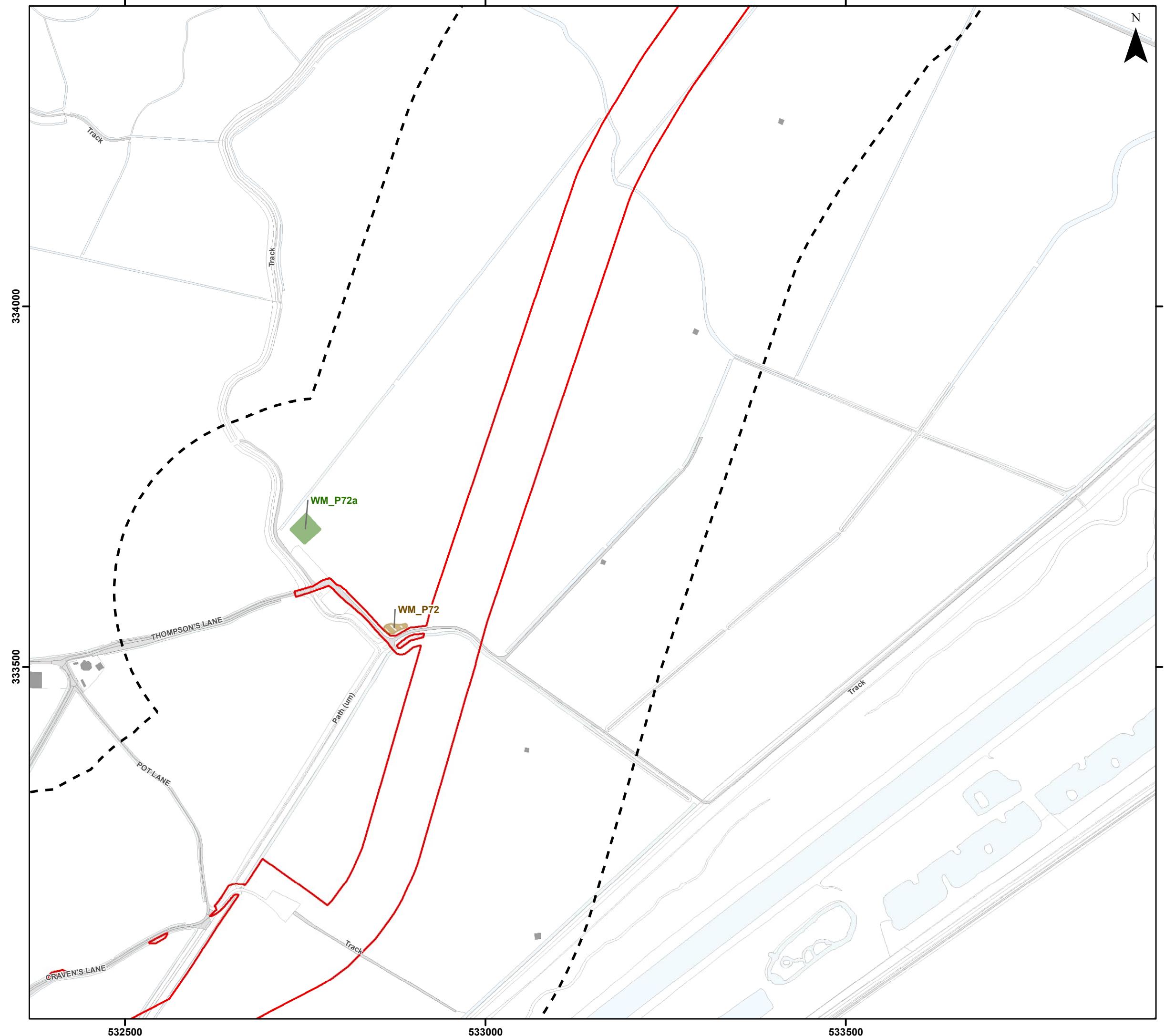
**OUTER
DOWSING**
OFFSHORE WIND

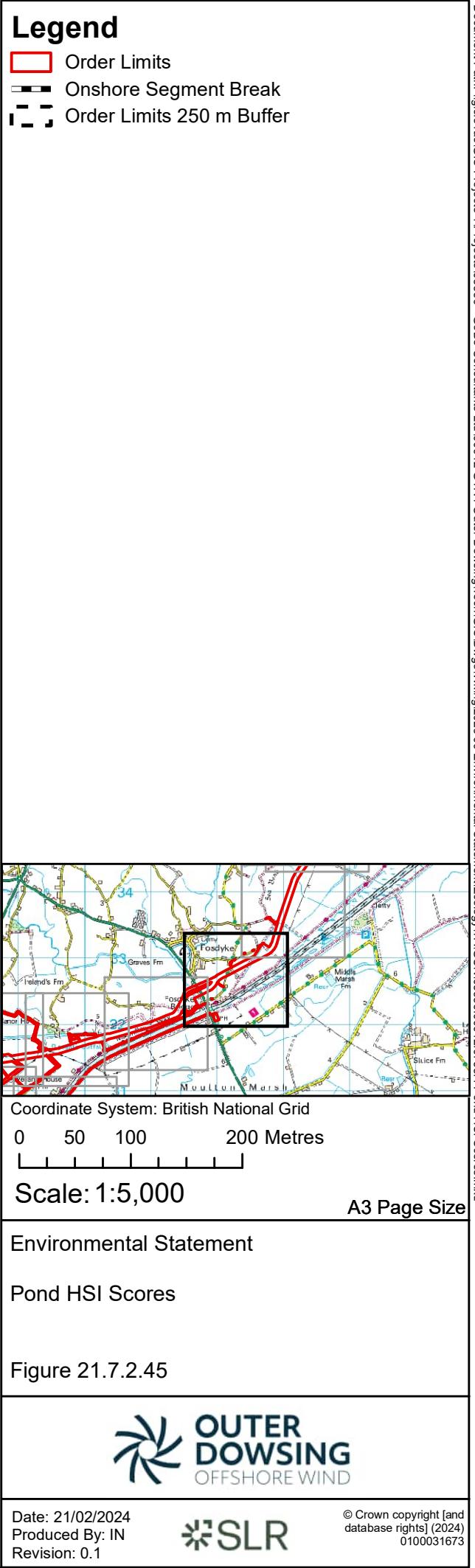
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Produced By: IN
Revision: 0.1

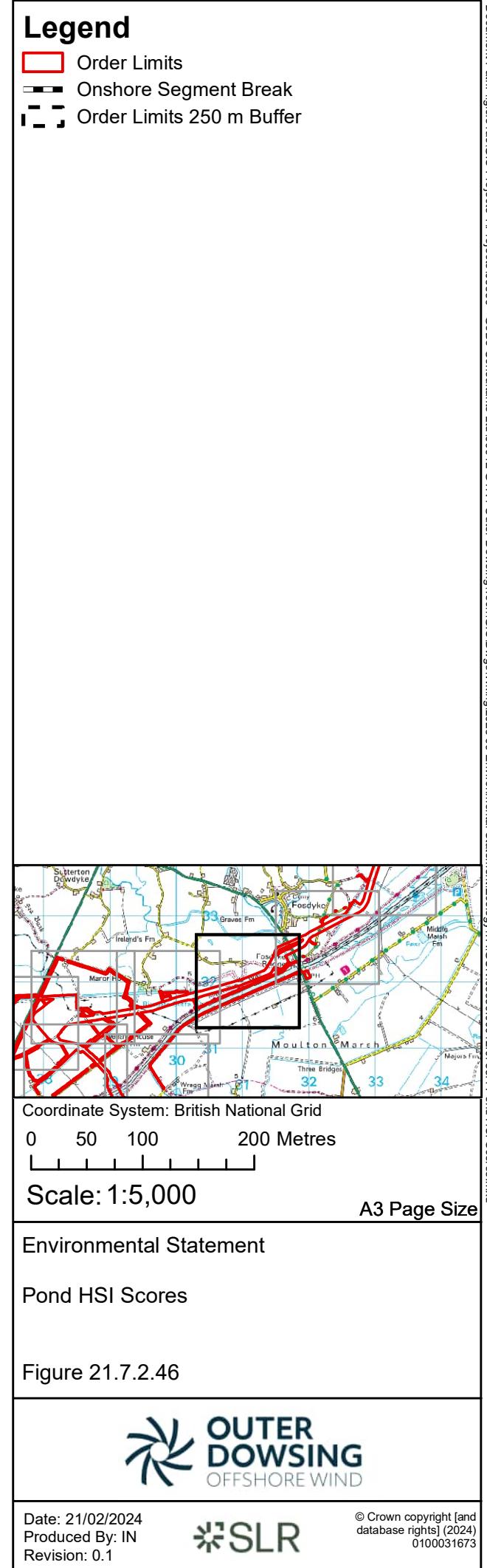
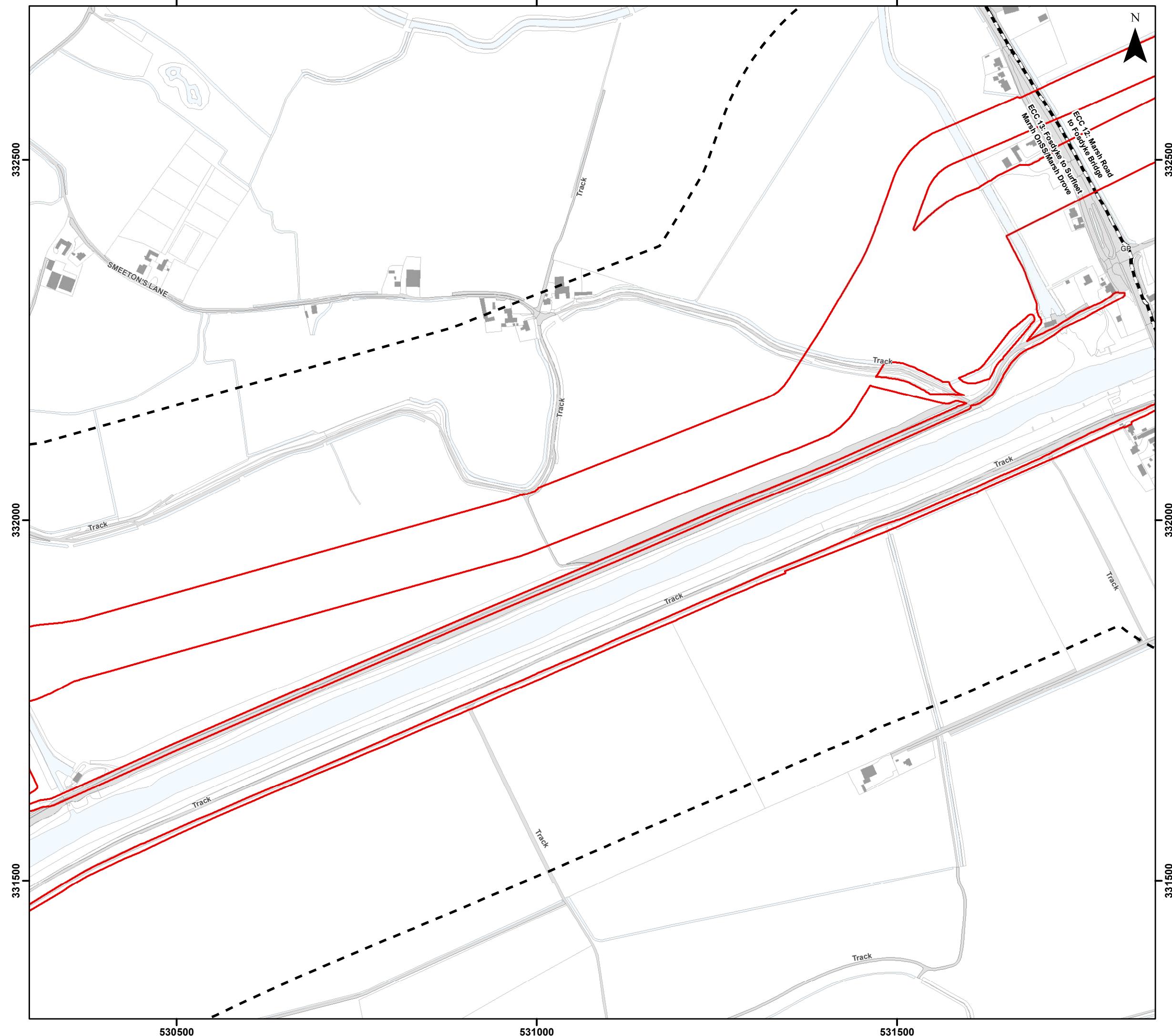
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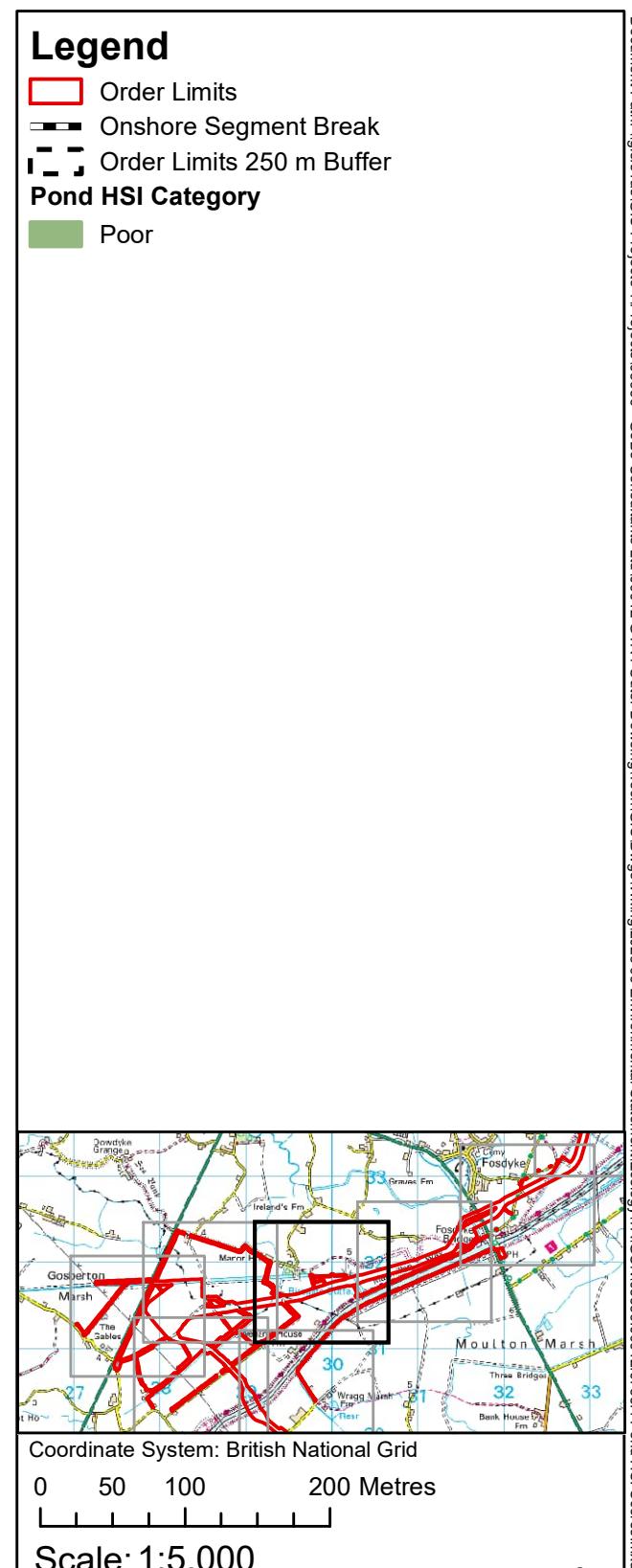
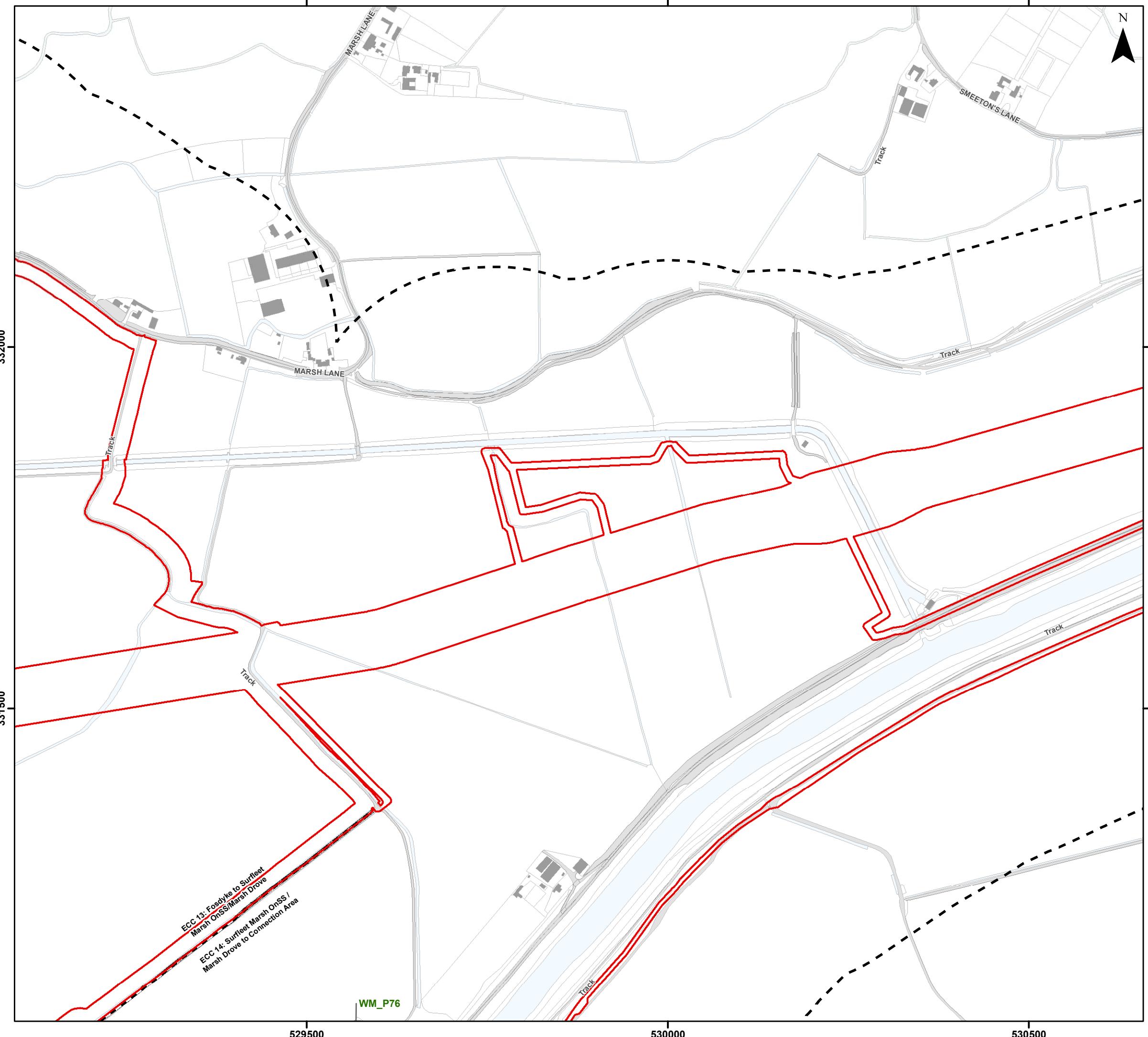
SLR

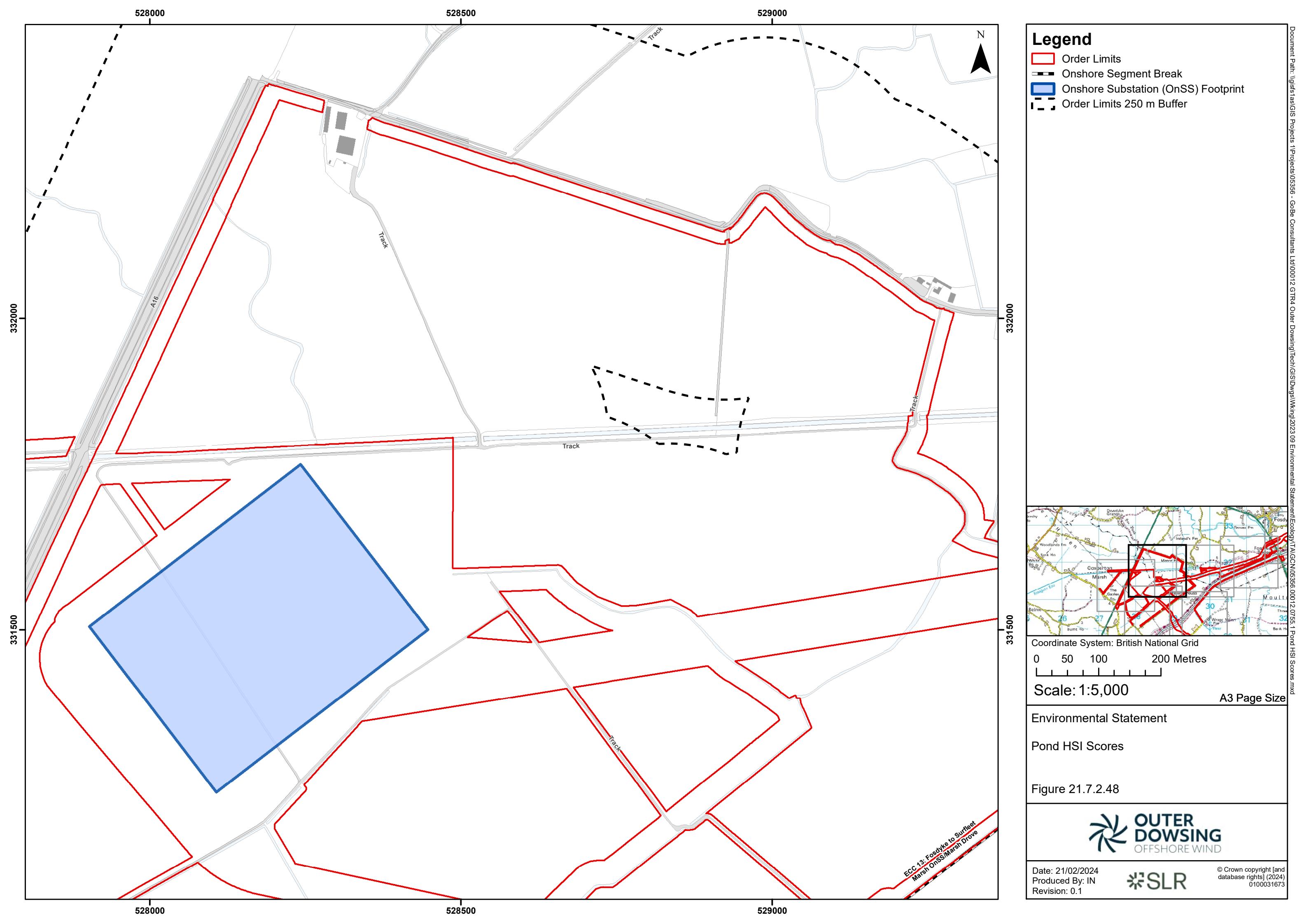


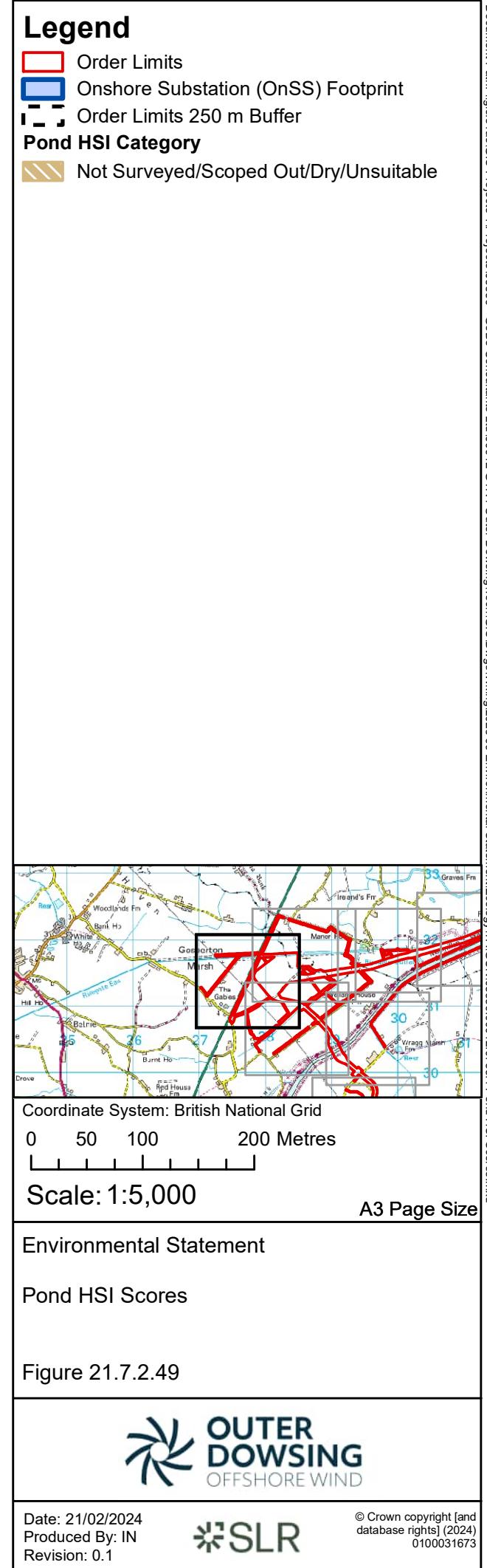
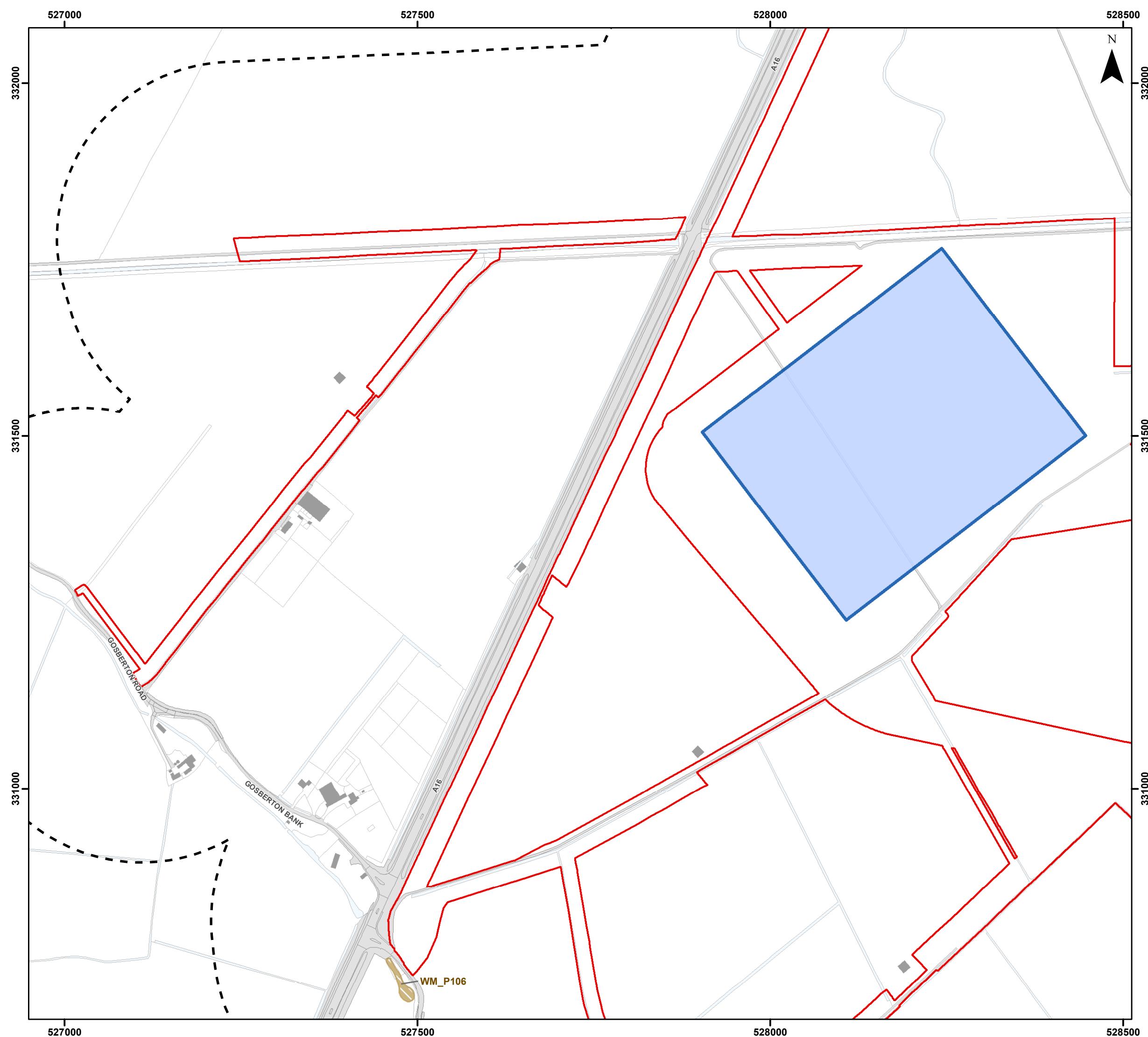


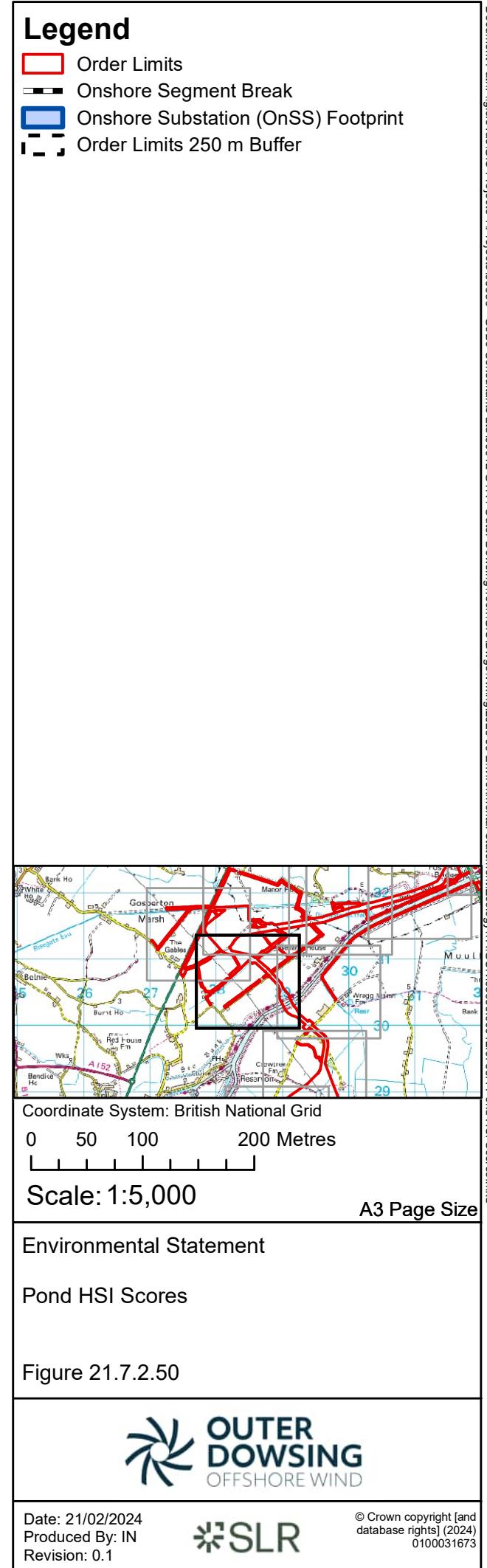
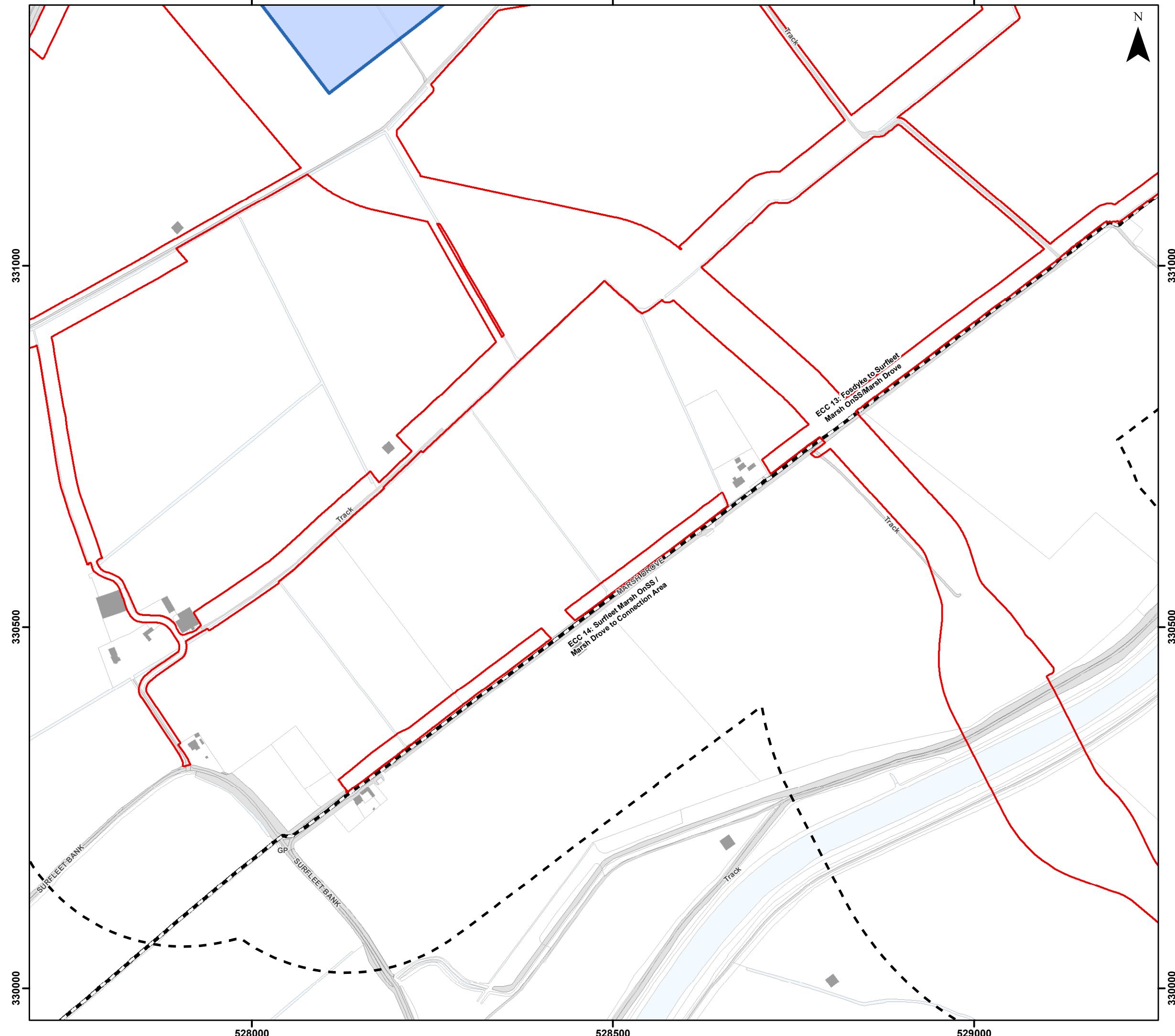


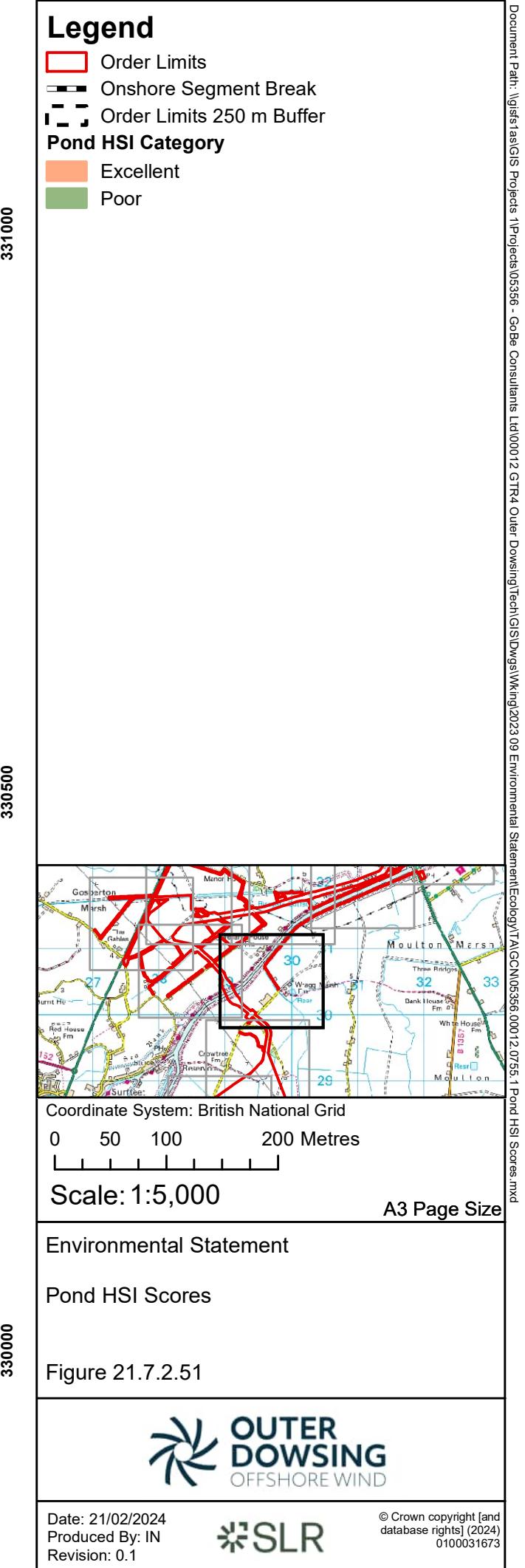
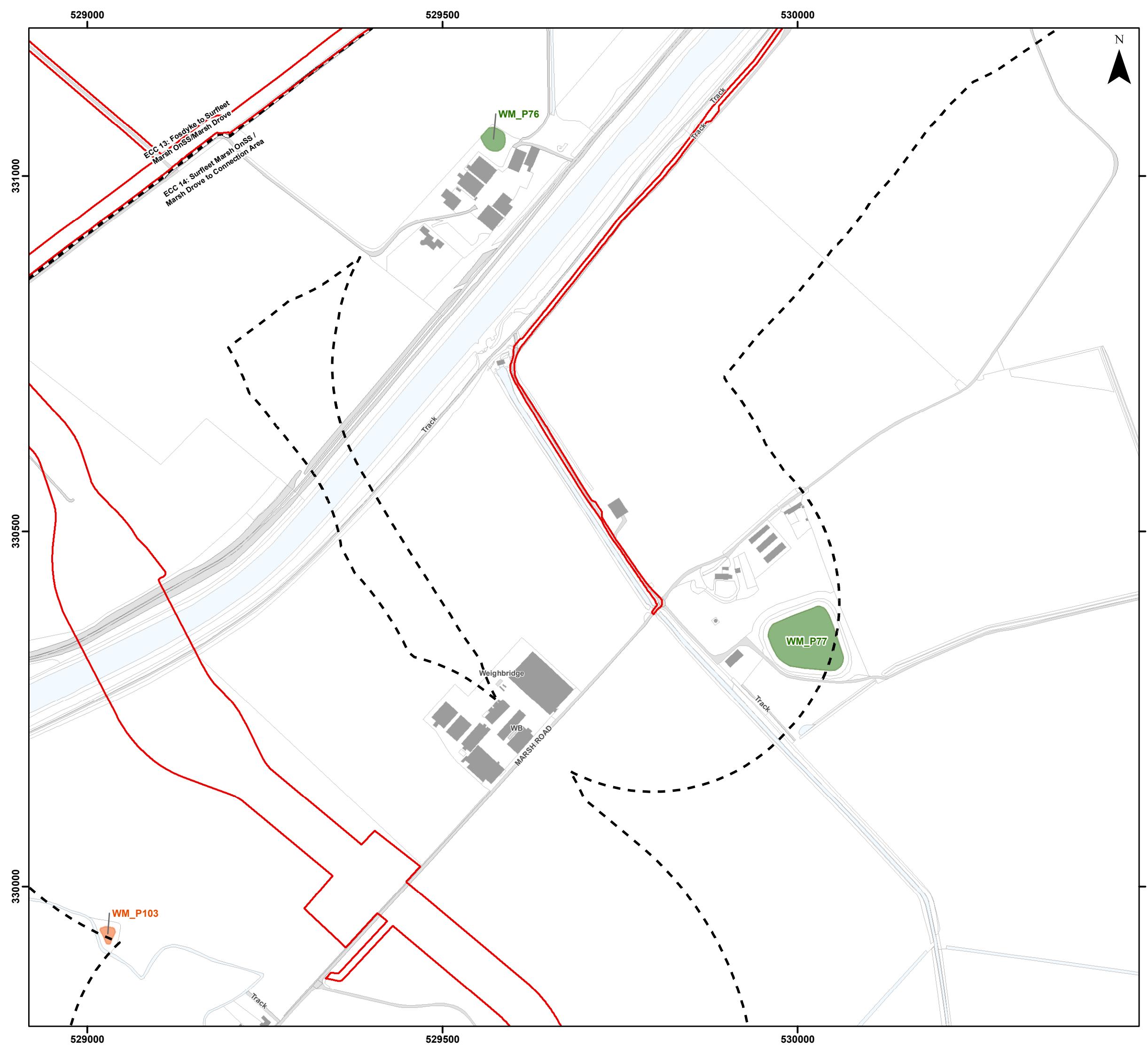


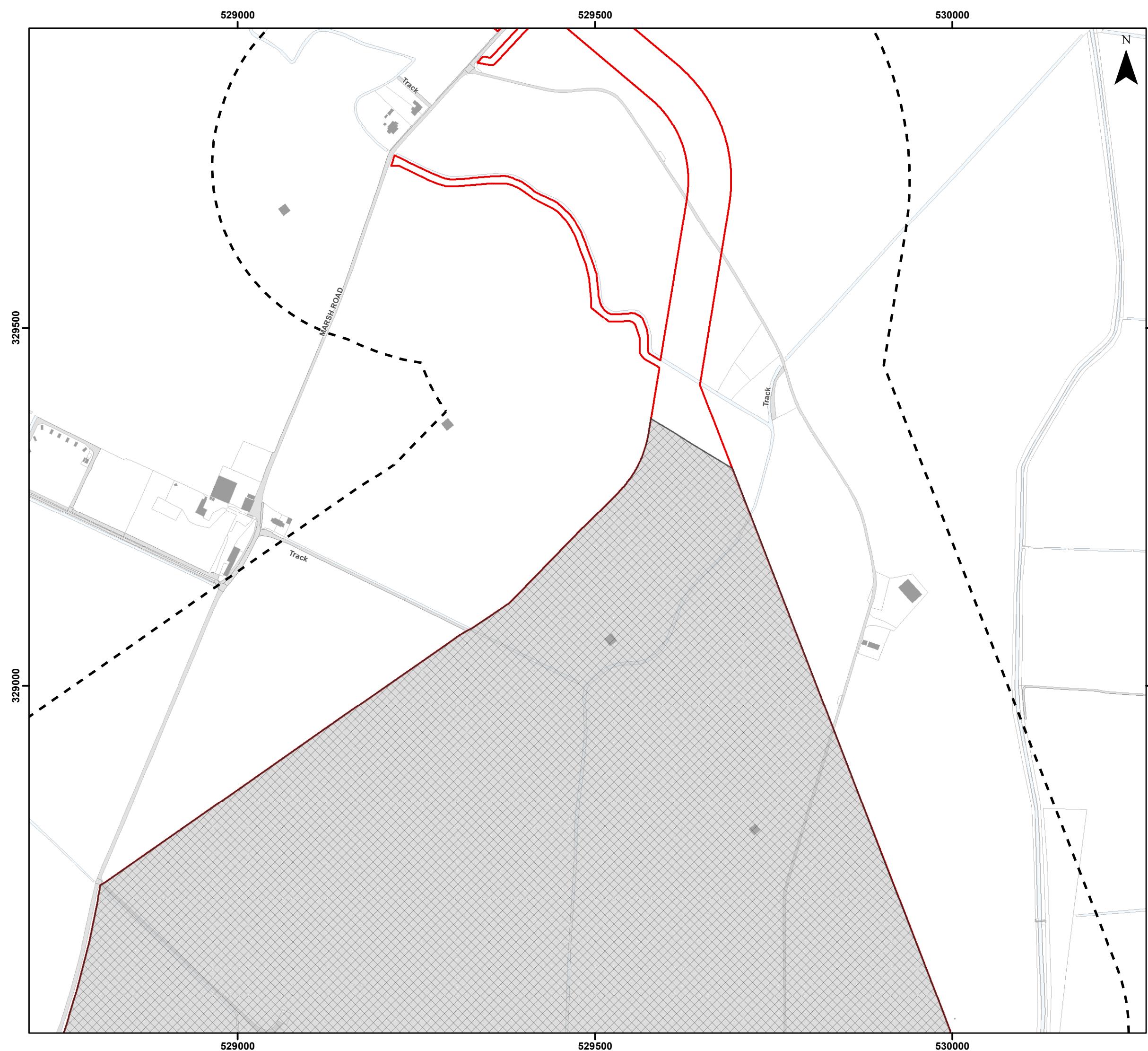






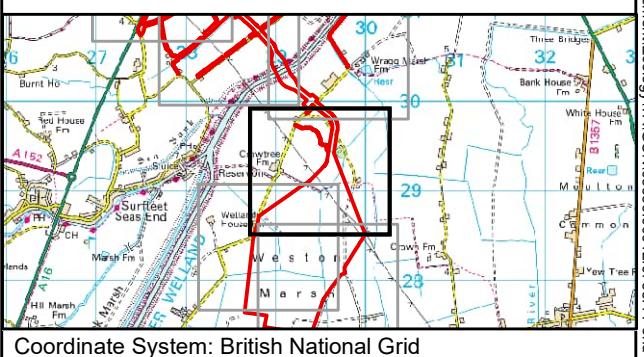






Legend

-  Order Limits
-  Connection Area
-  Order Limits 250 m Buffer



Coordinate System: British National Grid

Scale: 1:5 000

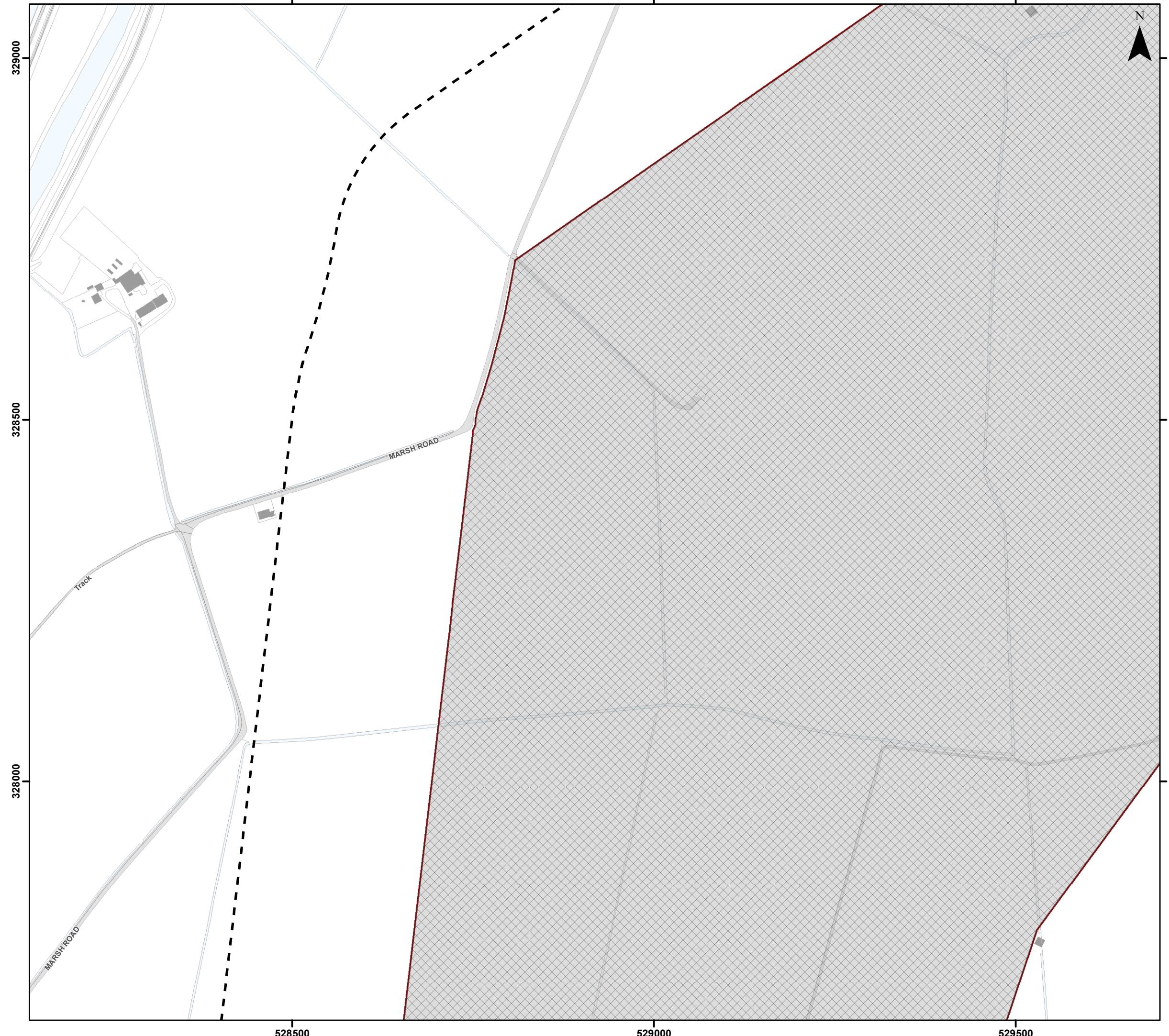
Environmental State

Figure 21.7.2.52

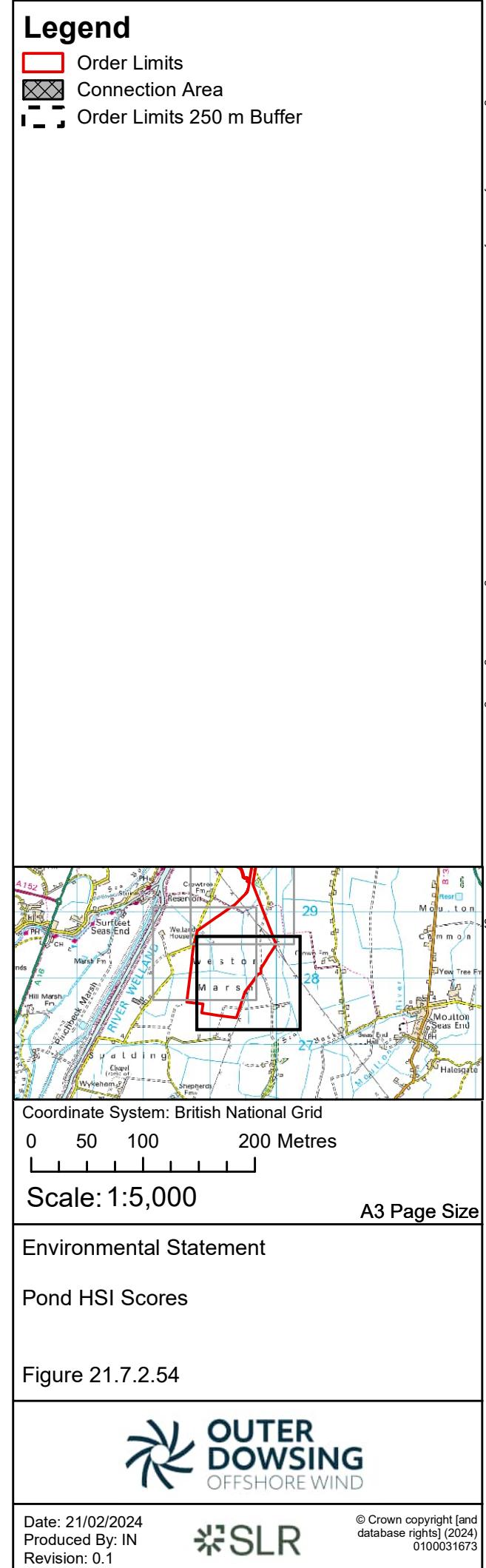
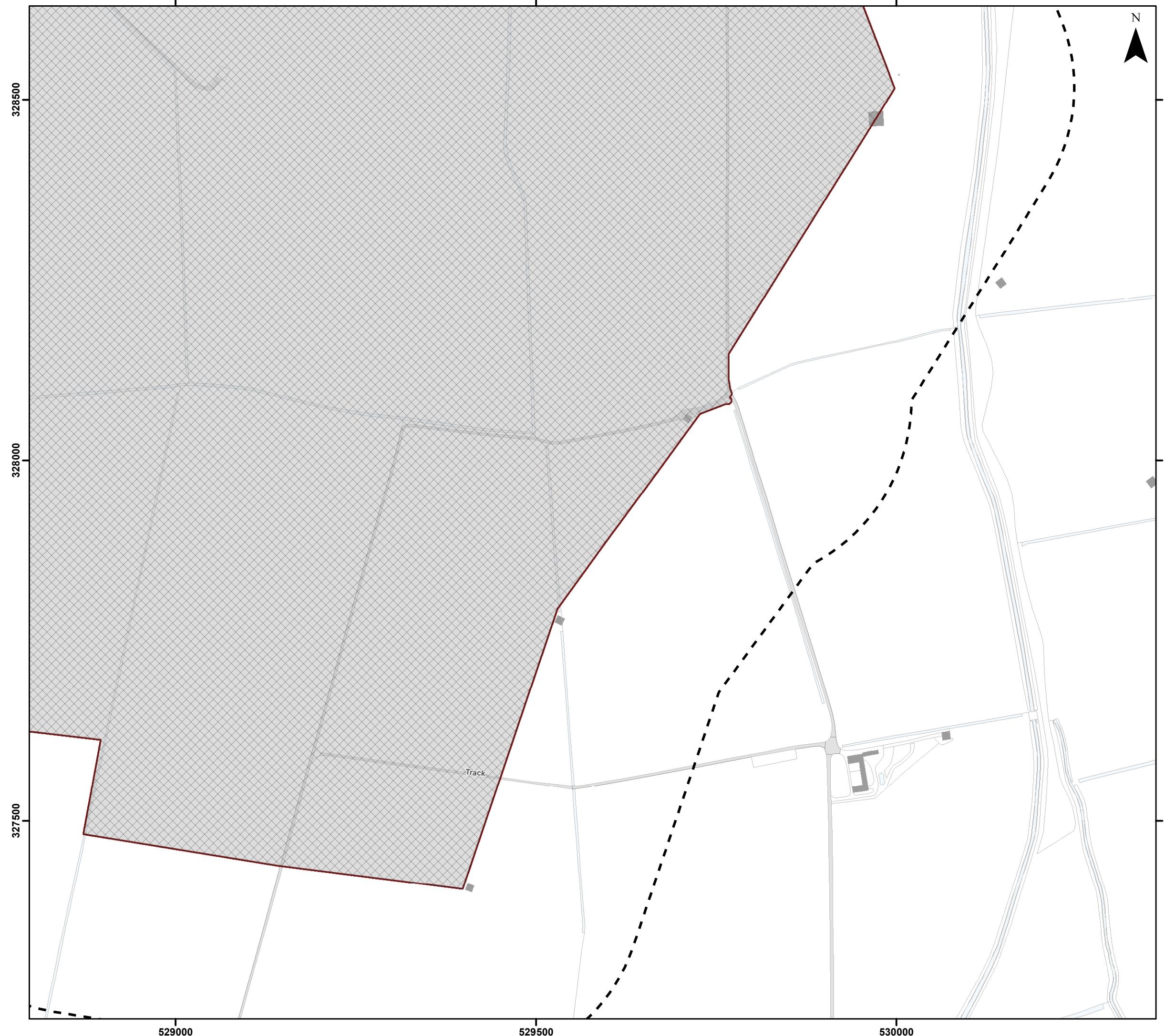


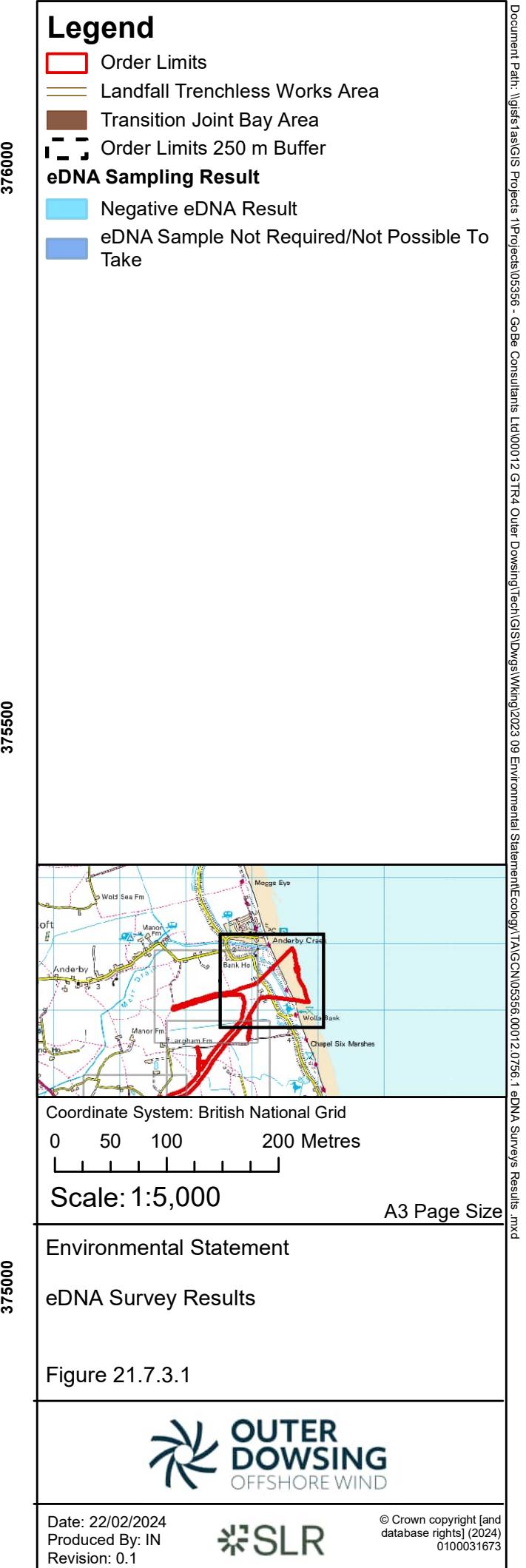
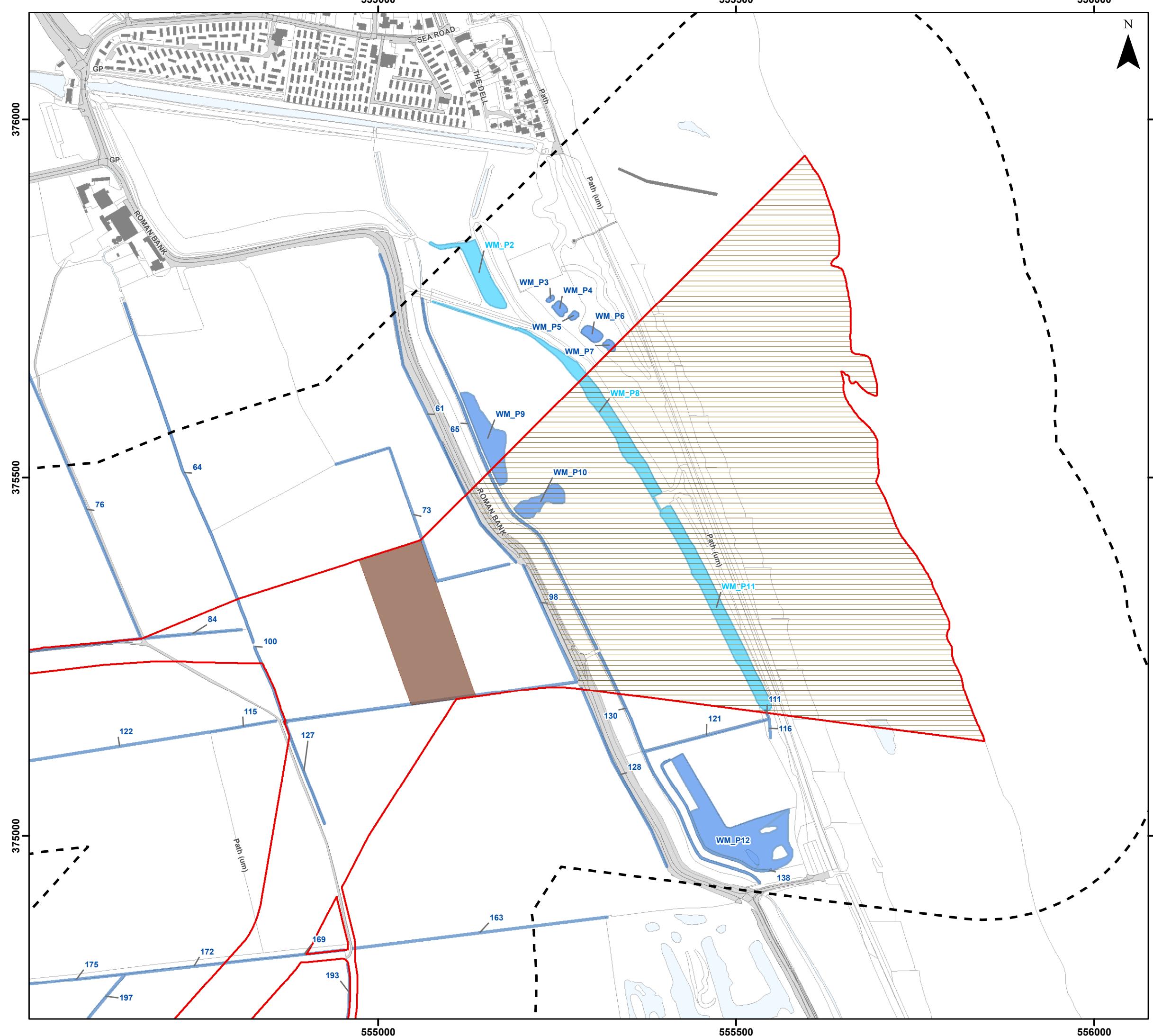
Date: 21/02/2024
Produced By: IN
Revision: 0.1

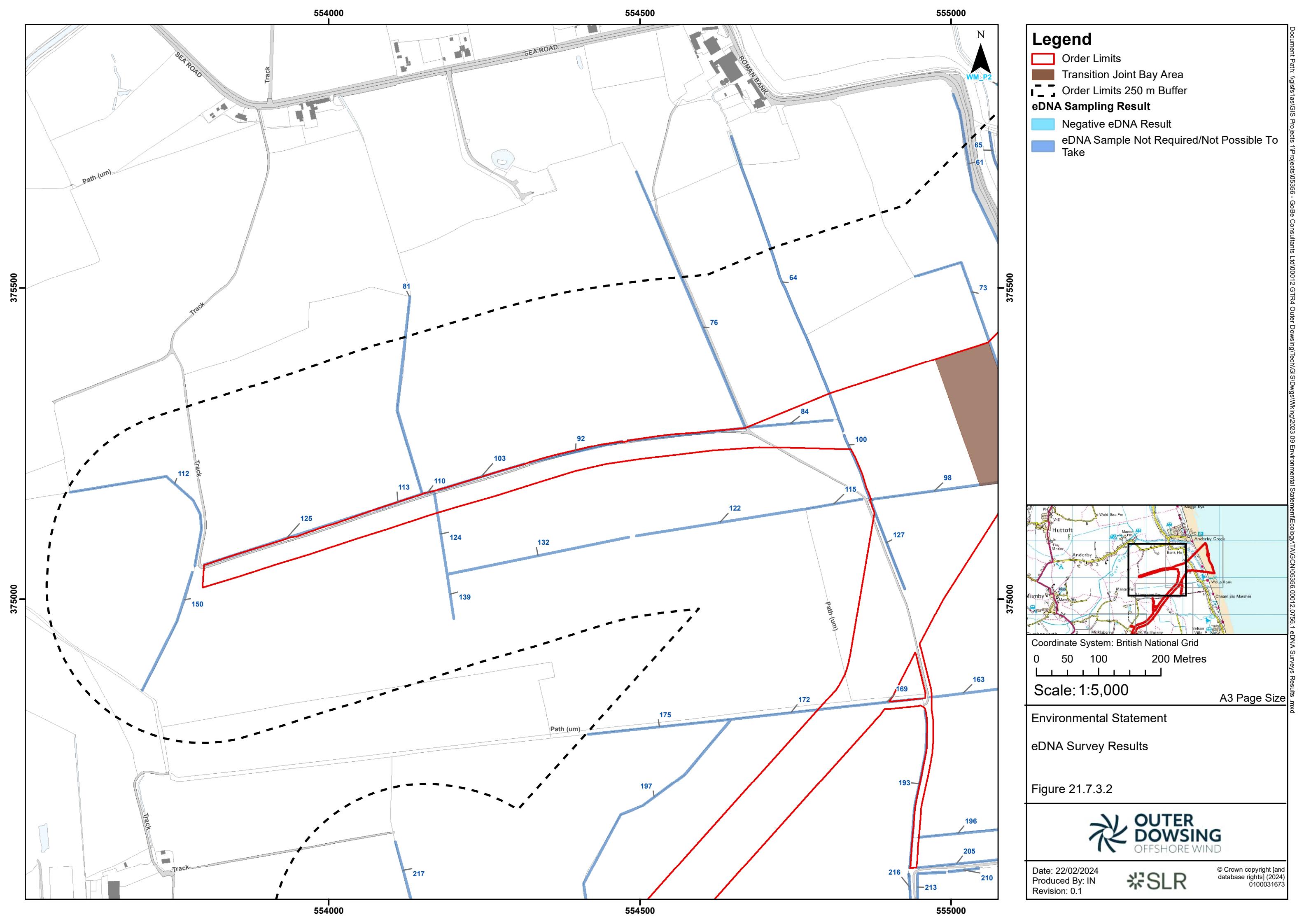
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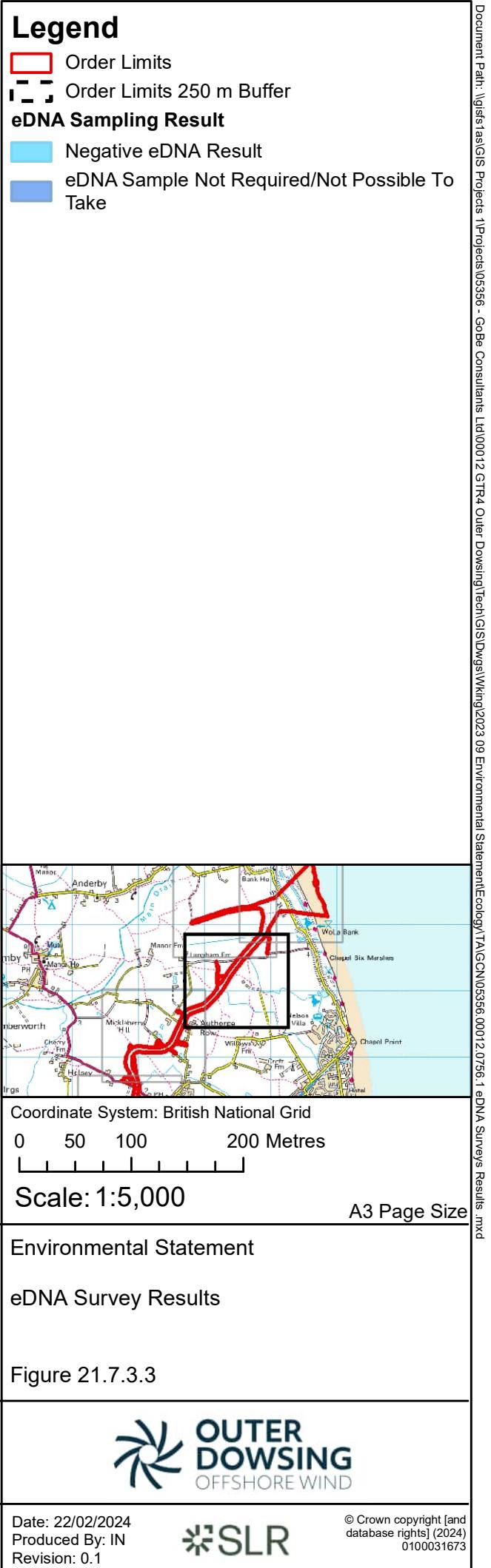
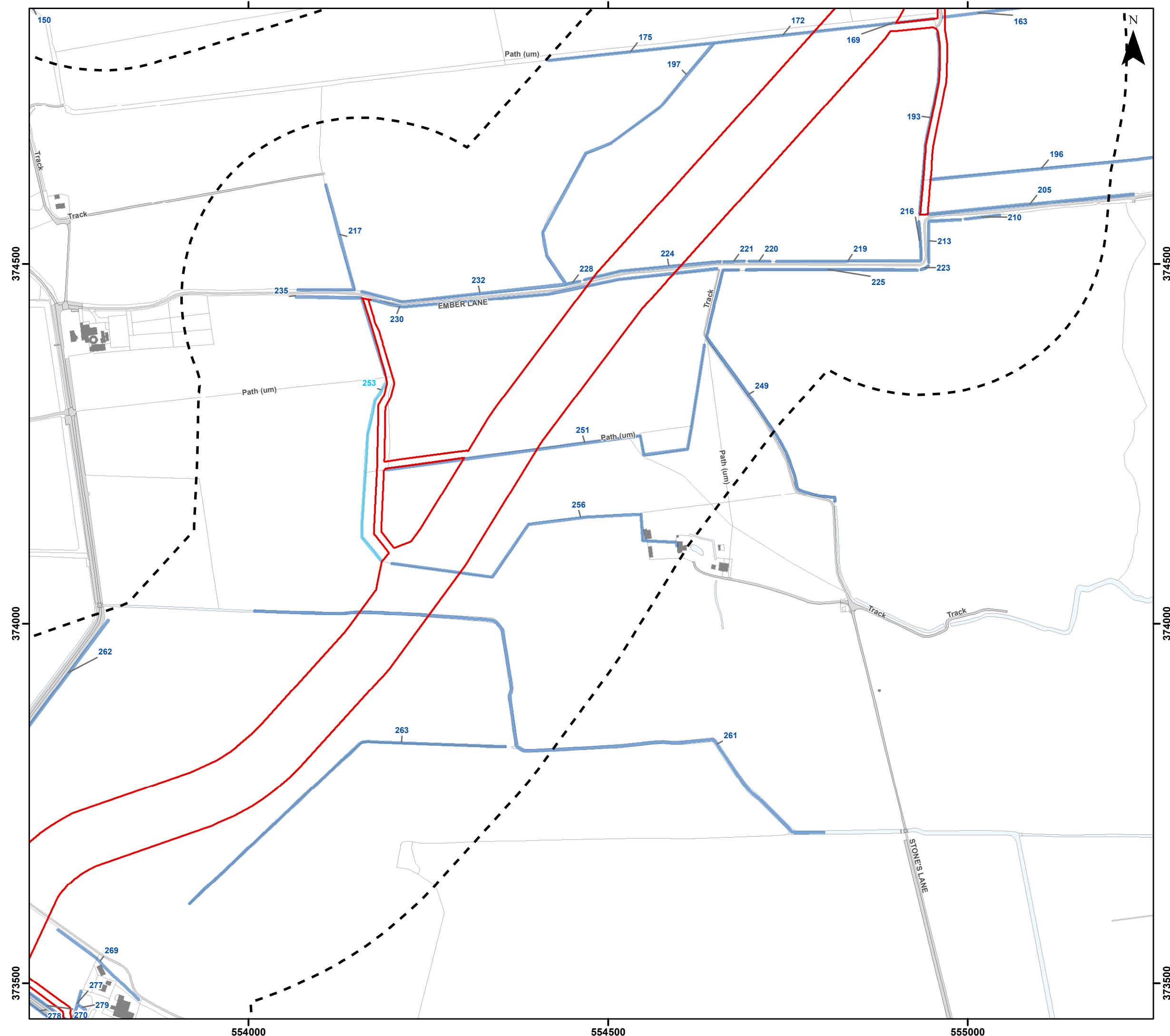


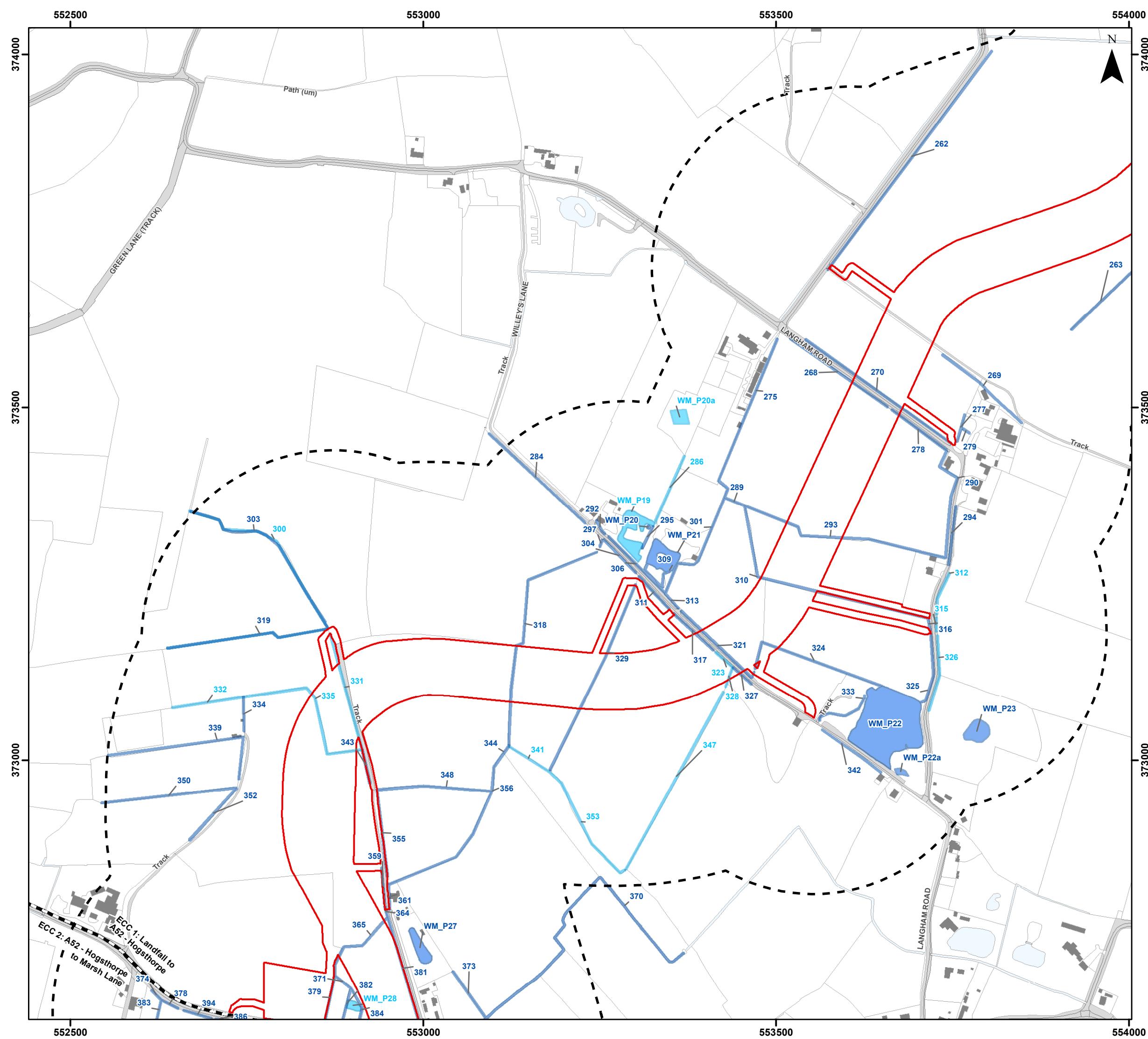
Legend
Order Limits
Connection Area
Order Limits 250 m Buffer
Coordinate System: British National Grid 0 50 100 200 Metres Scale: 1:5,000 A3 Page Size
Environmental Statement
Pond HSI Scores
Figure 21.7.2.53
OUTER DOWSING OFFSHORE WIND
Date: 21/02/2024 Produced By: IN Revision: 0.1
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SLR





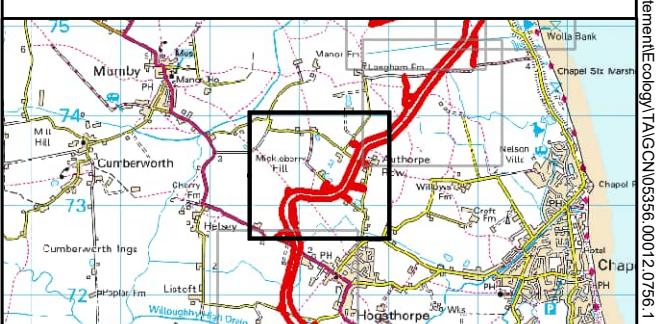






Legend

- Order Limits
- Onshore Segment Break
- Order Limits 250 m Buffer
- eDNA Sampling Result**
 - Negative eDNA Result
 - eDNA Sample Not Required/Not Possible To Take



Coordinate System: British National Grid
Scale: 1:5,000

A3 Page Size

Environmental Statement

eDNA Survey Results

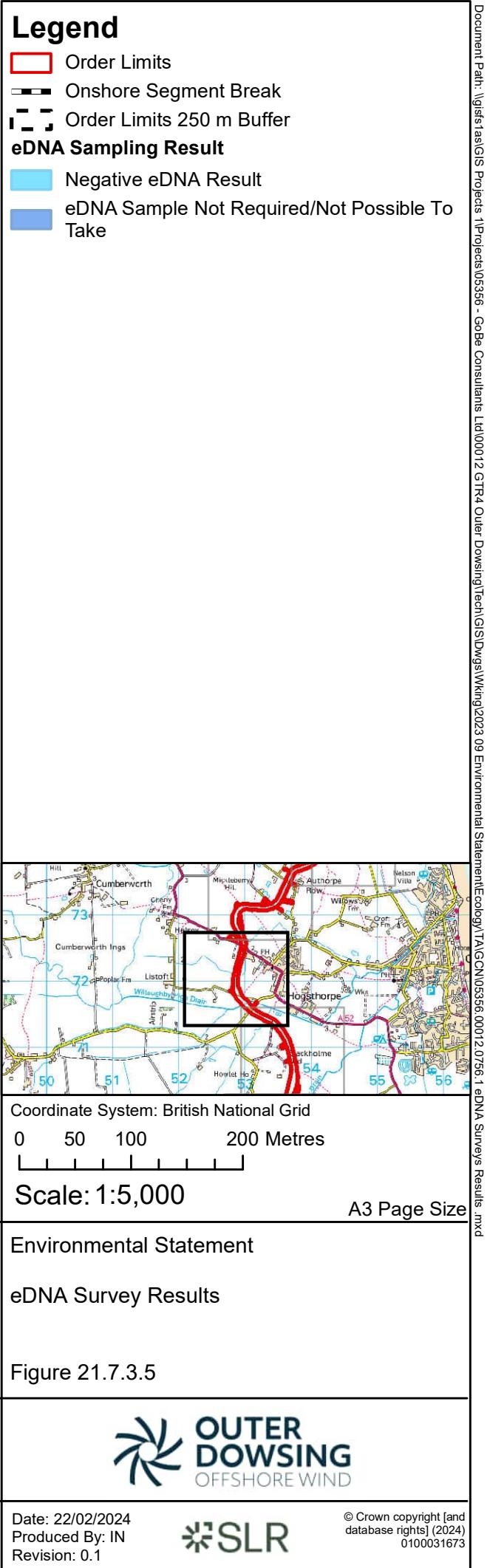
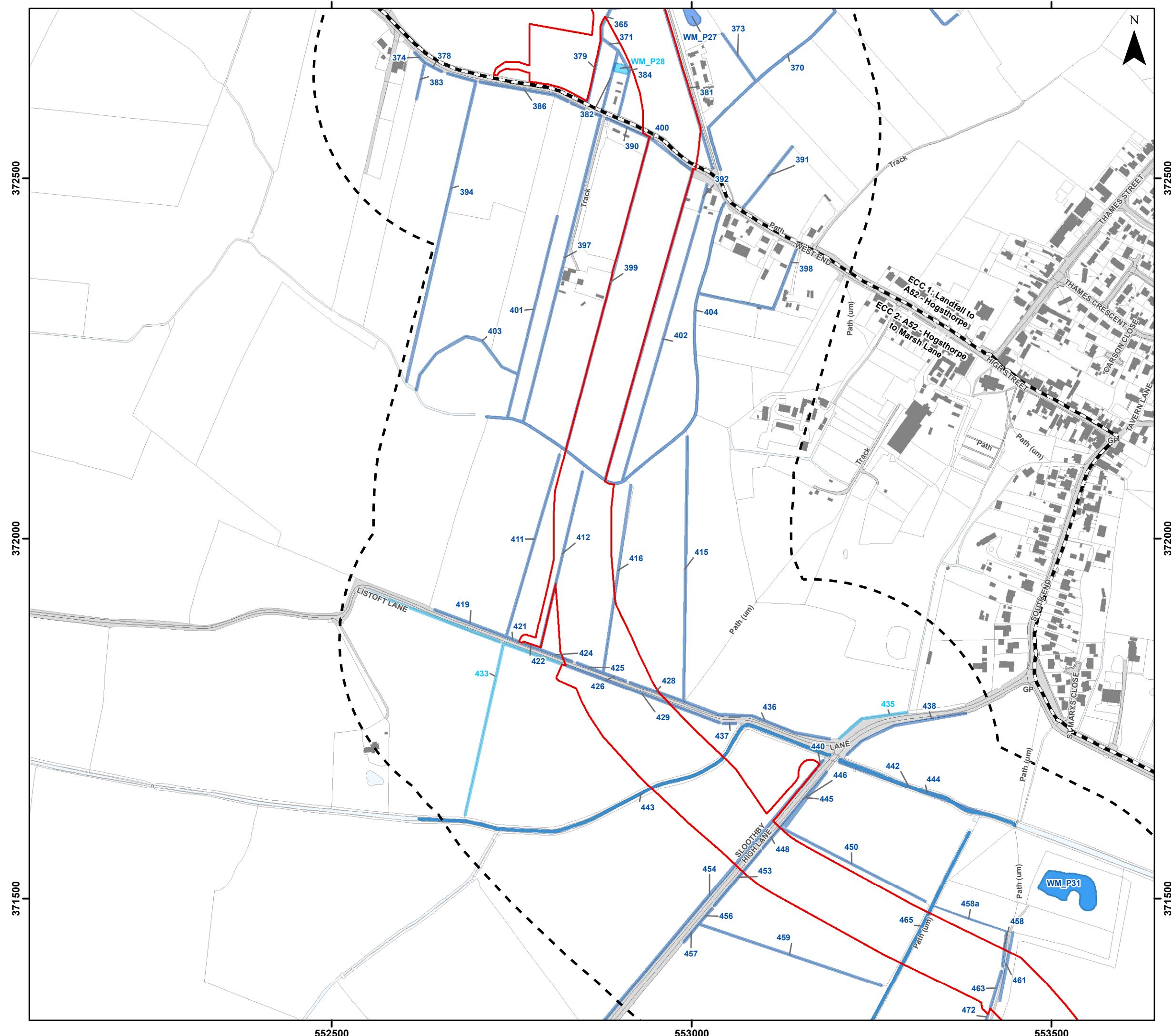
Figure 21.7.3.4

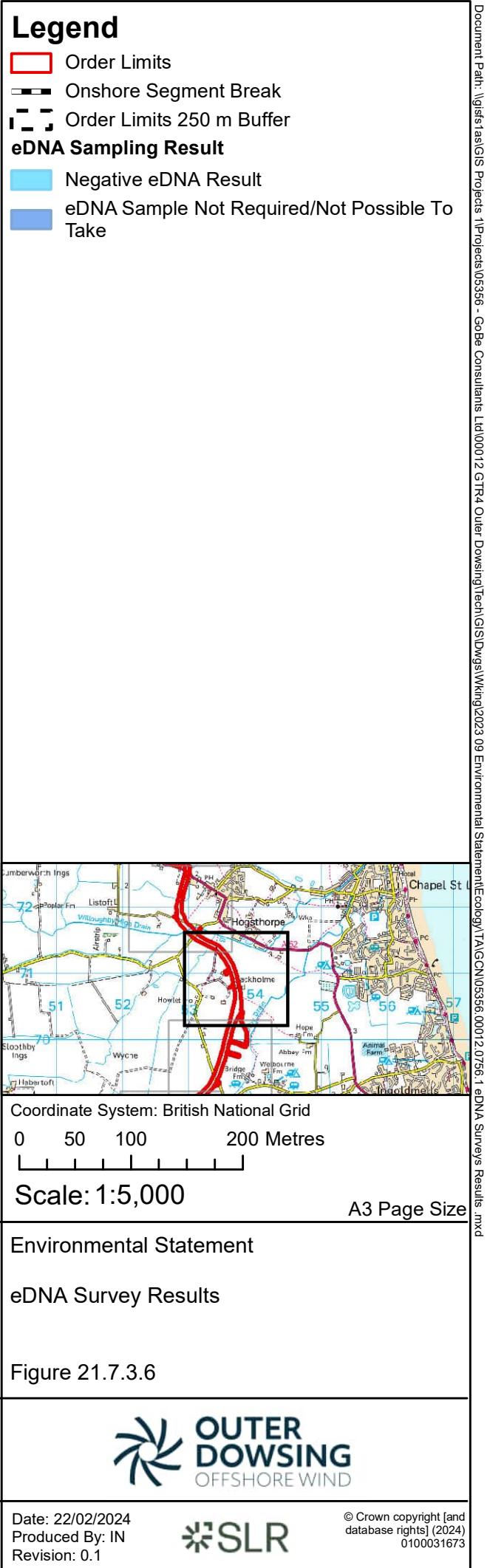
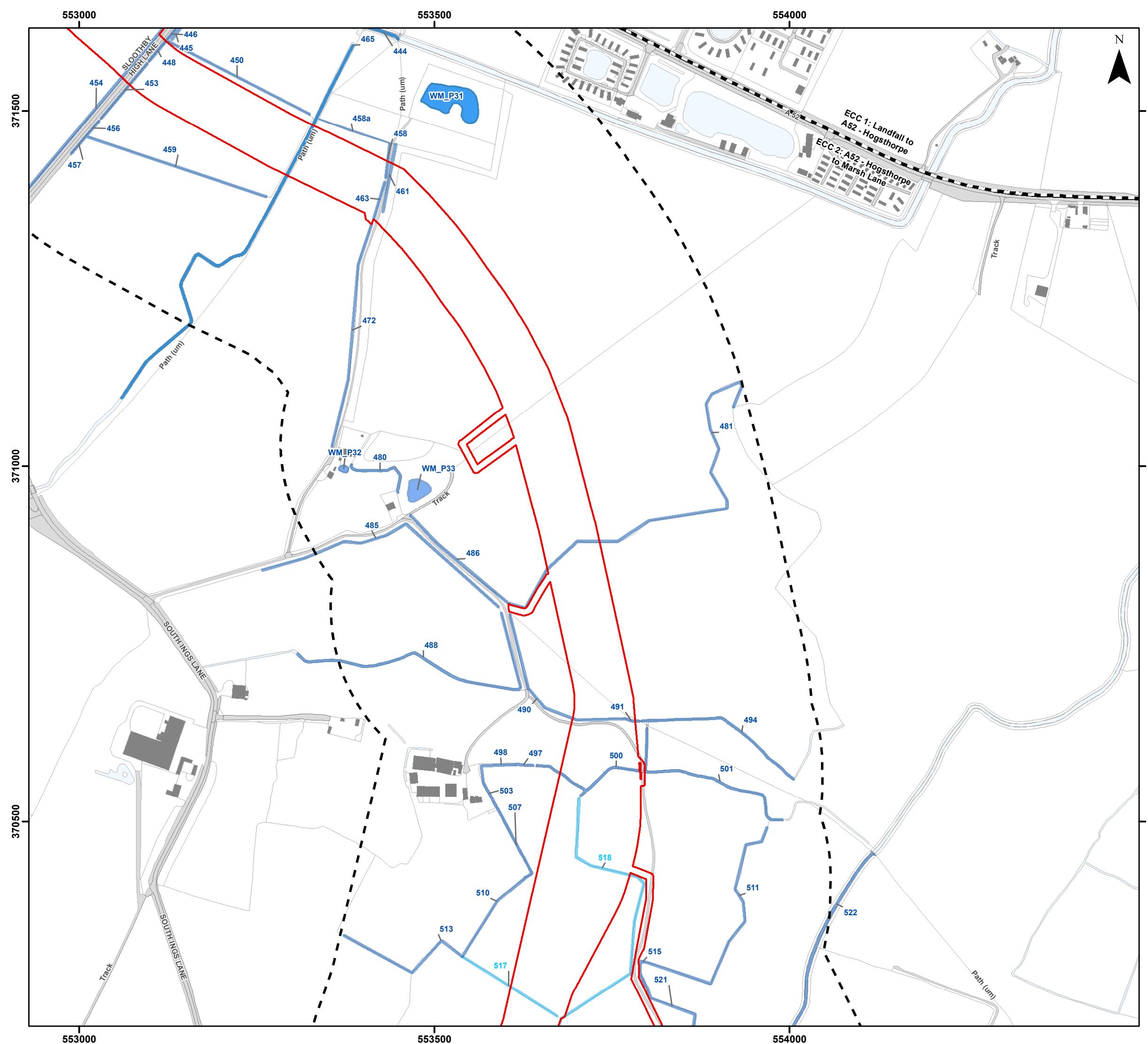
OUTER DOWNSING
OFFSHORE WIND

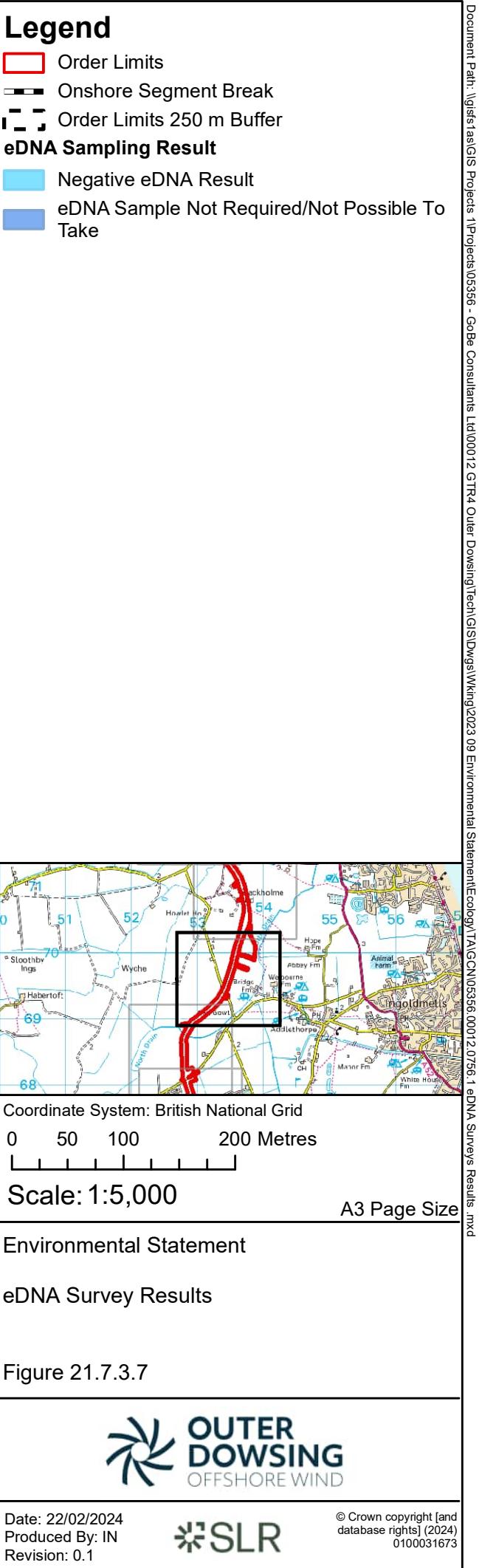
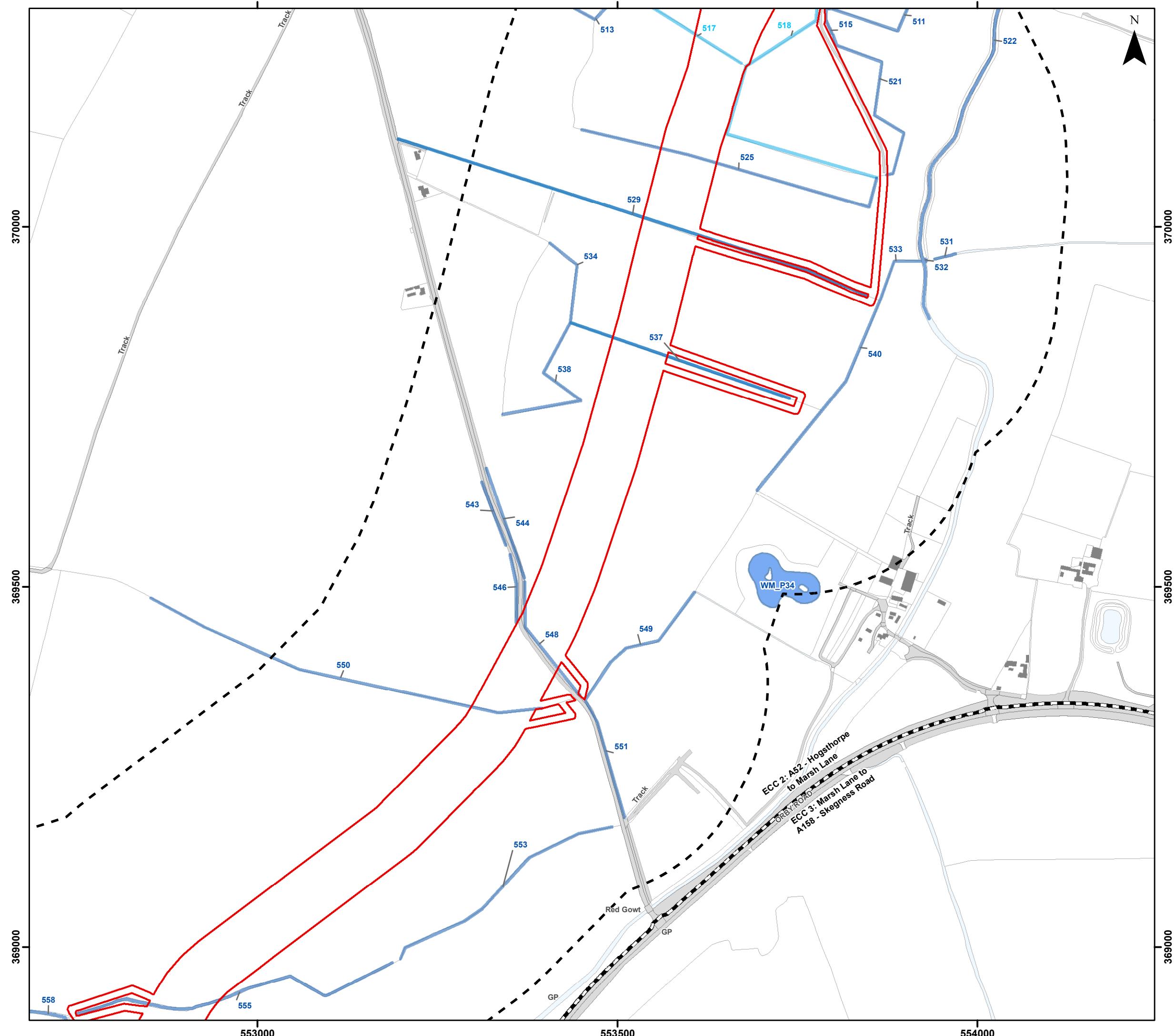
Date: 22/02/2024
Produced By: IN
Revision: 0.1

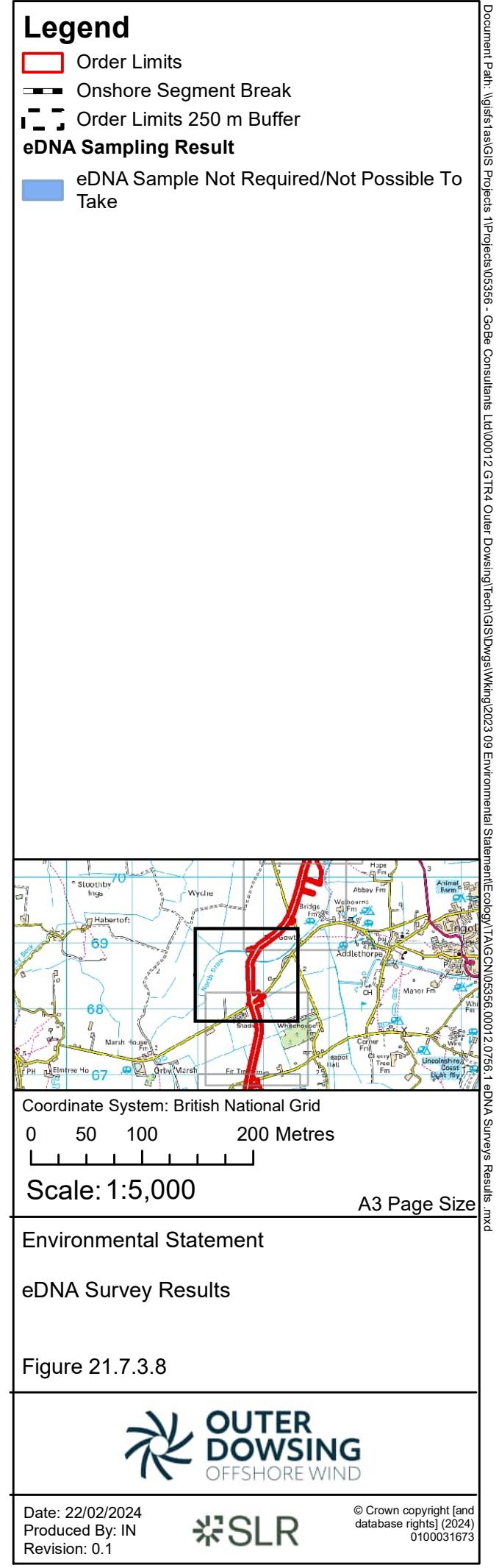
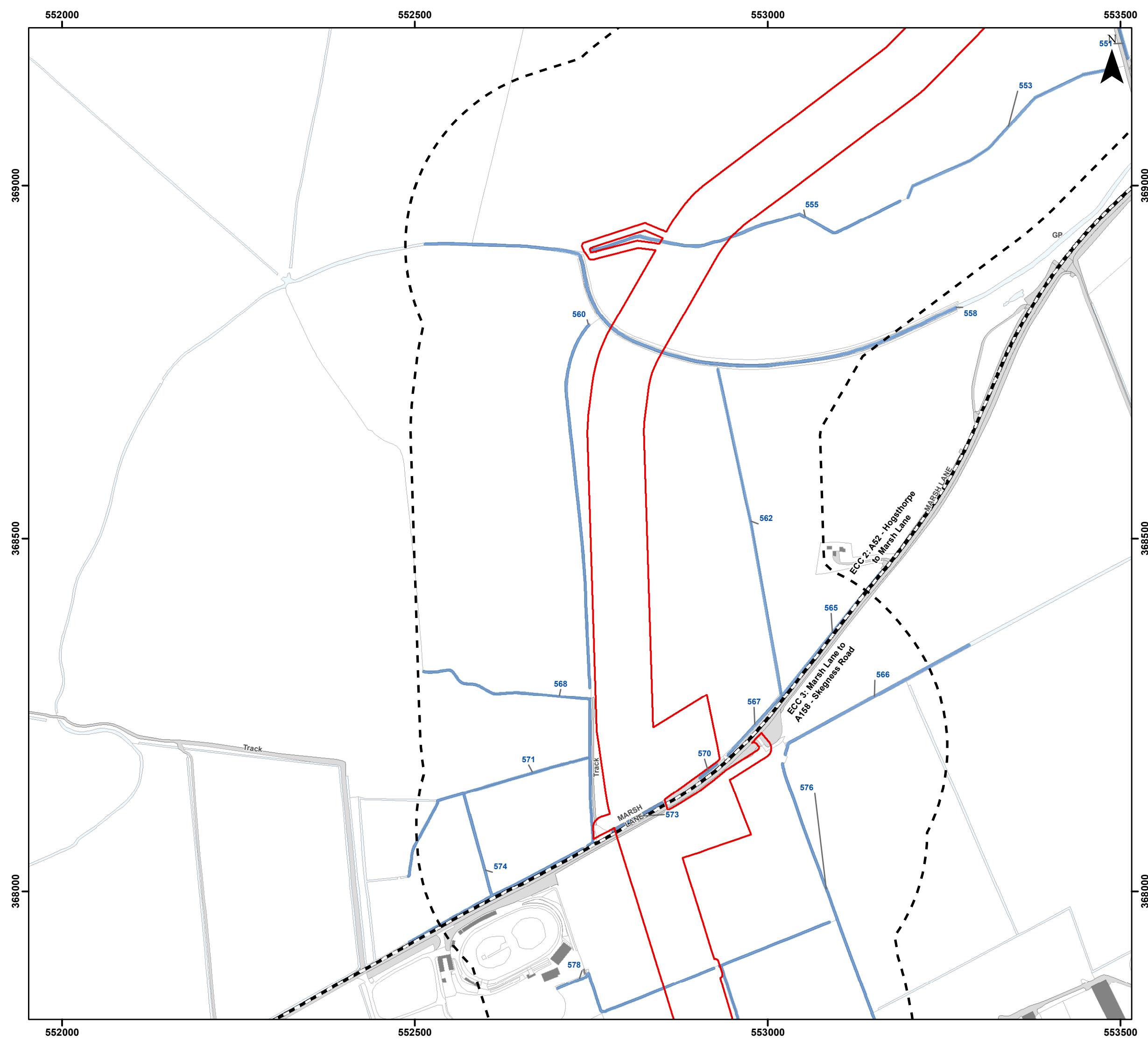
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0100031673

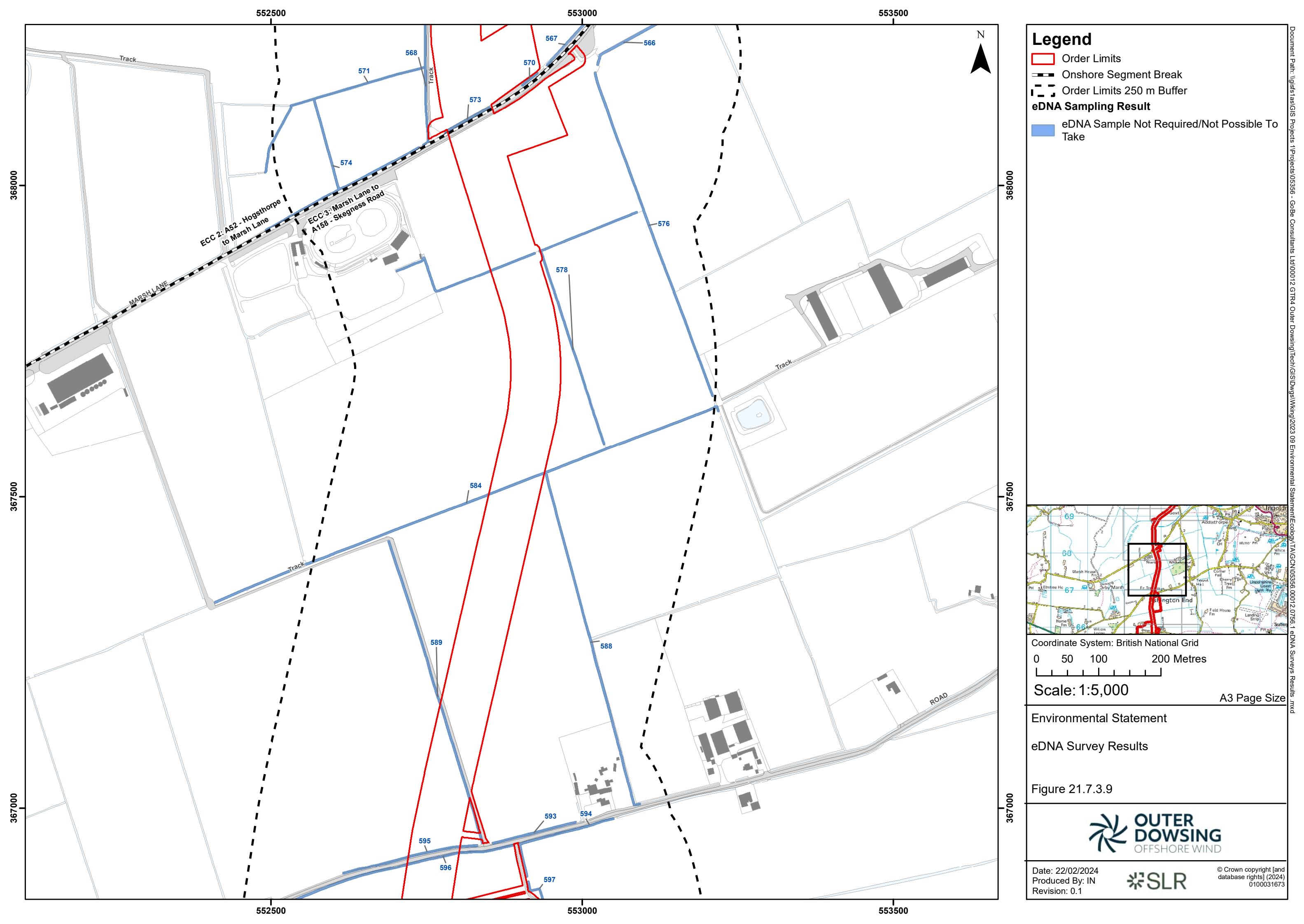
SLR

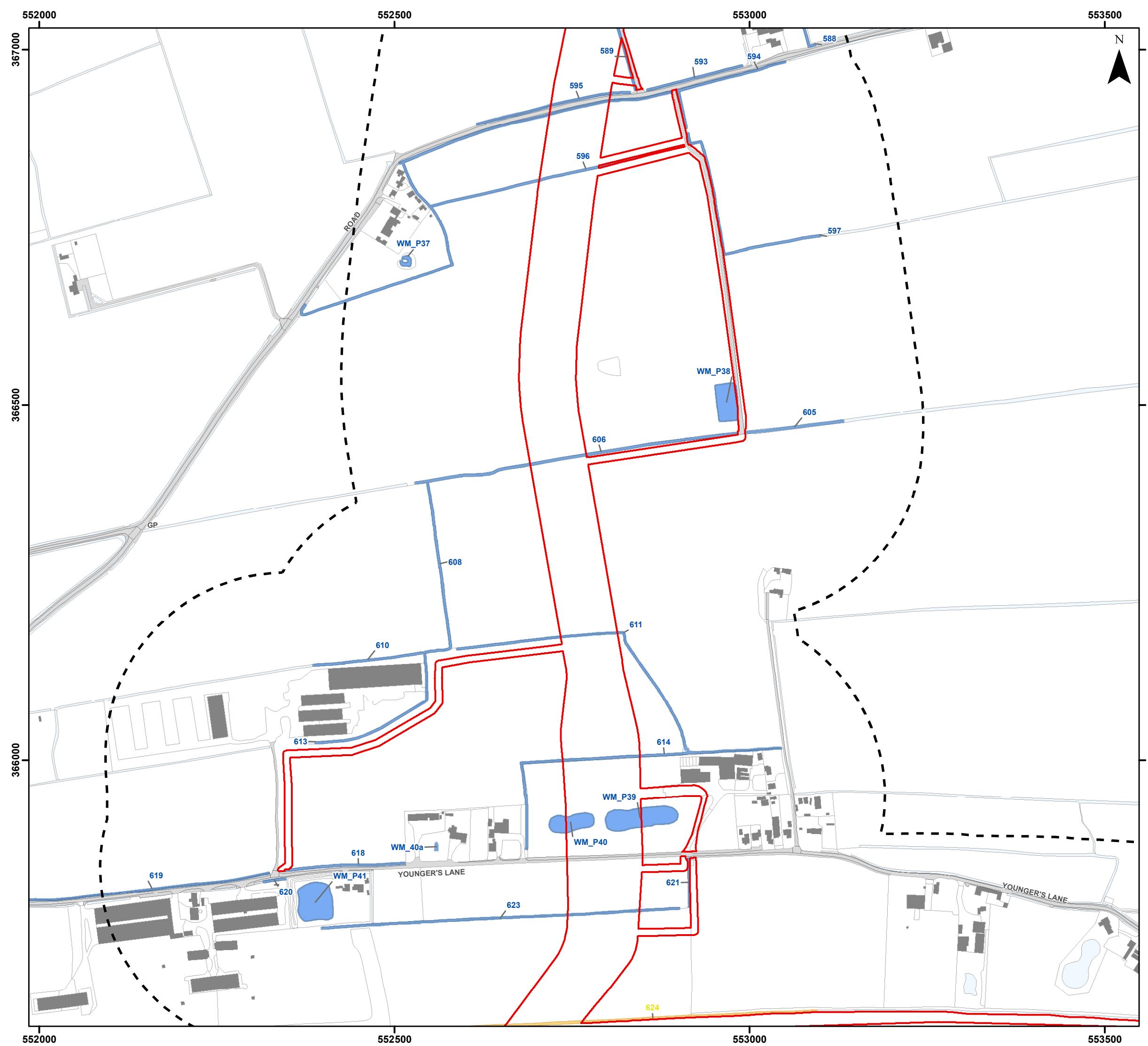






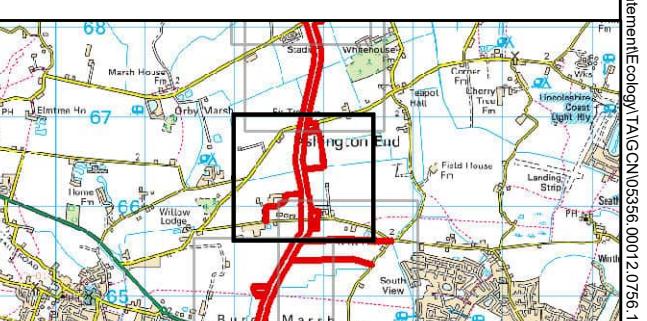






Legend

- Order Limits
- Order Limits 250 m Buffer
- eDNA Sampling Result
 - Indeterminate eDNA Result
 - eDNA Sample Not Required/Not Possible To Take



Coordinate System: British National Grid
0 50 100 200 Metres

Scale: 1:5,000

A3 Page Size

Environmental Statement

eDNA Survey Results

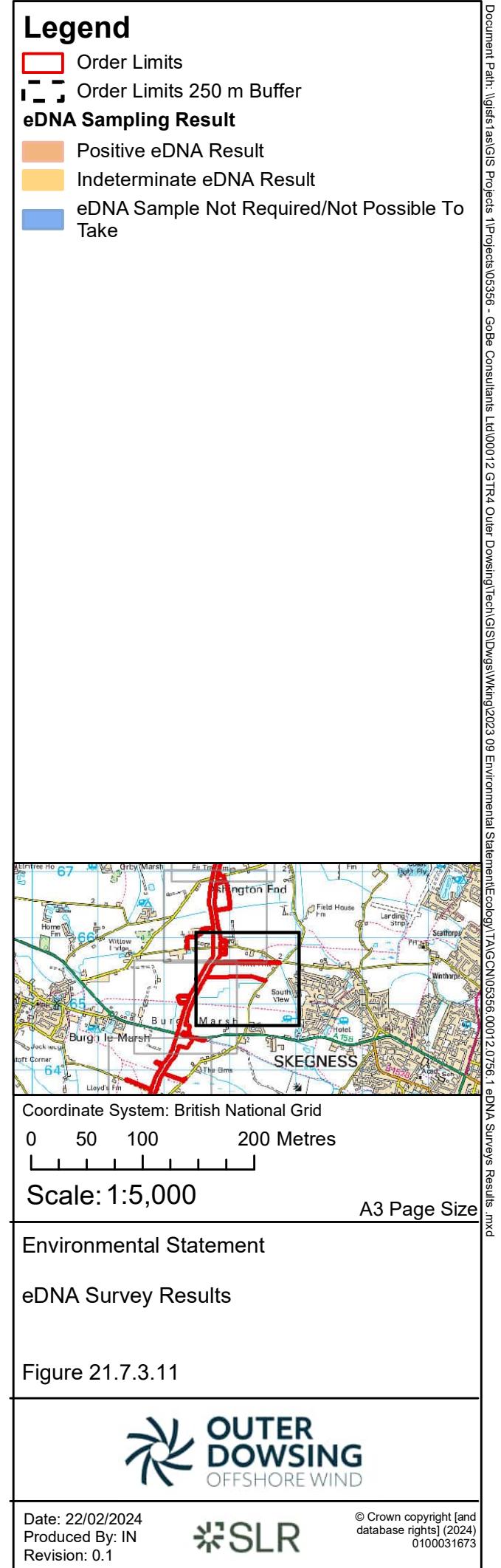
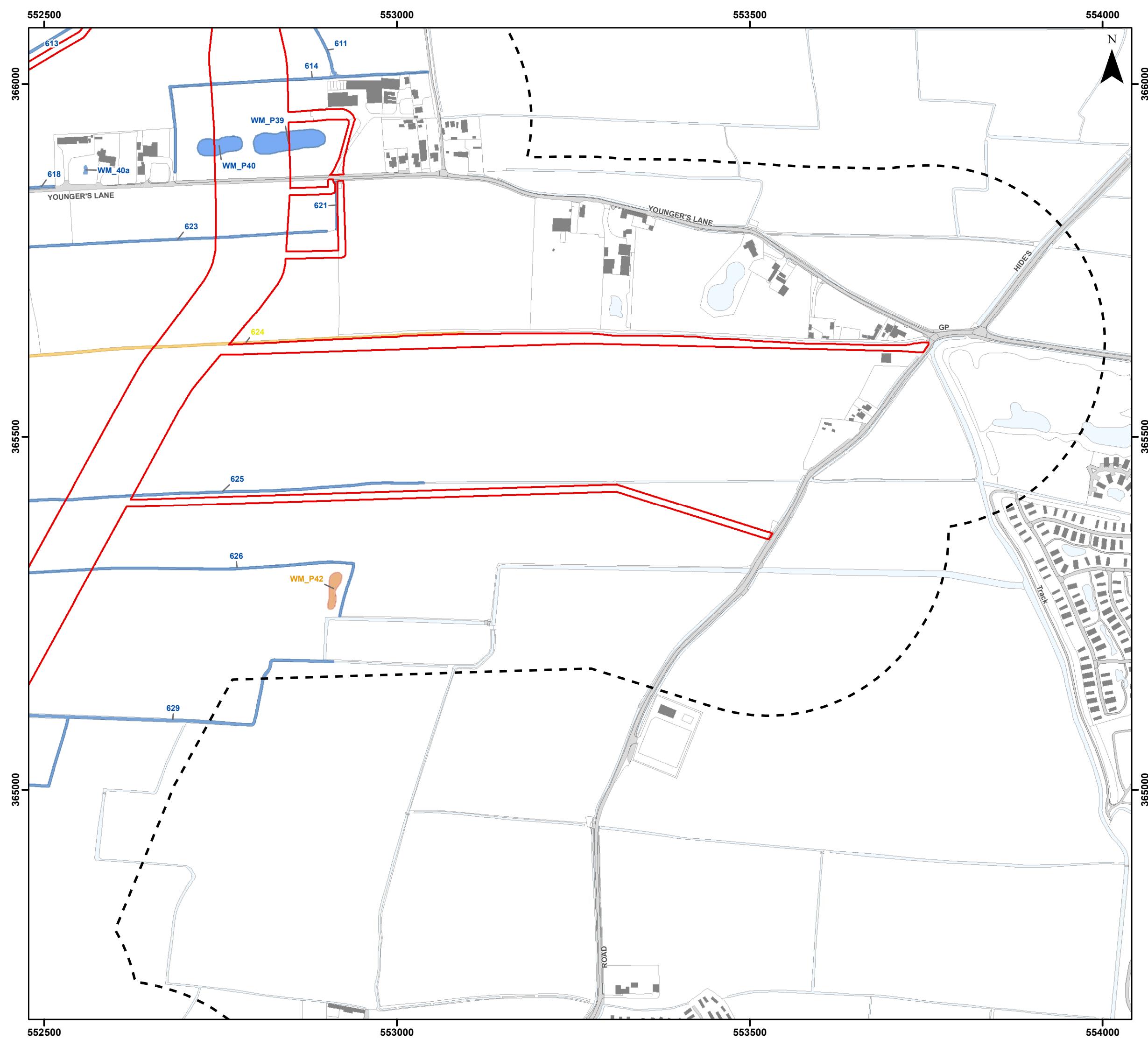
Figure 21.7.3.10

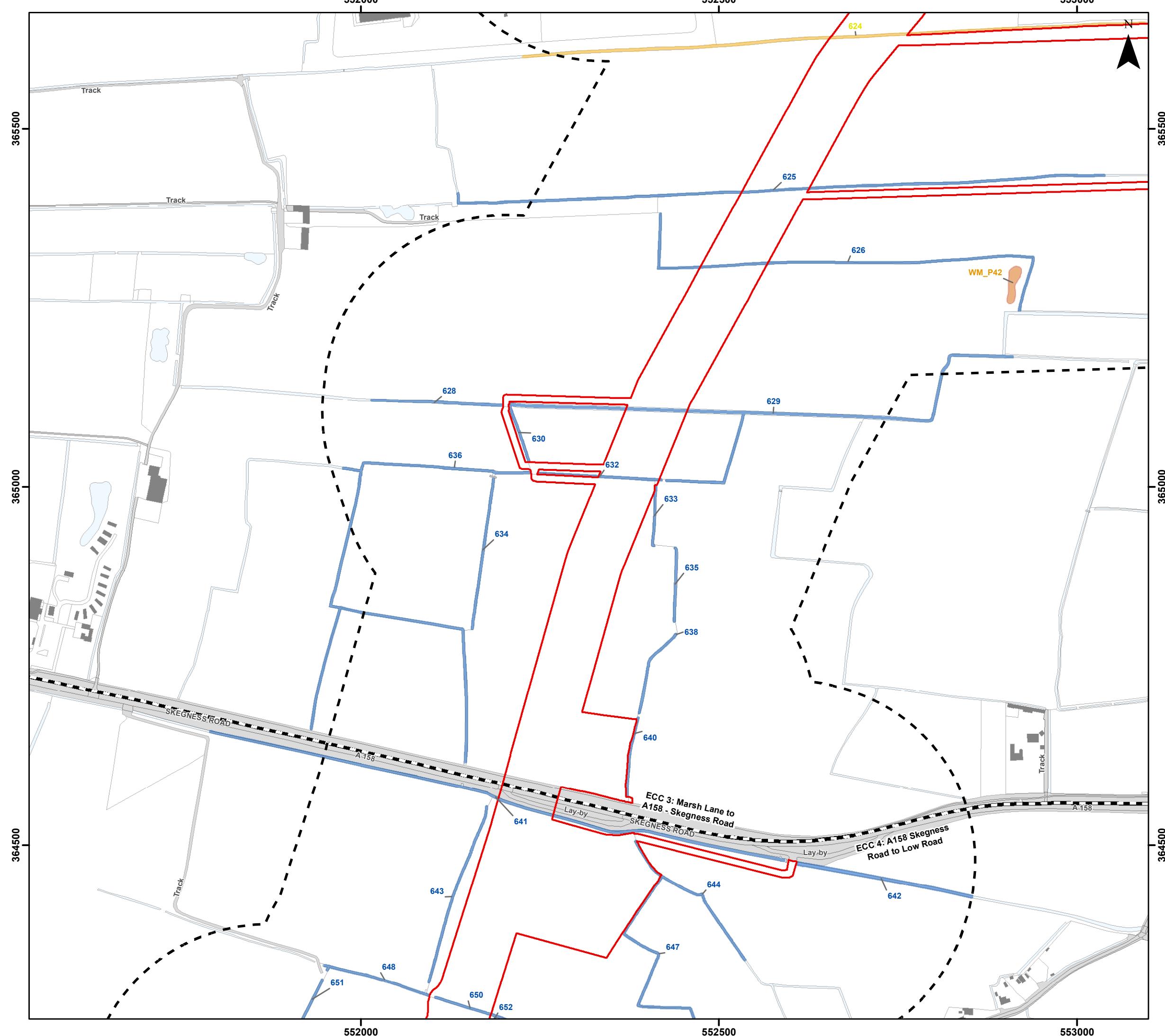


Date: 22/02/2024
Produced By: IN
Revision: 0.1

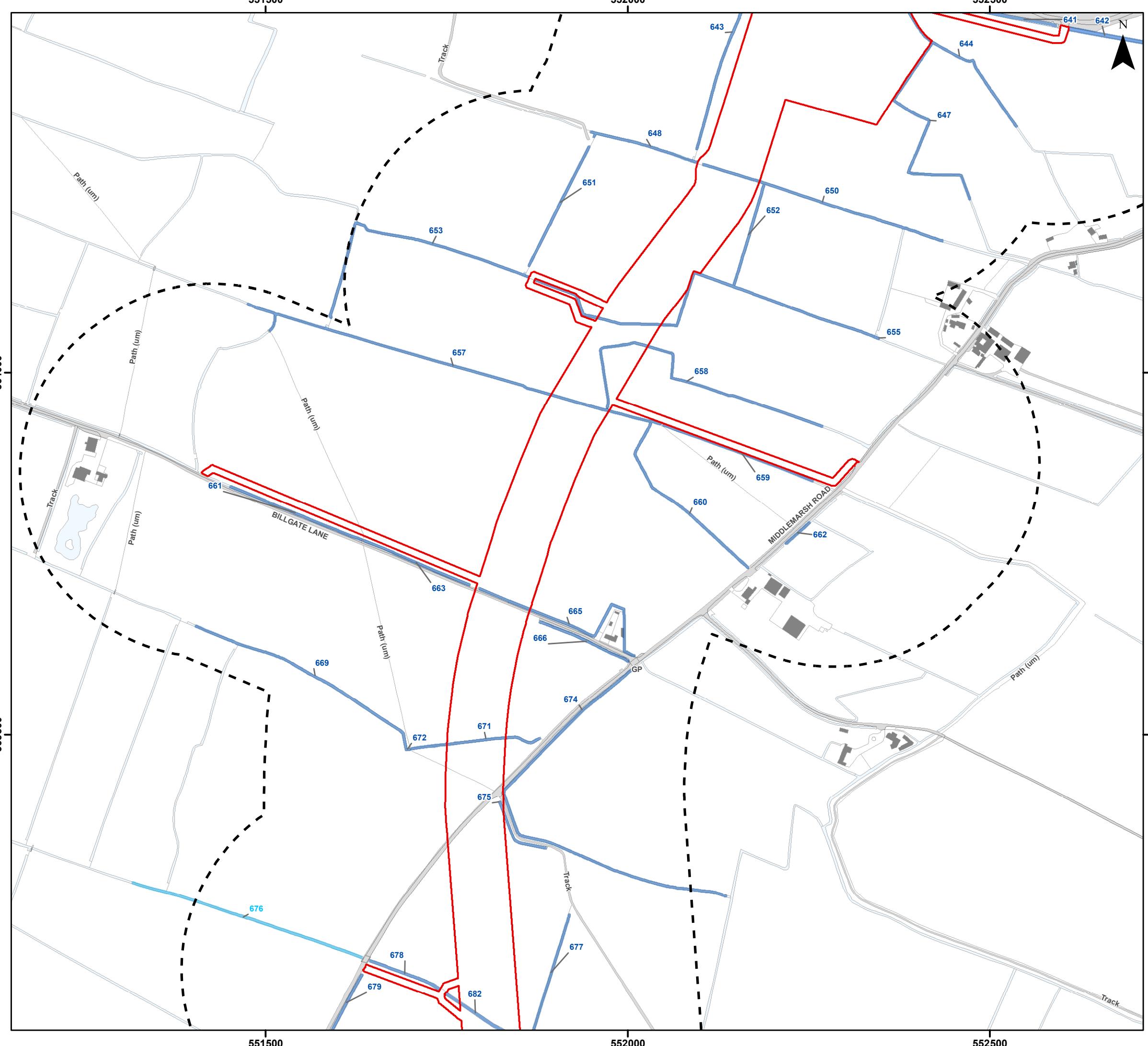
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Coordinate System: British National Grid
0 50 100 200 Metres
Scale: 1:5,000
A3 Page Size
Environmental Statement
eDNA Survey Results
Figure 21.7.3.12
Outer Dowsing Offshore Wind
Date: 22/02/2024
Produced By: IN
Revision: 0.1
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Legend

- Order Limits
- Order Limits 250 m Buffer
- eDNA Sampling Result**
- Negative eDNA Result
- eDNA Sample Not Required/Not Possible To Take



Coordinate System: British National Grid
0 50 100 200 Metres

Scale: 1:5,000

A3 Page Size

Environmental Statement

eDNA Survey Results

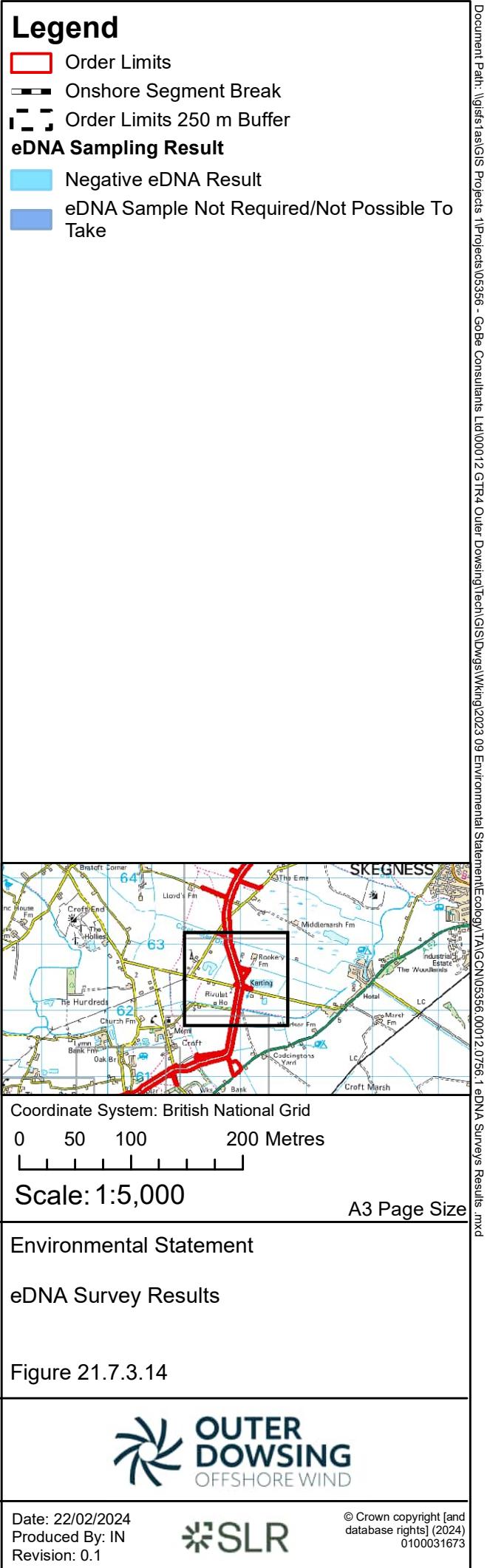
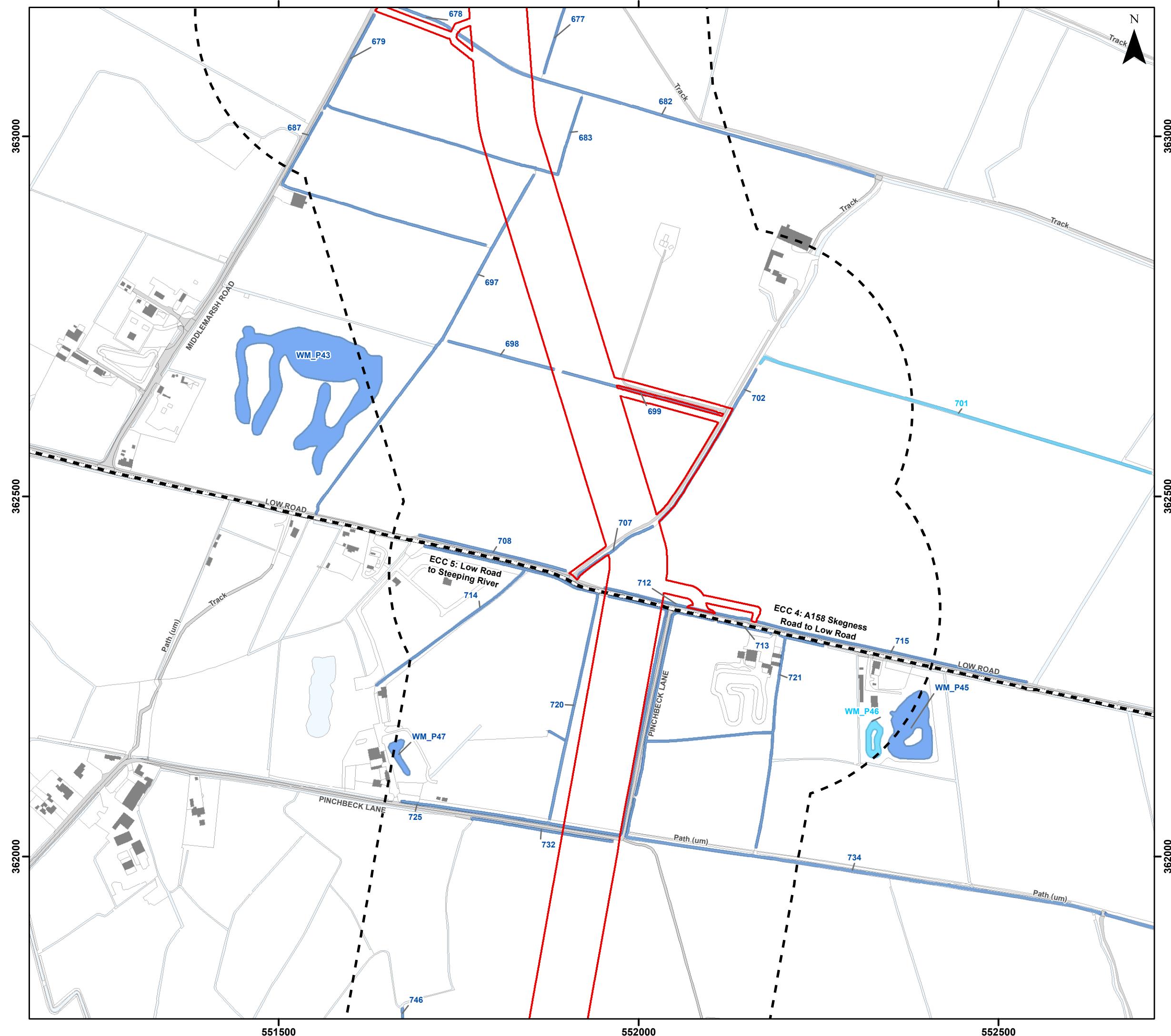
Figure 21.7.3.13

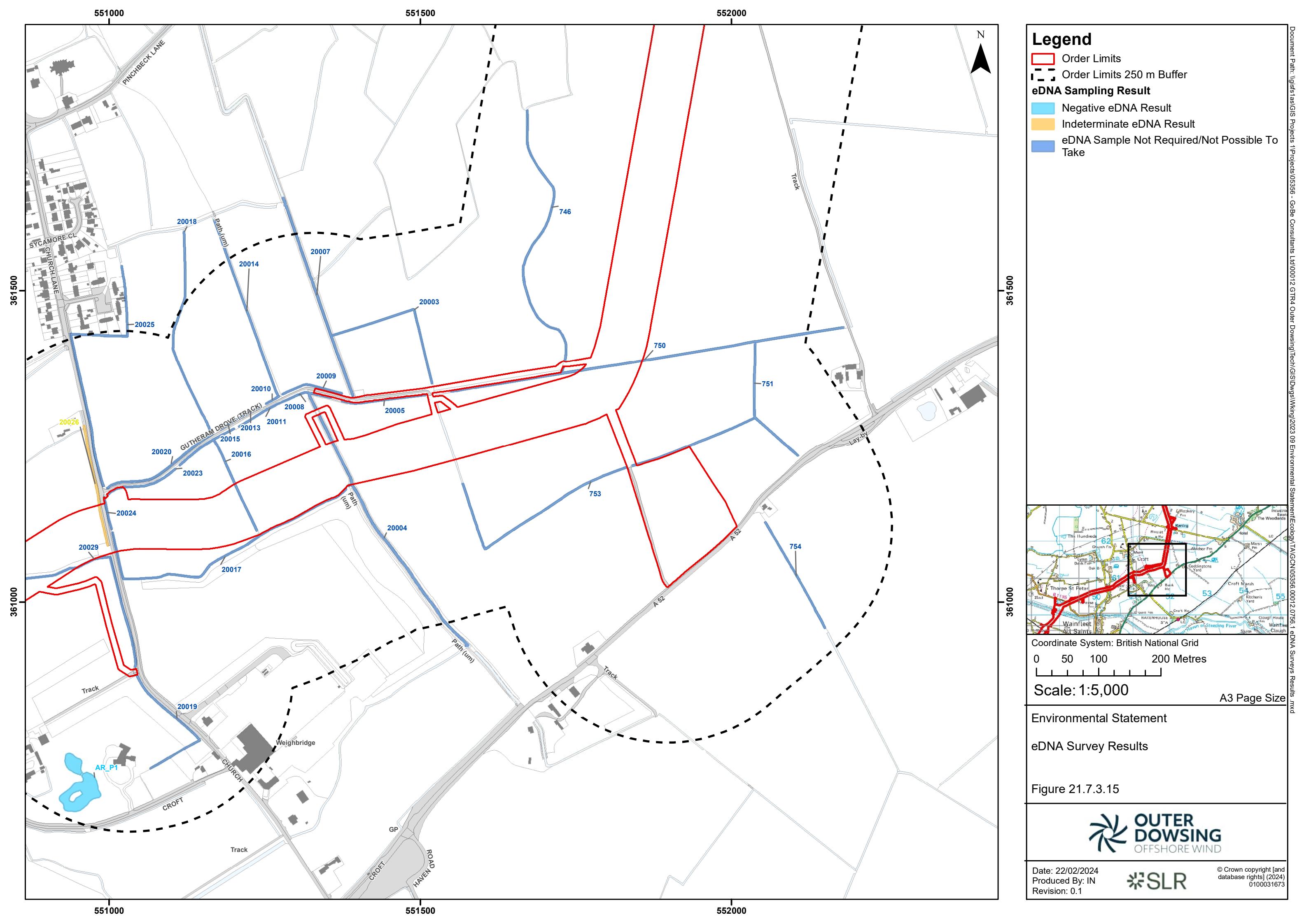


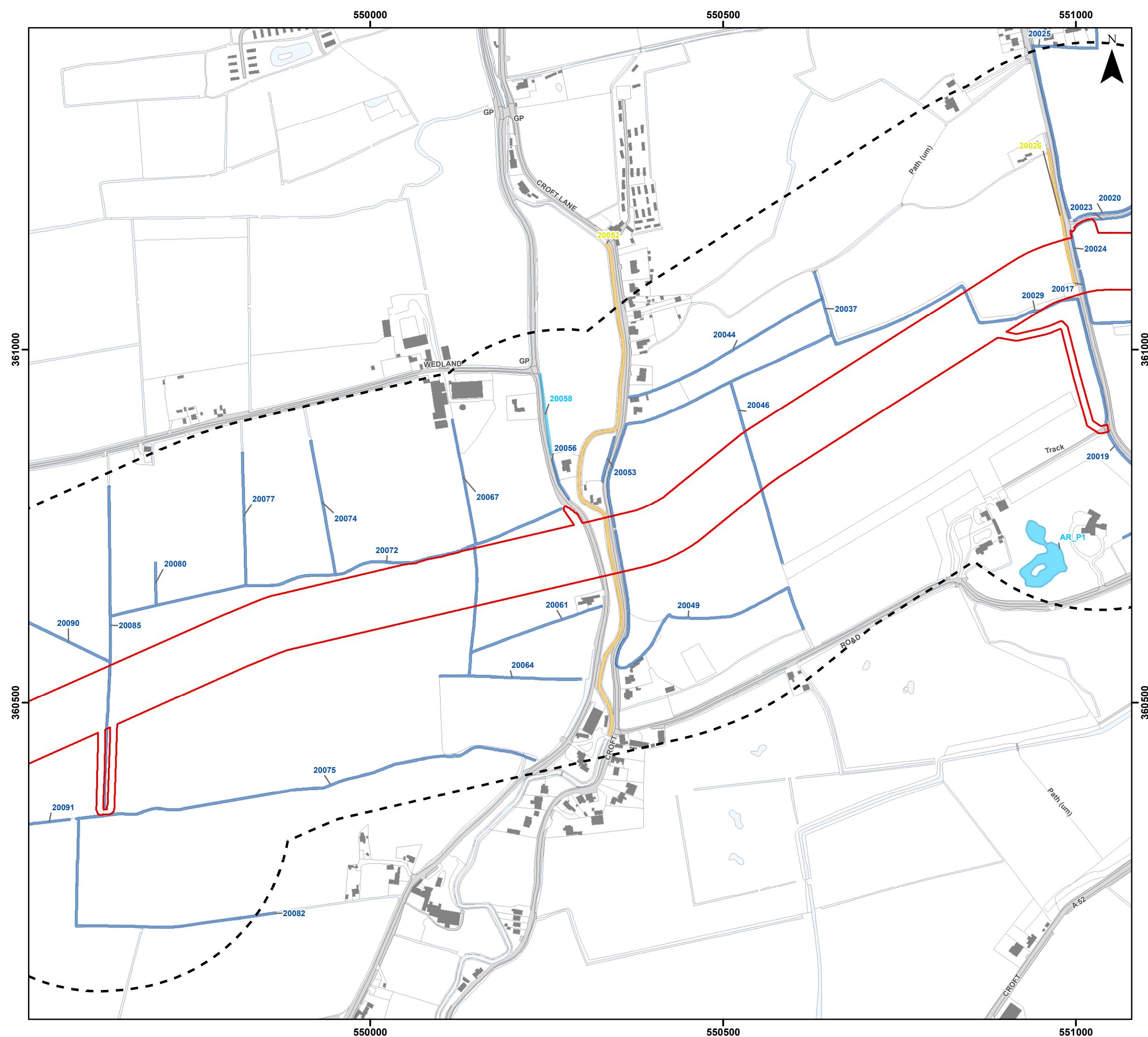
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Legend

- Order Limits
 - Order Limits 250 m Buffer

eDNA Sampling Result

 - Negative eDNA Result
 - Indeterminate eDNA Result
 - eDNA Sample Not Required/Not Possible To Take



Coordinate System: British National Grid

0 50 100 200 Metres

Scale: 1:5 000

Environmental Statement

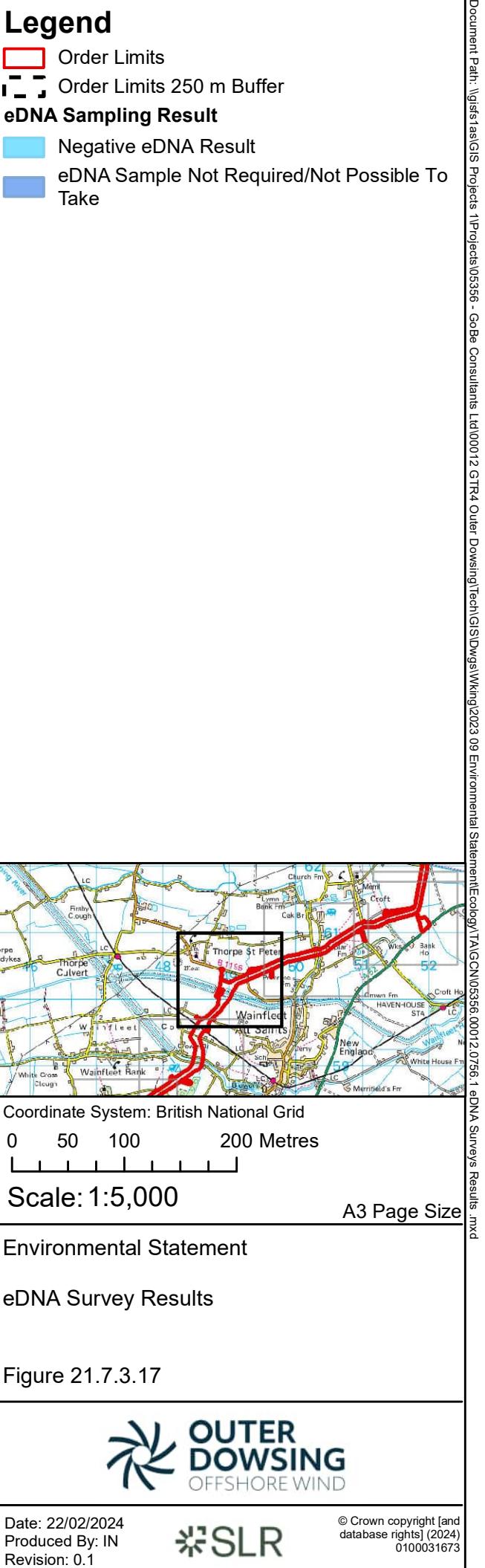
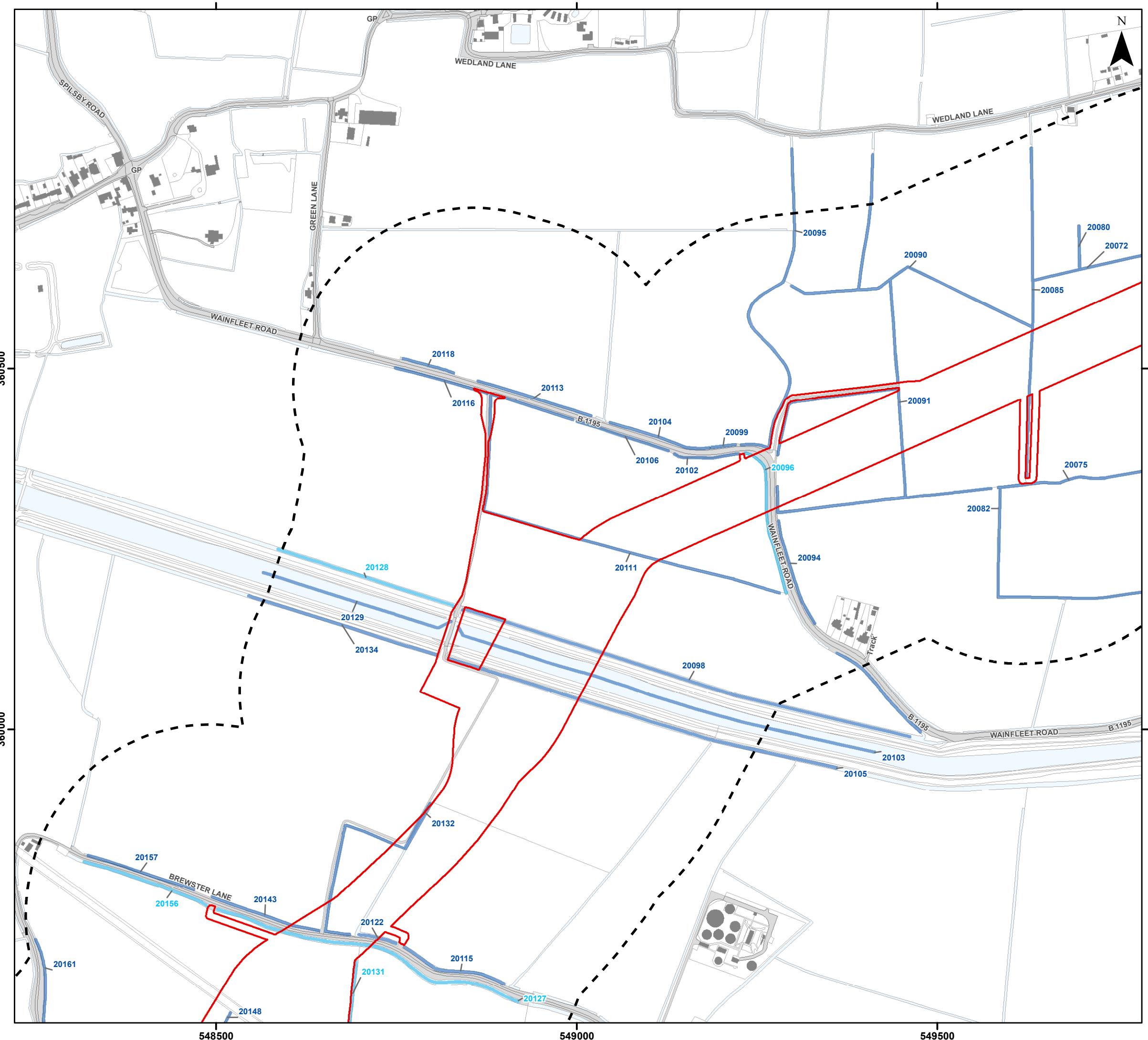
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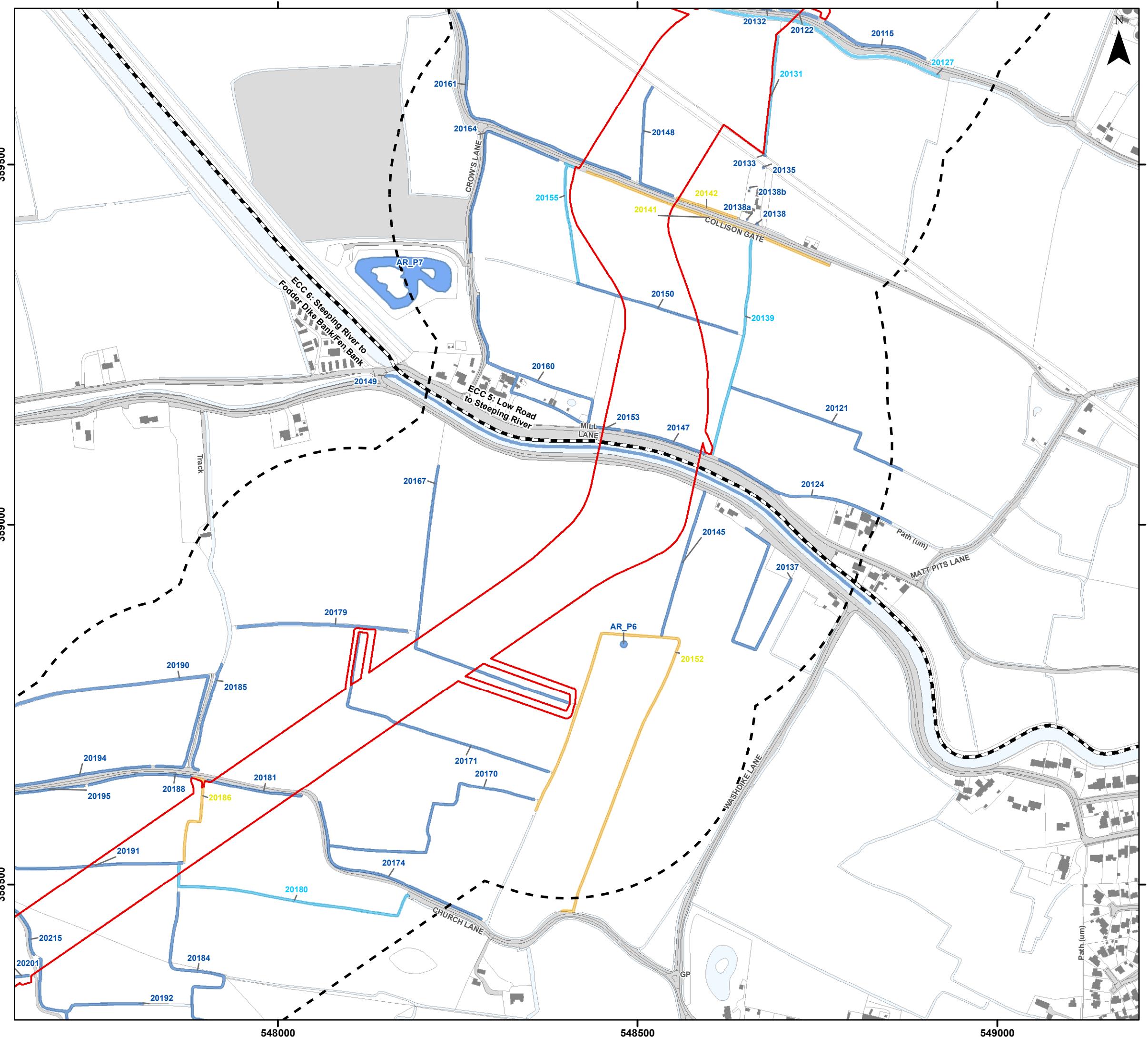
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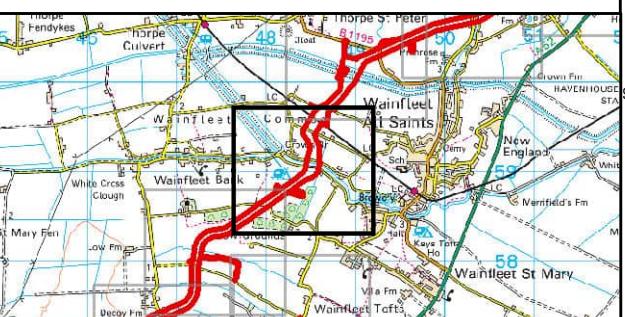
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Legend

- Order Limits
- Onshore Segment Break
- Order Limits 250 m Buffer
- eDNA Sampling Result**
- Negative eDNA Result
- Indeterminate eDNA Result
- eDNA Sample Not Required/Not Possible To Take



Scale: 1:5,000

A3 Page Size

Environmental Statement

eDNA Survey Results

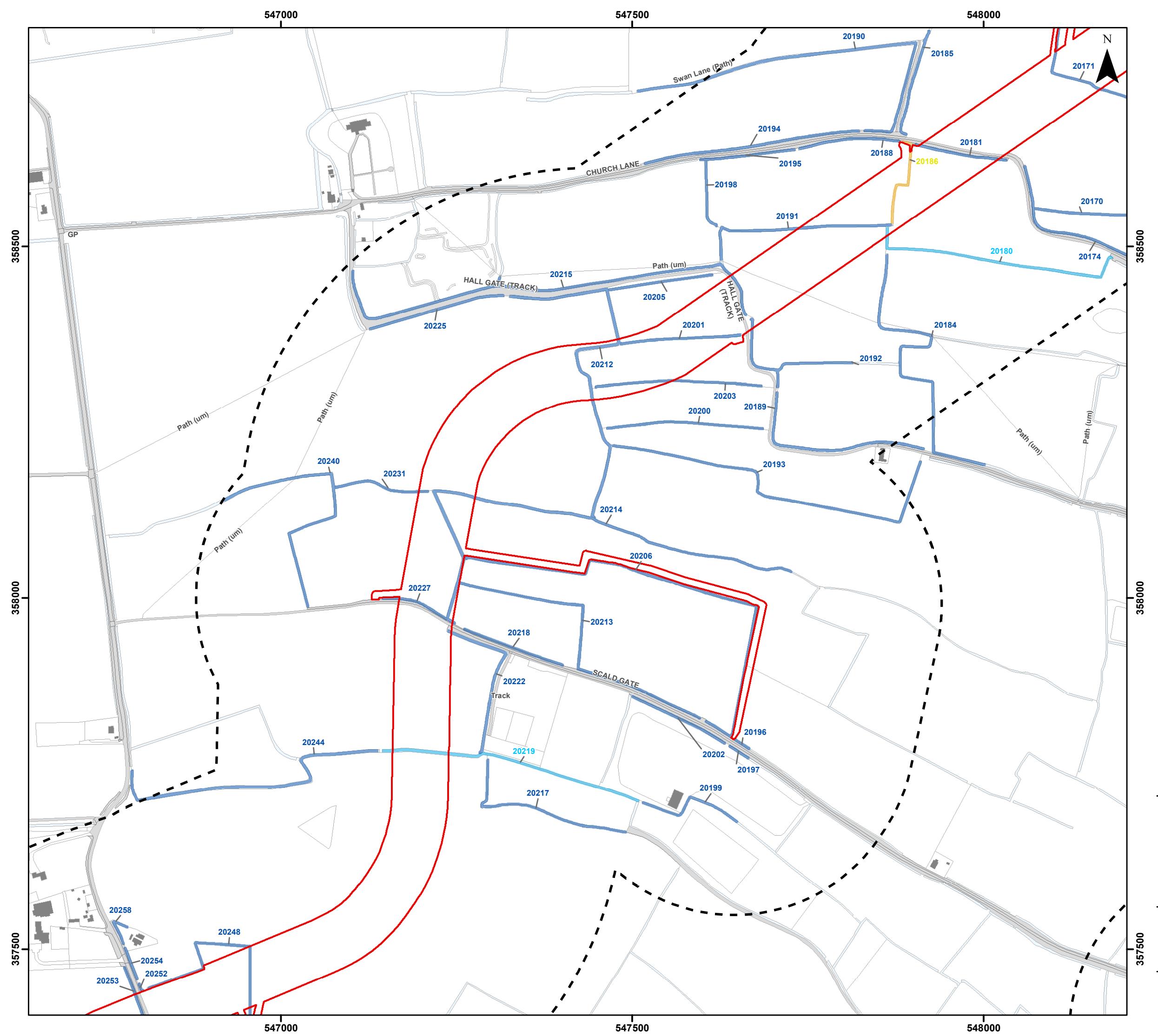
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OUTER DOWNSING
OFFSHORE WIND

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Legend

Order Limits

Order Limits 250 m Buffer

DNA Sampling Result

s|GS Projects 1|Pre



Coordinate System: British National Grid

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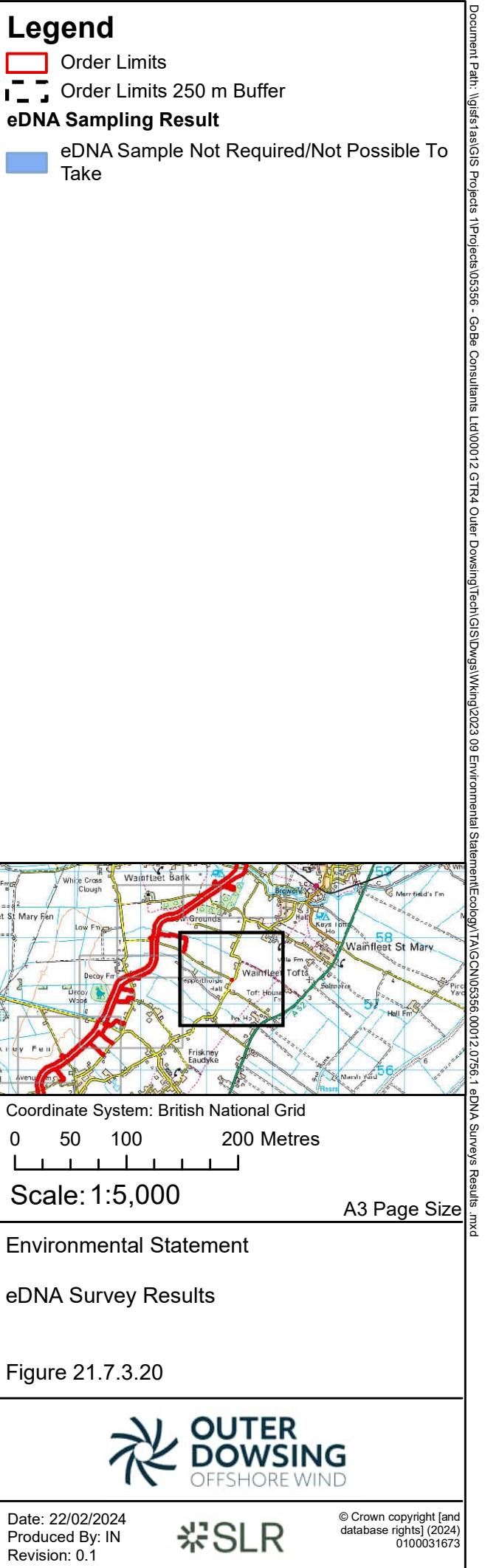
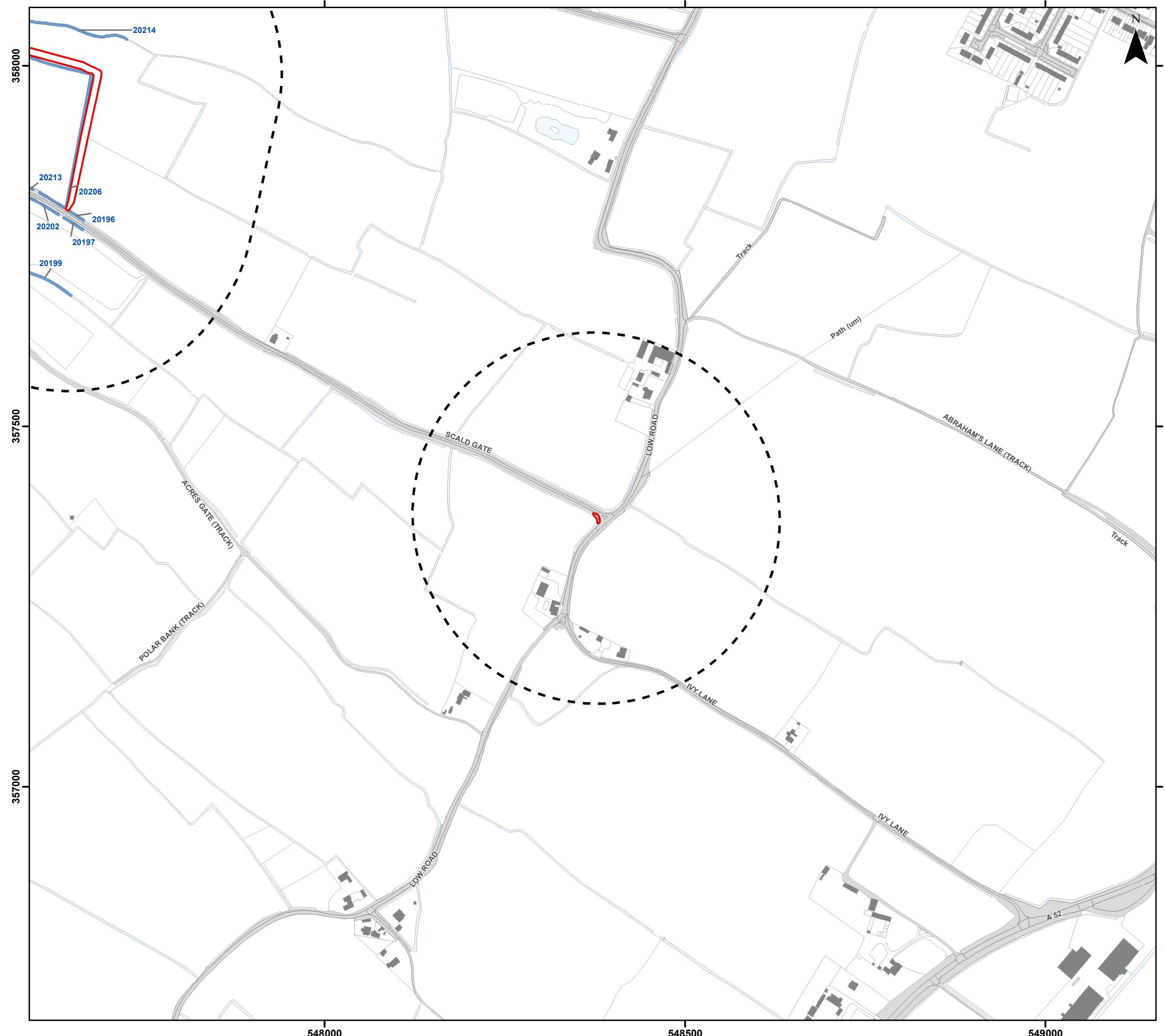
Environmental Statement

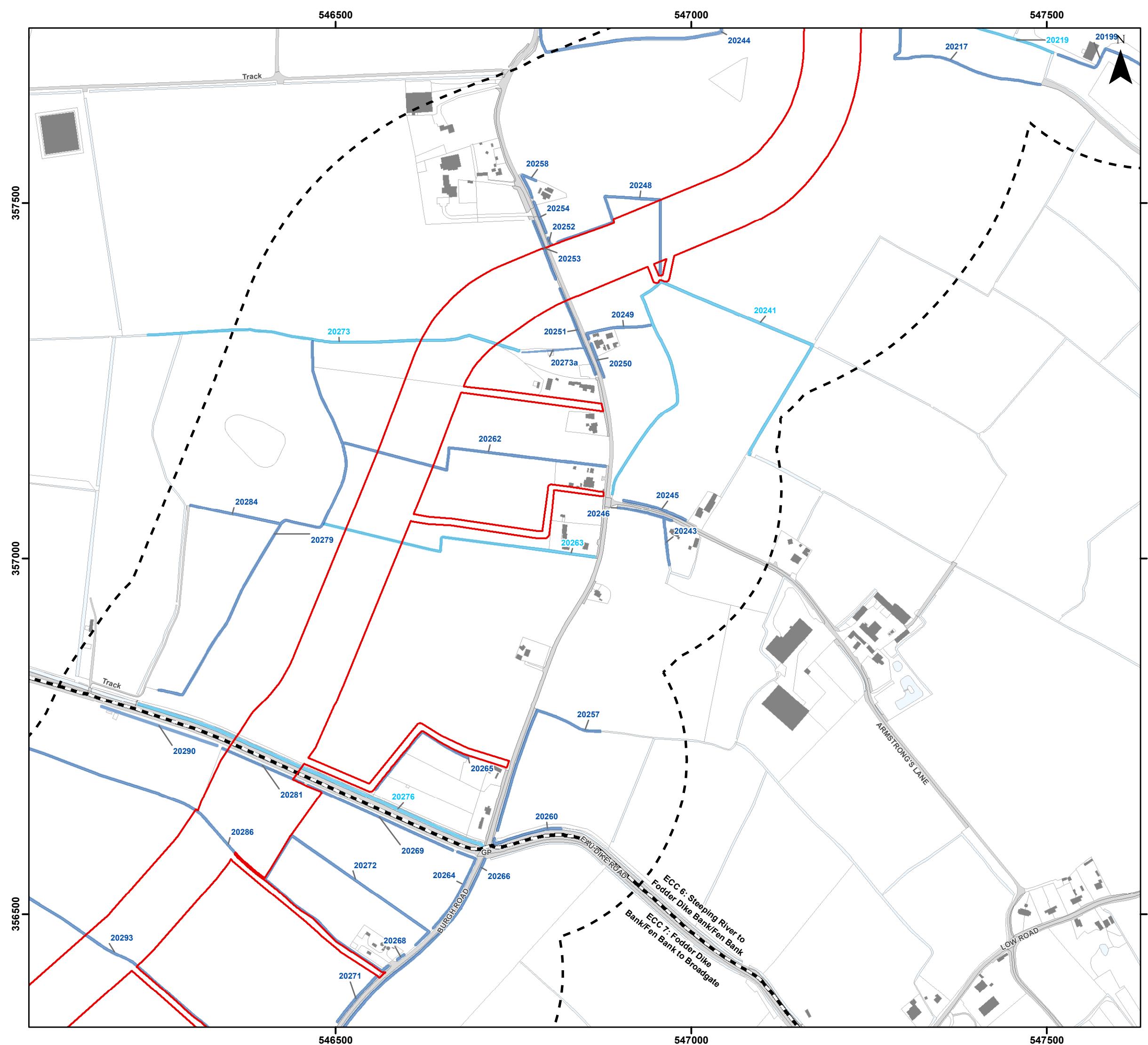
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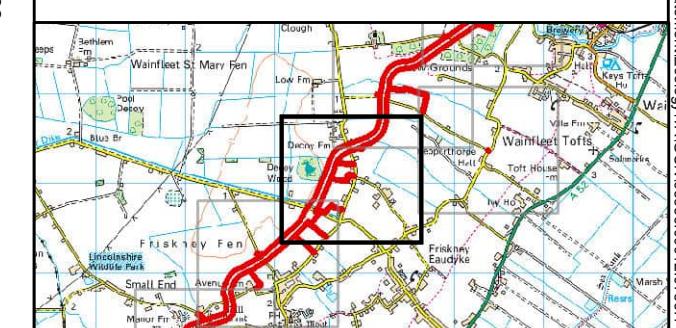


Legend

- Order Limits
- Onshore Segment Break
- Order Limits 250 m Buffer

eDNA Sampling Result

- Negative eDNA Result
 - eDNA Sample Not Required/Not Possible To Take



Coordinate System: British National Grid

0 50 100 200 Metres

Scale 1:5,000

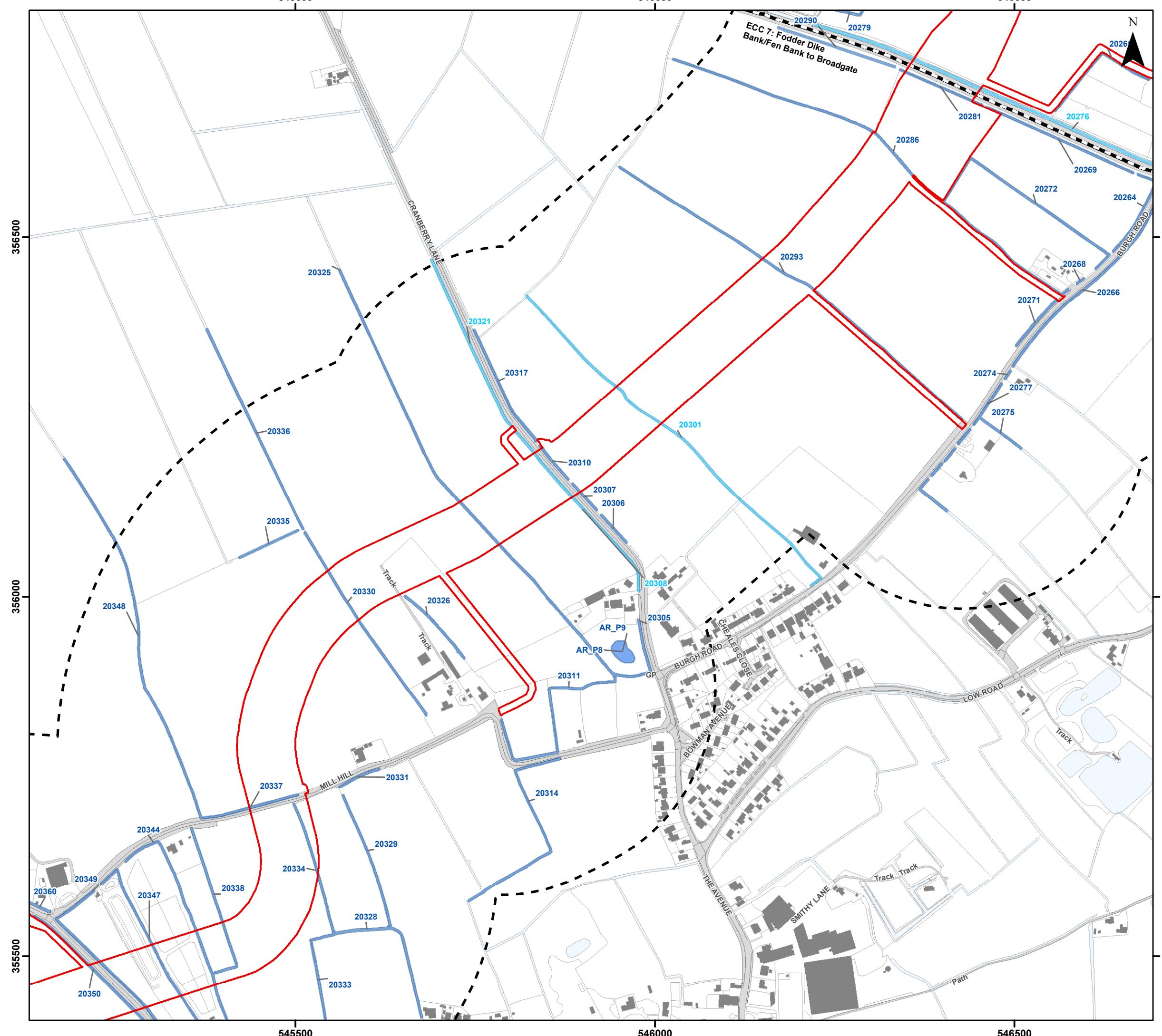
Environmental Statement

eDNA Survey Results

Figure 21.7.3.31



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Legend

- Order Limits
- Onshore Segment Break
- Order Limits 250 m Buffer
- eDNA Sampling Result**
 - Negative eDNA Result
 - eDNA Sample Not Required/Not Possible To Take



Coordinate System: British National Grid
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Scale: 1:5,000

A3 Page Size

Environmental Statement

eDNA Survey Results

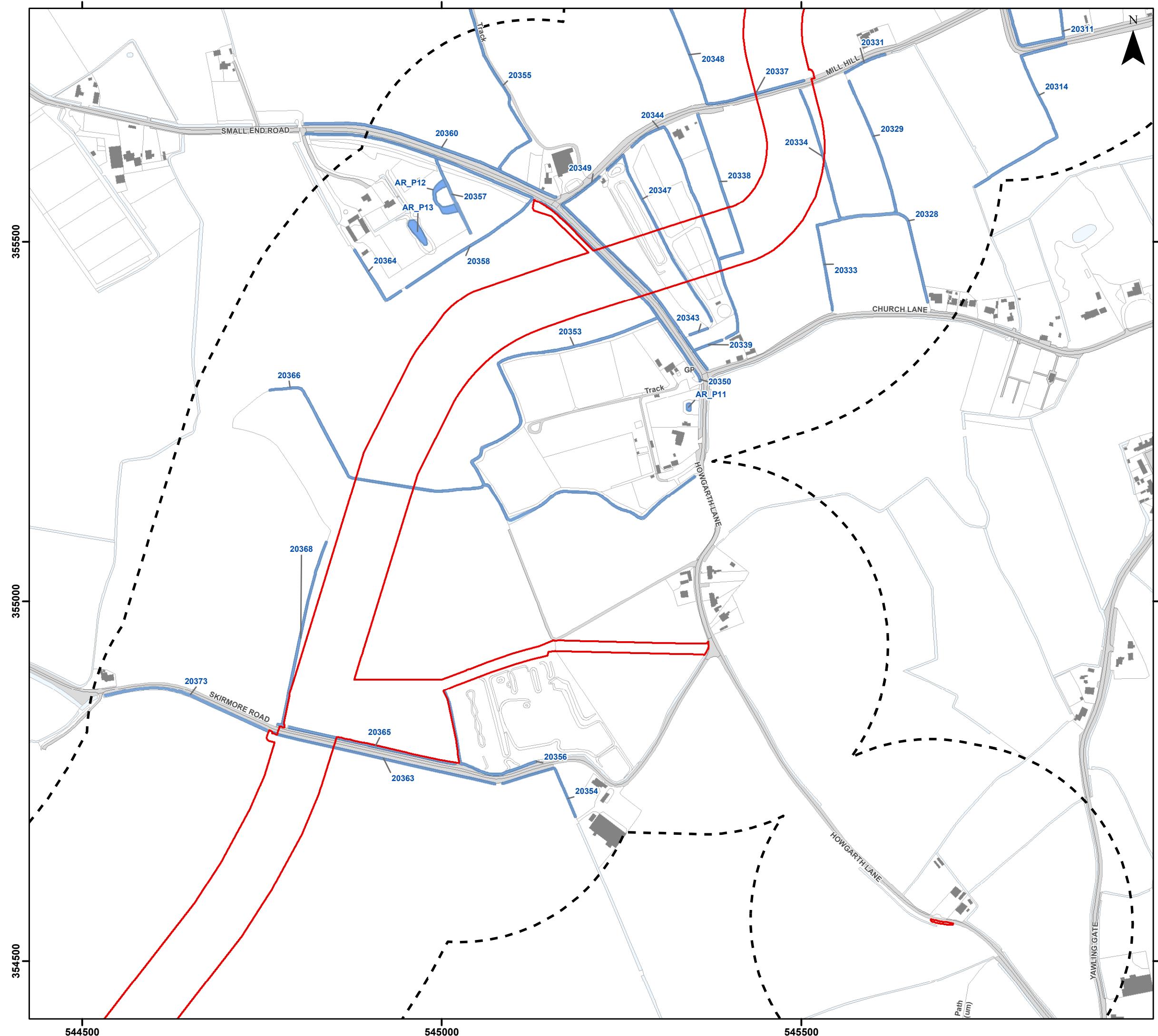
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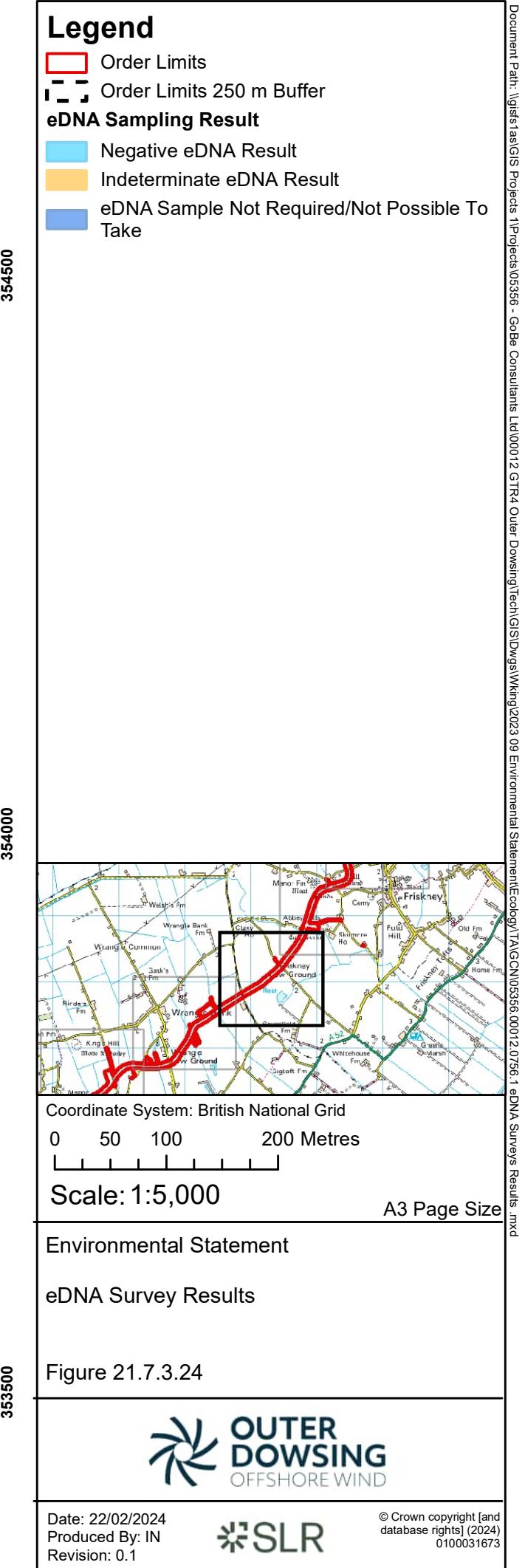
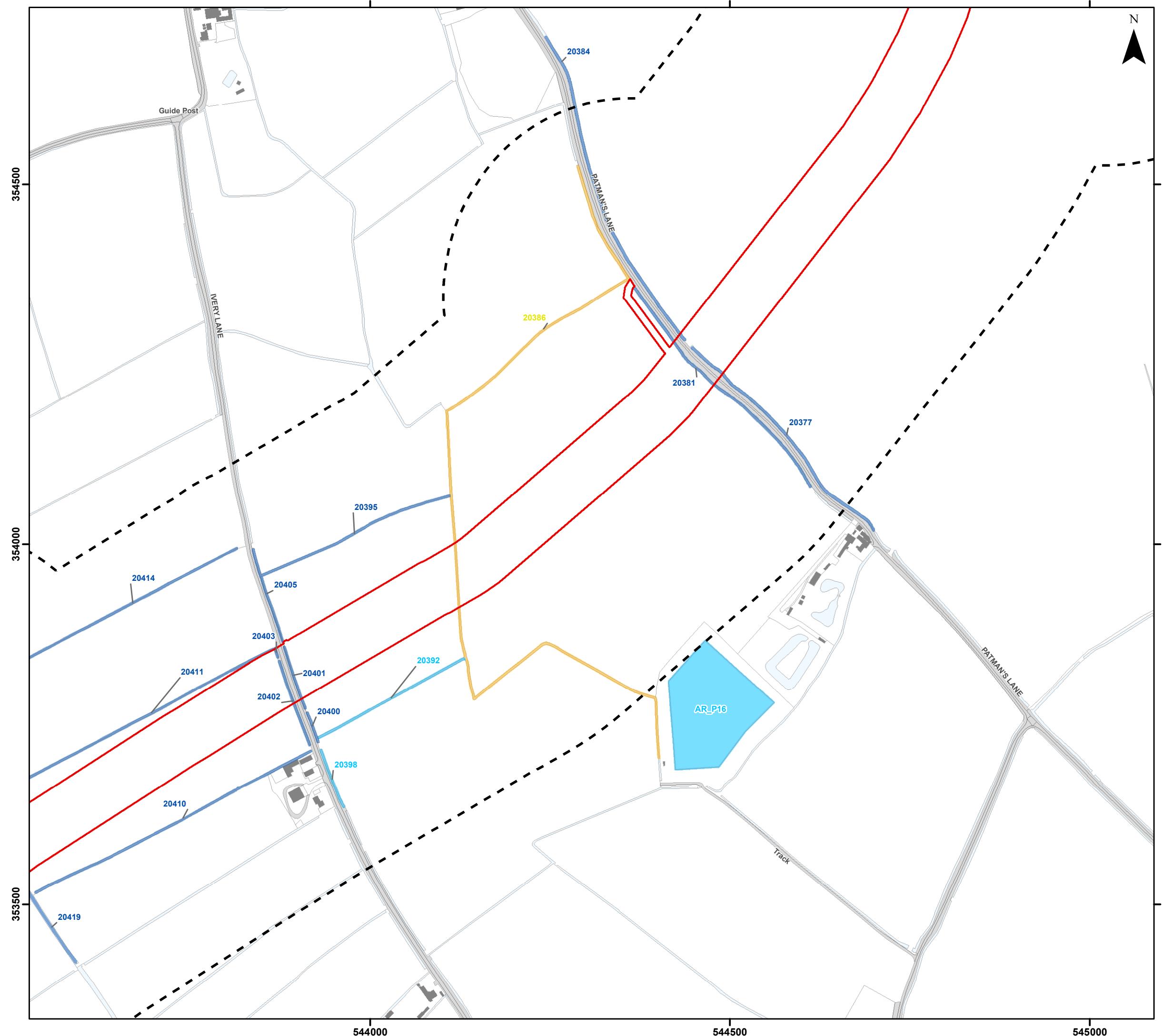


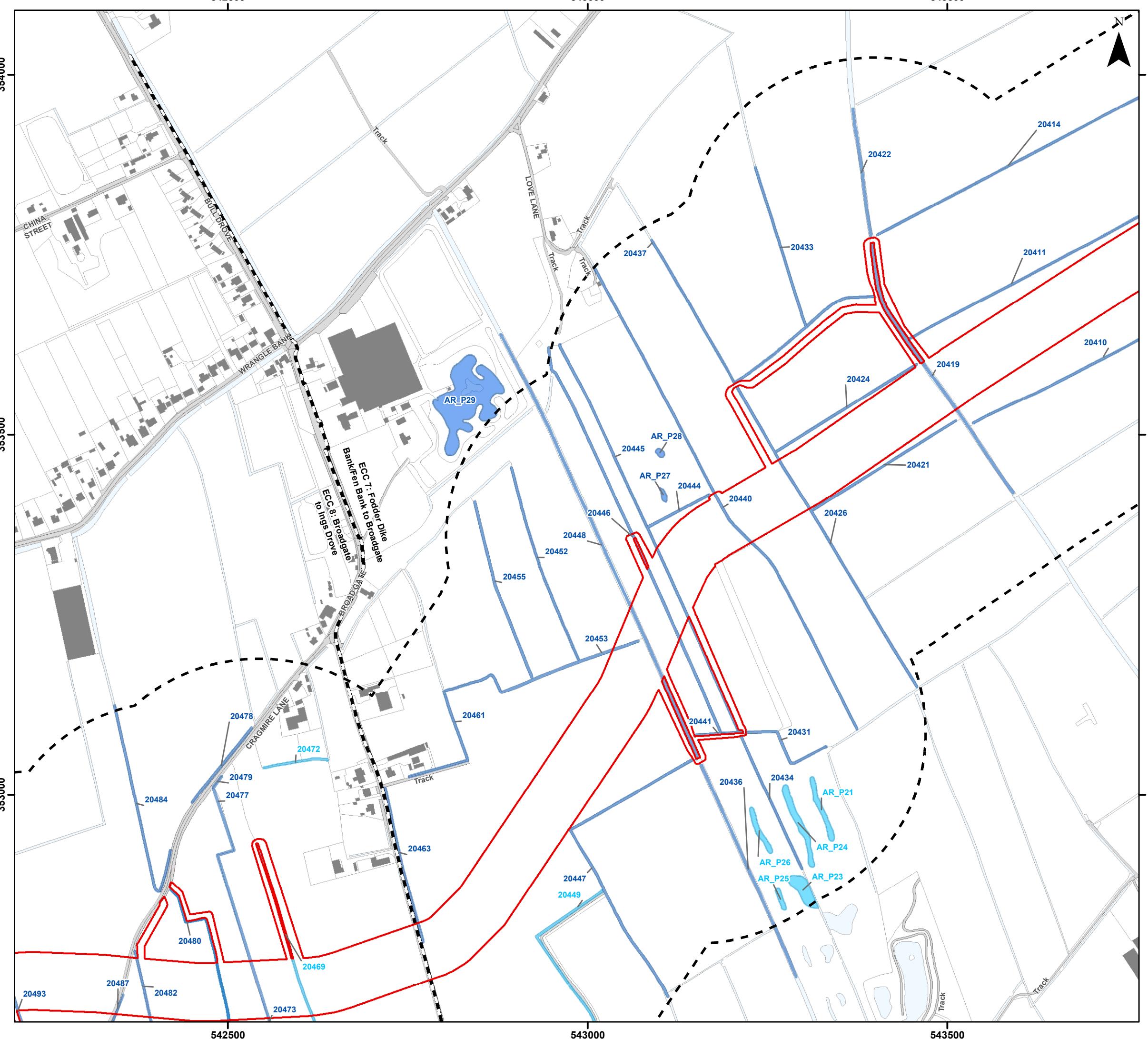
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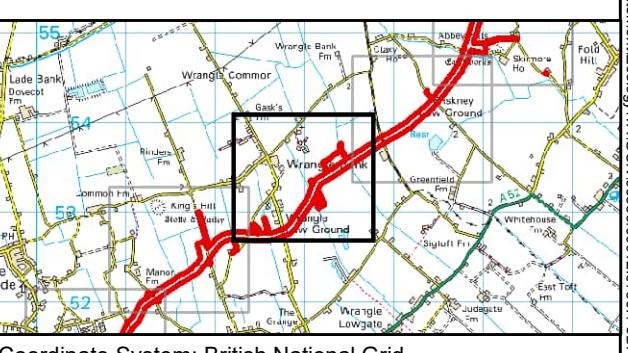






Legend

- Order Limits
- Onshore Segment Break
- Order Limits 250 m Buffer
- eDNA Sampling Result**
 - Negative eDNA Result
 - eDNA Sample Not Required/Not Possible To Take



Coordinate System: British National Grid

0 50 100 200 Metres

Scale: 1:5,000

A3 Page Size

Environmental Statement

eDNA Survey Results

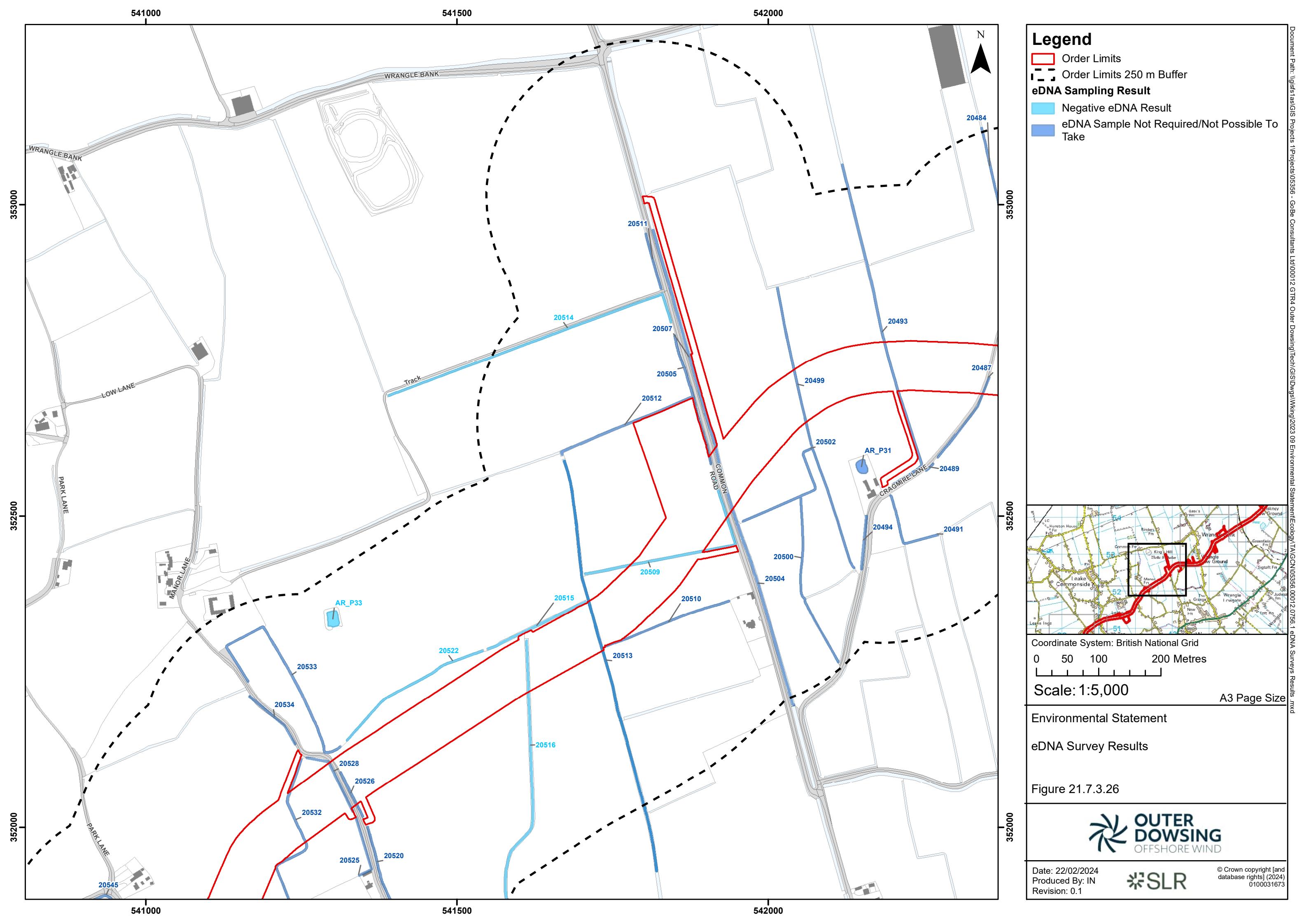
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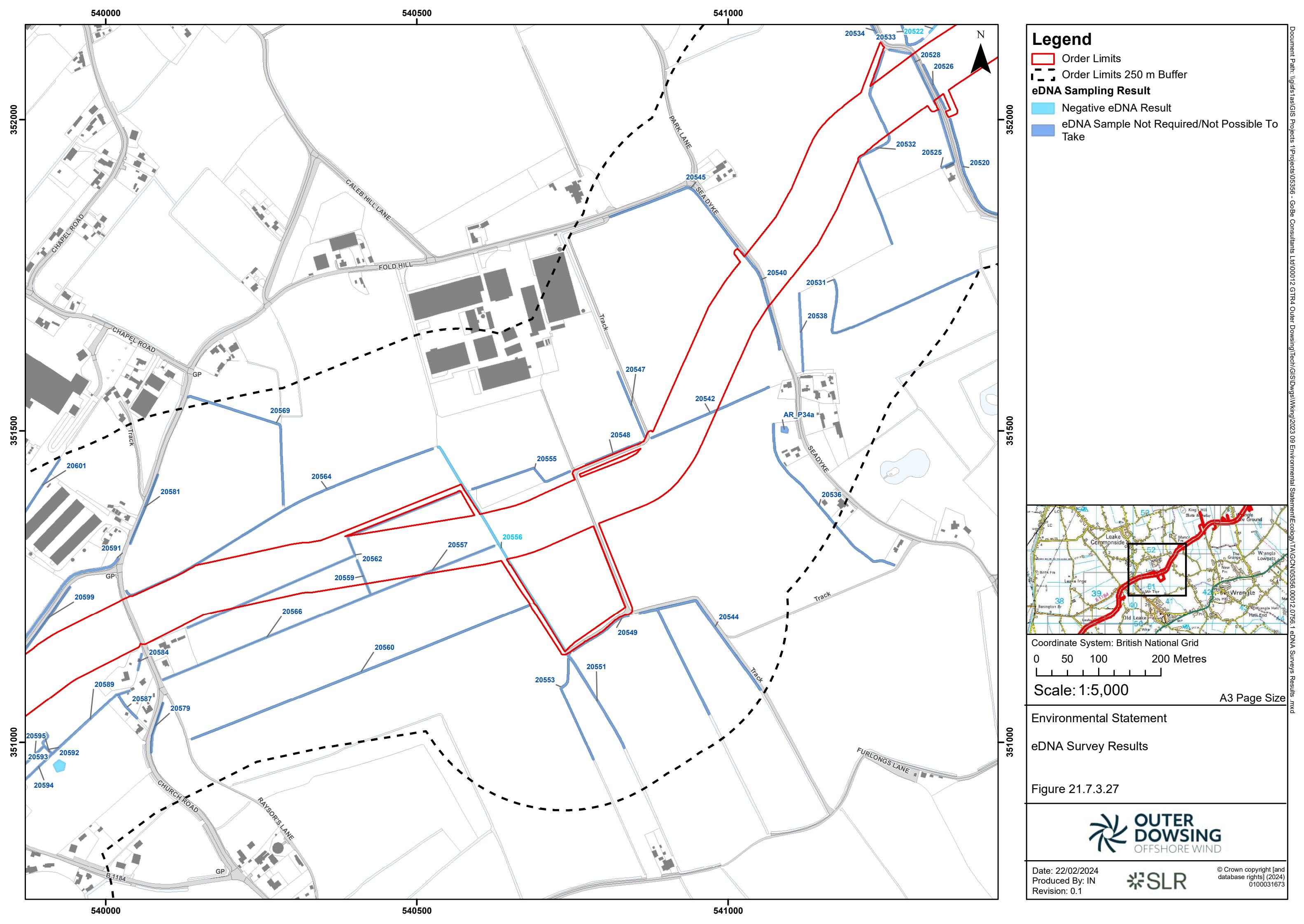


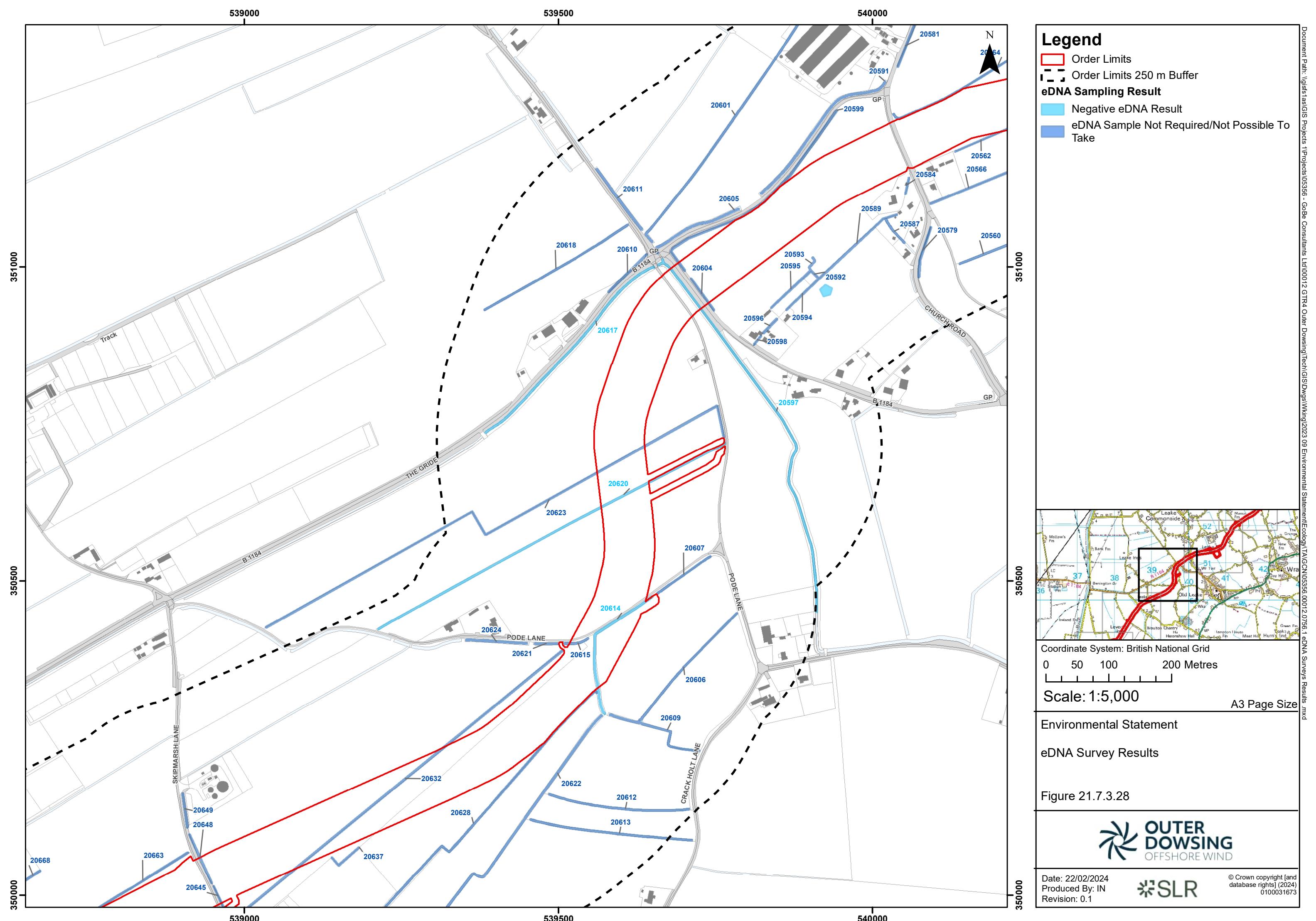
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Revision: 0.1

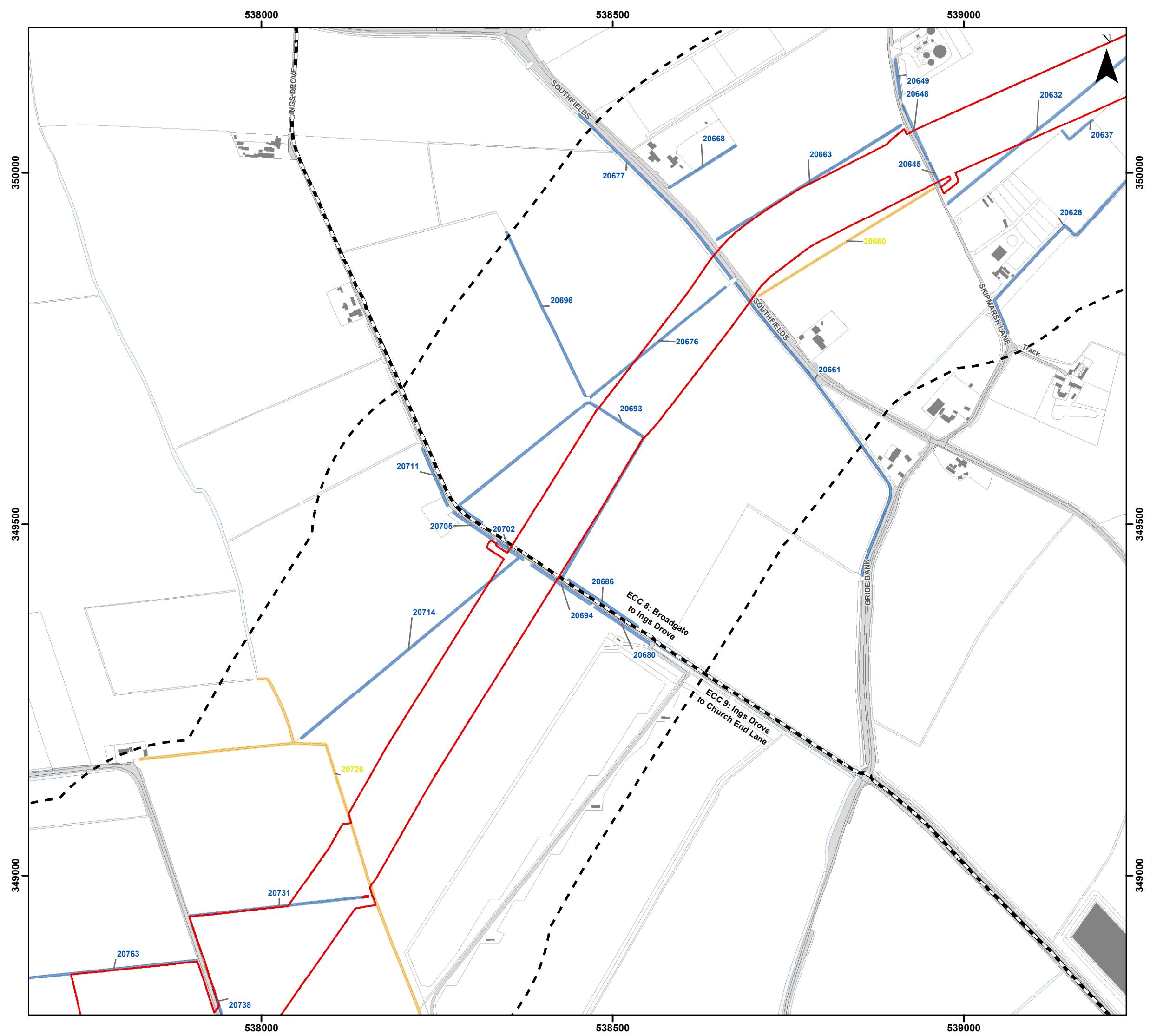
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Legend

Order Limits

— Onshore Segment Break

eDNA Sampling Result

Indeterminate eDNA Results

eDNA Sample Not Required

Take



Coordinate System: British National Grid

0 50 100 200 Metres

Scale: 1:5,000

Environmental Statement

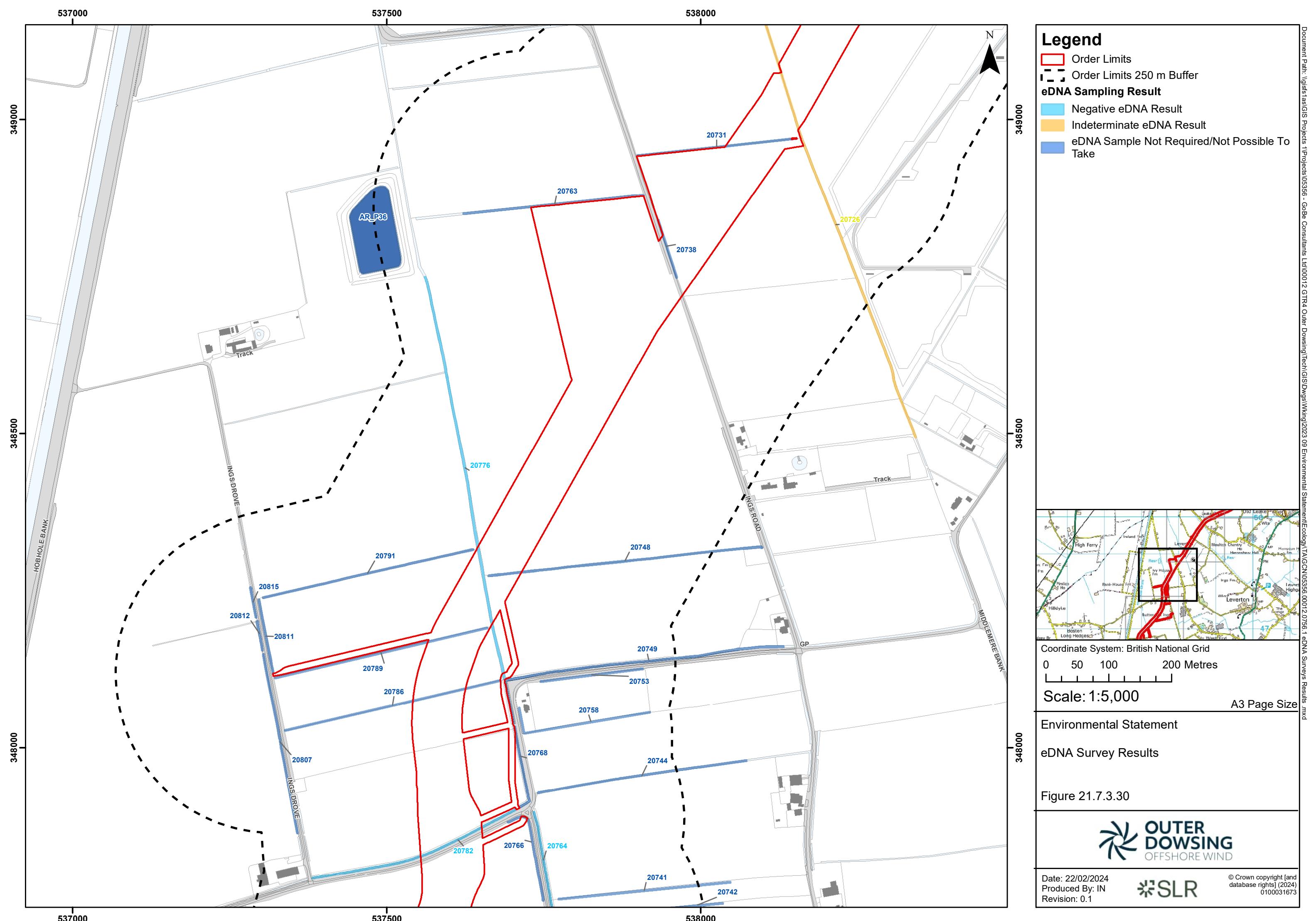
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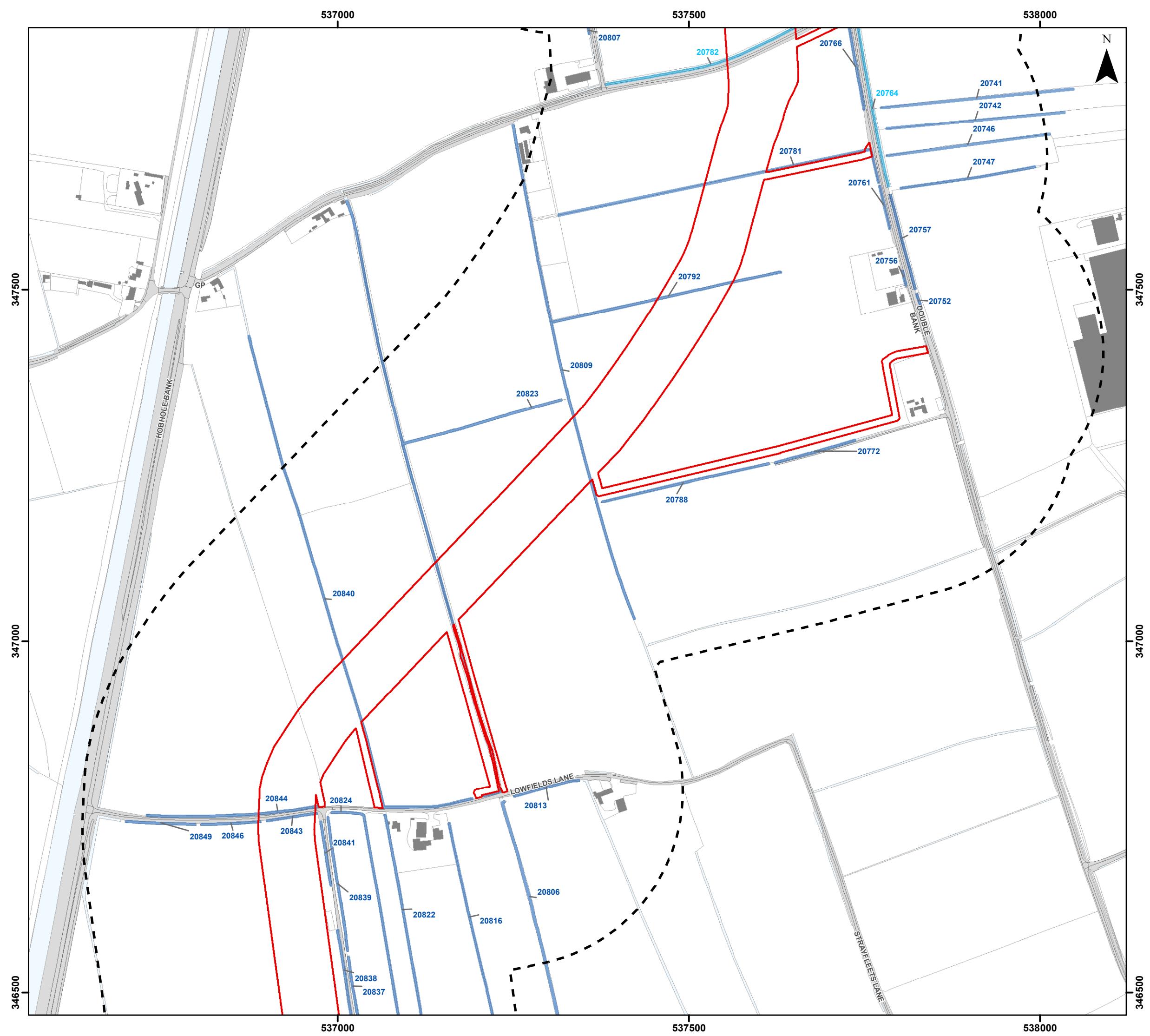
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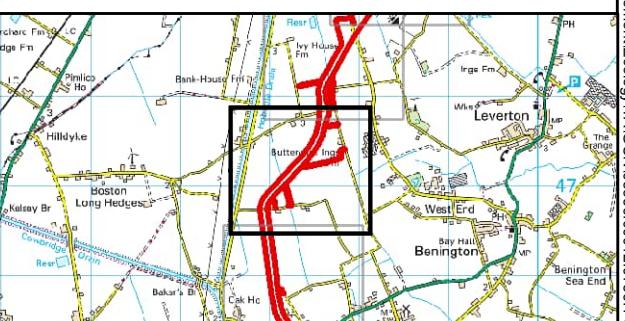
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Legend

- Order Limits
- Order Limits 250 m Buffer
- eDNA Sampling Result
 - Negative eDNA Result
 - eDNA Sample Not Required
 - Take



Coordinate System: British National Grid

0 50 100 200 Metres

Scale 1:5,000

Environmental Statement

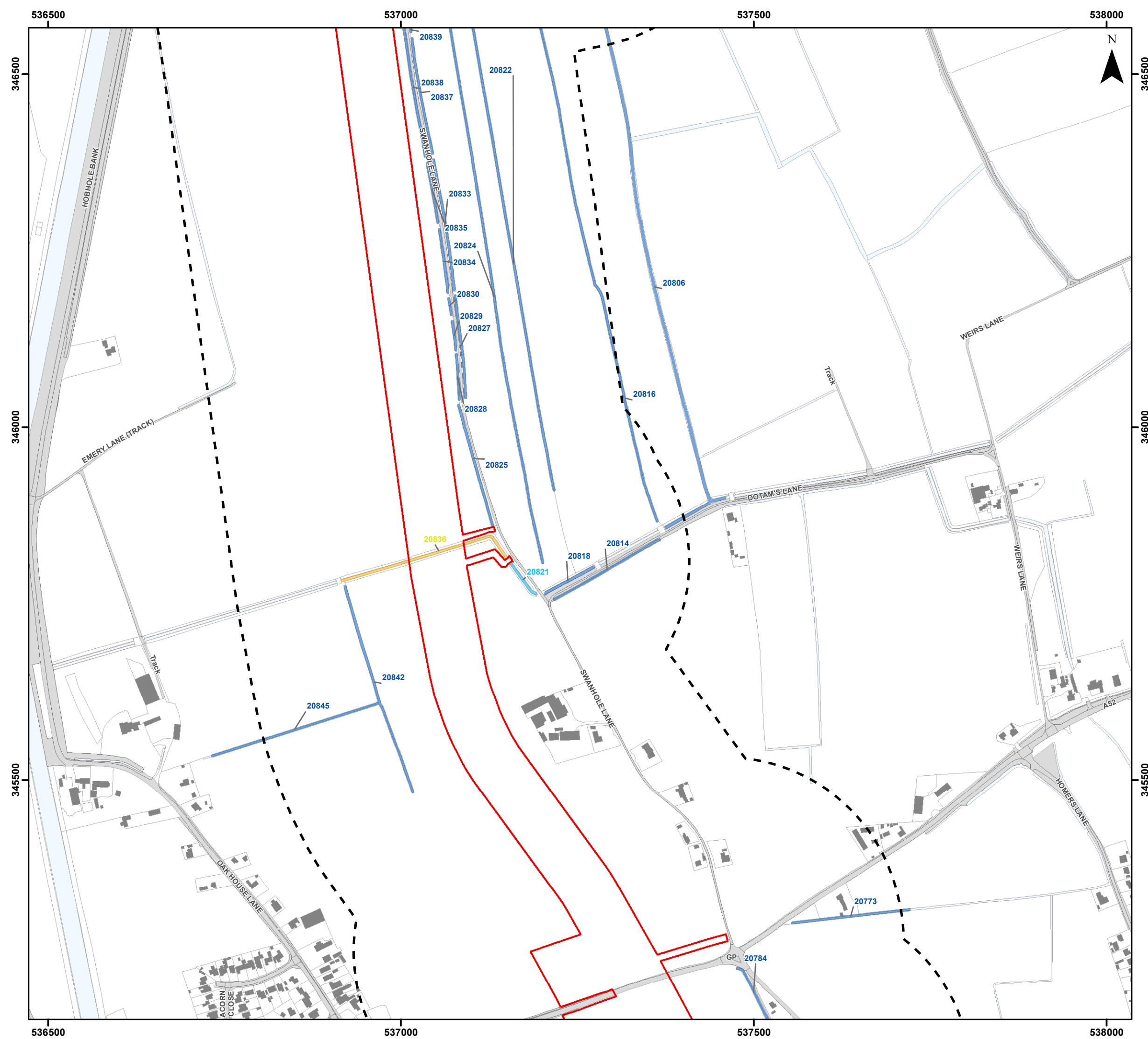
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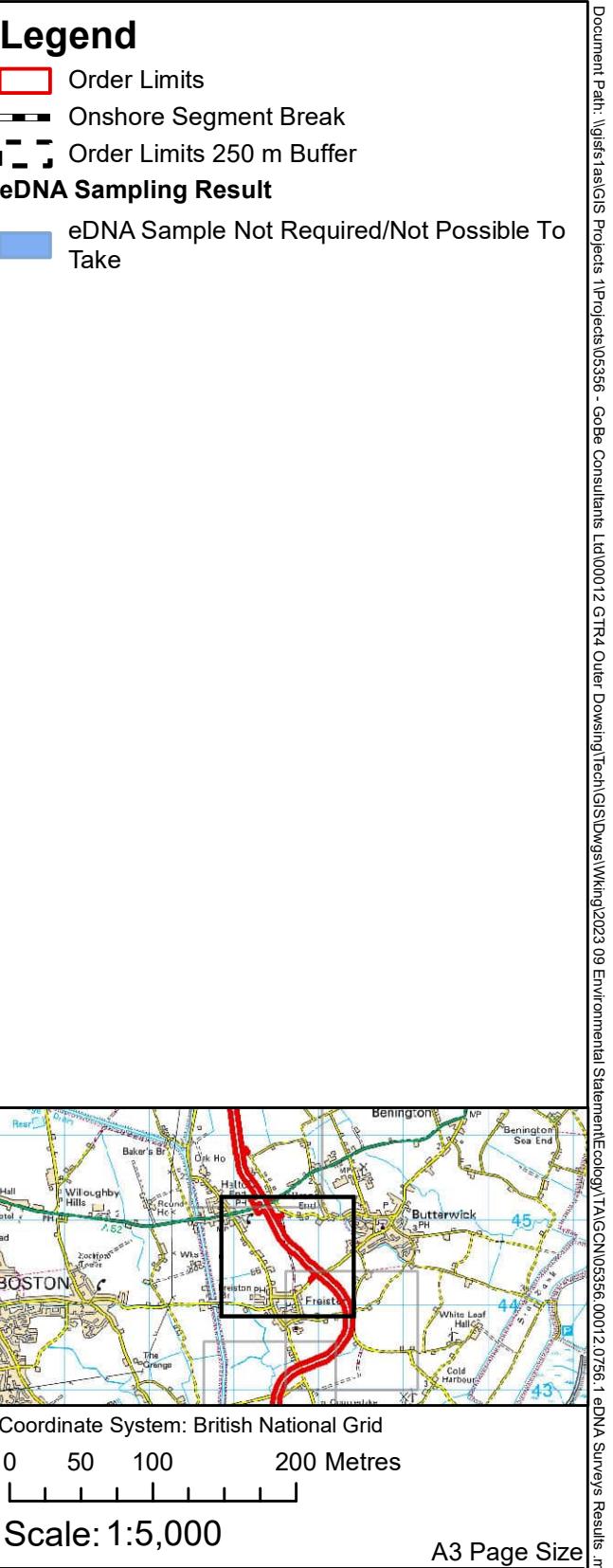
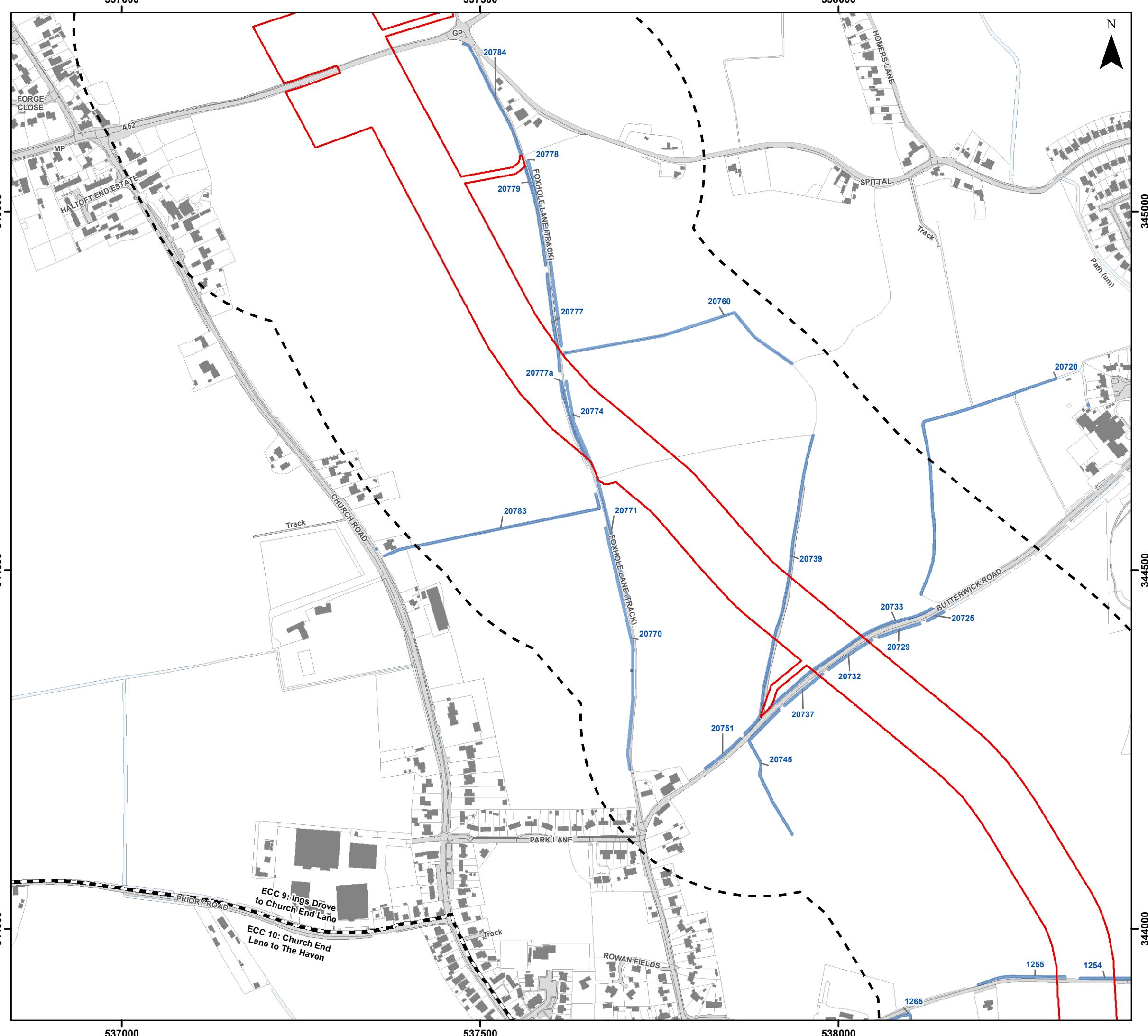
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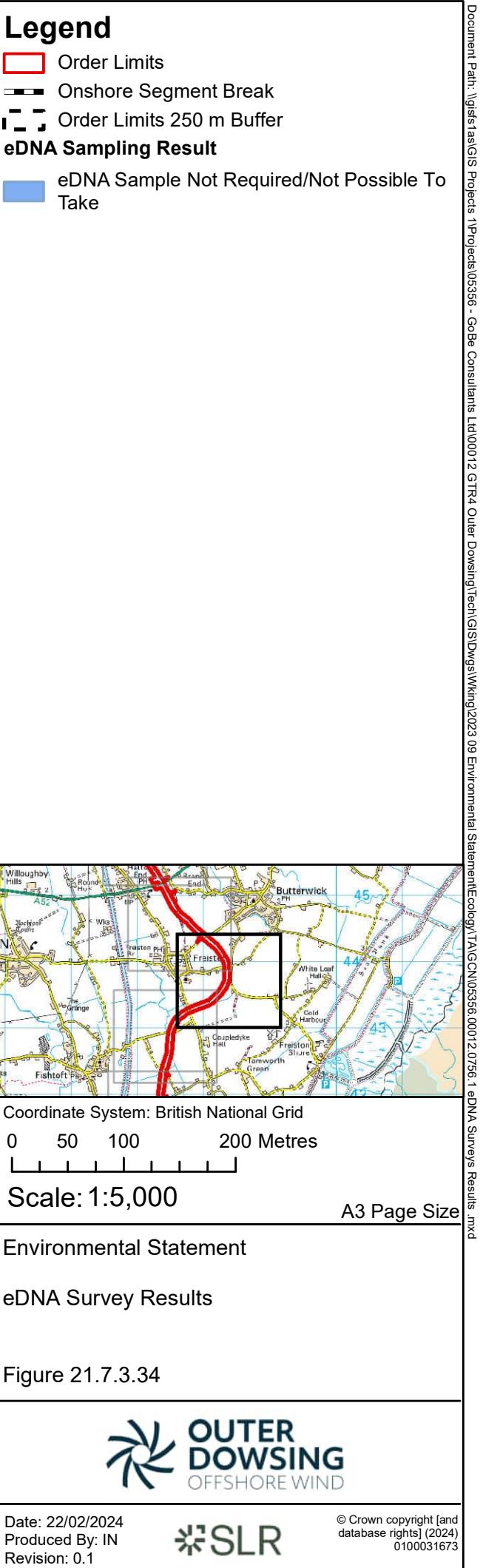
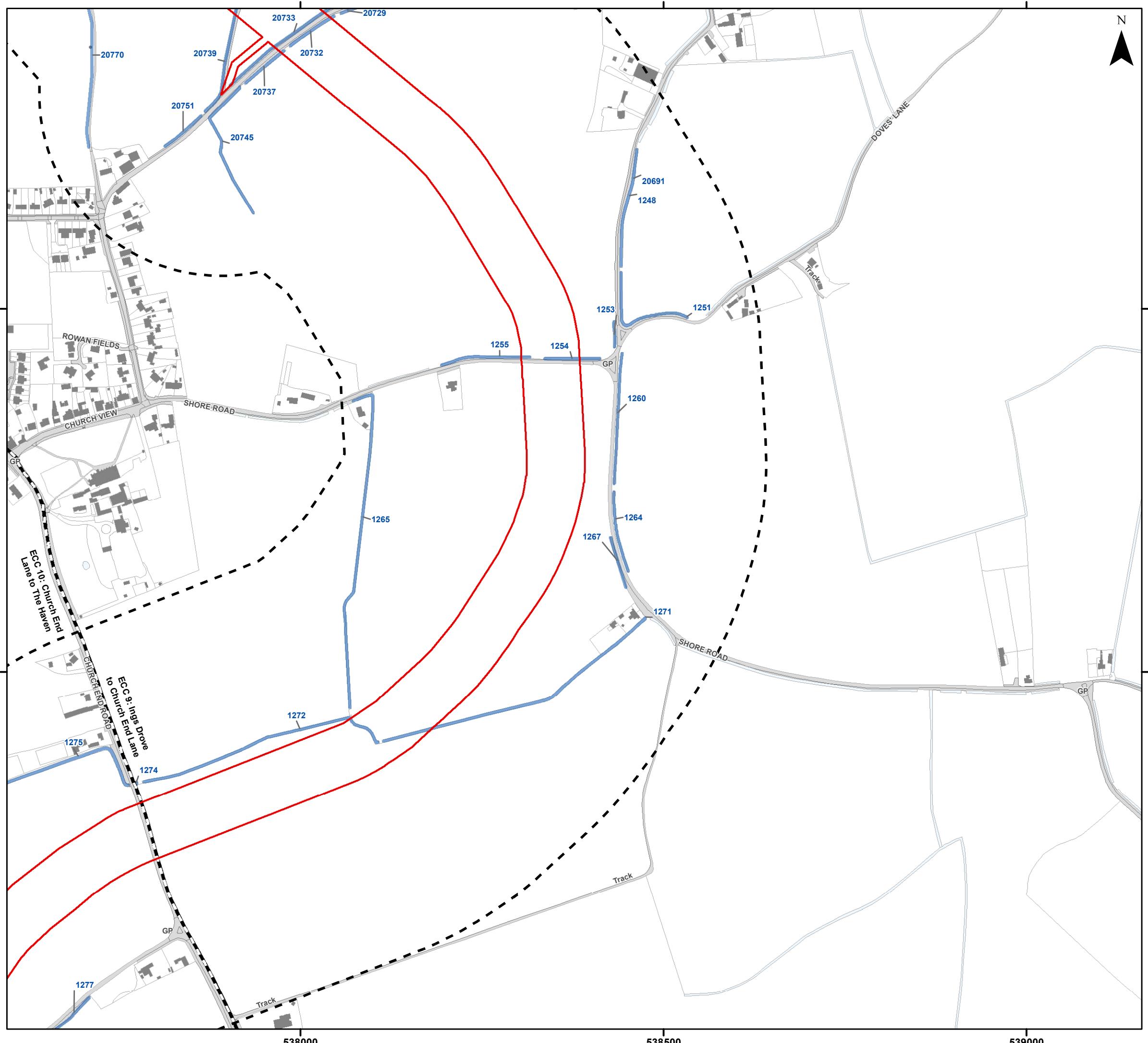


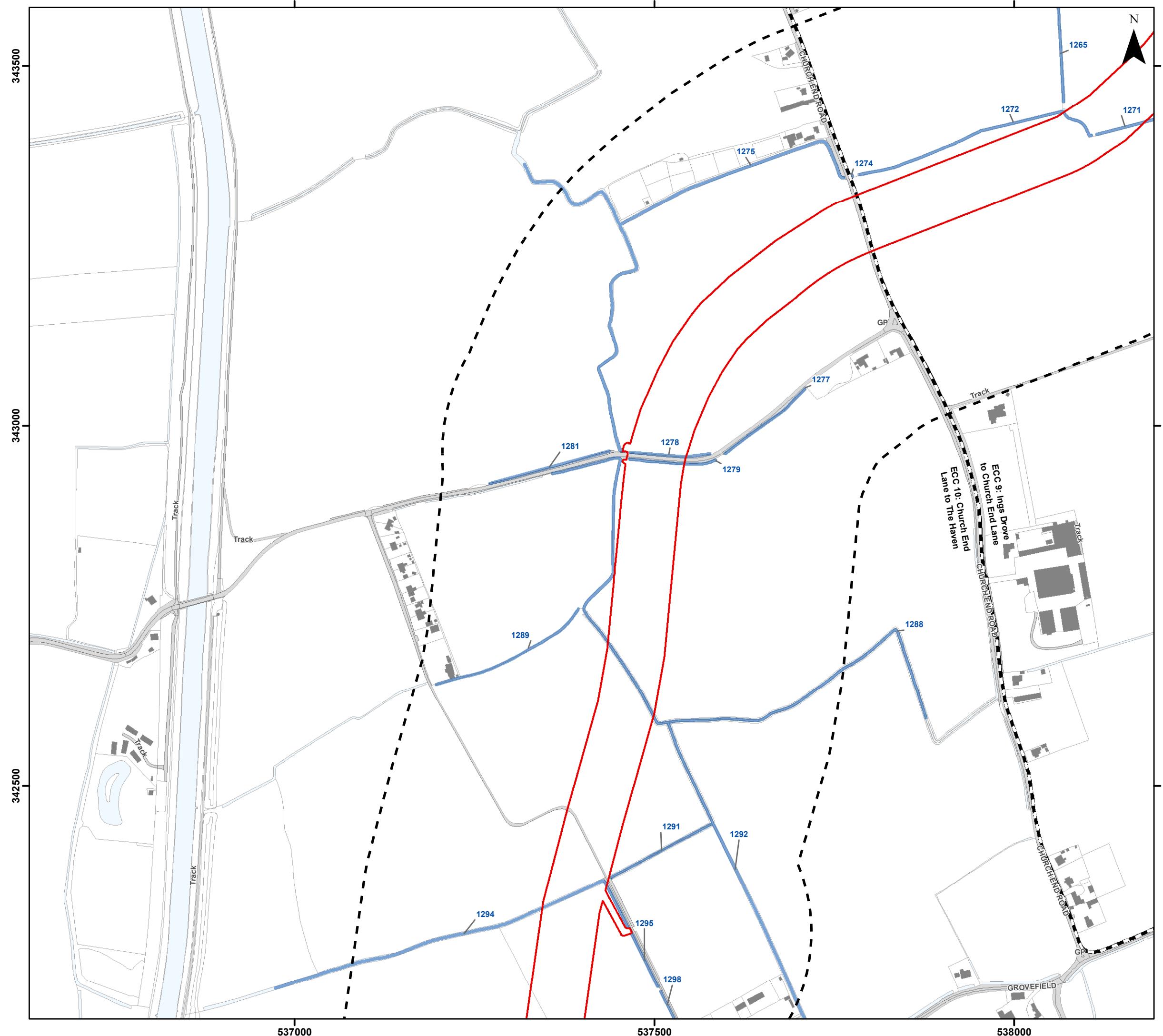
Environmental Statement
eDNA Survey Results
Figure 21.7.3.33

Outer Dowsing Offshore Wind

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Legend

- Order Limits
- Onshore Segment Break
- Order Limits 250 m Buffer
- eDNA Sampling Result**
- eDNA Sample Not Required/Not Possible To Take



Coordinate System: British National Grid

0 50 100 200 Metres

Scale: 1:5,000

A3 Page Size

Environmental Statement

eDNA Survey Results

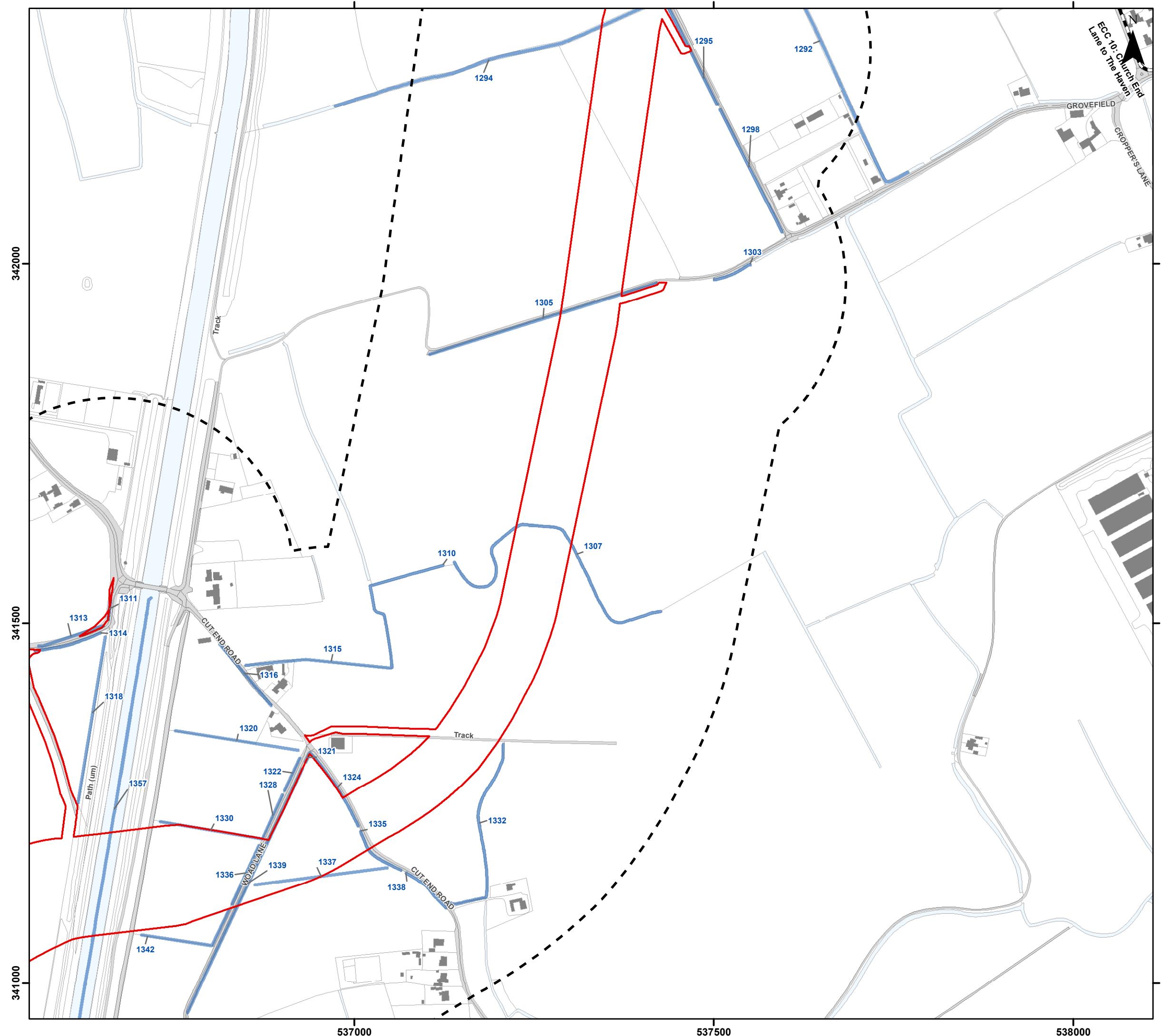
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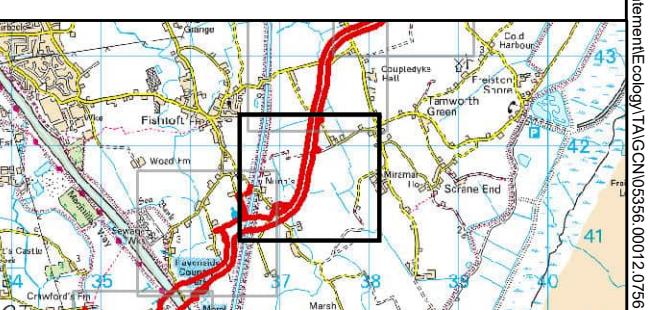
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Legend

- Order Limits
- Onshore Segment Break
- Order Limits 250 m Buffer
- eDNA Sampling Result**
- eDNA Sample Not Required/Not Possible To Take



Coordinate System: British National Grid

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Scale: 1:5,000

A3 Page Size

Environmental Statement

eDNA Survey Results

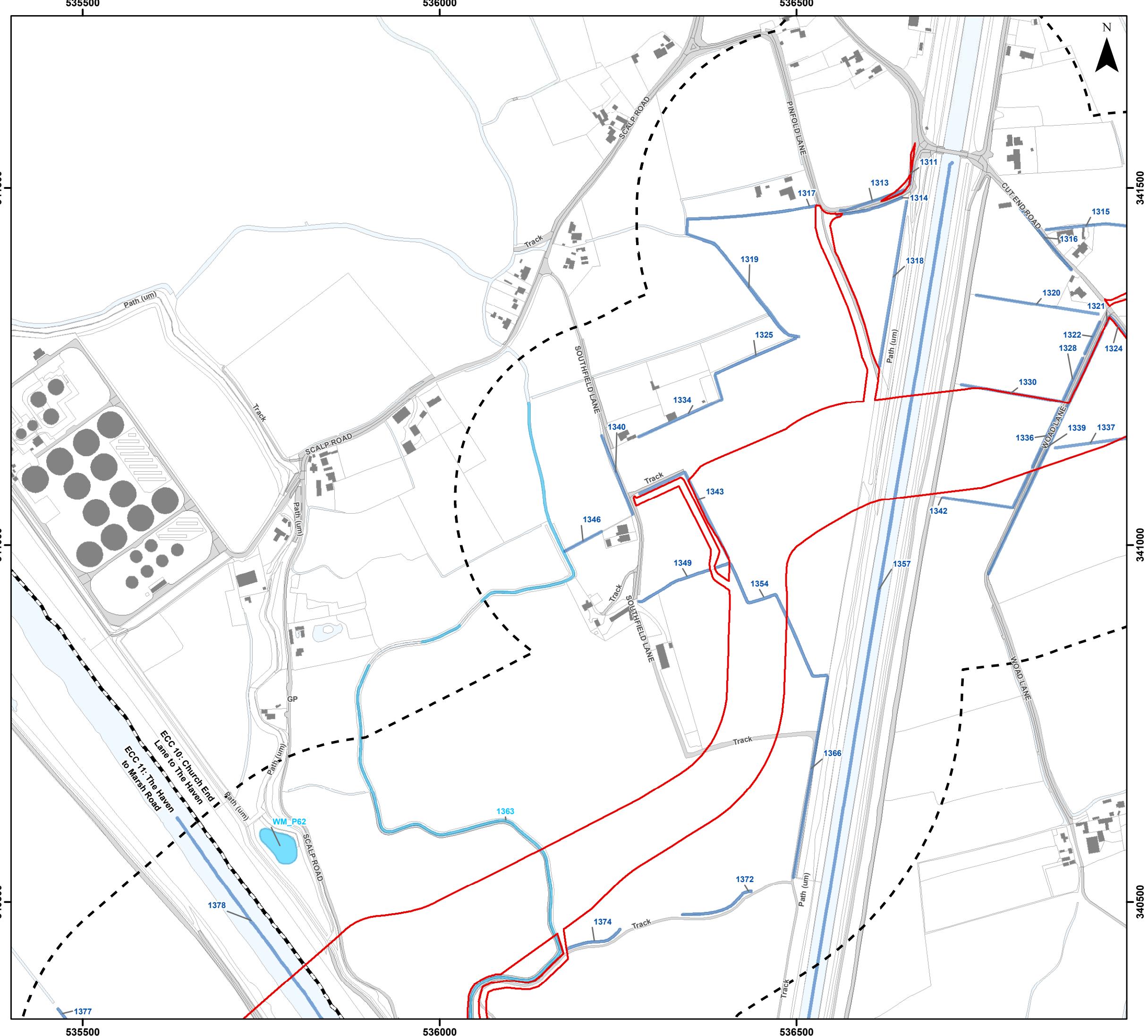
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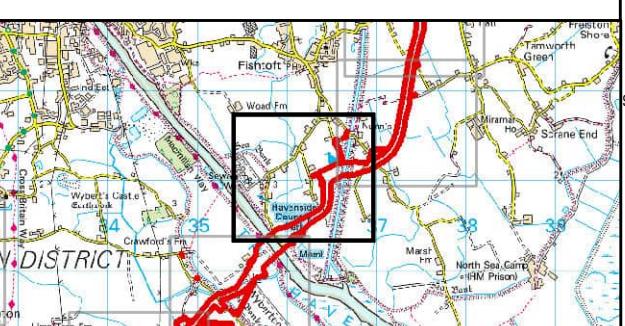
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Legend

- Order Limits
- Onshore Segment Break
- Order Limits 250 m Buffer
- eDNA Sampling Result**
 - Negative eDNA Result
 - eDNA Sample Not Required/Not Possible To Take



Coordinate System: British National Grid

0 50 100 200 Metres

Scale: 1:5,000

A3 Page Size

Environmental Statement

eDNA Survey Results

Figure 21.7.3.37



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Legend

- Order Limits
- Order Limits 250 m Buffer



Coordinate System: British National Grid
0 50 100 200 Metres

Scale: 1:5,000
A3 Page Size

Environmental Statement

eDNA Survey Results

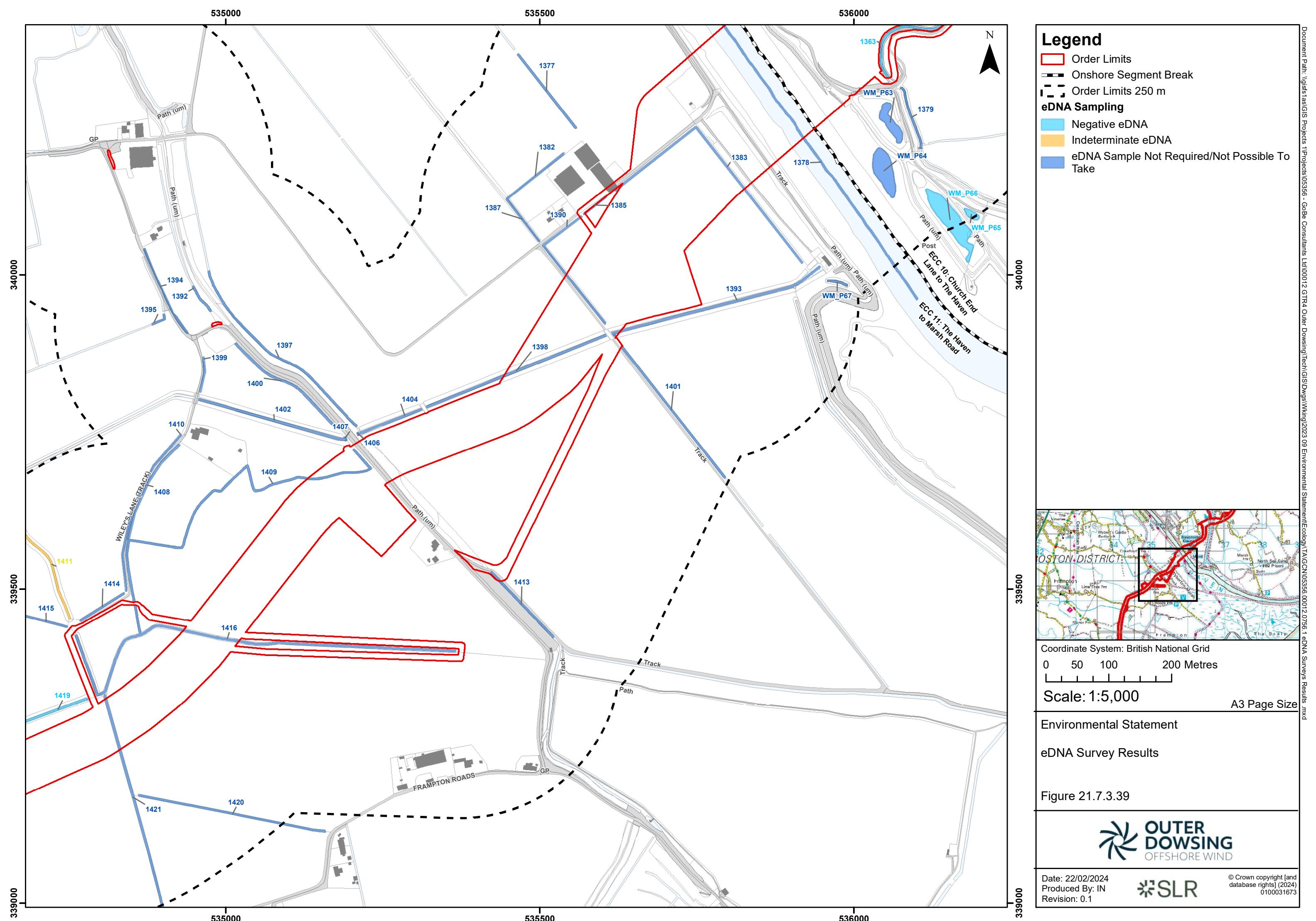
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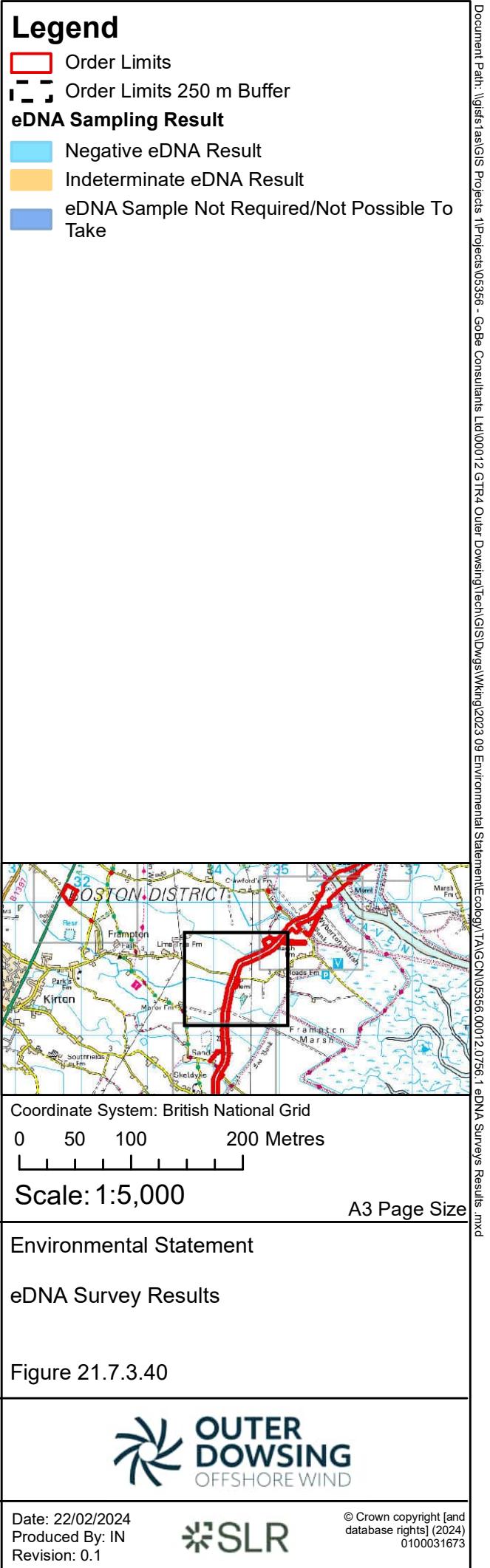
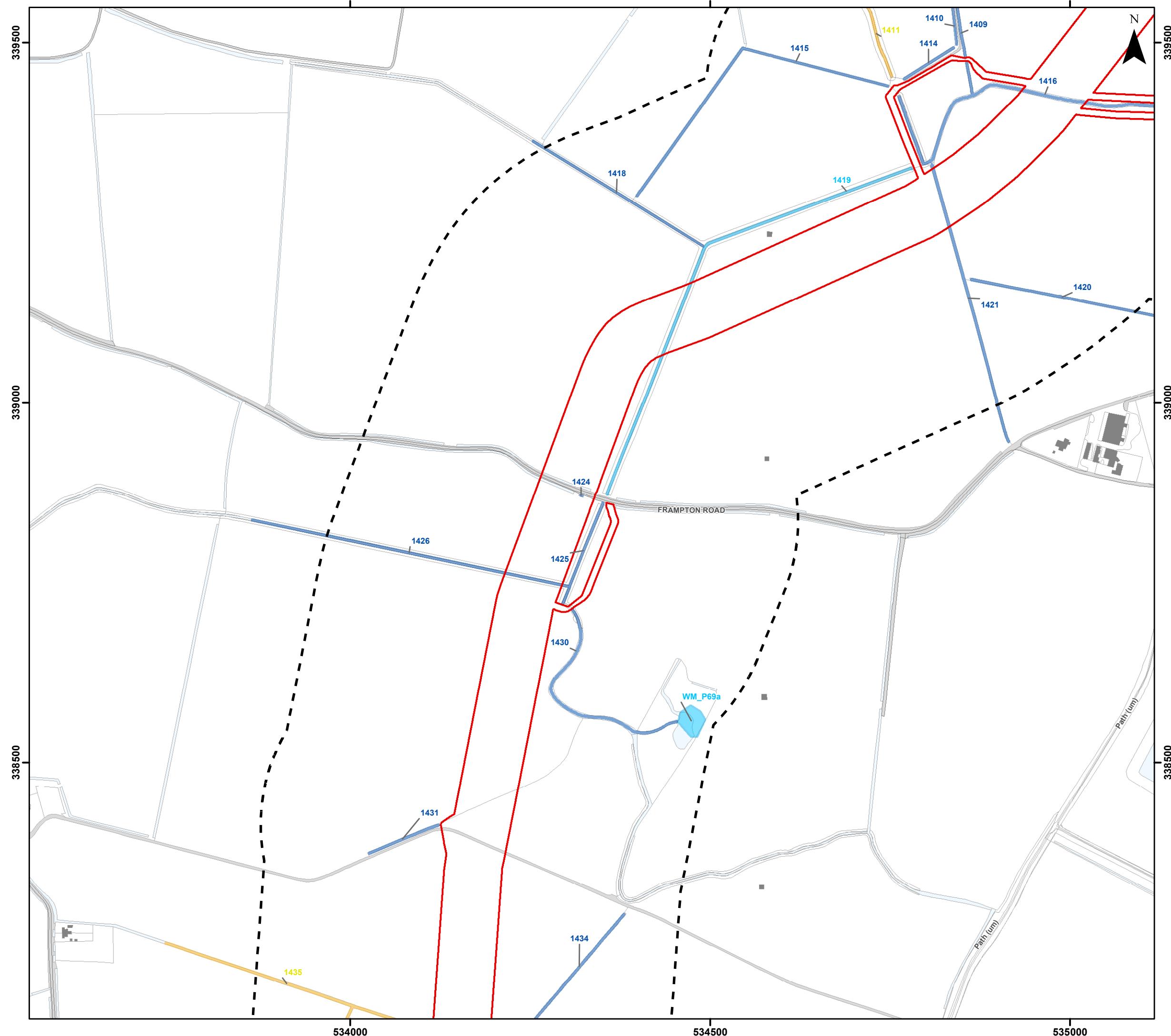
**OUTER
DOWSING**
OFFSHORE WIND

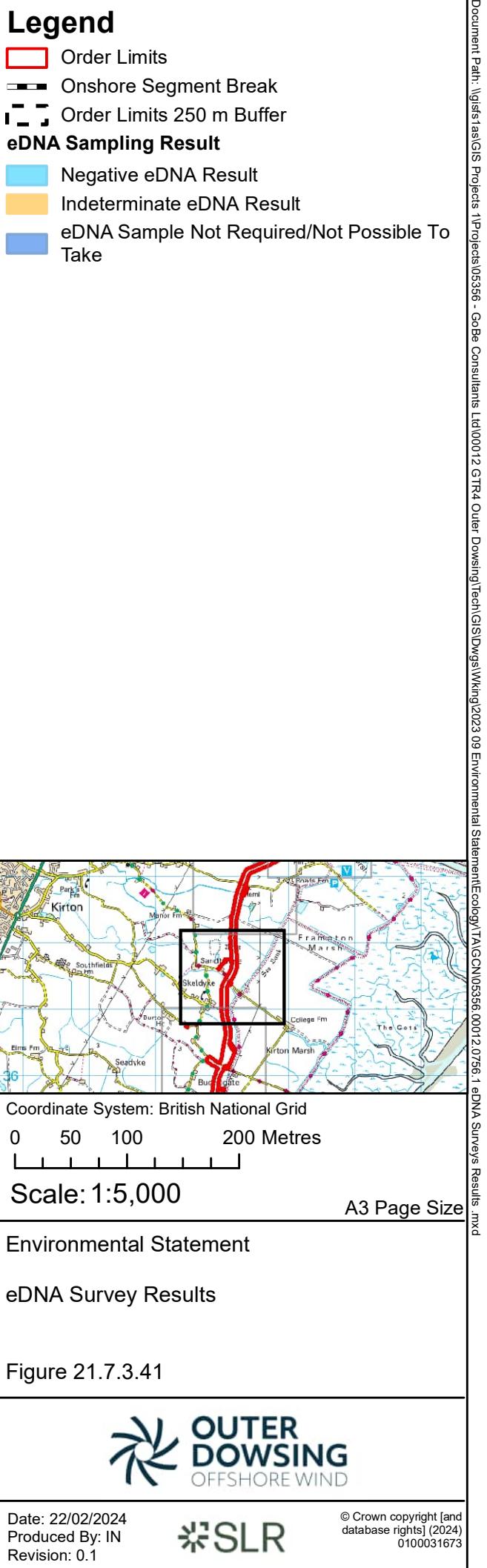
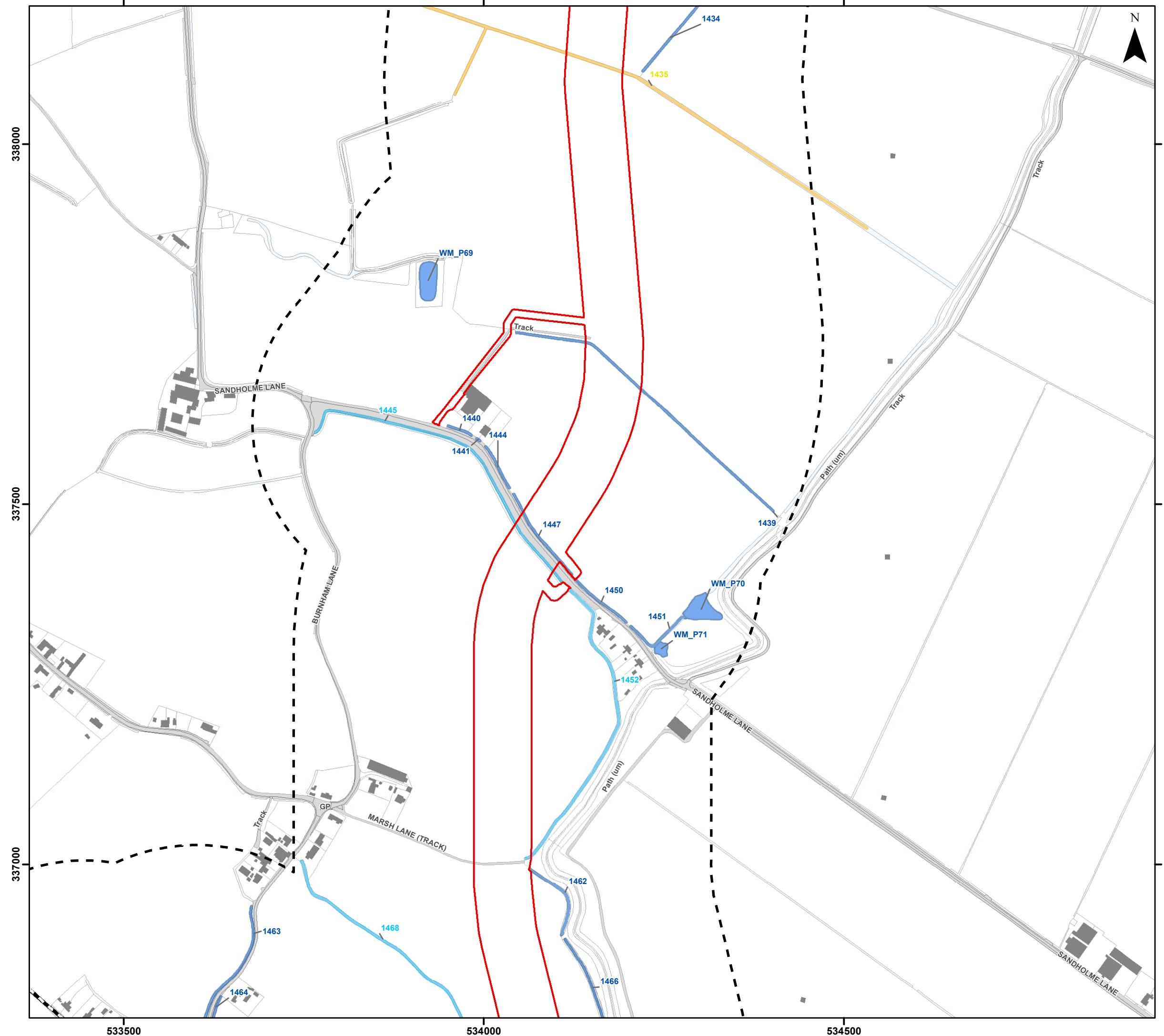
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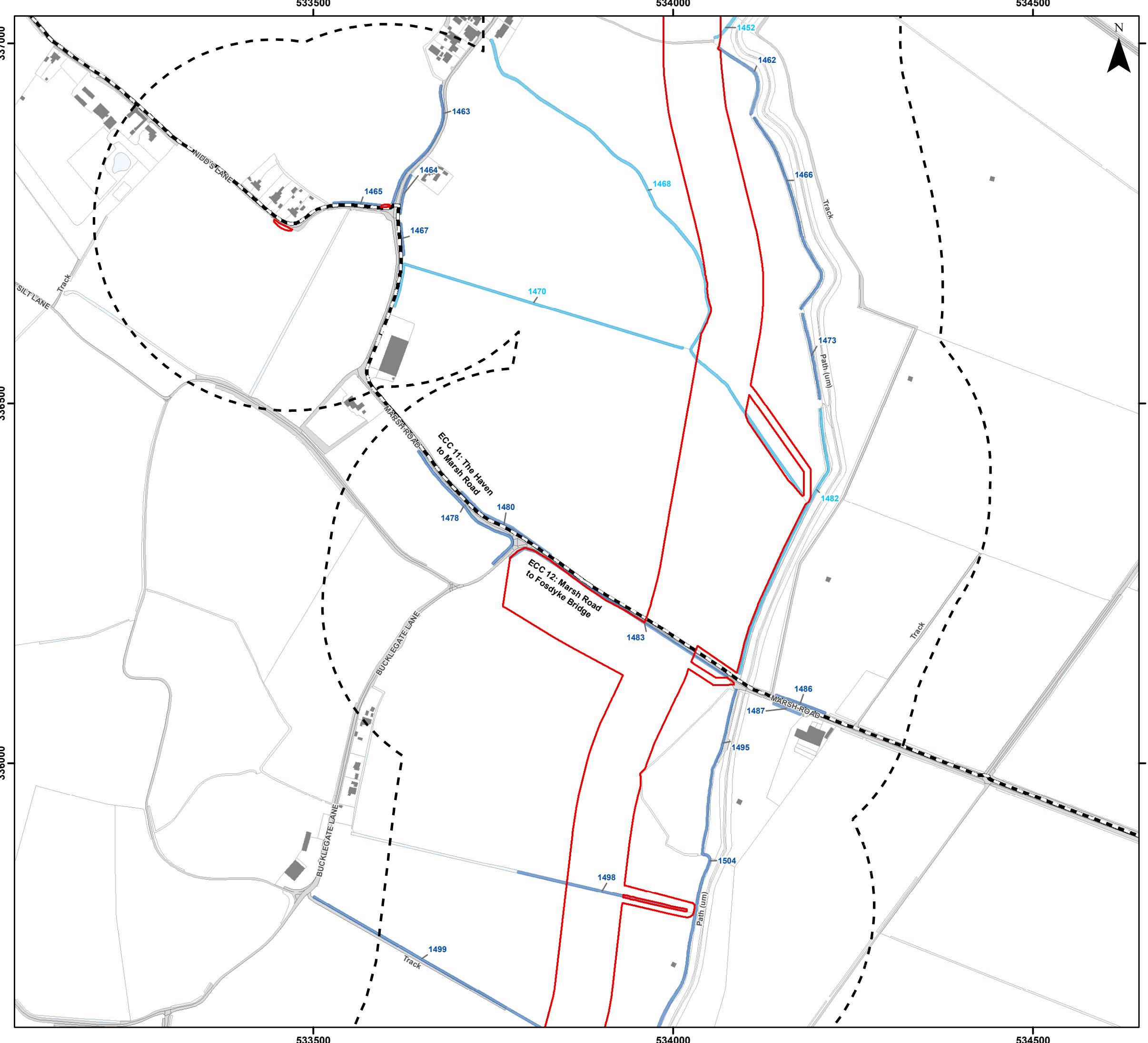
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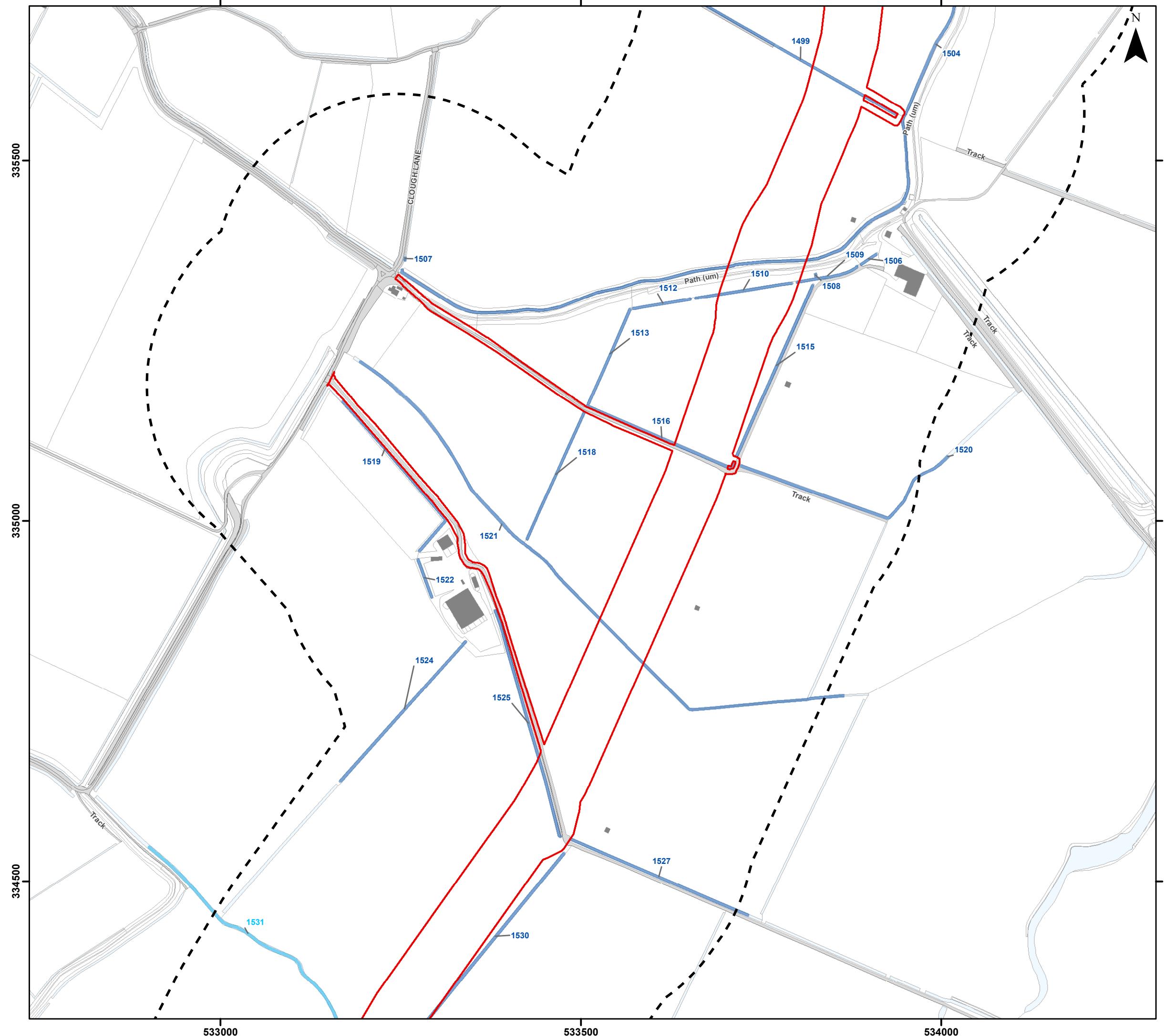
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Legend

- Order Limits
- Order Limits 250 m Buffer
- eDNA Sampling Result
 - Negative eDNA Result
 - eDNA Sample Not Required/Not Possible To Take



Coordinate System: British National Grid
0 50 100 200 Metres

Scale: 1:5,000

A3 Page Size

Environmental Statement

eDNA Survey Results

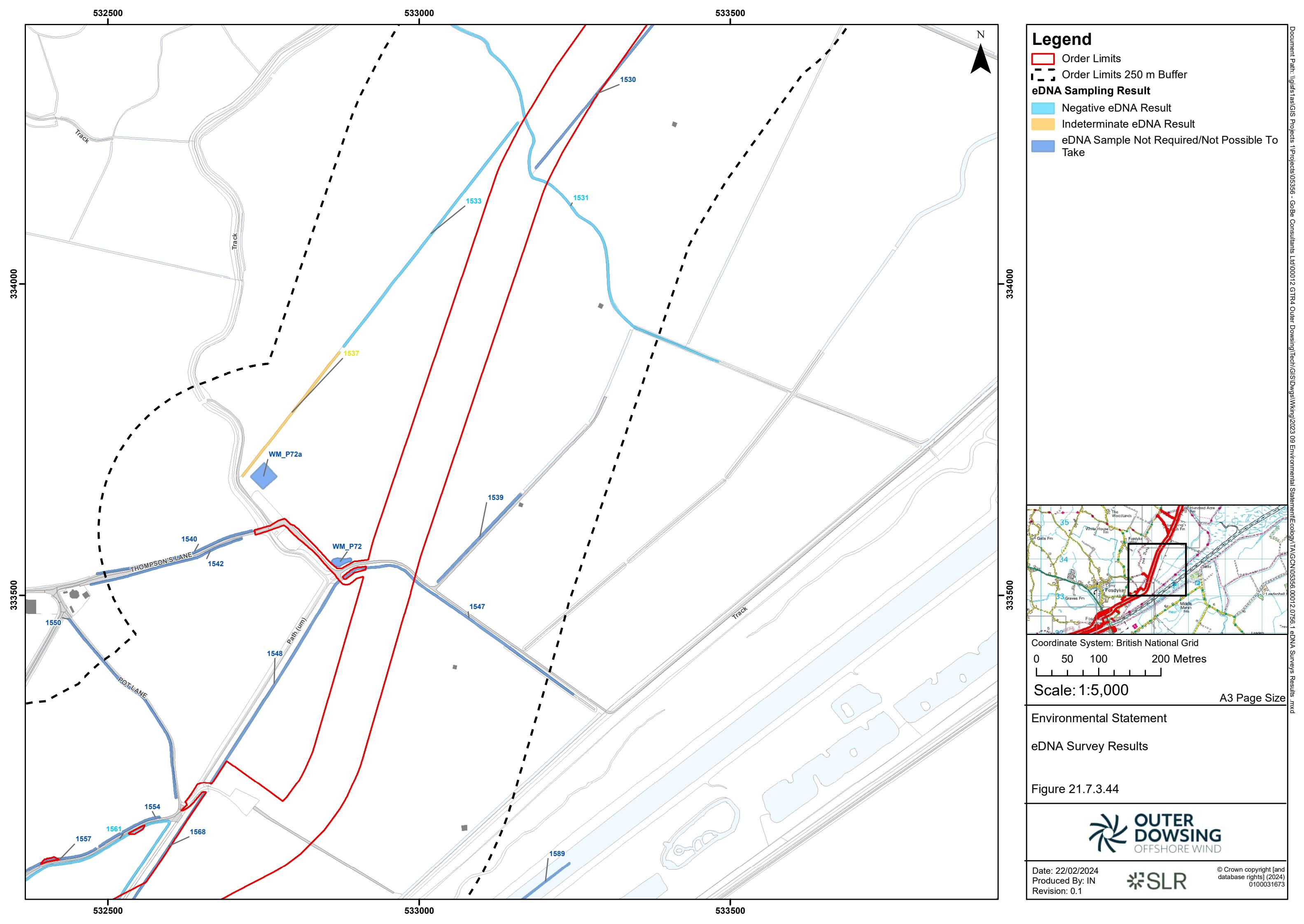
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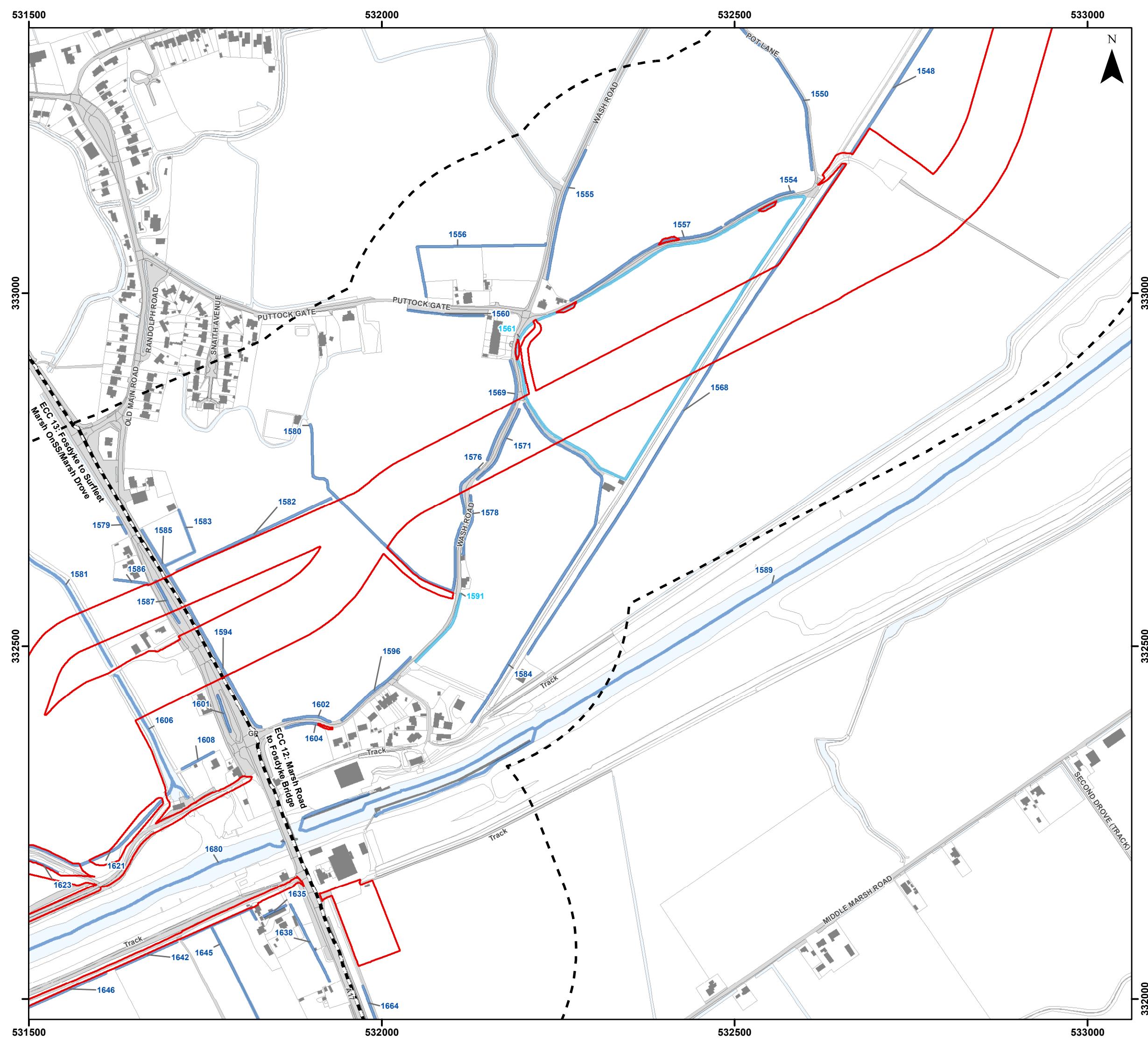


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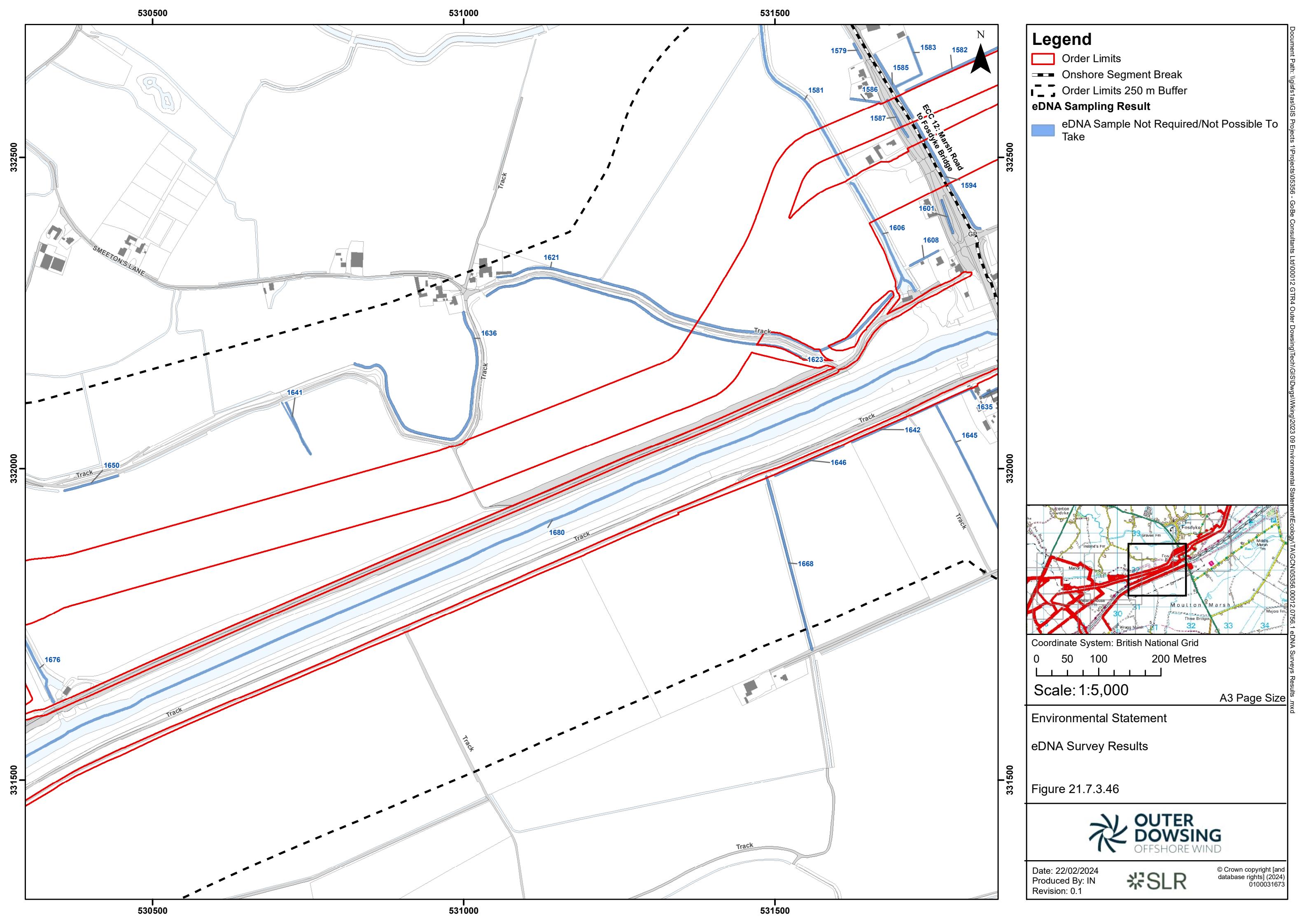


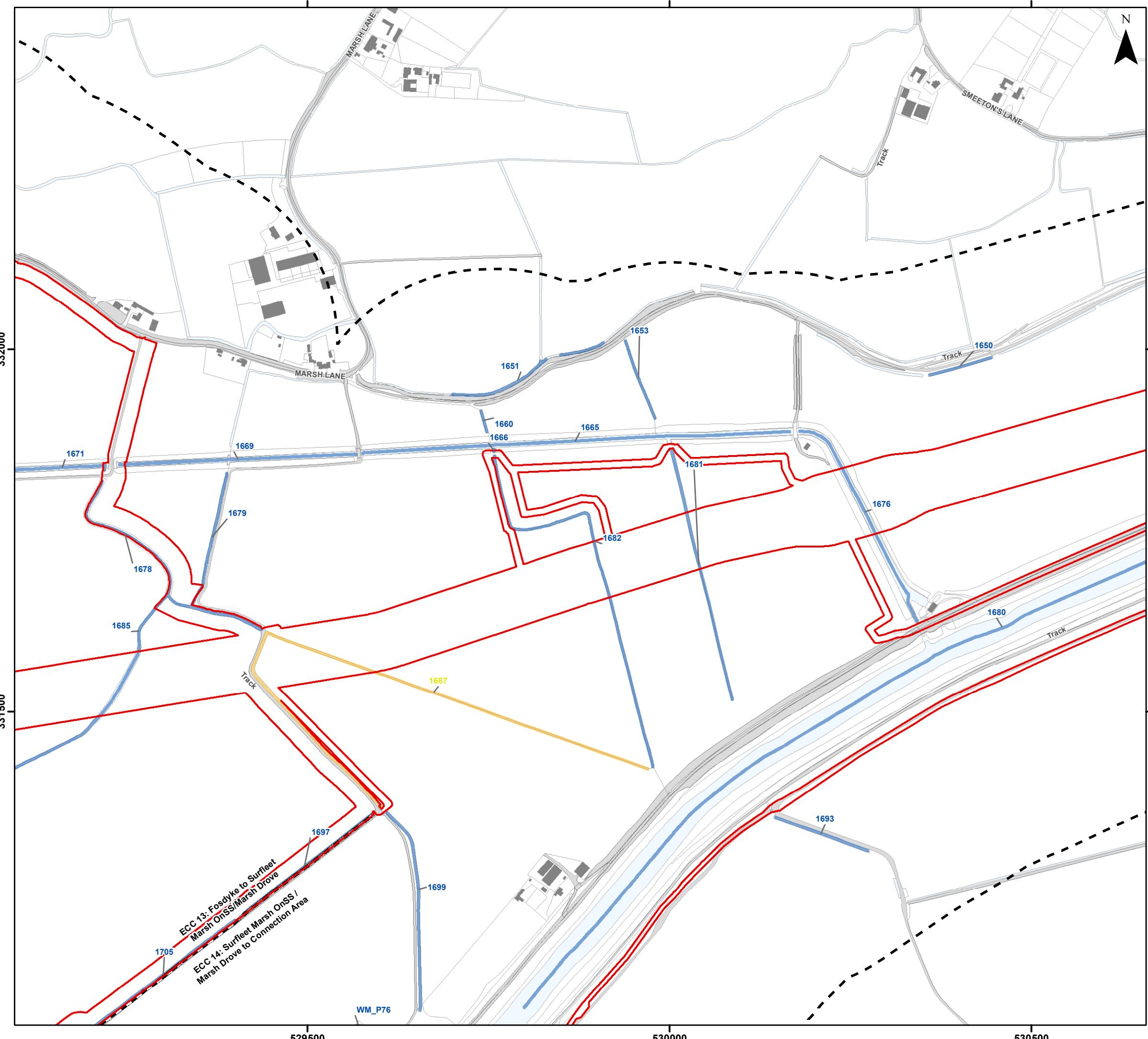
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Legend	
Order Limits	
Onshore Segment Break	
Order Limits 250 m Buffer	
eDNA Sampling Result	
Indeterminate eDNA Result	
eDNA Sample Not Required/Not Possible To Take	

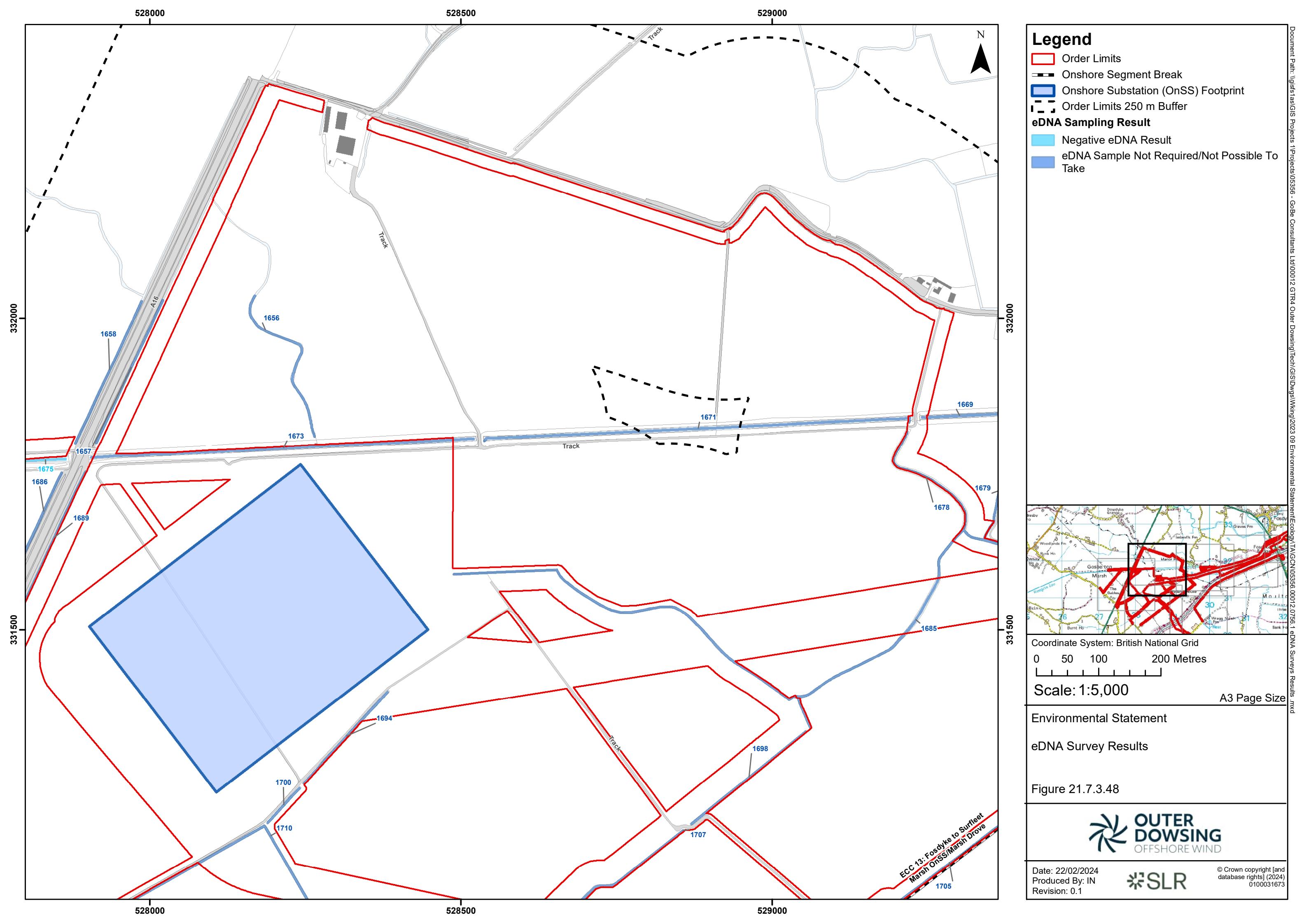
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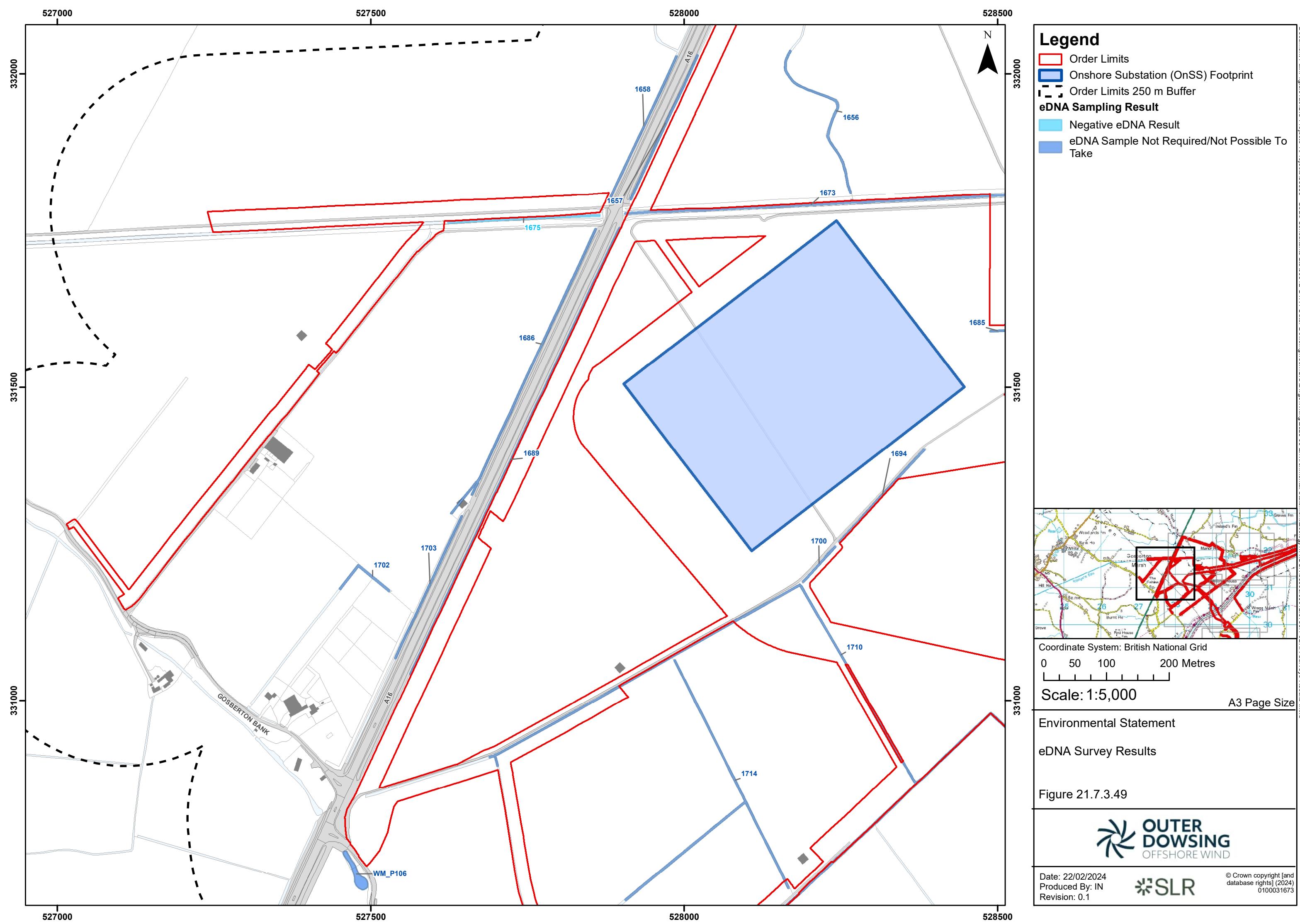
Environmental Statement
eDNA Survey Results
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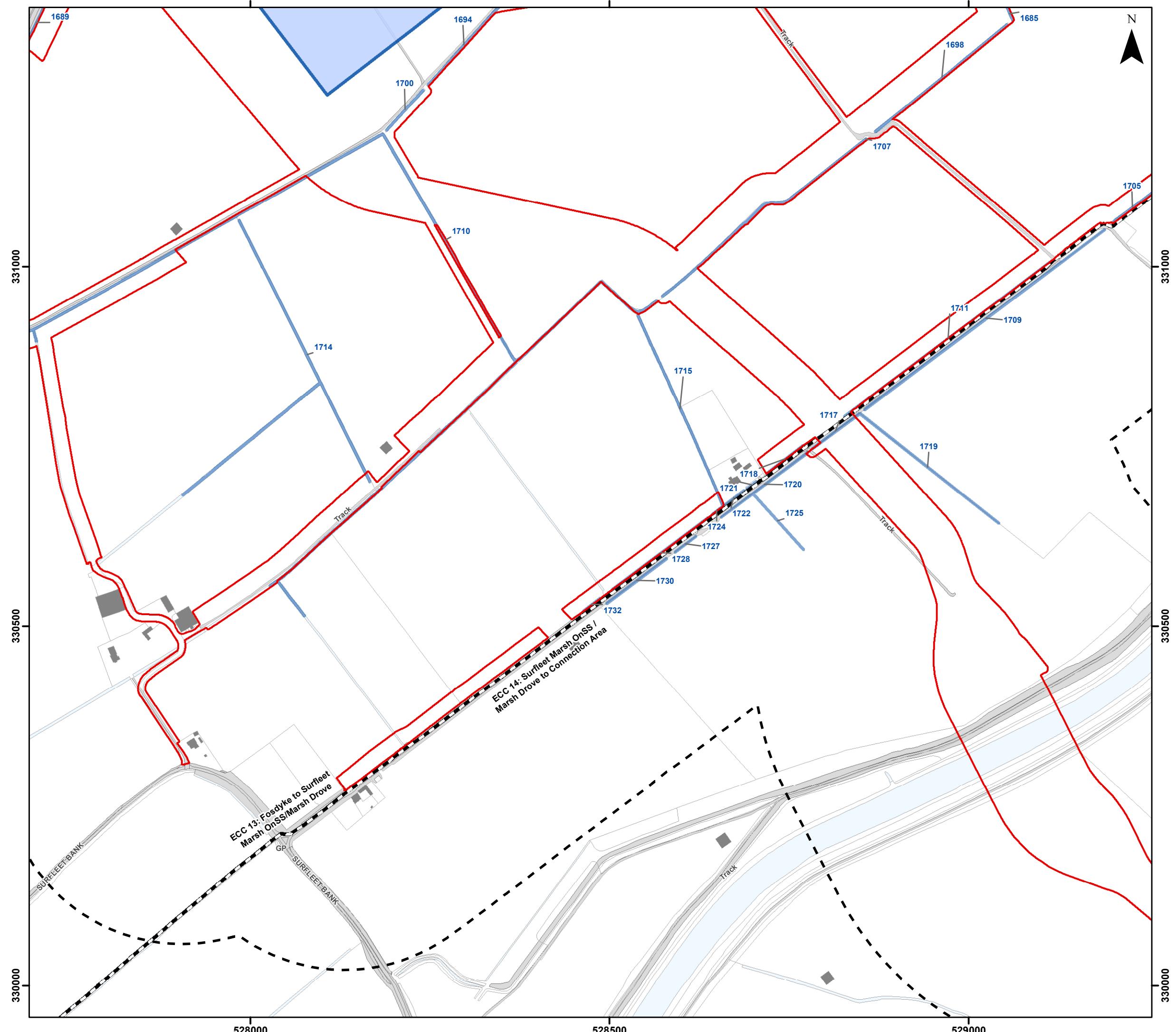
OUTER DOWSING
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Legend

- Order Limits
- Onshore Segment Break
- Onshore Substation (OnSS) Footprint

eDNA Sampling Result

eDNA Sample Not Required/Not Possible To Take



Coordinate System: British National Grid

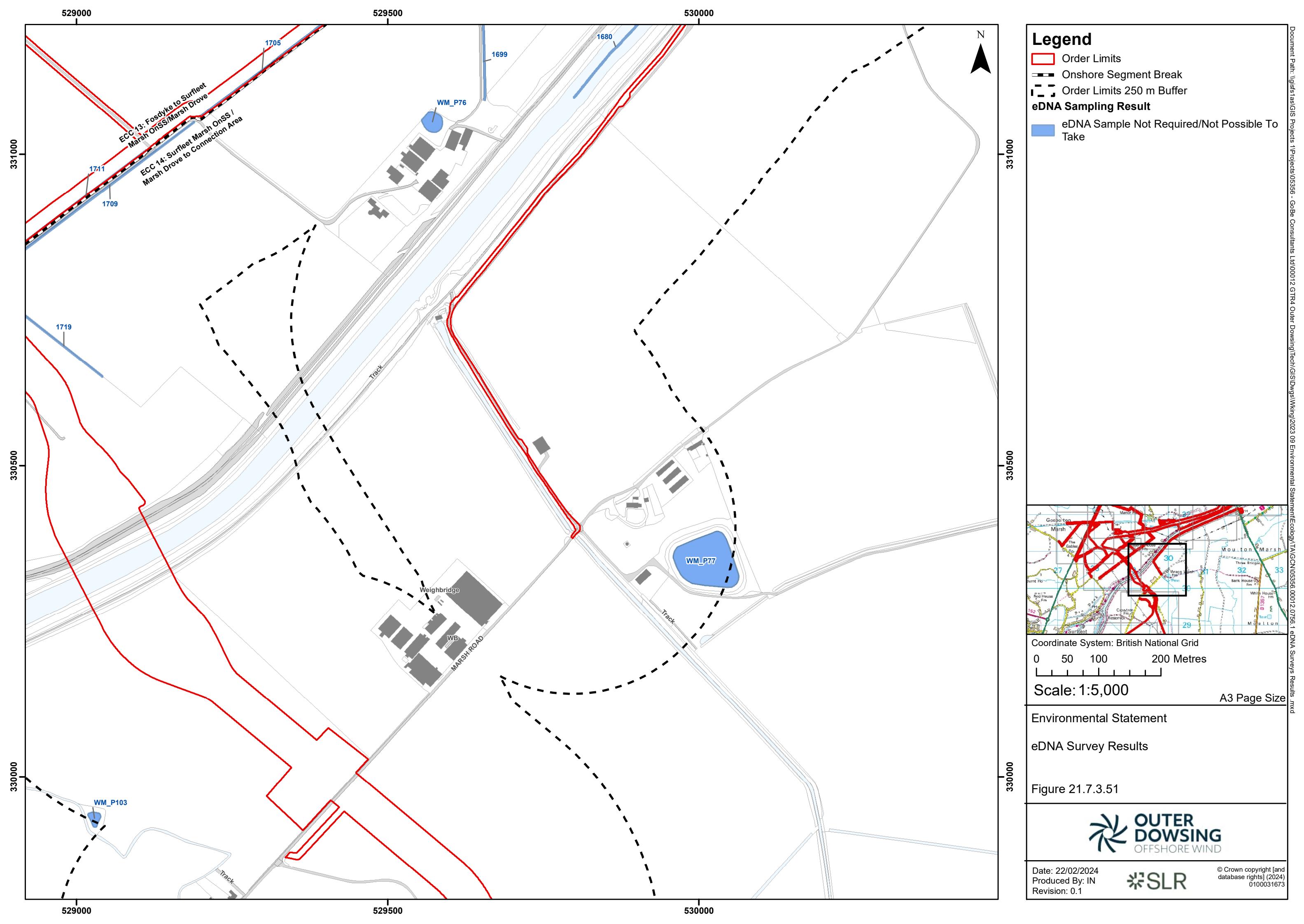
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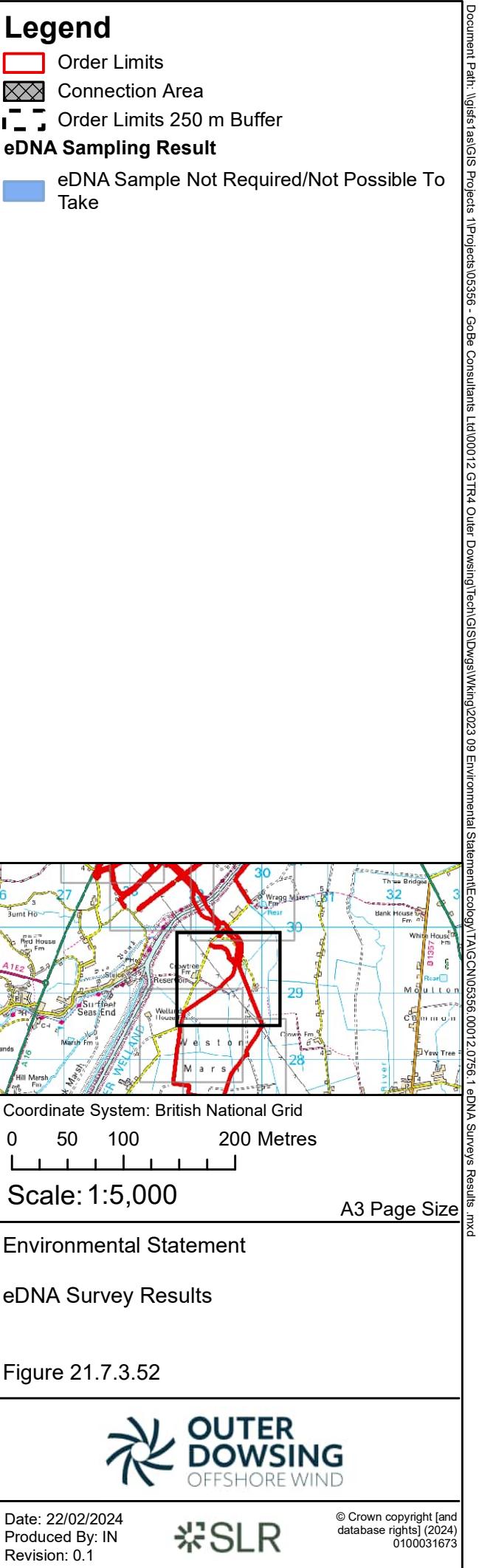
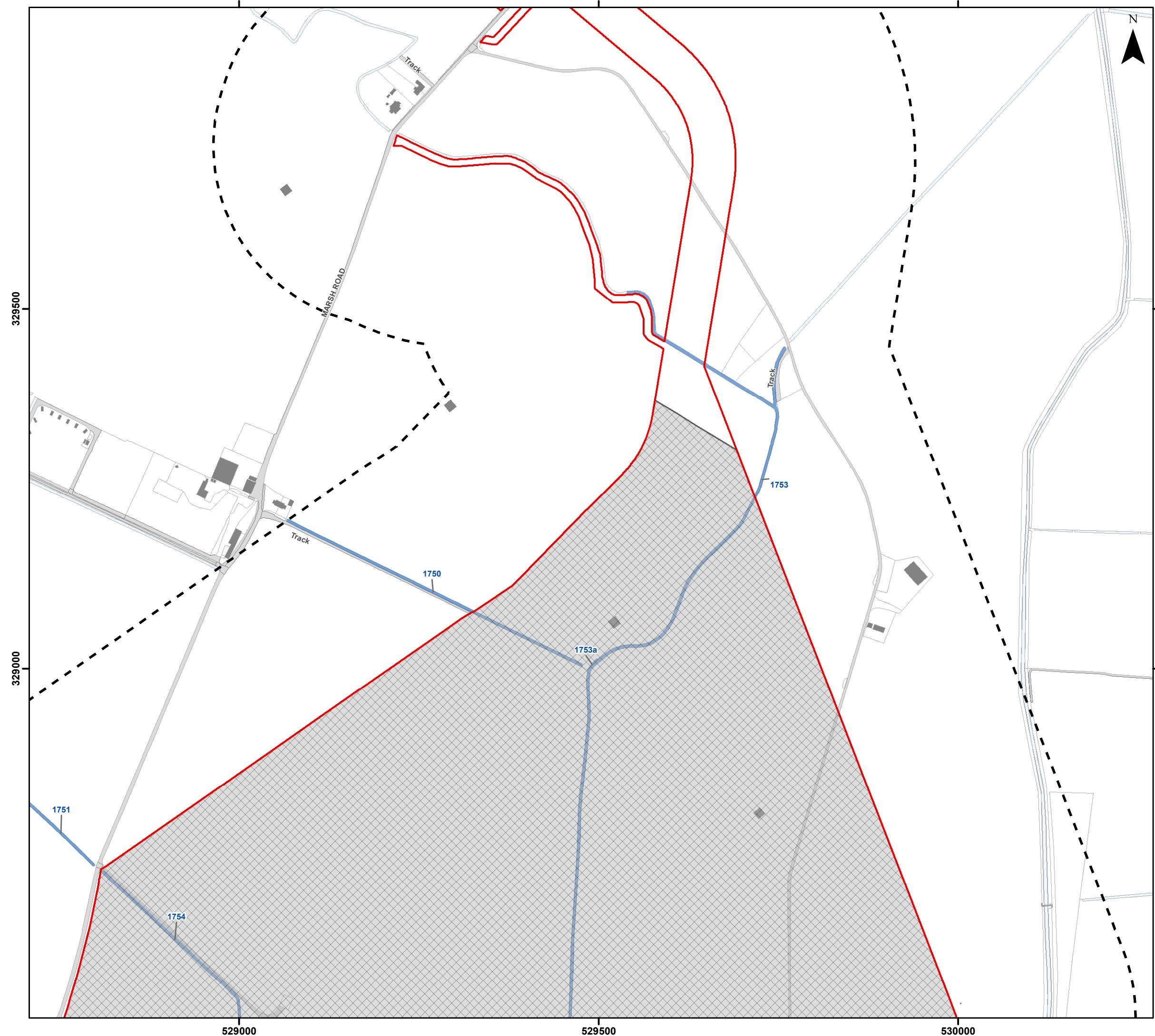
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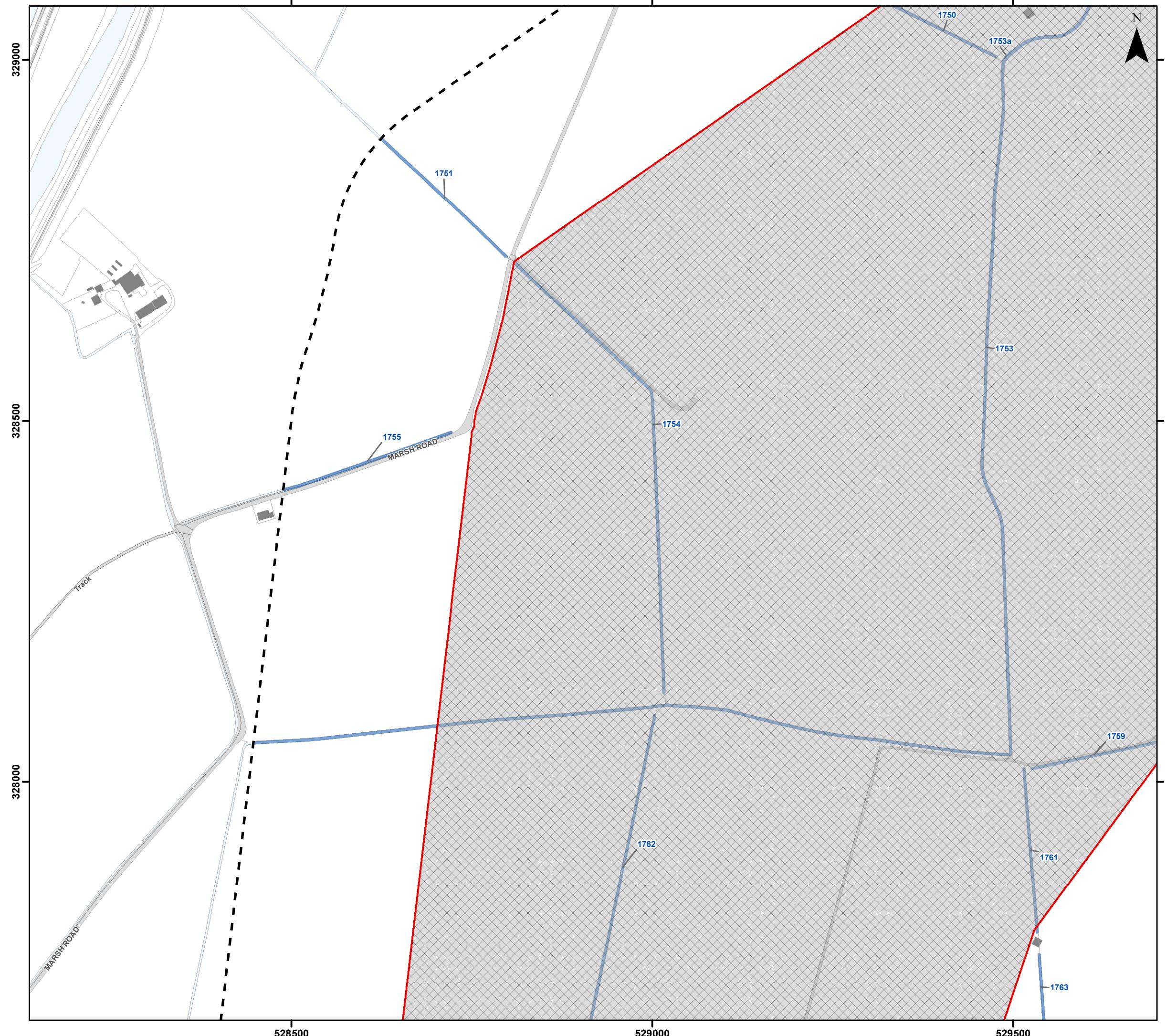
Environmental Statement

Figure 21.7.3.50









Legend

- Order Limits
- Connection Area
- Order Limits 250 m Buffer
- eDNA Sampling Result
 - eDNA Sample Not Required/Not Possible To Take



Coordinate System: British National Grid
0 50 100 200 Metres

Scale: 1:5,000
A3 Page Size

Environmental Statement

eDNA Survey Results

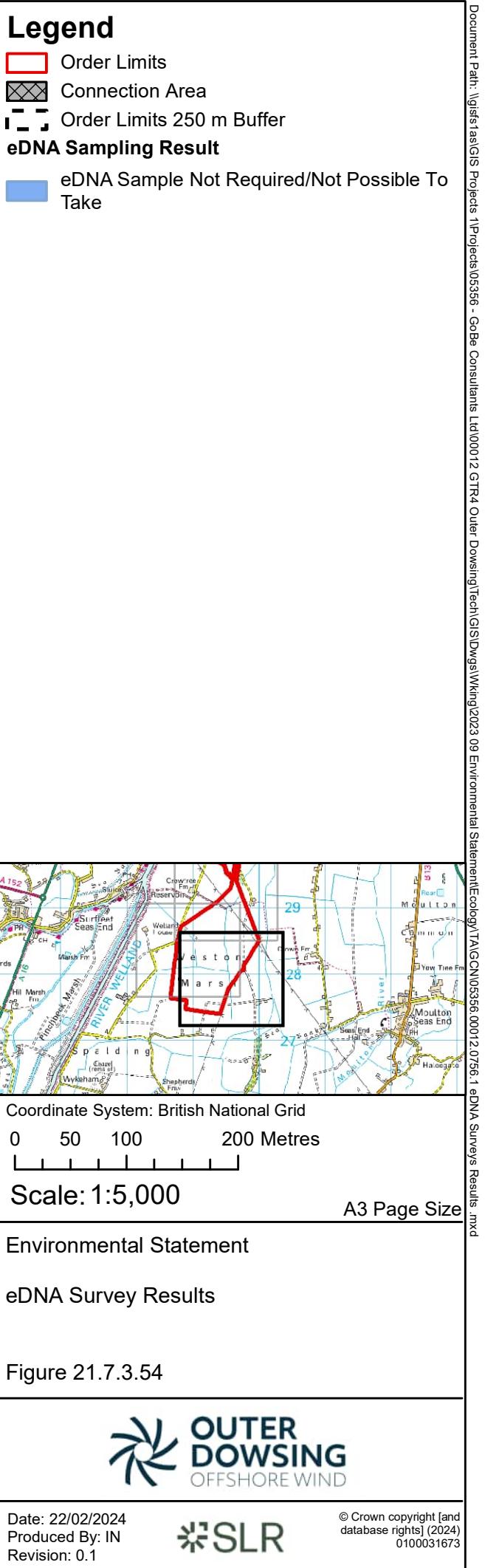
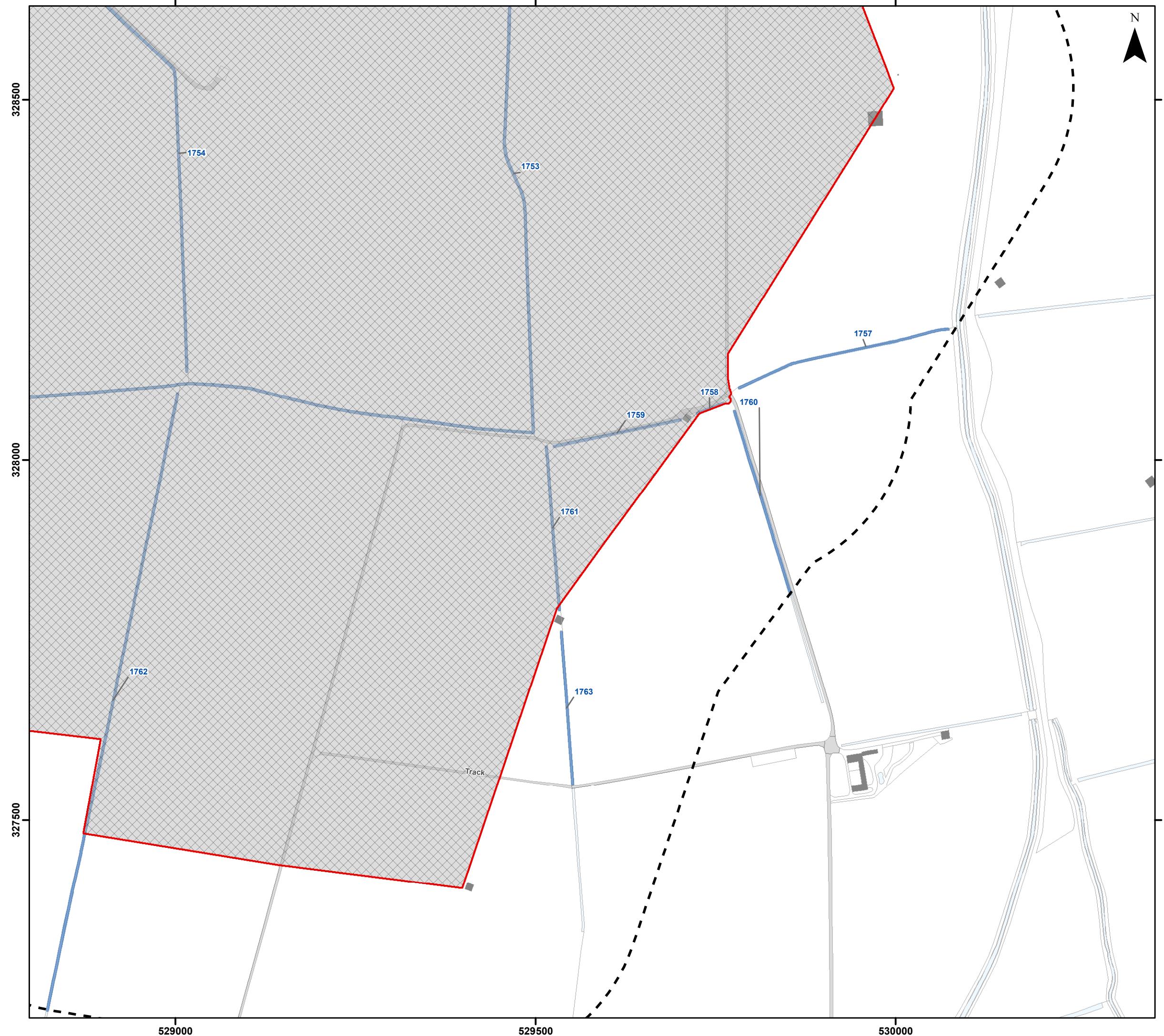
Figure 21.7.3.53



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Annex A HSI Results for Ponds

Volume 3, Appendix 21.7: Great Crested Newt Surveys

Outer Dowsing Offshore Wind Environmental Statement

GoBe Consultants Ltd.

SLR Project No.: 410.V05356.00013

1st March 2024

Pond Identification	HSI Score	HSI Category	SI1 Geographical Location	SI2 Waterbody Area m ² (when full of water)	SI3 Permanence	SI4 Water Quality	SI5 Shade	SI6 Waterfowl	SI7 Fish	SI8 Ponds within 1km	SI9 Terrestrial Habitat (within 100m and not beyond a major barrier)	SI10 Macrophytes (% cover of waterbody surface May to Sept, excluding duckweed)
AR_P1	0.58	Below Average	A - Optimal for GCN (England and N Wales except upland & SW)	2760	Never Dries	Moderate (moderate inverts)	5	Minor (present, but little impact on water quality & vegetation)	Minor (small numbers of crucian carp, goldfish or stickleback)	0	Good (good habitat (e.g. woodland, scrub, rough grassland) extensive & surrounds pond)	5
AR_P11	Scoped Out Residential	-	-	-	-	-	-	-	-	-	-	-
AR_P12	Scoped Out Residential	-	-	-	-	-	-	-	-	-	-	-
AR_P13	Scoped Out Residential	-	-	-	-	-	-	-	-	-	-	-
AR_P16	0.47	Poor	A - Optimal for GCN (England	15979	Never Dries	Good (abundant	5	Minor (present, but	Possible (none seen	3	Poor (only highly modified	10

Pond Identification	HSI Score	HSI Category	SI1 Geographical Location	SI2 Waterbody Area m ² (when full of water)	SI3 Permanence	SI4 Water Quality	SI5 Shade	SI6 Waterfowl	SI7 Fish	SI8 Ponds within 1km	SI9 Terrestrial Habitat (within 100m and not beyond a major barrier)	SI10 Macrophytes (% cover of waterbody surface May to Sept, excluding duckweed)
			and N Wales except upland & SW)			& diverse inverts)		little impact on water quality & vegetation)	but conditions suitable)		habitats (e.g. arable, improved grassland) present)	
AR_P21	0.89	Excellent	A - Optimal for GCN (England and N Wales except upland & SW)	400	Never Dries	Good (abundant & diverse inverts)	15	Minor (present, but little impact on water quality & vegetation)	Absent (no records & none seen)	5	Good (good habitat (e.g. woodland, scrub, rough grassland) extensive & surrounds pond)	60
AR_P23	0.89	Excellent	A - Optimal for GCN (England and N Wales except upland & SW)	1000	Never Dries	Good (abundant & diverse inverts)	20	Minor (present, but little impact on water quality & vegetation)	Absent (no records & none seen)	5	Good (good habitat (e.g. woodland, scrub, rough grassland) extensive & surrounds pond)	40

Pond Identification	HSI Score	HSI Category	SI1 Geographical Location	SI2 Waterbody Area m ² (when full of water)	SI3 Permanence	SI4 Water Quality	SI5 Shade	SI6 Waterfowl	SI7 Fish	SI8 Ponds within 1km	SI9 Terrestrial Habitat (within 100m and not beyond a major barrier)	SI10 Macrophytes (% cover of waterbody surface May to Sept, excluding duckweed)
AR_P24	0.87	Excellent	A - Optimal for GCN (England and N Wales except upland & SW)	700	Never Dries	Good (abundant & diverse inverts)	10	Minor (present, but little impact on water quality & vegetation)	Absent (no records & none seen)	5	Good (good habitat (e.g. woodland, scrub, rough grassland) extensive & surrounds pond)	25
AR_P25	0.88	Excellent	A - Optimal for GCN (England and N Wales except upland & SW)	300	Sometimes Dries (3-9 yrs. in 10)	Good (abundant & diverse inverts)	0	Minor (present, but little impact on water quality & vegetation)	Absent (no records & none seen)	5	Good (good habitat (e.g. woodland, scrub, rough grassland) extensive & surrounds pond)	75
AR_P26	0.91	Excellent	A - Optimal for GCN (England and N Wales except upland & SW)	400	Rarely Dries (<2yrs in 10)	Good (abundant & diverse inverts)	20	Minor (present, but little impact on water quality & vegetation)	Absent (no records & none seen)	5	Good (good habitat (e.g. woodland, scrub, rough grassland) extensive &	75

Pond Identification	HSI Score	HSI Category	SI1 Geographical Location	SI2 Waterbody Area m ² (when full of water)	SI3 Permanence	SI4 Water Quality	SI5 Shade	SI6 Waterfowl	SI7 Fish	SI8 Ponds within 1km	SI9 Terrestrial Habitat (within 100m and not beyond a major barrier)	SI10 Macrophytes (% cover of waterbody surface May to Sept, excluding duckweed)
WM_P1_1	0.86	Excellent	A - Optimal for GCN (England and N Wales except upland & SW)	900	Never Dries	Moderate (moderate inverts)	5	Absent (none, except moorhen)	Absent (no records & none seen)	21	Good (good habitat (e.g. woodland, scrub, rough grassland) extensive & surrounds pond)	5
WM_P1_2	0.51	Below Average	A - Optimal for GCN (England and N Wales except upland & SW)	8695	Never Dries	Good (abundant & diverse inverts)	0	Minor (present, but little impact on water quality & vegetation)	Possible (none seen but conditions suitable)	19	Good (good habitat (e.g. woodland, scrub, rough grassland) extensive & surrounds pond)	0
WM_P1_9	0.64	Average	A - Optimal for GCN (England and N Wales except upland & SW)	1366	Dries Annually	Moderate (moderate inverts)	80	Absent (none, except moorhen)	Absent (no records & none seen)	10	Good (good habitat (e.g. woodland, scrub, rough grassland) extensive &	0

Pond Identification	HSI Score	HSI Category	SI1 Geographical Location	SI2 Waterbody Area m ² (when full of water)	SI3 Permanence	SI4 Water Quality	SI5 Shade	SI6 Waterfowl	SI7 Fish	SI8 Ponds within 1km	SI9 Terrestrial Habitat (within 100m and not beyond a major barrier)	SI10 Macrophytes (% cover of waterbody surface May to Sept, excluding duckweed)
											surrounds pond)	
WM_P2	0.74	Good	A - Optimal for GCN (England and N Wales except upland & SW)	2386	Never Dries	Good (abundant & diverse inverters)	2	Minor (present, but little impact on water quality & vegetation)	Minor (small numbers of crucian carp, goldfish or stickleback)	19	Good (good habitat (e.g. woodland, scrub, rough grassland) extensive & surrounds pond)	4
WM_P20	Scoped Out Residential	-	-	-	-	-	-	-	-	-	-	-
WM_P20a	0.59	Below Average	A - Optimal for GCN (England and N Wales except upland & SW)	300	Dries Annually	Poor (low inverters, few submerged plants)	75	Absent (none, except moorhen)	Absent (no records & none seen)	10	Moderate (good habitat present but not extensive)	20
WM_P20a	0.7	Good	A - Optimal for GCN (England and N Wales	439	Dries Annually	Moderate (moderate inverters)	50	Absent (none, except moorhen)	Absent (no records & none seen)	10	Moderate (good habitat present but not extensive)	-

Pond Identification	HSI Score	HSI Category	SI1 Geographical Location	SI2 Waterbody Area m ² (when full of water)	SI3 Permanence	SI4 Water Quality	SI5 Shade	SI6 Waterfowl	SI7 Fish	SI8 Ponds within 1km	SI9 Terrestrial Habitat (within 100m and not beyond a major barrier)	SI10 Macrophytes (% cover of waterbody surface May to Sept, excluding duckweed)
	Suitable /Dry											
WM_P27	Not Surveyed - No Land Access	-	-	-	-	-	-	-	-	-	-	-
WM_P28	0.64	Average	A - Optimal for GCN (England and N Wales except upland & SW)	197	Sometimes Dries (3-9 yrs. in 10)	Poor (low inverts, few submerged plants)	85	Absent (none, except moorhen)	Absent (no records & none seen)	9	Moderate (good habitat present but not extensive)	20
WM_P3	0.55	Below Average	A - Optimal for GCN (England and N Wales except upland & SW)	62	Dries Annually	Moderate (moderate inverts)	0	Absent (none, except moorhen)	Absent (no records & none seen)	20	Good (good habitat (e.g. woodland, scrub, rough grassland) extensive & surrounds pond)	0
WM_P31	0.84	Excellent	A - Optimal for GCN (England	2566	Never Dries	Good (abundant)	5	Minor (present, but	Minor (small	10	Good (good habitat (e.g.	2

Pond Identification	HSI Score	HSI Category	SI1 Geographical Location	SI2 Waterbody Area m2 (when full of water)	SI3 Permanence	SI4 Water Quality	SI5 Shade	SI6 Waterfowl	SI7 Fish	SI8 Ponds within 1km	SI9 Terrestrial Habitat (within 100m and not beyond a major barrier)	SI10 Macrophytes (% cover of waterbody surface May to Sept, excluding duckweed)
			and N Wales except upland & SW)			& diverse inverts)		little impact on water quality & vegetation)	numbers of crucian carp, goldfish or stickleback)		woodland, scrub, rough grassland) extensive & surrounds pond)	
WM_P3 1	0.79	Good	A - Optimal for GCN (England and N Wales except upland & SW)	2566	Never Dries	Good (abundant & diverse inverts)	5	Minor (present, but little impact on water quality & vegetation)	Minor (small numbers of crucian carp, goldfish or stickleback)	4	Good (good habitat (e.g. woodland, scrub, rough grassland) extensive & surrounds pond)	2
WM_P3 2	0.46	Poor	A - Optimal for GCN (England and N Wales except upland & SW)	98	Never Dries	Poor (low inverts, few submerged plants)	20	Absent (none, except moorhen)	Major (dense populations)	9	Good (good habitat (e.g. woodland, scrub, rough grassland) extensive & surrounds pond)	2

Pond Identification	HSI Score	HSI Category	SI1 Geographical Location	SI2 Waterbody Area m ² (when full of water)	SI3 Permanence	SI4 Water Quality	SI5 Shade	SI6 Waterfowl	SI7 Fish	SI8 Ponds within 1km	SI9 Terrestrial Habitat (within 100m and not beyond a major barrier)	SI10 Macrophytes (% cover of waterbody surface May to Sept, excluding duckweed)
WM_P3 3	0.58	Below Average	A - Optimal for GCN (England and N Wales except upland & SW)	700	Dries Annually	Poor (low inverts, few submerged plants)	0	Minor (present, but little impact on water quality & vegetation)	Absent (no records & none seen)	2	Moderate (good habitat present but not extensive)	5
WM_P3 4	0.28	Poor	A - Optimal for GCN (England and N Wales except upland & SW)	4239	Rarely Dries (<2yrs in 10)	Moderate (moderate inverts)	0	Major (present, severe impact on water quality & vegetation)	Major (dense populations)	1	Poor (only highly modified habitats (e.g. arable, improved grassland) present)	1
WM_P3 7	Scoped Out Residential	-	-	-	-	-	-	-	-	-	-	-
WM_P3 8	0.43	Poor	A - Optimal for GCN (England and N Wales except upland & SW)	1485	Sometimes Dries (3-9 yrs. in 10)	Bad (polluted, few inverts, no submerged plants)	15	Minor (present, but little impact on water quality & vegetation)	Absent (no records & none seen)	4	Poor (only highly modified habitats (e.g. arable, improved	-

Pond Identification	HSI Score	HSI Category	SI1 Geographical Location	SI2 Waterbody Area m ² (when full of water)	SI3 Permanence	SI4 Water Quality	SI5 Shade	SI6 Waterfowl	SI7 Fish	SI8 Ponds within 1km	SI9 Terrestrial Habitat (within 100m and not beyond a major barrier)	SI10 Macrophytes (% cover of waterbody surface May to Sept, excluding duckweed)
											grassland) present)	
WM_P39	0.46	Poor	A - Optimal for GCN (England and N Wales except upland & SW)	2504	Never Dries	Moderate (moderate inverts)	0	Minor (present, but little impact on water quality & vegetation)	Major (dense populations)	5	Poor (only highly modified habitats (e.g. arable, improved grassland) present)	1
WM_P4	0.64	Average	A - Optimal for GCN (England and N Wales except upland & SW)	275	Dries Annually	Moderate (moderate inverts)	0	Absent (none, except moorhen)	Absent (no records & none seen)	20	Good (good habitat (e.g. woodland, scrub, rough grassland) extensive & surrounds pond)	0
WM_P40	0.47	Poor	A - Optimal for GCN (England and N Wales except upland & SW)	1274	Never Dries	Moderate (moderate inverts)	0	Minor (present, but little impact on water quality & vegetation)	Major (dense populations)	5	Poor (only highly modified habitats (e.g. arable, improved	1

Pond Identification	HSI Score	HSI Category	SI1 Geographical Location	SI2 Waterbody Area m ² (when full of water)	SI3 Permanence	SI4 Water Quality	SI5 Shade	SI6 Waterfowl	SI7 Fish	SI8 Ponds within 1km	SI9 Terrestrial Habitat (within 100m and not beyond a major barrier)	SI10 Macrophytes (% cover of waterbody surface May to Sept, excluding duckweed)
											grassland) present)	
WM_P4_1	0.71	Good	A - Optimal for GCN (England and N Wales except upland & SW)	2304	Never Dries	Good (abundant & diverse inverts)	5	Minor (present, but little impact on water quality & vegetation)	Possible (none seen but conditions suitable)	5	Poor (only highly modified habitats (e.g. arable, improved grassland) present)	1
WM_P4_2	0.65	Average	A - Optimal for GCN (England and N Wales except upland & SW)	551	Dries Annually	Moderate (moderate inverts)	50	Absent (none, except moorhen)	Absent (no records & none seen)	3	Moderate (good habitat present but not extensive)	0
WM_P4_3	0.33	Poor	A - Optimal for GCN (England and N Wales except upland & SW)	16515	Never Dries	Poor (low inverts, few submerged plants)	0	Minor (present, but little impact on water quality & vegetation)	Absent (no records & none seen)	4	Poor (only highly modified habitats (e.g. arable, improved grassland) present)	1
WM_P4_5	0.49	Poor	A - Optimal for GCN (England	3994	Never Dries	Good (abundant)	5	Major (present,	Possible (none seen)	5	Good (good habitat (e.g.	1

Pond Identification	HSI Score	HSI Category	SI1 Geographical Location	SI2 Waterbody Area m ² (when full of water)	SI3 Permanence	SI4 Water Quality	SI5 Shade	SI6 Waterfowl	SI7 Fish	SI8 Ponds within 1km	SI9 Terrestrial Habitat (within 100m and not beyond a major barrier)	SI10 Macrophytes (% cover of waterbody surface May to Sept, excluding duckweed)
			and N Wales except upland & SW)			& diverse inverts)		severe impact on water quality & vegetation)	but conditions suitable)		woodland, scrub, rough grassland) extensive & surrounds pond)	
WM_P4 6	0.79	Good	A - Optimal for GCN (England and N Wales except upland & SW)	770	Never Dries	Moderate (moderate inverts)	20	Minor (present, but little impact on water quality & vegetation)	Possible (none seen but conditions suitable)	5	Moderate (good habitat present but not extensive)	20
WM_P4 7	0.24	Poor	A - Optimal for GCN (England and N Wales except upland & SW)	548	Never Dries	Bad (polluted, few inverts, no submerged plants)	5	Absent (none, except moorhen)	Major (dense populations)	1	Poor (only highly modified habitats (e.g. arable, improved grassland) present)	-
WM_P5	0.59	Below Average	A - Optimal for GCN (England and N Wales	114	Dries Annually	Moderate (moderate inverts)	0	Absent (none, except moorhen)	Absent (no records & none seen)	20	Good (good habitat (e.g. woodland, scrub, rough	0

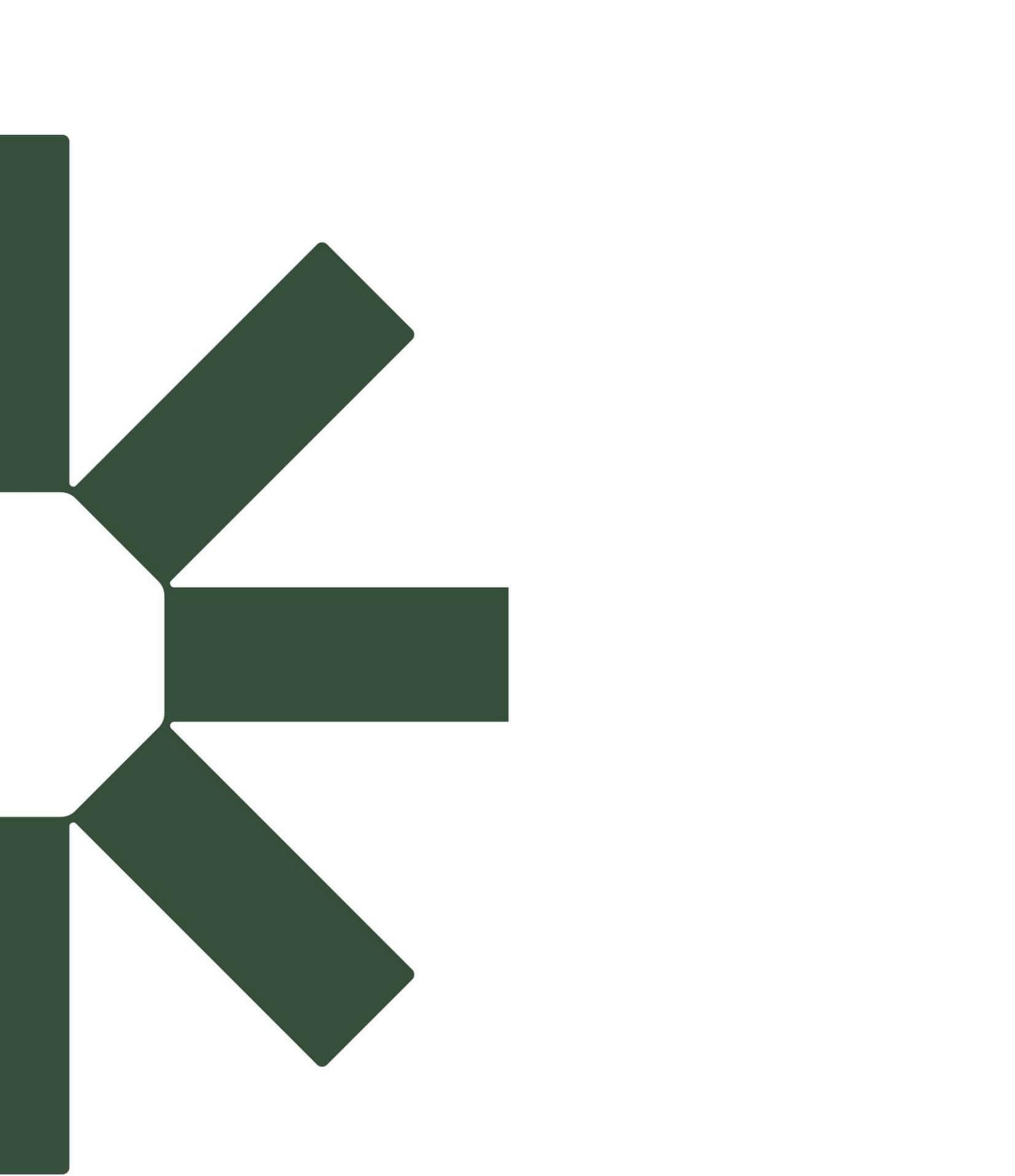
Pond Identification	HSI Score	HSI Category	SI1 Geographical Location	SI2 Waterbody Area m ² (when full of water)	SI3 Permanence	SI4 Water Quality	SI5 Shade	SI6 Waterfowl	SI7 Fish	SI8 Ponds within 1km	SI9 Terrestrial Habitat (within 100m and not beyond a major barrier)	SI10 Macrophytes (% cover of waterbody surface May to Sept, excluding duckweed)
	Suitable /Dry		and N Wales except upland & SW)									
WM_P6_4	0.8	Excellent	A - Optimal for GCN (England and N Wales except upland & SW)	1684	Sometimes Dries (3-9 yrs. in 10)	Moderate (moderate inverts)	80	Absent (none, except moorhen)	Absent (no records & none seen)	5	Moderate (good habitat present but not extensive)	4
WM_P6_5	0.82	Excellent	A - Optimal for GCN (England and N Wales except upland & SW)	223	Never Dries	Good (abundant & diverse inverts)	5	Absent (none, except moorhen)	Absent (no records & none seen)	5	Good (good habitat (e.g. woodland, scrub, rough grassland) extensive & surrounds pond)	4
WM_P6_6	0.76	Good	A - Optimal for GCN (England and N Wales except upland & SW)	2528	Never Dries	Moderate (moderate inverts)	90	Absent (none, except moorhen)	Absent (no records & none seen)	4	Good (good habitat (e.g. woodland, scrub, rough grassland) extensive &	5

Pond Identification	HSI Score	HSI Category	SI1 Geographical Location	SI2 Waterbody Area m ² (when full of water)	SI3 Permanence	SI4 Water Quality	SI5 Shade	SI6 Waterfowl	SI7 Fish	SI8 Ponds within 1km	SI9 Terrestrial Habitat (within 100m and not beyond a major barrier)	SI10 Macrophytes (% cover of waterbody surface May to Sept, excluding duckweed)
											surrounds pond)	
WM_P6 7	0.4	Poor	A - Optimal for GCN (England and N Wales except upland & SW)	77	Dries Annually	Moderate (moderate inverts)	100	Minor (present, but little impact on water quality & vegetation)	Absent (no records & none seen)	1	Poor (only highly modified habitats (e.g. arable, improved grassland) present)	100
WM_P6 9	Not Surveyed - No Land Access	-	-	-	-	-	-	-	-	-	-	-
WM_P6 9a	0.79	Good	A - Optimal for GCN (England and N Wales except upland & SW)	543	Never Dries	Moderate (moderate inverts)	55	Absent (none, except moorhen)	Absent (no records & none seen)	1	Moderate (good habitat present but not extensive)	-
WM_P7	0.72	Good	A - Optimal for GCN (England and N Wales	184	Sometimes Dries (3-9)	Moderate (moderate inverts)	0	Absent (none, except moorhen)	Absent (no records & none seen)	20	Good (good habitat (e.g. woodland, scrub, rough	0

Pond Identification	HSI Score	HSI Category	SI1 Geographical Location	SI2 Waterbody Area m ² (when full of water)	SI3 Permanence	SI4 Water Quality	SI5 Shade	SI6 Waterfowl	SI7 Fish	SI8 Ponds within 1km	SI9 Terrestrial Habitat (within 100m and not beyond a major barrier)	SI10 Macrophytes (% cover of waterbody surface May to Sept, excluding duckweed)
			except upland & SW)		yrs. in 10)						grassland) extensive & surrounds pond)	
WM_P70	Not Surveyed - No Land Access	-	-	-	-	-	-	-	-	-	-	-
WM_P71	Not Surveyed - No Land Access	-	-	-	-	-	-	-	-	-	-	-
WM_P72	Yes - Not Suitable /Dry	-	-	276	-	-	-	-	-	-	-	-
WM_P72a	0.46	Poor	A - Optimal for GCN (England and N Wales except upland & SW)	891	Never Dries	Bad (polluted, few invert, no	0	Minor (present, but little impact on water	Absent (no records & none seen)	1	Poor (only highly modified habitats (e.g. arable, improved	0

Pond Identification	HSI Score	HSI Category	SI1 Geographical Location	SI2 Waterbody Area m ² (when full of water)	SI3 Permanence	SI4 Water Quality	SI5 Shade	SI6 Waterfowl	SI7 Fish	SI8 Ponds within 1km	SI9 Terrestrial Habitat (within 100m and not beyond a major barrier)	SI10 Macrophytes (% cover of waterbody surface May to Sept, excluding duckweed)
						submerged plants)		quality & vegetation)			grassland) present)	
WM_P7_6	0.4	Poor	A - Optimal for GCN (England and N Wales except upland & SW)	800	Dries Annually	Bad (polluted, few invert, no submerged plants)	40	Minor (present, but little impact on water quality & vegetation)	Absent (no records & none seen)	1	Poor (only highly modified habitats (e.g. arable, improved grassland) present)	70
WM_P7_7	0.43	Poor	A - Optimal for GCN (England and N Wales except upland & SW)	6000	Never Dries	Good (abundant & diverse invert)	0	Minor (present, but little impact on water quality & vegetation)	Possible (none seen but conditions suitable)	1	None (bare ground)	0
WM_P8	0.76	Good	A - Optimal for GCN (England and N Wales except upland & SW)	4337	Never Dries	Moderate (moderate invert)	2	Absent (none, except moorhen)	Absent (no records & none seen)	20	Moderate (good habitat present but not extensive)	5
WM_P9	0.58	Below Average	A - Optimal for GCN (England and N Wales	2992	Dries Annually	Poor (low invert, few	0	Absent (none, except moorhen)	Absent (no records & none seen)	20	Moderate (good habitat	0

Pond Identification	HSI Score	HSI Category	SI1 Geographical Location	SI2 Waterbody Area m ² (when full of water)	SI3 Permanence	SI4 Water Quality	SI5 Shade	SI6 Waterfowl	SI7 Fish	SI8 Ponds within 1km	SI9 Terrestrial Habitat (within 100m and not beyond a major barrier)	SI10 Macrophytes (% cover of waterbody surface May to Sept, excluding duckweed)
			except upland & SW)			submerged plants)					present but not extensive)	



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