NORTH FALLS

Offshore Wind Farm

ENVIRONMENTAL STATEMENT

Appendix 23.8 Bat Emergence/Re-entry Survey Report

Document Reference:	3.3.37
Volume:	3.3
APFP Regulation:	5(2)(a)
Date:	July 2024
Revision:	0

Project Reference: EN010119

NORTH FALLS
Offshore Wind Farm

Project	North Falls Offshore Wind Farm
Document Title	Environmental Statement Appendix 23.8 Bat Emergence/Re-entry Survey Report
Document Reference	3.3.37
APFP Regulation	5(2)(a)
Supplier	Royal HaskoningDHV
Supplier Document ID	n/a

Revision	Date	Status/Reason for Issue	Originator	Checked	Approved
0	July 2024	Submission	RHDHV	NFOW	NFOW

ECOLOGY
RESOURCES

Bat Roost Survey Report

North Falls Offshore Wind Farm Ltd

January 2023

ECOLOGY | ARBORICULTURE

Status	Name	Date
Draft	Dominic Bowyer ACIEEM	04/01/2023
Rev 1	Gavin Mullan BA (Hons) MCIEEM	25/01/2023
Rev 2	Gavin Mullan BA (Hons) MCIEEM	20/07/2023

EXECUTIVE SUMMARY

Ecology Resources Limited was commissioned by Royal HaskoningDHV on behalf of North Falls Offshore Wind Farm Limited (NFOW), to undertake bat presence/likely absence surveys of trees and structures previously identified as potentially suitable for supporting roosting bats within the onshore project area plus a 50m buffer.

In addition to 83 trees identified by previous surveys as providing 'moderate' or 'high' suitability to support roosting bats, a further 23 trees near Horsley Cross were subject to a Ground Level Tree Assessment by Ecology Resources. All 23 trees were assessed as having negligible suitability to support roosting bats.

An additional 11 trees with suitability to support roosting bats were also identified during the surveys, which were subsequently added to the Royal HaskoningDHV survey scope. Furthermore, three 'incidental' trees with suitability to support roosting bats were identified during other phase 2 surveys, and also added to the scope of the bat presence/likely absence surveys. Therefore a total of 97 trees were subject to presence/likely absence surveys.

Surveys were completed on all 97 scoped into the bat presence/likely absence surveys. In total, 11 trees were confirmed as supporting active roosts. Species including common pipistrelle, soprano pipistrelle, *Myotis sp*. and Noctule were recorded roosting. All roosts were classified as being day roosts.

Contents

1. INTRODUCTION

Ecology Resources Limited was commissioned by Royal HaskoningDHV on behalf of North Falls Offshore Wind Farm Limited (NFOW), to undertake bat presence/likely absence surveys of trees previously identified as potentially suitable for supporting roosting bats within the onshore project area.

1.1 Project background

North Falls Offshore Wind Farm (herein North Falls or 'the project') is a proposed extension to the operational Greater Gabbard Offshore Wind Farm (GGOW), which is located off the east coast of England in the Southern North Sea and was opened in 2013. North Falls is located to the west of the existing GGOW and at its closest point is approximately 22km offshore. The wind farm is being developed by North Falls Offshore Wind Farm Limited, a joint venture between SSE Renewables and RWE.

North Falls is currently awaiting a formal grid connection offer from National Grid. Whilst this process is ongoing, in order to ensure that adequate baseline data is collected to inform the Environmental Impact Assessment (EIA), North Falls has progressed with site selection of the project's onshore infrastructure (landfall location, onshore cable route and onshore substation location) at risk. The outputs of North Falls site selection process have then been used to generate a study area for the purposes of undertaking a suite of ecological surveys during 2021 and 2022 so that baseline data for the project can be gathered. This is referred to herein as the 'onshore project area'.

An Extended Phase 1 Habitat Survey of the onshore project area was undertaken between April 2021 and March 2022, the findings of which were used to inform the scope of further 'Phase 2' ecology surveys required in 2022 to inform the project's Ecological Impact Assessment (EcIA) in support of its Development Consent Order (DCO) application.

The surveys undertaken by Ecology Resources and detailed in this report aimed to determine the presence or likely absence of roosting bats within those trees identified within the Extended Phase 1 Habitat Survey as supporting moderate or high suitability for supporting roosting bats, and to gain an understanding of how they could be utilising the trees surveyed and characterise any roosts recorded as per the Bat Conservation Trust (BCT) *Bat Surveys for Professional Ecologists: Good Practice Guidelines* (Collins, 2016). To achieve this, the following surveys have been taken:

- A Preliminary Ground Level Roost Assessment of 23 trees within the onshore project area not surveyed as part of the Extended Phase 1 Habitat Survey, identifying any potential roost features (PRFs) present and assessing the trees for their suitability to support roosting bats.
- Bat presence/ likely absence surveys of 97 trees identified within the Extended Phase 1 Habitat Survey as supporting moderate or high suitability for supporting roosting bats, to determine the presence or likely absence of roosting bats and to gain an understanding of how they use the site and characterize any roosts recorded as per the BCT guidelines This report details the scope, methodology and findings of these bat presence/ likely absence surveys conducted on suitable trees within the onshore scoping area.

1.2 Legislation

All 18 British bat species are protected under the Wildlife and Countryside Act 1981 (as amended) and Annex IV of the EU Habitats Directive, which is transcribed into UK law as the Conservation of Habitats and Species Regulations 2017 (as amended). The combined effect of the legislation makes it an offence to:

- deliberately capture, injure or kill a bat;
- deliberately disturb a bat, in such a way as to be likely to:
    - impair their ability:
        - to survive, breed or reproduce or rear or nurture their young; or
        - to hibernate or migrate;
    - significantly affect the local distribution or abundance of that bat species;
- damage or destroy a breeding site or resting place of any bat;
- intentionally or recklessly disturb a bat while it is occupying a structure or place that it uses for shelter or protection; or
- intentionally or recklessly obstruct access to any place that a bat uses for shelter or protection (this is taken to mean all bat roosts whether bats are present or not).

Seven British bat species are additionally listed on Annex II of the EU Habitats Directive, which designates core areas of their habitat as Special Areas of Conservation. These must be protected under the National Sites Network and the sites managed in accordance with the ecological requirements of the species. These species are:

- Barbastelle *Barbastella barbastellus;*
- Bechstein's bat *Myotis bechsteinii*;
- Brown Long-eared bat *Plecotus auratus;*
- Greater horseshoe bat *Rhinolophus ferrumequinum;*
- Lesser horseshoe bat *Rhinolophus hipposideros*;
- Noctule *Nyctalus noctule; and*
- Soprano Pipistrelle *Pipistrellus pygmaeus*

2. METHODOLOGY

2.1 Ground Level Roost Assessment (GLRA)

In line with best practice guidelines Bat Surveys for Professional Ecologists: Good Practice Guidelines Collins (2016), the GLRA surveys were led by the following trained, competent ecologists with several years of undertaking GLRAs:

- Johnnie Johnson bat Level 1 Class Licence 2021-52167-CLS-CLS,
- Chloe Marzuoli bat Level 1 Class Licence 2021-10078-CL17, and
- Patrick Davies with 8 years of professional consultancy experience.

As these works were non-intrusive assessments, a licence was not required.

A non-intrusive visual appraisal was undertaken from the ground using binoculars, inspecting the external features of the tree and for signs of bat use. The surveyor paid close attention to the ground and tree features where droppings may collect.

Features on trees that were considered to provide suitable roost sites for bats include, but are not limited to, the following:

- Natural holes (e.g., knot holes) arising from naturally shed branches or branches previously pruned back to a branch collar.
- Man-made holes (e.g., cavities that have developed from flush cuts or cavities created by branches tearing out from parent stems).
- Woodpecker holes.
- Cracks/splits in stems or branches (horizontal and vertical).
- Partially detached, loose or bark plates.
- Cankers (caused by localised bark death) in which cavities have developed.
- Other hollows or cavities, including butt rots.
- Compression of forks with included bark, forming potential cavities.
- Crossing stems or branches with suitable roosting space between.
- Ivy stems with diameters greater than 50mm with suitable roosting space behind (or where roosting space can be seen where a mat of thinner stems has left a gap between the mat and the trunk).
- Bat or bird boxes.

All survey features on site were categorised according to their suitability for supporting roosting bats in line with best practice guidelines (Collins, 2016). Tree features that dictate the likelihood of roosting bats are summarised in Table 1 on the following page.

Table 1: Guidelines for assessing the potential suitability of proposed development sites for bats (Collins, 2016)

Suitability	Roosting habitats	Commuting and foraging habitats
Negligible	Negligible habitat features on site likely to be used by roosting bats.	Negligible habitat features on site likely to be used by commuting or foraging bats.
Low	A structure with one or more potential roost sites that could be used by individual bats	Habitat that could be used by small numbers of commuting

Suitability	Roosting habitats	Commuting and foraging habitats
	opportunistically. However, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions[1] and/or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats (i.e., unlikely to be suitable for maternity or hibernation). A tree of sufficient size and age to contain PRFs but with none seen from the ground or features seen with only very limited roosting potential.	bats such as a gappy hedgerow or unvegetated stream, but isolated, i.e. not very well connected to the surrounding landscape by other habitats. Suitable, but isolated habitat that could be used by small numbers of foraging bats such as a lone tree (not in a parkland situation) or a patch of scrub.
Moderate	A structure or tree with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions and surrounding habitat but unlikely to support a roost of high conservation status (with respect to roost type only – the assessments in this table are made irrespective of species conservation status, which is established after presence is confirmed). A tree with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions and surrounding habitat but unlikely to support a roost of high conservation status (with respect to roost type only – the assessments in this table are made irrespective of species conservation status, which is established after presence is confirmed).	Continuous habitat connected to the wider landscape that could be used by bats for commuting such as lines of trees and scrub or linked back gardens. Habitat that is connected to the wider landscape that could be used by bats for foraging such as trees, scrub, grassland or water.
High	A structure with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions and surrounding habitat. A tree with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions and surrounding habitat.	Continuous, high-quality habitat that is well connected to the wider landscape that is likely to be used regularly by commuting bats such as river valleys, streams, hedgerows, lines of trees and woodland edge. High-quality habitat that is well connected to the wider landscape that is likely to be used regularly by foraging bats such as broadleaved woodland, tree-lined watercourses and grazed parkland. Site is close to and connected to known roosts.

2.2 Bat Presence/Likely Absence Surveys (dusk emergence and dawn re-entry)

Presence/ likely absence surveys were completed by experienced bat surveyors in accordance with the Bat Conservation Trust (2016) guidelines in suitable weather conditions. The metadata for each survey, including prevailing weather conditions, is shown in Appendix B. Trees classified as providing moderate suitability to support roosting bats had two surveys completed, one dusk (emergence) survey and one dawn (re-entry) survey. Trees classified as having high potential had three surveys completed, either two dusk (emergence) surveys and one dawn (re-entry) survey) or one dusk and two dawn.

Trees that had confirmed presence an additional fourth survey was completed to aid with roost characterisation and in the event that a Natural England license is required.

Dusk emergence surveys were conducted from 15 minutes before sunset and concluded 1.5 hours after the sunset time. Dawn re-entry surveys began at 1.5 hours before sunrise and ended 15 minutes after the sun had risen. Bat surveyors were placed strategically to provide the best view of PRF's most likely in use by bats.

Detectors used by surveyors for bat identification were EchoMeter® Touch 2 Pro (heterodyne, time expansion) bat detectors connected to Samsung® tablets. Where possible, species were identified from visual contact, and if the bat was seen, visual cues were used to aid identification.

In addition, Pulsar Helion 2 infra-red cameras were deployed on each survey to record the tree throughout the duration of each survey. The video files were then analysed post-survey and any bat emergence or re-entries noted.

Sound analysis was conducted on recorded bat calls by competent personnel, using Kaleidoscope Pro computer software to confirm and enable species identification. All sound files were initially subject to "auto ID" and then subsequently 10% of these calls and those bats considered to be rare in Essex were subject to manual identification also.

2.3 Field Survey Personnel

All surveys were led by suitably trained and competent ecologists, primarily Johnnie Johnson bat Level 1 Class Licence 2021-52167-CLS-CLS and supported by:

- Chloe Marzuoli bat Level 1 Class Licence 2021-10078-CL17,
- Beth Hunt bat Level 1 Class Licence 2021-51424-CLS-CLS
- John Lynch bat Level 1 Class Licence 2021-52824-CLS-CLS
- Hattie Taylor, 8 seasons of bat surveys
- Patrick Hennessy, 8 seasons of bat surveys

The remainder of the survey team consisted of ecologists with varied survey experience within consultancy. All the surveyors that assisted in the delivery of the surveys were suitably experienced and qualified ecologists and are either members of the Chartered Institute of Ecology and Environmental Mangers (CIEEM) or adhere to CIEEM's professional Code of Conduct.

- Alex Sheppard
- Ben Millington-Jones
- Ben Turner
- Clare Peto
- Dan Butlin
- Francesca Auston
- Ian Devereux
- Jo Dent
- Josh Smith
- Marcus Honour
- Mark Lovell
- Patrick Hennessy
- Ross Lane
- Stephen Treadwell
- Rich Erskine

2.4 Survey Limitations

Access restrictions (refusal by landowner) prevented completion of the second survey for tree BR454 and the third survey for tree BR455. Otherwise all surveys were completed as planned within the recommended season as per the BCT guidelines (2016) following the methodology set out above.

3. RESULTS

3.1 Ground Level Roost Assessment

Additional trees were added to the survey scope throughout the survey season due to changes to the onshore project area, incidental finds, and ongoing review of the trees scoped in for assessment. The results of the GLRA of these additional trees can be found in the following pages (Tables 2 – 4).

Ecology Resources were instructed by Royal HaskoningDHV to carry out ground assessments of an additional 23 trees near Horsley Cross (Figure 1.4, Appendix C) not previously subject to preliminary appraisal. The survey was conducted on the 24th June, 2023 by Pat Davies. All trees present were assessed as having negligible suitability to support roosting bats (see Table 2) and therefore no further surveys were carried out on these trees.

Table 2: Ground Level Roost Assessment results of trees near Horsley Cross

Tree ID	Survey date	Lead Surveyor	x	y	Species	Final Assessment
INCBR03	24.06.22	P. Davies	612431	227265	Pedunculate Oak	Negligible
INCBR04	24.06.22	P. Davies	612438	227269	Pedunculate Oak	Negligible
INCBR05	24.06.22	P. Davies	612427	227270	Field Maple *Acer campestre*	Negligible
INCBR06	24.06.22	P. Davies	612434	227278	Pedunculate Oak	Negligible
INCBR07	24.06.22	P. Davies	612432	227281	Pedunculate Oak	Negligible
INCBR08	24.06.22	P. Davies	612426	227278	Pedunculate Oak	Negligible
INCBR09	24.06.22	P. Davies	612425	227281	Field Maple	Negligible
INCBR10	24.06.22	P. Davies	612424	227282	Field Maple	Negligible
INCBR11	24.06.22	P. Davies	612421	227285	Common Ash	Negligible
INCBR12	24.06.22	P. Davies	612421	227288	Pedunculate Oak	Negligible
INCBR13	24.06.22	P. Davies	612420	227286	Field Maple	Negligible
INCBR14	24.06.22	P. Davies	612420	227291	Pedunculate Oak	Negligible
INCBR15	24.06.22	P. Davies	612416	227288	Norway Maple *Acer platanoides*	Negligible
INCBR16	24.06.22	P. Davies	612420	227297	Norway Maple	Negligible
INCBR17	24.06.22	P. Davies	612419	227300	Field Maple	Negligible

Tree ID	Survey date	Lead Surveyor	x	y	Species	Final Assessment
INCBR18	24.06.22	P. Davies	612417	227306	Field Maple	Negligible
INCBR19	24.06.22	P. Davies	612421	227327	Pedunculate Oak	Negligible
INCBR20	24.06.22	P. Davies	612423	227327	Pedunculate Oak	Negligible
INCBR21	24.06.22	P. Davies	612429	227286	Pedunculate Oak	Negligible
INCBR22	24.06.22	P. Davies	612430	227286	Pedunculate Oak	Negligible
INCBR23	24.06.22	P. Davies	612431	227285	Pedunculate Oak	Negligible
INCBR24	24.06.22	P. Davies	612428	227287	Pedunculate Oak	Negligible
INCBR25	24.06.22	P. Davies	612430	227293	Pedunculate Oak	Negligible

Three 'incidental' trees with bat potential were identified when surveyors were conducting other Phase 2 ecological surveys, these were added to the list of trees requiring bat presence/ likely absence surveys already provided by Royal HaskoningDHV.

In addition to the incidentals and the trees provided by Royal HaskoningDHV, three trees (271, 274 and 452) that fall within the project area were found to contain bat roosts during nearby surveys. These trees have therefore been reclassified as part of the GLRA, as detailed in Table 2 (Figure 3.2 and 3.3, Appendix C).

Table 3: Ground Level Roost Assessment results of incidental trees

Tree ID	Survey date	Surveyor	Tree Species	Tree Height (m)	DBH (m)	X, Y	PRF details (type, height, orientation and potential)	Overall tree assessment
INCBR1	10/06/2022	P. Davies	Pedunculate Oak	10	0.1	614304, 226474	a) Rot hole, 0m, S.E - Moderate	Moderate
INCBR2	16/06/2022	P. Davies	Ash	25	0.1	614529, 225899	a) Wood pecker hole, 15m, SE – high. b) Wood pecker hole, 15m, SE – high. c) Trunk cavity, 10m, S.E - High	High
INCBR28	20/06/2022	C. Marzuoli	Willow sp.	15	0.8	622523, 218504	a) Rot hole, 3.5m, S – High.	High

Tree ID	Survey date	Surveyor	Tree Species	Tree Height (m)	DBH (m)	X, Y	PRF details (type, height, orientation and potential)	Overall tree assessment
							b) Lifted bark, 5m, S – Low. c)Crack/split, 5m, E – Moderate. d) Branch cavity, 5m, E – High. e) Crack/split, 7m, E – Low f) Woodpecker hole, 8m, NW - High	
271	01/06/2022	P. Davies	Ash	25	1.3	617346, 223722	a) Rot hole. b) Tear out. c) Wood pecker hole	High
274	01/06/2022	P. Davies	Pedunculate Oak	25	1	617414, 223707	a) Crack/split. Other	Moderate
452	08/06/2022	P. Davies	Ash	25	0.3	614238, 226364	a) Rot hole	Moderate

Following an updated ground assessment of trees within the onshore project area, 11 were added to the survey scope as they were re-graded from low to either moderate to high potential (see Table 4 and Figures 1.1, 1.2 and 1.3, Appendix C).

Table 4: Ground Level Roost Assessment - Results of Re-graded Trees within the onshore project area

Tree ID	Survey date	Surveyor	Tree Species	Tree Height (m)	DBH (m)	X, Y	PRF details (type, height, orientation and potential)	Overall tree assessment
BR137	25/05/2022	J. Johnson	Pedunculate Oak *Quercus robur*	12	0.6	619833, 221027	a) Branch end cavity/cracks, 7m, NW – Low. b) Branch end cavity/cracks, 7m, NE – Low. c) Trunk cavity, 7m, NE - High	High
BR162	14/06/2022	P. Davies	Pedunculate Oak	30	0.6	618831, 222946	a) Wood pecker hole, 6m, NW - High b) Wood pecker hole, 6m, NW - High	High

Tree ID	Survey date	Surveyor	Tree Species	Tree Height (m)	DBH (m)	X, Y	PRF details (type, height, orientation and potential)	Overall tree assessment
							Wood pecker hole, 11m, SW – High	
BR172	17/06/2022	P. Davies	Willow sp. *Salix sp.*	35	1	618350, 223133	a) Lifted bark, 2m, SE - Low b) Rot hole, 8m, SW - Moderate c) Wood pecker hole, 7m, SW - High	High
BR205	17/06/2022	P. Davies	Pedunculate Oak	30	1.6	617429, 223494	a) Branch end cavity/cracks, 13m, SE - Moderate b) Rot hole, 20m, SE - High c) Branch end cavity/cracks, 10m , SW - High	High
BR210	11/06/2022	P. Davies	Pedunculate Oak	25	1	617266, 223405	a) Rot hole, 15m, SE - High b) Wood pecker hole, 16m, SE - High c) Lifted bark, 16m, SE - Moderate d) Wood pecker hole, 16m, SE - High e) Wood pecker hole, 14m, SE - High f) Wood pecker hole, 16m, S - High g) Crack/split, 11m, SE - Moderate	High
BR211	11/06/2022	P. Davies	Pedunculate Oak	35	1	617241, 223406	a) Wood pecker hole, 16m , NE - High b) Wood pecker hole, 25m, SE - High c) Wood pecker hole, 15m, NE - Low	High
BR213	11/06/2022	P. Davies	Pedunculate Oak	35	1.6	617311, 223474	a) Rot hole, 16m, N - High b) Wood pecker hole, 14m, N - Low c) Lifted bark, 22m, N - Low d) Lifted bark, 27m, N - Moderate e) Wood pecker hole, 16m, E - Moderate f) Lifted bark, 15m, SE - Low	High
BR215	11/06/2022	P. Davies	Ash *Fraxinus excelisor*	30	1	617339, 223511	a) Wood pecker hole, 16m, SE - High b) Wood pecker hole, 16m, SE - High c) Wood pecker hole, 16m, SE - High	High
BR248	10/06/2022	P. Davies	Pedunculate Oak	35	1	616292, 223747	a) Dense ivy, 4m, S - High	High
BR254	09/06/2022	P. Davies	Pedunculate Oak	30	1	616882, 223926	a) Wood pecker hole, 5m, SE - High b) Wood pecker hole, 5m, SW - High c) Wood pecker hole, 5m, SW - High d) Wood pecker hole, 6m, SE - Low e) Lifted bark, 8m, SE - Low f) Lifted bark, 15m, SE - Low	High

Tree ID	Survey date	Surveyor	Tree Species	Tree Height (m)	DBH (m)	X, Y	PRF details (type, height, orientation and potential)	Overall tree assessment
							g) Crack/split, 15m , SE - Moderate	
BR388	12/06/2022	P. Davies	Pedunculate Oak	20	0.6	614926, 225174	a) Large hollow, 7m, SE - High b) Large hollow, 8m, NE - High c) Branch end cavity/cracks, 9m, NE - High d) Crack/split, 9m, SE - Moderate	High

3.2 Presence / likely absence survey

Ninety-one trees requiring presence/likely absence surveys were initially provided by Royal HaskoningDHV. Of these 91, 79 were classified as having moderate potential for roosting bats and 12 were classified as having high potential (11 being upgraded from moderate to high, see Table 4 above).

In combination with the additional 'incidental' trees identified above, a total of 97 trees were subject to further presence/absence surveys.

A summary of the pertinent results is presented below however full details of each survey, for each tree, including metadata, can be found in Appendix A and B.

Of the 97 trees surveyed, 11 were confirmed as roosts (see Table 5 below). Tree BR352 had two roosts identified during two separate surveys. The remaining 86 were considered to have a likely absence of bat roosts.

Table 5: Trees with confirmed bat roosts

Tree ID	X and Y coordinates	Date of survey	Time	Species	Number	Roost Status	Description Notes	PRFID
BR126	619875, 220136	05/05/2022	20:59	*Pipistrellus pipistrellus*	3	Day	Emergence from woodpecker hole, 5m up on West aspect	BR126d
BR136	619992, 221013	03/05/2022	20:58	*Pipistrellus pipistrellus*	1	Day	Emerged from south aspect of building	Unknown
BR184	618520, 223401	10/05/2022	21:18	*Pipistrellus pipistrellus*	1	Day	Emergence from rot hole/crevice, 4m high on south aspect	BR184a
BR255	616888, 223930	11/05/2022	21:22	*Pipistrellus pygmaeus*	1	Day	Emergence from large hollow, 6m from ground level	BR255a
BR352	615723, 224513	17/05/2022	21:34	*Pipistrellus pipistrellus*	1	Day	Emergence from crevice within the tree	BR352a
BR352	615723, 224513	06/09/2022	20:06	*Pipistrellus pipistrellus*	7	Day	7 Common pipistrelles emerged at 20:06, 20:08, 20:10, 20:11, 20:14, 20:16	BR352a
BR388	614926, 225174	16/05/2022	21:17	Unknown	1	Day	Emergence from a large Hollow	BR388a
BR453	611559, 229842	07/06/2022	21:40	*Pipistrellus pygmaeus*	1	Day	Emergence from hollow (broken main trunk of tree), 4m from ground level	Unknown

Tree ID	X and Y coordinates	Date of survey	Time	Species	Number	Roost Status	Description Notes	PRFID
BR455	611573, 229733	07/06/2022	22:23	*Pipistrellus pygmaeus. Myostis Sp.*	3	Day	1 bat seen emerging at 22:23 (common pip and Myotis sp. both present on sound files) and 2 emerged at 22:30 (Not recorded). Dense ivy clad unable to see under due to dense vegetation	Unknown
271	617346, 223722	22/09/2022	19:05	*Nyctalus noctula*	2	Day	2 emergences from a woodpecker hole, 4m high on the north east of the trunk	271b
274	617414, 223707	28/07/2022	20:53	Unknown	1	Day	Seen crawling on tree, possible perching/feeding roost	N/A
452	614238, 226364	10/08/2022	21:06	*Pipistrellus pipistrellus*	1	Day	Emerged from a cluster of trees so could not identify PRF	Unknown

4. CONCLUSION

Twenty-three trees near the Horsley Cross were subject to a Ground Level Tree Assessment by Ecology Resources all of which were assessed as having negligible potential to support roosting bats.

Three 'incidental' trees with bat potential were identified by surveyors conducting other Phase ecological 2 surveys.

Following an updated ground assessment of trees within the project area 11 of the trees were added to the survey scope as they were graded as having moderate to high potential and a further 3 trees were identified as having bat roosts.

A total of 97 trees were subject to presence/ likely absence surveys. In total, 11 trees were confirmed as day roosts and 86 were considered likely to have an absence of bat roosts.

5. REFERENCES

Collins, J. (ed). (2016). Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd edn). The Bat Conservation Trust, London.

Royal HaskoningDHV, (2022) North Falls Extended Phase 1 Habitat Survey Report.

APPENDIX A: Tree Survey Data

Table 7: Trees survey data

Tree ID	Survey 1 Date & Type	Survey 2 Date & Type	Survey 3 Date & Type	Survey 4 Date & Type
BR001	06.05 DUSK	02.08 DAWN		
BR003	06.05 DUSK	02.08 DAWN		
BR004	06.05 DUSK	02.08 DAWN		
BR007	03.05 DUSK	26.07 DAWN		
BR010	08.06 DUSK	29.07 DAWN		
BR012	08.06 DUSK	29.07 DAWN		
BR016	09.06 DUSK	26.07 DAWN	09.08 DUSK	
BR113	11.06 DUSK	28.09 DAWN		
BR123	05.05 DUSK	03.08 DAWN		
BR125	09.05 DUSK	29.06 DAWN	03.08 DAWN	
BR126	05.05 DUSK	29.06 DAWN	03.08 DAWN	07.09 DUSK
BR128	05.05 DUSK	03.08 DAWN		
BR129	29.06 DAWN	03.08 DAWN	07.09 DUSK	
BR130	05.05 DUSK	29.06 DAWN	03.08 DAWN	
BR136	03.05 DUSK	03.07 DAWN	31.08 DUSK	07.09 DUSK
BR137	03.05 DUSK	03.07 DAWN	28.07 DAWN	
BR149	09.05 DUSK	27.07 DAWN		
BR150	09.05 DUSK	02.07 DAWN		
BR152	09.05 DUSK	27.07 DAWN		
BR161	09.05 DUSK	27.07 DAWN		
BR162	09.05 DUSK	27.07 DAWN	11.08 DUSK	
BR172	10.05 DUSK	28.07 DAWN	11.08 DUSK	
BR184	10.05 DUSK	28.07 DAWN	31.08 DUSK	08.09 DUSK
BR187	10.05 DUSK	03.07 DAWN		
BR188	10.05 DUSK	03.07 DAWN		
BR200	12.05 DUSK	02.07 DAWN		
BR202	12.05 DUSK	07.07 DAWN		
BR203	12.05 DUSK	07.07 DAWN		
BR205	13.05 DUSK	28.07 DUSK	12.08 DAWN	
BR210	13.05 DUSK	08.07 DAWN	01.08 DUSK	
BR211	13.05 DUSK	08.07 DAWN	01.08 DUSK	
BR213	13.05 DUSK	08.07 DAWN	01.08 DUSK	
BR215	13.05 DUSK	08.07 DAWN	01.08 DUSK	
BR219	10.06 DUSK	08.07 DAWN		
BR222	12.05 DUSK	12.08 DAWN		
BR223	12.05 DUSK	08.07 DAWN		
BR234	20.05 DUSK	07.07 DAWN		
BR248	10.06 DUSK	06.07 DAWN	04.08 DUSK	
BR250	10.06 DUSK	06.07 DAWN		
BR252	11.05 DUSK	07.07 DAWN		

Tree ID	Survey 1 Date & Type	Survey 2 Date & Type	Survey 3 Date & Type	Survey 4 Date & Type
BR254	11.05 DUSK	07.07 DAWN	24.08 DUSK	
BR255	11.05 DUSK	07.07 DAWN	24.08 DUSK	08.09 DUSK
BR256	11.05 DUSK	06.07 DAWN		
BR257	10.05 DUSK	06.07 DAWN		
BR268	12.06 DUSK	06.07 DAWN		
BR282	24.05 DUSK	16.08 DAWN		
BR327	06.05 DUSK	02.08 DAWN		
BR330	11.06 DUSK	26.07 DAWN		
BR348	12.06 DUSK	06.07 DAWN		
BR352	17.05 DUSK	26.08 DAWN	05.09 DUSK	
BR353	17.05 DUSK	17.08 DAWN		
BR369	17.05 DUSK	10.08 DAWN		
BR370	17.05 DUSK	05.07 DAWN		
BR371	17.05 DUSK	05.07 DAWN		
BR372	17.05 DUSK	05.07 DAWN		
BR380	16.05 DUSK	10.08 DAWN		
BR388	16.05 DUSK	05.07 DAWN	10.08 DAWN	
BR390	16.05 DUSK	05.07 DAWN		
BR391	16.05 DUSK	05.07 DAWN		
BR420	19.05 DUSK	04.08 DAWN		
BR423	19.05 DUSK	04.08 DAWN		
BR424	18.05 DUSK	04.08 DAWN		
BR425	19.05 DUSK	04.08 DAWN		
BR426	18.05 DUSK	06.09 DAWN		
BR427	18.05 DUSK	06.09 DAWN		
BR428	18.05 DUSK	06.09 DAWN		
BR429	18.05 DUSK	06.09 DAWN		
BR434	08.06 DUSK	04.08 DAWN		
BR436	08.06 DUSK	04.08 DAWN		
BR439	08.06 DUSK	31.08 DAWN		
BR453	07.06 DUSK	31.08 DAWN		
BR454	07.06 DUSK			
BR455	07.06 DUSK	31.08 DAWN		
BR460	25.05 DUSK	19.08 DAWN		
BR461	25.05 DUSK	01.09 DAWN		
BR464	10.06 DUSK	01.09 DAWN		
BR465	09.06 DUSK	01.09 DAWN		
BR467	07.06 DUSK	01.09 DAWN		
BR468	23.05 DUSK	05.08 DAWN		
BR469	12.06 DUSK	05.08 DAWN		
BR470	23.05 DUSK	05.08 DAWN		
BR473	09.06 DUSK	05.08 DAWN		
BR483	23.05 DUSK	05.08 DAWN		
BR485	23.05 DUSK	05.08 DAWN		

Tree ID	Survey 1 Date & Type	Survey 2 Date & Type	Survey 3 Date & Type	Survey 4 Date & Type
BR487	24.05 DUSK	07.09 DAWN		
BR488	25.05 DUSK	07.09 DAWN		
BR491	24.05 DUSK	07.09 DAWN		
BR494	24.05 DUSK	07.09 DAWN		
BR495	24.05 DUSK	07.09 DAWN		
BR497	12.06 DUSK	07.09 DAWN		
INCBR1	10.08 DUSK	23.09 DAWN		
INCBR2	17.08 DUSK	31.08 DAWN	21.09 DUSK	
INCBR28	02.08 DAWN	18.08 DUSK	01.09 DUSK	
271	28.07 DUSK	12.08 DAWN	22.09 DUSK	
274	28.07 DUSK	12.08 DAWN	22.09 DUSK	
452	10.08 DUSK	30.08 DUSK	23.09 DAWN	

APPENDIX B: Bat Survey Metadata

Table 8: Trees survey metadata

Date	Dusk/ Dawn	Sunrise /sunset	Start	Finish	Temp start	Temp finish	Cloud start	Cloud finish	Wind start	Wind finish	Rain start	Rain finish	Description start	Description finish
03/05/2022	Dusk	20:25	20:10	21:55	14	14	3	3	3	3	0	0	Dry and sunny, low of 8c high of 13c, wind low and no rain	Dry and sunny, low of 8c high of 13c, wind low and no rain
05/05/2022	Dusk	20:30	19:55	22:00	14	14	1	1	0	0	0	0		
06/05/2022	Dusk	20:32	19:55	21:50	17	17	7	7	2	2	0	0		
09/05/2022	Dusk	20:26	20:11	21:51	14	14	1	1	0	0	0	0		
10/05/2022	Dusk	20:38	20:13	22:00	16	16	6	6	2	2	0	0		
11/05/2022	Dusk	20:40	20:25	22:10	12	12	7	7	2	2	0	0		
12/05/2022	Dusk	20:37	20:22	22:07	15	15	5	5	2	2	0	0		
13/05/2022	Dusk	20:39	20:24	22:09	18	18	2	2	1	1	0	0		
16/05/2022	Dusk	20:43	20:28	22:13	18	18	3	3	2	2	0	0		
17/05/2022	Dusk	20:49	20:34	22:04	16	16	3	3	3	3	0	0		
18/05/2022	Dusk	20:50	20:35	22:05	15	15	6	6	2	2	0	0	Cloudy start with cool breeze, cooling throughout the survey. Breeze became stronger towards the end of the survey.	
19/05/2022	Dusk	20:52	20:37	22:07	16	16	2	2	2	2	0	0	Still, mild, mainly clear start to the survey. Remaining mild still and clear throughout.	
20/05/2022	Dusk	20:49	20:34	22:19	15	15	3	3	3	3	0	0		
23/05/2022	Dusk	20:55	20:24	22:15	14	11	4	7	3	3	1	4	Light drizzle. Damp.	Rain and lightning.
24/05/2022	Dusk	20:55	20:40	22:25	11	8	5	6	5	5	1	1	Overcast, mild, gentle breeze	Hardly any clouds in the sky, a lot of moisture
25/05/2022	Dusk	20:56	20:22	22:26	16	15	3	2	3	3	0	0	Mild evening with a gentle breeze.	wind became a little stronger and clouds cleared.
07/06/2022	Dusk	21:11	20:55	22:40	16	16	3	3	2	2	0	0		
08/06/2022	Dusk	21:11	20:54	22:40	17	17	2	2	2	2	0	0		
09/06/2022	Dusk	21:14	20:50	22:50	16	15	7	8	1	1	0	0	Warm, large cloud cover, no rain, high of 17	Full cloud cover, light breeze, mild

Date	Dusk/ Dawn	Sunrise /sunset	Start	Finish	Temp start	Temp finish	Cloud start	Cloud finish	Wind start	Wind finish	Rain start	Rain finish	Description start	Description finish
10/06/2022	Dusk	21:14	20:48	22:56	23	20	0	0	1	1	0	0	Warm, no rain, high of 22	Light breeze, warm
11/06/2022	Dusk	21:15	20:50	23:15	22	20	0	0	0	0	0	0	Warm, no rain,	Warm, mild
12/06/2022	Dusk	21:17	21:00	23:00	15	11	1	4	0	0	0	0		
29/06/2022	Dawn	04:39	03:24	04:54	15	15	6	4	0	0	0	0	Calm, overcast. Dry	Calm, overcast. Dry
02/07/2022	Dawn	04:43	03:08	05:01	15	17	3	3	1	2	0	0	Partly cloudy and gentle breeze	Partly cloudy and gentle breeze
03/07/2022	Dawn	04:43	03:00	04:58	14	13	6	6	2	2	0	0	Light breeze, dry, cloudy skies	Light breeze, dry, cloudy skies
05/07/2022	Dawn	04:44	03:14	04:59	12	11	1	5	1	1	0	0	Dry, cool, still	Dry, cool, partially overcast
06/07/2022	Dawn	04:45	03:15	05:00	11	11	3	2	1	1	0	0	Cool. Dry. Patchy cloud	Cool. Dry. Patchy cloud
07/07/2022	Dawn	04:45	03:15	05:00	17	17	7	8	3	2	1	0	Warm. Very faint rain for approx 2mins. Cloudy	Warm. Remained dry underfoot after Very faint rain towards end of survey. Cloudy.
08/07/2022	Dawn	04:46	03:16	05:01	14	13	1	1	0	1	0	0	Warm. Calm. Dry. Clear skies	Warm. Calm. Dry. Clear skies
26/07/2022	Dawn	05:08	03:51	05:23	15	15	8	6	1	1	0	0	Dry with a chilly moderate breeze.	Dry with cold gusts of wind towards the end of the survey.
27/07/2022	Dawn	05:11	03:41	05:26	15	13	3	1	0	0	0	0	Calm, partial cloud, no breeze, dry.	Calm, light cloud large area clear sky, no breeze, dry.
28/07/2022	Dawn	05:12	03:42	05:27	17	17	7	8	0	0	0	0	Overcast, dry, calm	Overcast, dry, calm
28/07/2022	Dusk	20:51	20:36	22:21	18	17	6	5	2	1	0	0	Dry, cold, still	Dry, overcast but mild
01/08/2022	Dusk	20:48	20:29	22:14	20	20	6	6	0	0	0	0		
02/08/2022	Dawn	05:20	03:50	05:35	19	19	2	4	0	0	0	0	mild, continual light wind, becoming cloudy	mild, heavier cloud, wind moved up to moderate
03/08/2022	Dawn	05:21	03:51	05:36	19	19	1	0	4	5	0	0	very gusty, dry	very gusty, dry, thick cloud
04/08/2022	Dusk	20:39	20:24	00:09	19	19	8	8	0	0	0	0	Warm, dry, overcast	Warm, dry, overcast
05/08/2022	Dawn	05:24	03:34	05:39	14	13	6	6	3	3	0	0	Moderate breeze, cloudy skies, dry and cool	Moderate breeze, cloudy skies, dry and cool
10/08/2022	Dusk	20:12	19:57	21:42	21	20	4	2	4	4	0	0	Partly cloudy with clear sky patches, moderate breeze, dry	Clear skies, partial cloud, moderate breeze, dry
11/08/2022	Dusk	20:30	20:15	22:00	19	18	0	0	3	3	0	0	Clear skies, moderate breeze, dry.	Clear skies, moderate breeze, dry
12/08/2022	Dawn	05:35	04:05	05:50	17	17	0	0	1	1	0	0	Warm, clear skies, calm	Warm, clear skies, calm
12/08/2022	Dusk	20:30	20:00											
16/08/2022	Dawn	05:57	04:12	05:57	18	18	7	6	1	1	0	0	Cool, still and cloudy	Cool, still and partly cloudy

Date	Dusk/ Dawn	Sunrise /sunset	Start	Finish	Temp start	Temp finish	Cloud start	Cloud finish	Wind start	Wind finish	Rain start	Rain finish	Description start	Description finish
17/08/2022	Dawn	05:43	04:13	05:58	18	18	6	3	1	1	0	0	Mild, cloudy skies with clear patches, dry	Light mist, light cloud, dry, light breeze
18/08/2022	Dusk	20:12	19:57	21:42	21	20	4	2	4	4	0	0	Partly cloudy with clear sky patches, moderate breeze, dry	Clear skies, partial cloud, moderate breeze, dry
18/08/2022	Dusk	20:12	19:57	21:42	21	20	4	2	4	4	0	0	Partly cloudy with clear sky patches, moderate breeze, dry	Clear skies, partial cloud, moderate breeze, dry
19/08/2022	Dawn	05:47	04:17	06:02	18	18	6	4	1	1	0	0	Partly cloudy, gentle breeze, dry, mild.	Partly cloudy, gentle breeze, dry, mild.
19/08/2022	Dusk	20:14	19:59	21:44	19	19	7	7	3	4	0	0	Mild and cloudy, with a cool breeze	Cool and cloudy with a constant moderate breeze.
24/08/2022	Dusk	19:59	19:44	21:29	23	22	2	4	2	2	0	0	Warm and dry with light breeze	Warm and dry with partial cloud and light breeze
26/08/2022	Dawn	05:58	04:28	06:13	15	15	0	6	1	1	0	0	Cool, clear and still	Cool, clear and still
30/08/2022	Dusk	19:46	19:31	21:16	19	18	2	1	4	4	0	0	Clear, dry, feels cool with a moderate wind and occasional gusts	Cool and clear with a moderate wind
31/08/2022	Dawn	06:06	04:36	06:21	19	16	4	6	3	3	0	1	Gentle/moderate breeze, partly cloudy, earlier light rain shower	Gentle/moderate breeze, partly cloudy, very brief light rain shower
31/08/2022	Dusk	19:44	19:29	21:14	19	18	2	1	6	8	0	0	very high strength of gusty winds	very high strength of gusty winds
01/09/2022	Dawn	06:08	04:38	06:23	17	16	4	1	4	4	0	0	Gusty wind but dry conditions	Gusty wind but dry conditions
01/09/2022	Dusk	19:27	21:12	19:42	21	20	3	4	4	5	0	0	very gusty	very gusty
05/09/2022	Dusk	19:33	19:18	21:03	21	19	6	2	2	3	0	0	Warm, sunny, dry	Warm, clear, electrical storms observed moving in from SE
06/09/2022	Dawn	06:16	04:46	06:31	17	18	1	1	2	2	0	1	Cool, dry, patchy cloud	Cool, dry, patchy cloud. Drizzle at times
07/09/2022	Dawn	06:17	04:47	06:32	15	15	7	5	2	2	0	0	Partly cloudy, dry with a light breeze	Partly cloudy, dry with a moderate breeze
07/09/2022	Dusk	19:28	19:13	20:58	22	20	3	2	3	3	0	0	Warm, and dry with a strong breeze	Clear skies, warm and breezy.
08/09/2022	Dusk	19:26	19:11	20:56	18	17	3	4	2	2	0	0	Mild and still, clear skies. Rain earlier in the day.	Cloudier, mild and still.
21/09/2022	Dusk	18:57	18:42	20:27	16	15	7	8	1	1	0	0	Calm dry and overcast	calm dry and overcast
22/09/2022	Dusk	18:54	18:39	20:24	17	16	6	8	2	2	0	0	Calm, overcast and dry	Calm, overcast and dry
23/09/2022	Dawn	06:42	05:12	06:57	14	14	8	7	2	1	2	2	Cloudy, cool with light rain shower	Cloudy, cool with light rain shower
28/09/2022 Dawn		06:50	05:20	07:05	6	7	0	0	1	1	0	0	Cool, clear and dry	Cool, clear and dry

APPENDIX C: Bat Tree Survey Results - Figures 1.1-3.4

LEGEND

Onshore project area plus 50m

Incidental/Upgraded Trees

BAT TREES: INCIDENTAL FINDS AND UPGRADED CLASSIFICATIONS FIGURE 1.1

PROJECT TITLE:
North Falls Offshore Wind Farm

CLIENT:
Royal HaskoningDHV

DATE:
10.01.2023

PRODUCED BY:
J. McMahon

REF: 22042

ECOLOGY RESOURCES

LEGEND

Onshore project area plus 50m

Incidental/Upgraded Trees

BAT TREES: INCIDENTAL FINDS AND UPGRADED CLASSIFICATIONS
FIGURE 1.2

PROJECT TITLE:
North Falls Offshore Wind Farm

CLIENT:
Royal HaskoningDHV

DATE:
10.01.2023

PRODUCED BY:
J. McMahon

REF: 22042

ECOLOGY RESOURCES

LEGEND

Onshore project area plus 50m

Incidental/Upgraded Trees

BAT TREES: INCIDENTAL FINDS AND UPGRADED CLASSIFICATIONS
FIGURE 1.3

PROJECT TITLE:
North Falls Offshore Wind Farm

CLIENT:
Royal HaskoningDHV

DATE:
10.01.2023

PRODUCED BY:
J. McMahon

REF: 22042

ECOLOGY RESOURCES

LEGEND

- Onshore project area plus 50m
- Incidental Trees - Negligible

BAT TREES: INCIDENTAL FINDS AND UPGRADED CLASSIFICATIONS
FIGURE 1.4

PROJECT TITLE:
North Falls Offshore Wind Farm

CLIENT:
Royal HaskoningDHV

DATE:
10.01.2023

PRODUCED BY:
J. McMahon

REF: 22042

ECOLOGY RESOURCES

LEGEND

Onshore project area plus 50m

Bat Trees

- High
- Moderate

BAT TREES SUBJECT TO DUSK/DAWN SURVEYS
FIGURE 2.1

PROJECT TITLE:
North Falls Offshore Wind Farm

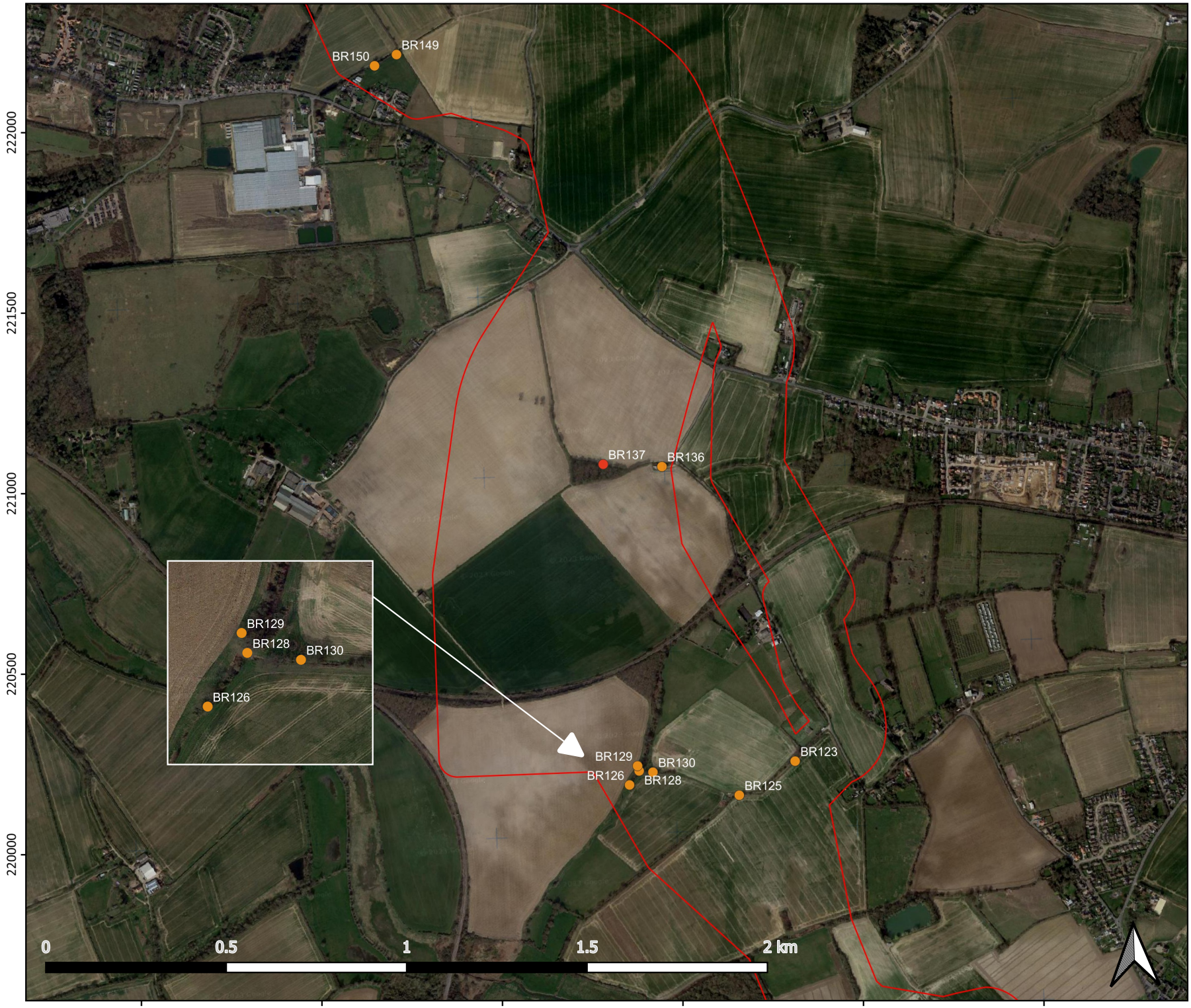
CLIENT:
Royal HaskoningDHV

DATE:
10.01.2023

PRODUCED BY:
J. McMahon

REF: 22042

ECOLOGY RESOURCES



LEGEND

Onshore project area plus 50m

Bat Trees

- High
- Moderate

BAT TREES SUBJECT TO DUSK/DAWN SURVEYS
FIGURE 2.2

PROJECT TITLE:
North Falls Offshore Wind Farm

CLIENT:
Royal HaskoningDHV

DATE:
10.01.2023

PRODUCED BY:
J. McMahon

REF: 22042

ECOLOGY RESOURCES

LEGEND

Onshore project area plus 50m

Bat Trees

- High
- Moderate

BAT TREES SUBJECT TO DUSK/DAWN SURVEYS
FIGURE 2.3

PROJECT TITLE:
North Falls Offshore Wind Farm

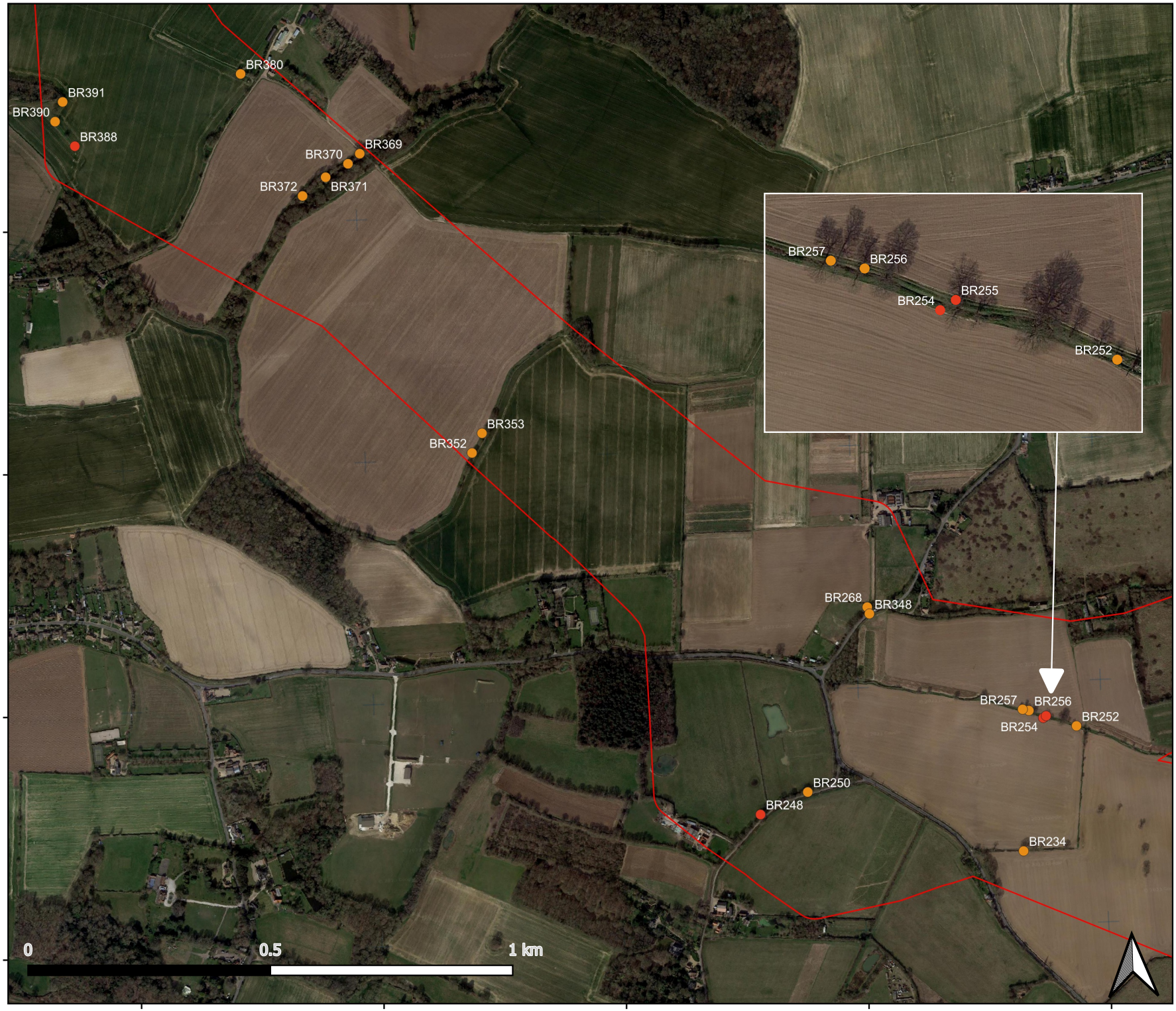
CLIENT:
Royal HaskoningDHV

DATE:
10.01.2023

PRODUCED BY:
J. McMahon

REF: 22042

ECOLOGY RESOURCES



LEGEND

Onshore project area plus 50m

Bat Trees

- High
- Moderate

BAT TREES SUBJECT TO DUSK/DAWN SURVEYS FIGURE 2.4

PROJECT TITLE:
North Falls Offshore Wind Farm

CLIENT:
Royal HaskoningDHV

DATE:
10.01.2023

PRODUCED BY:
J. McMahon

REF: 22042

ECOLOGY RESOURCES

LEGEND

Onshore project area plus 50m

Bat Trees

- High
- Moderate

BAT TREES SUBJECT TO DUSK/DAWN SURVEYS
FIGURE 2.5

PROJECT TITLE:
North Falls Offshore Wind Farm

CLIENT:
Royal HaskoningDHV

DATE:
10.01.2023

PRODUCED BY:
J. McMahon

REF: 22042

ECOLOGY RESOURCES

LEGEND

Onshore project area plus 50m

Bat Trees

- Moderate

BAT TREES SUBJECT TO DUSK/DAWN SURVEYS
FIGURE 2.6

PROJECT TITLE:
North Falls Offshore Wind Farm

CLIENT:
Royal HaskoningDHV

DATE:
10.01.2023

PRODUCED BY:
J. McMahon

REF: 22042

ECOLOGY RESOURCES

LEGEND

Onshore project area plus 50m

Bat Trees

Moderate

BAT TREES SUBJECT TO DUSK/DAWN SURVEYS
FIGURE 2.7

PROJECT TITLE:
North Falls Offshore Wind Farm

CLIENT:
Royal HaskoningDHV

DATE:
10.01.2023

PRODUCED BY:
J. McMahon

REF: 22042

ECOLOGY RESOURCES

LEGEND

Onshore project area plus 50m

Bat Trees

Moderate

BAT TREES SUBJECT TO DUSK/DAWN SURVEYS
FIGURE 2.8

PROJECT TITLE:
North Falls Offshore Wind Farm

CLIENT:
Royal HaskoningDHV

DATE:
10.01.2023

PRODUCED BY:
J. McMahon

REF: 22042

ECOLOGY RESOURCES

LEGEND

- Onshore project area plus 50m
- Confirmed Roosts

CONFIRMED BAT ROOST TREE LOCATIONS
FIGURE 3.1

PROJECT TITLE:
North Falls Offshore Wind Farm

CLIENT:
Royal HaskoningDHV

DATE:
10.01.2023

PRODUCED BY:
J. McMahon

REF: 22042

ECOLOGY RESOURCES

LEGEND

Onshore project area plus 50m

Confirmed Roosts

CONFIRMED BAT ROOST TREE LOCATIONS FIGURE 3.2

PROJECT TITLE:
North Falls Offshore Wind Farm

CLIENT:
Royal HaskoningDHV

DATE:
10.01.2023

PRODUCED BY:
J. McMahon

REF: 22042

ECOLOGY RESOURCES

LEGEND

Onshore project area plus 50m

Confirmed Roosts

CONFIRMED BAT ROOST TREE LOCATIONS FIGURE 3.3

PROJECT TITLE:
North Falls Offshore Wind Farm

CLIENT:
Royal HaskoningDHV

DATE:
10.01.2023

PRODUCED BY:
J. McMahon

REF: 22042

ECOLOGY RESOURCES

LEGEND

Onshore project area plus 50m

Confirmed Roosts

CONFIRMED BAT ROOST TREE LOCATIONS FIGURE 3.4

PROJECT TITLE:
North Falls Offshore Wind Farm

CLIENT:
Royal HaskoningDHV

DATE:
10.01.2023

PRODUCED BY:
J. McMahon

REF: 22042

ECOLOGY RESOURCES

NORTH FALLS

Offshore Wind Farm

sse Renewables | RWE

HARNESSING THE POWER OF NORTH SEA WIND

North Falls Offshore Wind Farm Limited

A joint venture company owned equally by SSE Renewables and RWE.

To contact please email contact@northfallsoffshore.com

North Falls Offshore Wind Farm Limited Registered Address: Windmill Hill Business Park, Whitehill Way, Swindon, Wiltshire, SN5 6PB, United Kingdom

Registered in England and Wales Company Number: 12435947