FIVE ESTUARIES
OFFSHORE WIND FARM

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ECOLOGY
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Bat Activity Survey Report

Five Estuaries Offshore Wind Farm Ltd

January 2023

ECOLOGY | ARBORICULTURE

Status	Name	Date
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EXECUTIVE SUMMARY

Ecology Resources Limited was commissioned by Royal HaskoningDHV on behalf of Five Estuaries Offshore Wind Farm Limited (VE OWL), to undertake bat activity surveys within the onshore project area plus a 100m buffer.

Fourteen survey transects were identified within the onshore project area (plus a 100m buffer) as areas with highly suitable habitat to support foraging and commuting bats. Transect routes were walked a total of seven times at dusk between April-October (inclusive), and once at dawn within the same 24hr survey period during July.

Two static bat detectors were placed along each transect route, plus two extra lone ones to cover two hedgerows not already part of a transect and too small or too far away to be considered a new transect or adding to an existing one. The statics were set to record from 30 minutes before sunset to 30 minutes after sunrise for five consecutive days, between April – October (inclusive).

A total of nine bat species were confirmed from bat call analysis using Kaleidoscope software. Barbastelle bats, an Annex II species under the European Habitats Directive (1992), were recorded by either method along all 14 transects. Common pipistrelle bats comprised over 70% of the calls recorded on transect surveys and 64% from all calls recorded by static detectors.

Contents

1. INTRODUCTION

Ecology Resources Limited was commissioned by Royal HaskoningDHV on behalf of Five Estuaries Offshore Wind Farm Limited (VE OWFL), to undertake bat activity surveys of hedgerows and woodlands with moderate to high commuting and foraging habitat potential within the onshore project area plus a 100m buffer.

1.1 Project background

VE is a proposed extension to the operational Galloper Offshore Wind Farm (OWF) which consists of 56 wind turbine generators (WTGs). The 5 Estuaries will comprise up to 79 WTGs situated within two array areas to the east of the operational Galloper OWF. The array areas will be located approximately 30km off the coast of Suffolk, England.

Cables will connect the turbines to the offshore substation platforms and then export the power generated to shore. It is expected that there will be a number of inter-array cables, up to four export cables and up to two offshore substations platforms.

A landfall area has been identified between Holland-on Sea and Frinton-on-Sea on the Essex coast. The landfall point is yet to be determined but will be located within this area of coastline. A new VE onshore substation will be needed and will be constructed in an area to the north of the A120.

The VE cables will be installed underground between the landfall and the grid connection point north of the A120. A preferred corridor has not yet been determined with several corridors still under consideration at the time of writing. Potential substation land parcels and associated corridor options north of the A120 also remain under review at the time of writing.

A more detailed description of the project, several elements of which have yet to be finalised at this time, will be provided in the PEIR and ES in due course.

1.2 Legislation

All UK bat species are protected under the Wildlife and Countryside Act 1981 (as amended), the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 and Annex IV of the European Habitats Directive 1992. The combined effect of this 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;
        - to hibernate or migrate;
    - affect significantly the local distribution or abundance of that bat species;

- damage or destroy a breeding site or resting place of any bat; and
- 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).

In addition, five British bat species are listed on Annex II of the EU Habitats Directive, 1992. Annex II species may qualify as features for sites to be designated as Special Areas for Conservation (SACs). These species are:

- greater horseshoe bat (*Rhinolophus ferrumequinum*);
- lesser horseshoe bat (*Rhinolophus hipposideros*);
- Bechstein's bat (*Myotis bechsteinii*);
- barbastelle (*Barbastella barbastellus*); and
- greater mouse-eared bat (*Myotis myotis*).

2. METHODOLOGY

Bat surveys were completed in accordance with Bat Conservation Trust guidelines (Collins, J (ed.), 2016). Thirteen transects (labelled Transect 4 to Transect 17) were created so that all hedgerows and woodlands crossing the route would be assessed for their bat activity and each route was approximately 3-5km in length.

Transect 15 was descoped in July following cable route revisions, although static detector surveys along this transect were still conducted until October for a complete data set. Each transect had two static detectors deployed along the route.

Following discussion with SLR on survey design, two further statics were also placed as individual lone statics along two remaining ~100m long hedgerows which were not associated with a walked transect (due to locality, distance from existing transects and transect survey requirements). All transect and static detector locations are shown in Appendix A.

2.1 Transect surveys

In accordance with the Bat Conservation Trust guidelines (Collins, J (ed.), 2016), transect surveys were carried out every month between April-October 2022 with back-to-back dusk and dawn surveys conducted in July, totalling eight surveys for each transect. Each transect was walked at a constant pace by two surveyors to record levels of bat activity, starting at sunset and continued for two hours after sunset. Surveys were conducted during suitable weather conditions (temperatures above 10˚C at dusk, little/no wind, no precipitation) when bats are most likely to be active.

Surveyors used Wildlife Acoustics Echo Meter Touch 2 bat detectors in conjunction with an Android tablet or Kindle. Where possible, species were identified from contacts and, if a bat was seen, visual cues were used to aid identification. Where possible, the number of bats observed, and their behaviour was also recorded.

2.2 Static detectors

In accordance with the Bat Conservation Trust guidelines, two static detectors were deployed per transect of moderate commuting and foraging potential once a month between April-October (inclusive), 2022. These were given an identification number based upon location of deployment. Static detectors used were Wildlife Acoustics Song Meter Mini Bat Ultrasonic detectors. These were securely fastened to a suitable anchor point e.g. fence post, pole or tree and set to record for a minimum of five consecutive nights, beginning 30 minutes before sunset until 30 minutes after sunrise. Weather forecasting was checked prior to static bat detector deployment to ensure that the survey period was during suitable weather conditions.

2.3 Field survey personnel

All surveys were led by suitably trained and competent ecologists primarily Johnnie Johnson (Natural England Level 1 Class Licence 2021-52167-CLS-CLS) and supported by;

- Alex Sheppard
- Ben Millington-Jones
- Dan Smith
- Patrick Hennessy

All 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 Managers (CIEEM) or adhere to CIEEM's professional Code of Conduct.

2.4 Data analysis

Following all surveys, sound analysis was carried out on recorded calls by suitably experienced ecologists, using Kaleidoscope® computer software to confirm and enable species identification.

All sound files (.wav) were subject to AutoID with a further 10% of the files having manual identification applied. This included checking rare Essex species identified from the AutoID (alcathoe bat *Myotis alcathoe*, Bechstein's bat *Myotis bechsteinii*, Leisler's bat *Nyctalus leisleri*, Nathusius' pipistrelle *Pipistrellus nathusii*, serotine *Eptesicus serotinus*, barbastelle *Barbastella barbastellus*, grey long-eared bat *Plecotus austriacus*). During analysis all species were labelled by the first three initials of the genus followed by the first three letters of their species name e.g. BARBAR or NYCNOC. Where analysis was unable to identify to species level, Myotis species were grouped into their genus as MYOSP.

Once analysis was completed, a total species list and number of passes were made per transect and static location. For static detector surveys, species lists and total passes were also made per night for the five night time period of each monthly deployment, along with mean and max passes.

2.5 Survey limitations

Bats rely on different habitats depending on the season and may appear on a given site after activity surveys have been conducted. On this basis, bats may potentially be present but remain undetected.

The summer of 2022 was exceptionally dry and hot. The month of August, in particular, experienced reoccurring 'extreme weather warnings' and prolonged periods where temperatures were above 35˚C. This may have had an unknown effect on bat activity, even in the months to follow.

Transect surveys capture bat activity during a single snapshot of time and dependent on the location of the surveyor along the transect route. Static detector bat surveys capture a larger dataset, however quantities and behaviour of bats cannot be determined from sound recordings alone. Both sets of data must be used to determine the assemblage and activity levels of bats using the site.

During transect surveys there were times the detector would stop recording resulting in certain time periods not being recorded before the detector was turned back on again. This is not considered to have impacted upon the assemblage of bats detected during any survey.

It was noted when analysing files there were two cases with static sound files (May Static ID 23 and June Static ID 10) and one case with transect sound files (June survey for Transect 4) where the files were corrupted, and analysis could not be completed.

Myotis species were grouped into their genus as *Myotis sp*. as species within this genus have notoriously similar calls which are difficult to accurately differentiate from sound analysis. This is not considered to have impacted upon the results as these species are still captured within the data set.

Through a hardware malfunction the statics deployed in April and May were showing incorrect timestamps therefore the dates and times presented on the sound files were showing February/March dates and day-time hours, this was corrected for the subsequent months. This malfunction is not considered to have impacted upon the survey results as sound files could still be analysed to produce a species list relative to the time of static detector deployment and collection.

Access restrictions meant that Transect 7 was not surveyed in April, Transect 15 was not surveyed in July and Transects 4 and 14 were not surveyed in October. Due to surveyor error, dawn surveys were not conducted along Transects 14-17 in July.

All statics were deployed apart from on Transect 7 (Static IDs 23 and 24) in April due to access refusals resulting in incomplete datasets. Static detectors could not be deployed along Transect 14 (Static IDs 31 and 32) in October due to landowner access refusal.

3. RESULTS

3.1 Transect Surveys

A summary of observed bats and behaviour noted during transect surveys is presented per transect in Tables 1-14. Survey results for each transect are shown in Figures 2.1-2.14 (Appendix B). Appendix C Bat Activity Data Completion illustrates where full data sets and incomplete data sets are located for both transects and statics.

Table 1. Summary of observed bats during walked transect surveys along Transect 4.

Transect 4					
Month	**Bat behavioural events**				**No. bats recorded**
	Commuting	**Foraging**	**Socialising**	**Unknown**	
April	1	2	0	7	10
May	0	0	0	0	0
June	2	4	0	14	20
July (dusk)	0	9	0	15	24
July (dawn)	0	0	0	11	11
August	0	4	0	1	5
September	2	10	0	15	27
October	No access				

Table 2. Summary of observed bats during walked transect surveys along Transect 5.

Transect 5					
Month	**Bat behavioural events**				**No. bats recorded**
	Commuting	**Foraging**	**Socialising**	**Unknown**	
April	1	2	0	6	9
May	4	1	0	0	5
June	3	0	0	1	4
July (dusk)	1	1	0	12	14
July (dawn)	5	4	0	20	29
August	1	6	0	6	13
September	0	0	0	19	19
October	1	1	0	18	20

Table 3. Summary of observed bats during walked transect surveys along Transect 6.

Transect 6					
Month	**Bat behavioural events**				**No. bats recorded**
	Commuting	**Foraging**	**Socialising**	**Unknown**	
April	1	1	0	4	6
May	0	0	0	1	1
June	2	5	0	11	18
July (dusk)	1	4	0	8	13
July (dawn)	0	3	0	8	11
August	0	4	0	3	7

September	0	17	0	0	17
October	0	1	0	7	8

Table 4. Summary of observed bats during walked transect surveys along Transect 7.

Transect 7					
Month	**Bat behavioural events**				**No. bats recorded**
	Commuting	**Foraging**	**Socialising**	**Unknown**	
April	No access				
May	6	6	0	3	15
June	0	4	0	4	8
July (dusk)	1	3	1	8	13
July (dawn)	1	3	0	19	23
August	1	1	0	8	10
September	1	18	3	0	22
October	0	0	0	8	8

Table 5. Summary of observed bats during walked transect surveys along Transect 8.

Transect 8					
Month	**Bat behavioural events**				**No. bats recorded**
	Commuting	**Foraging**	**Socialising**	**Unknown**	
April	2	1	0	5	8
May	5	4	0	13	22
June	3	3	0	0	6
July (dusk)	1	2	0	15	18
July (dawn)	2	0	0	8	10
August	2	2	0	8	12
September	1	20	0	0	21
October	0	11	0	1	12

Table 6. Summary of observed bats during walked transect surveys along Transect 9.

Transect 9					
Month	**Bat behavioural events**				**No. bats recorded**
	Commuting	**Foraging**	**Socialising**	**Unknown**	
April	2	0	0	0	2
May	3	0	0	1	4
June	0	9	0	0	9
July (dusk)	0	3	0	8	11
July (dawn)	0	0	0	6	6
August	4	11	0	0	15
September	6	5	0	2	13
October	0	1	1	8	10

Table 7. Summary of observed bats during walked transect surveys along Transect 10.

Transect 10					
Month	**Bat behavioural events**				**No. bats recorded**
	Commuting	**Foraging**	**Socialising**	**Unknown**	
April	0	2	0	1	3
May	0	1	0	0	1
June	0	2	0	1	3
July (dusk)	0	0	0	4	4
July (dawn)	0	0	0	2	2
August	2	9	0	1	12
September	0	2	1	2	5
October	1	0	0	6	7

Table 8. Summary of observed bats during walked transect surveys along Transect 11.

Transect 11					
Month	**Bat behavioural events**				**No. bats recorded**
	Commuting	**Foraging**	**Socialising**	**Unknown**	
April	3	3	0	10	16
May	1	3	0	1	5
June	5	3	0	1	9
July (dusk)	0	0	0	6	6
July (dawn)	0	1	1	8	10
August	3	11	0	5	19
September	1	5	4	4	14
October	0	3	3	17	23

Table 9. Summary of observed bats during walked transect surveys along Transect 12.

Transect 12					
Month	**Bat behavioural events**				**No. bats recorded**
	Commuting	**Foraging**	**Socialising**	**Unknown**	
April	0	3	0	6	9
May	6	3	1	10	20
June	1	5	0	0	6
July (dusk)	1	0	0	3	4
July (dawn)	0	0	0	12	12
August	3	6	0	0	9
September	0	0	0	3	3
October	0	0	0	1	1

Table 10. Summary of observed bats during walked transect surveys along Transect 13.

Transect 13					
Month	**Bat behavioural events**				**No. bats recorded**
	Commuting	**Foraging**	**Socialising**	**Unknown**	
April	0	1	0	0	1
May	3	9	0	3	15
June	1	3	0	2	6
July (dusk)	0	0	0	5	5
July (dawn)	0	2	0	2	4
August	0	12	0	0	12
September	0	1	0	7	8
October	0	1	0	7	8

Table 11. Summary of observed bats during walked transect surveys along Transect 14.

Transect 14					
Month	**Bat behavioural events**				**No. bats recorded**
	Commuting	**Foraging**	**Socialising**	**Unknown**	
April	No access				
May	1	4	0	5	10
June	0	1	0	2	3
July (dusk)	0	1	0	2	3
July (dawn)	No survey				
August	1	15	0	0	16
September	0	6	1	1	8
October	No survey				

Table 12. Summary of observed bats during walked transect surveys along Transect 15.

Transect 15					
Month	**Bat behavioural events**				**No. bats recorded**
	Commuting	**Foraging**	**Socialising**	**Unknown**	
April	No access				
May	7	3	0	24	34
June	0	3	0	21	24
July (dusk)	No survey (descoped)				
July (dawn)	No survey (descoped)				
August	No survey (descoped)				
September	No survey (descoped)				
October	No survey (descoped)				

Table 13. Summary of observed bats during walked transect surveys along Transect 16.

Transect 16					
Month	**Bat behavioural events**				**No. bats recorded**
	Commuting	**Foraging**	**Socialising**	**Unknown**	
April	No access				
May	0	1	0	3	4
June	0	2	0	4	6
July (dusk)	0	1	0	8	9
July (dawn)	No survey				
August	1	5	0	3	9
September	1	0	0	16	17
October	0	2	0	4	6

Table 14. Summary of observed bats during walked transect surveys along Transect 17.

Transect 17					
Month	**Bat behavioural events**				**No. bats recorded**
	Commuting	**Foraging**	**Socialising**	**Unknown**	
April	No access				
May	0	0	0	15	15
June	0	7	0	8	15
July (dusk)	1	3	0	9	13
July (dawn)	No survey				
August	0	1	0	2	3
September	0	3	0	3	6
October	4	0	0	0	4

During analysis of bat detector recordings taken during transect surveys, a total of 3682 recordings of bats were gathered from all transect surveys between April and October (inclusive), 2022. The results of bat detector recording analysis conducted are outlined in Tables 15-28, below.

All survey results i.e., location of bats observed during transects are shown in in Appendix B and were undertaken in optimal weather conditions (Appendix C).

Table 15: Summary of bat recording analysis, Transect 4.

Month	Bat Species Recordings											Total Bats Recorded
	B.bar	E.ser	N.lei	E.ser/ N.lei	N.noc	P.nat	P.pip	P.pyg	P.aur	*Myotis sp.*	*Pipistrellus sp.*	
April	0	0	0	0	0	0	0	0	0	0	0	0
May	0	0	0	0	0	0	0	0	0	0	0	0
June	No access											
July dusk	0	0	0	0	0	0	114	10	0	1	0	125
July dawn	0	0	0	0	0	0	36	4	0	0	0	40
August	0	0	0	0	0	0	37	0	0	0	1	38
September	1	0	0	1	17	0	40	4	0	1	7	71
October	No access											
Total	**1**	**0**	**0**	**1**	**17**	**0**	**227**	**18**	**0**	**2**	**8**	**274**

Table 16: Summary of bat recording analysis, Transect 5.

Month	Bat Species Recordings											Total Bats Recorded
	B.bar	E.ser	N.lei	E.ser/ N.lei	N.noc	P.nat	P.pip	P.pyg	P.aur	*Myotis sp.*	*Pipistrellus sp.*	
April	1	0	0	0	0	0	15	29	0	0	0	45
May	0	0	0	0	0	0	4	0	0	0	0	4
June	0	0	0	0	0	0	18	0	0	0	0	18
July dusk	0	0	0	0	1	0	53	0	0	0	0	54
July dawn	0	0	0	0	0	0	94	24	0	6	0	124
August	4	0	0	0	4	0	99	12	3	4	4	130
September	1	0	0	0	0	0	56	8	0	1	0	66
October	2	0	0	0	0	0	58	20	2	1	3	86
Total	**8**	**0**	**0**	**0**	**5**	**0**	**397**	**93**	**5**	**12**	**7**	**527**

Table 17: Summary of bat recording analysis, Transect 6.

Month	Bat Species Recordings											Total Bats Recorded
	B.bar	E.ser	N.lei	E.ser/ N.lei	N.noc	P.nat	P.pip	P.pyg	P.aur	*Myotis sp.*	*Pipistrellus sp.*	
April	0	0	0	0	0	0	4	0	0	0	0	4
May	0	0	0	0	1	0	0	0	0	0	0	1
June	0	0	0	0	0	0	72	36	0	0	0	108
July dusk	0	0	0	0	3	0	36	10	0	0	0	49
July dawn	0	0	0	0	0	0	27	2	0	1	0	30
August	0	0	0	0	2	0	15	11	0	0	0	28
September	0	0	7	0	5	0	11	2	1	0	0	26
October	1	0	0	1	0	0	18	10	0	0	0	30
Total	**1**	**0**	**7**	**1**	**11**	**0**	**183**	**71**	**1**	**1**	**0**	**276**

Table 18: Summary of bat recording analysis, Transect 7.

Month	Bat Species Recordings											Total Bats Recorded
	B.bar	E.ser	N.lei	E.ser/ N.lei	N.noc	P.nat	P.pip	P.pyg	P.aur	*Myotis sp.*	*Pipistrellus sp.*	
April	No access											
May	0	0	0	0	1	0	49	1	0	0	0	51
June	0	0	0	0	0	0	27	6	0	0	0	33
July dusk	0	0	0	0	3	0	30	5	0	2	0	40
July dawn	0	0	0	0	3	0	37	6	1	1	0	48
August	0	0	0	0	3	0	29	0	2	1	0	35
September	2	0	0	0	0	0	30	5	0	0	0	37
October	1	0	0	0	0	0	29	3	0	1	0	34
Total	**3**	**0**	**0**	**0**	**10**	**0**	**231**	**26**	**3**	**5**	**0**	**278**

Table 19: Summary of bat recording analysis, Transect 8.

Month	Bat Species Recordings											Total Bats Recorded
	B.bar	E.ser	N.lei	E.ser/ N.lei	N.noc	P.nat	P.pip	P.pyg	P.aur	*Myotis sp.*	*Pipistrellus sp.*	
April	0	0	0	0	0	0	13	2	0	0	0	15
May	0	0	0	0	0	0	195	37	1	0	0	233
June	0	0	0	0	0	0	9	0	0	0	1	10
July dusk	1	0	0	0	2	0	37	22	0	2	0	64
July dawn	0	0	0	0	1	0	28	0	0	0	0	29
August	0	0	0	0	0	0	13	8	0	1	0	22
September	1	0	0	0	0	0	3	13	0	0	0	17
October	3	0	0	0	1	0	12	4	0	0	0	20
Total	**5**	**0**	**0**	**0**	**4**	**0**	**310**	**86**	**1**	**3**	**1**	**410**

Table 20: Summary of bat recording analysis, Transect 9.

Month	Bat Species Recordings											Total Bats Recorded
	B.bar	E.ser	N.lei	E.ser/ N.lei	N.noc	P.nat	P.pip	P.pyg	P.aur	*Myotis sp.*	*Pipistrellus sp.*	
April	0	0	0	0	0	0	0	0	0	0	0	0
May	0	0	0	0	0	0	12	0	0	0	0	12
June	0	0	0	0	0	0	21	0	0	0	0	21
July dusk	0	0	0	0	0	0	17	18	0	0	0	35
July dawn	0	0	0	0	0	0	9	7	0	0	0	16
August	0	0	0	0	2	0	10	4	0	0	0	16
September	0	0	0	0	2	0	47	2	0	0	0	51
October	0	0	0	0	0	0	23	10	0	0	0	33
Total	**0**	**0**	**0**	**0**	**4**	**0**	**139**	**41**	**0**	**0**	**0**	**184**

Table 21: Summary of bat recording analysis, Transect 10.

Month	Bat Species Recordings											Total Bats Recorded
	B.bar	E.ser	N.lei	E.ser/ N.lei	N.noc	P.nat	P.pip	P.pyg	P.aur	*Myotis sp.*	*Pipistrellus sp.*	
April	0	0	0	0	0	0	0	0	0	0	0	0
May	0	0	0	0	0	0	2	0	0	0	0	2
June	0	0	0	0	0	0	8	0	0	0	0	8
July dusk	0	0	0	0	0	0	7	2	0	0	0	9
July dawn	0	0	0	0	0	0	11	5	0	0	0	16
August	1	0	0	0	0	0	1	4	1	0	0	7
September	0	0	0	0	1	0	28	3	0	0	1	33
October	0	0	0	0	0	0	0	0	0	0	0	0
Total	**1**	**0**	**0**	**0**	**1**	**0**	**57**	**14**	**1**	**0**	**1**	**75**

Table 22: Summary of bat recording analysis, Transect 11.

Month	Bat Species Recordings											Total Bats Recorded
	B.bar	E.ser	N.lei	E.ser/ N.lei	N.noc	P.nat	P.pip	P.pyg	P.aur	*Myotis sp.*	*Pipistrellus sp.*	
April	0	0	0	0	0	0	92	29	0	4	0	125
May	0	0	0	0	0	0	9	1	0	0	0	10
June	0	0	0	0	4	0	27	4	0	1	2	38
July dusk	0	0	0	0	1	0	18	5	0	0	0	24
July dawn	0	0	0	0	0	0	39	1	0	0	0	40
August	0	0	0	0	26	0	22	28	0	6	0	82
September	0	0	0	0	1	0	59	5	0	1	14	80
October	0	0	0	0	0	0	32	60	0	2	3	97
Total	**0**	**0**	**0**	**0**	**32**	**0**	**298**	**133**	**0**	**14**	**19**	**496**

Table 23: Summary of bat recording analysis, Transect 12.

Month	Bat Species Recordings											Total Bats Recorded
	B.bar	E.ser	N.lei	E.ser/ N.lei	N.noc	P.nat	P.pip	P.pyg	P.aur	*Myotis sp.*	*Pipistrellus sp.*	
April	0	0	0	0	0	0	132	11	0	1	0	144
May	0	0	0	0	0	1	13	9	0	0	0	23
June	0	4	0	9	2	0	30	2	0	0	0	47
July dusk	0	0	0	0	0	0	19	1	0	0	0	20
July dawn	0	0	0	0	0	0	42	8	0	0	0	50
August	0	0	0	0	0	0	5	2	0	0	1	8
September	0	0	0	0	0	0	12	0	0	0	0	12
October	0	0	0	0	0	0	10	0	0	0	0	10
Total	**0**	**4**	**0**	**9**	**2**	**1**	**263**	**33**	**0**	**1**	**1**	**314**

Table 24: Summary of bat recording analysis, Transect 13.

Month	Bat Species Recordings											Total Bats Recorded
	B.bar	E.ser	N.lei	E.ser/ N.lei	N.noc	P.nat	P.pip	P.pyg	P.aur	*Myotis sp.*	*Pipistrellus sp.*	
April	0	0	0	0	0	0	0	0	0	0	0	0
May	9	0	0	0	0	0	87	26	0	5	0	127
June	0	0	0	0	0	0	0	0	0	0	0	0
July dusk	0	0	0	0	0	0	12	0	0	0	0	12
July dawn	0	0	0	0	0	0	16	0	0	0	0	16
August	0	0	0	0	0	0	6	4	0	1	0	11
September	0	0	0	0	0	0	2	1	0	0	0	3
October	0	0	0	0	0	0	14	2	0	0	0	16
Total	**9**	**0**	**0**	**0**	**0**	**0**	**137**	**33**	**0**	**6**	**0**	**185**

Table 25: Summary of bat recording analysis, Transect 14.

Month	Bat Species Recordings											Total Bats Recorded
	B.bar	E.ser	N.lei	E.ser/ N.lei	N.noc	P.nat	P.pip	P.pyg	P.aur	*Myotis sp.*	*Pipistrellus sp.*	
April	N/A											
May	0	0	0	0	0	0	26	2	1	0	1	30
June	0	0	0	0	0	0	8	1	0	0	4	13
July dusk	0	0	0	0	4	0	0	4	0	0	0	8
July dawn	No survey											
August	0	0	0	0	1	0	8	7	1	0	0	17
September	0	0	0	0	3	0	16	39	0	0	0	58
October	No access											
Total	**0**	**0**	**0**	**0**	**8**	**0**	**58**	**53**	**2**	**0**	**5**	**126**

Table 26: Summary of bat recording analysis, Transect 15.

Month	Bat Species Recordings											Total Bats Recorded
	B.bar	E.ser	N.lei	E.ser/ N.lei	N.noc	P.nat	P.pip	P.pyg	P.aur	*Myotis sp.*	*Pipistrellus sp.*	
April	N/A											
May	0	0	0	0	0	2	74	13	0	0	0	89
June	0	0	0	0	0	1	24	15	0	0	0	40
July dusk	Transect descoped											
July dawn	Transect descoped											
August	Transect descoped											
September	Transect descoped											
October	Transect descoped											
Total	**0**	**0**	**0**	**0**	**0**	**3**	**98**	**28**	**0**	**0**	**0**	**129**

Table 27: Summary of bat recording analysis, Transect 16.

Month	Bat Species Recordings											Total Bats Recorded
	B.bar	E.ser	N.lei	E.ser/ N.lei	N.noc	P.nat	P.pip	P.pyg	P.aur	*Myotis sp.*	*Pipistrellus sp.*	
April	N/A											
May	0	0	0	0	0	0	20	0	0	0	0	20
June	0	0	0	0	0	0	31	1	0	0	0	32
July dusk	0	0	0	0	0	0	55	56	0	0	0	111
July dawn	No survey											
August	0	0	0	0	3	0	33	1	0	0	0	37
September	0	0	0	0	0	0	0	0	0	0	0	0
October	0	0	0	0	0	0	9	12	1	0	0	22
Total	**0**	**0**	**0**	**0**	**3**	**0**	**148**	**70**	**1**	**0**	**0**	**222**

Table 28: Summary of bat recording analysis, Transect 17.

Month	Bat Species Recordings											Total Bats Recorded
	B.bar	E.ser	N.lei	E.ser/ N.lei	N.noc	P.nat	P.pip	P.pyg	P.aur	*Myotis sp.*	*Pipistrellus sp.*	
April	N/A											
May	2	0	0	0	0	0	15	25	0	0	0	42
June	0	0	0	0	0	0	37	16	0	0	1	54
July dusk	0	0	0	0	0	0	18	24	0	0	0	42
July dawn	No survey											
August	0	0	0	0	0	0	2	10	0	0	0	12
September	0	0	0	0	0	0	8	16	0	0	0	24
October	0	0	0	0	0	0	7	5	0	0	0	12
Total	**2**	**0**	**0**	**0**	**0**	**0**	**87**	**96**	**0**	**0**	**1**	**186**

3.2 Static detector surveys

A total of 270393 recordings of bats were gathered from static bat detector surveys between April and October (inclusive), 2022. Each month, two static bat detectors along each of fourteen transects and two additional lone static detectors not related to a transect were deployed, totalling 30 static detectors deployed per month. The date ranges of data collection for each static are provided in Table 29. The results of the surveys conducted across all 14 transects plus additional lone statics are outlined in Tables 30-44, below.

All surveys were undertaken when the weather for the five consecutive nights was forecast to be optimal for bats (temperatures above 10˚C, little to no precipitation and wind).

Table 29. Summary of static bat detector survey dates.

Location ID - Static ID	Eastings	Northings	Date range per month						
			April	May	June	July	August	September	October
T4L1 – 4	613910	226714	21-25	13-17	23-27	06-10	09-13	05-09	05-09
T4L2 – 3	614053	226609	21-25	13-17	23-27	06-10	09-13	15-19	05-09
T5L1 – 6	615526	225117	21-25	13-17	23-27	06-10	09-13	05-09	05-09
T5L2 – 5	615926	224780	21-25	13-17	23-27	06-10	09-13	05-09	05-09
T6L1 – 20	617469	223916	26-30	13-17	23-27	06-10	09-13	05-09	05-09
T6L2 – 19	616487	224120	26-30	13-17	23-27	06-10	09-13	05-09	05-09
T7L1 – 24	616445	223839	No access	11-16	20-24	07-11	09-12	15-19	06-10
T7L2 – 23	616062	224066	No access	13-17*	20-24	07-11	09-12	06-10	06-10
T8L1 – 17	617232	223411	26-30	13-17	20-24	07-11	10-14	06-10	06-10
T8L2 – 18	617688	223806	26-30	13-17	20-24	07-11	10-14	06-10	06-10
T9L1 – 13	618160	222992	21-25	13-17	20-24	07-11	10-14	06-10	05-07
T9L2 – 14	617761	223123	21-25	13-17	20-24	07-11	10-14	06-10	06-10
T10L1 – 8	618905	222625	21-25	13-17	20-24	07-11	10-14	06-10	06-10
T10L2 – 7	619020	223296	21-25	13-17	20-24	07-11	10-14	06-10	06-10
T11L1 – 9	619138	222641	21-25	13-17	20-24	07-11	10-14	06-10	06-10
T11L2 – 10	619456	222276	21-25	13-17	20-24*	07-11	10-14	06-10	25-29
T12L1 – 11	620716	219321	21-25	13-17	20-24	07-11	10-14	05-09	06-10
T12L2 – 12	620690	219788	21-25	13-17	20-24	07-11	10-14	06-10	06-10

Location ID - Static ID	Eastings	Northings	Date range per month						
			April	May	June	July	August	September	October
T13L1 – 15	621210	218442	26-30	13-17	20-24	07-11	11-15	07-11	07-11
T13L2 – 16	622407	218470	26-30	13-17	20-24	07-11	09-13	07-11	07-11
T14L1 – 31	612935	227497	No access	25-29	24-28	08-12	11-15	07-11	No access
T14L2 – 32	612402	227932	No access	25-29	24-28	08-12	11-15	07-11	No access
T15L1 – 29	615130	225004	No access	25-29	24-28	08-12	11-15	07-11	25-29
T15L2 – 30	614598	226018	No access	25-29	24-28	08-12	11-15	07-11	25-29
T16L1 – 27	619964	220371	No access	25-29	24-28	08-12	11-15	07-11	07-11
T16L2 – 28	619903	221008	No access	25-29	24-28	08-12	11-15	07-11	07-11
T17L1 – 25	620182	219614	No access	25-29	24-28	08-12	11-15	07-11	07-11
T17L2 - 26	620427	219116	No access	25-29	24-28	08-12	11-15	07-11	07-11
Lone1 – 36	618822	222451	N/A	N/A	N/A	13-17	19-23	21-25	25-29
Lone2 - 35	616154	224317	N/A	N/A	N/A	13-17	19-23	21-25	25-29*

**Detector failed and did not record.*

Table 30. Summary of bat recording analysis, Statics 3 and 4 (Transect 4).

Month	Static	Bat Species Recordings													Total Bats Recorded
		B.bar	E.ser	N.lei	E.ser/ N.lei	N.noc	P.nat	P.pip	P.pyg	P.aur	*Myo. sp.*	*Nyc. sp.*	*Pip. sp.*	Bat sp.	
April	**3**	3	0	0	0	1	1	1168	304	0	54	0	0	0	1531
May	**3**	0	0	0	0	0	5	1895	102	0	0	0	0	0	2002
June	**3**	0	0	0	0	0	3	1975	134	0	9	0	5	0	2126
July	**3**	0	0	0	0	2	0	61	26	0	0	0	0	0	89
August	**3**	4	1	1	1	310	0	400	154	15	13	5	1	1	906
September	**3**	0	0	0	0	0	0	12	1	0	0	1	0	0	14
October	**3**	0	0	0	0	0	1	4	2	0	0	0	0	0	7
Total		**7**	**1**	**1**	**1**	**313**	**10**	**5515**	**723**	**15**	**76**	**6**	**6**	**1**	**6675**
April	**4**	4	4	0	0	1	3	342	61	3	10	0	0	0	428
May	**4**	1	0	0	0	0	8	418	127	0	0	1	1	0	556
June	**4**	0	0	0	0	1	4	39	10	0	3	0	2	0	59
July	**4**	0	0	0	0	6	6	260	57	0	0	0	2	0	331
August	**4**	1	0	0	0	0	0	980	30	0	0	0	0	0	1011
September	**4**	1	0	0	0	6	1	41	50	2	6	1	3	0	111
October	**4**	1	0	0	0	0	0	1619	64	33	4	0	0	0	1721
Total		**8**	**4**	**0**	**0**	**14**	**22**	**3699**	**399**	**38**	**23**	**2**	**8**	**0**	**4217**
Combined total		**30**	**10**	**2**	**2**	**654**	**64**	**18428**	**2244**	**106**	**198**	**16**	**28**	**2**	**21784**

Table 31. Summary of bat recording analysis, Statics 5 and 6 (Transect 5).

Month	Static	Bat Species Recordings													Total Bats Recorded
		B.bar	E.ser	N.lei	E.ser/ N.lei	N.noc	P.nat	P.pip	P.pyg	P.aur	*Myo. sp.*	*Nyc. sp.*	*Pip. sp.*	Bat sp.	
April	**5**	1	0	0	0	8	4	896	116	0	25	0	0	0	1050
May	**5**	3	0	0	0	5	8	1737	536	2	2	0	2	0	2295
June	**5**	2	0	0	0	3	4	526	273	2	9	0	3	0	822
July	**5**	3	0	0	0	10	0	4324	352	2	38	1	2	0	4732
August	**5**	2	0	0	0	0	1	7095	123	1	4	0	0	0	7226
September	**5**	35	0	0	0	6	3	321	35	3	0	0	0	0	403
October	**5**	2	0	0	0	0	0	649	76	0	0	0	0	0	727
Total		**48**	**0**	**0**	**0**	**32**	**20**	**15548**	**1511**	**10**	**78**	**1**	**7**	**0**	**17255**
April	**6**	5	0	0	0	5	2	3755	624	3	79	0	1	0	4474
May	**6**	0	0	1	0	4	1	348	301	1	19	0	0	0	675
June	**6**	1	0	0	0	4	18	1368	913	0	58	0	1	0	2363
July	**6**	1	0	0	0	10	1	584	362	0	30	2	0	0	990
August	**6**	1	0	3	0	31	0	3164	493	9	29	3	0	4	3737
September	**6**	1	0	0	1	1	0	241	140	1	5	1	4	0	395
October	**6**	0	0	0	0	0	0	222	405	0	3	0	0	0	630
Total		**9**	**0**	**4**	**1**	**55**	**22**	**9682**	**3238**	**14**	**223**	**6**	**6**	**4**	**13264**
Combined total		**57**	**0**	**4**	**1**	**87**	**42**	**25230**	**4749**	**24**	**301**	**7**	**13**	**4**	**30519**

Table 32. Summary of bat recording analysis, Statics 19 and 20 (Transect 6).

Month	Static	Bat Species Recordings													Total Bats Recorded
		B.bar	E.ser	N.lei	E.ser/ N.lei	N.noc	P.nat	P.pip	P.pyg	P.aur	*Myo. sp.*	*Nyc. sp.*	*Pip. sp.*	Bat sp.	
April	**19**	4	0	0	0	20	9	986	308	0	36	0	0	0	1363
May	**19**	4	0	0	0	23	6	3458	769	2	17	0	0	0	4279
June	**19**	2	0	0	0	0	1	356	147	1	31	0	2	0	540
July	**19**	1	0	0	1	11	2	251	74	2	66	0	4	0	412
August	**19**	6	1	2	2	33	0	1003	316	11	18	2	0	0	1394
September	**19**	3	0	0	1	5	0	101	72	2	13	5	3	0	205
October	**19**	17	0	0	0	3	0	127	36	8	2	3	0	0	195
Total		**37**	**1**	**2**	**4**	**95**	**18**	**6282**	**1722**	**26**	**183**	**9**	**9**	**0**	**8388**
April	**20**	22	0	0	0	21	2	644	110	0	26	0	0	0	825
May	**20**	7	0	0	0	3	4	1535	171	21	13	0	0	0	1754
June	**20**	1	0	0	0	0	17	456	116	3	16	0	1	0	610
July	**20**	0	0	0	0	6	2	302	73	2	7	2	6	0	400
August	**20**	16	0	1	1	15	1	1692	96	7	18	1	0	0	1848
September	**20**	5	0	0	0	10	4	49	38	3	15	0	1	0	125
October	**20**	8	0	2	0	2	0	24	18	0	17	2	0	0	71
Total		**59**	**0**	**3**	**1**	**57**	**30**	**4702**	**622**	**36**	**112**	**3**	**8**	**0**	**5633**
Combined total		**96**	**1**	**5**	**5**	**152**	**48**	**10984**	**2344**	**62**	**295**	**122**	**17**	**0**	**14021**

Table 33. Summary of bat recording analysis, Statics 23 and 24 (Transect 7).

Month	Static	Bat Species Recordings													Total Bats Recorded
		B.bar	E.ser	N.lei	E.ser/ N.lei	N.noc	P.nat	P.pip	P.pyg	P.aur	*Myo. sp.*	*Nyc. sp.*	*Pip. sp.*	Bat sp.	
April	**23**	No access													
May	**23**	Static detector corrupted and did not record.													
June	**23**	3	0	0	0	4	4	2652	160	1	8	0	7	0	2839
July	**23**	26	0	1	0	12	1	2494	127	4	23	5	29	0	2722
August	**23**	18	0	1	0	13	0	1487	201	1	1	0	0	2	1724
September	**23**	2	0	0	2	6	3	1304	87	3	13	0	0	0	1420
October	**23**	2	0	1	0	7	2	176	95	2	2	0	0	0	287
Total		**51**	**0**	**3**	**2**	**42**	**10**	**8113**	**670**	**11**	**47**	**5**	**36**	**2**	**8992**
April	**24**	No access													
May	**24**	0	0	0	0	7	0	2301	216	1	1	0	0	0	2526
June	**24**	3	0	0	0	6	1	93	13	3	1	0	0	0	120
July	**24**	2	0	0	0	16	3	2667	100	1	12	1	7	2	2811
August	**24**	3	3	1	0	13	0	2141	128	0	27	2	0	0	2318
September	**24**	0	0	0	0	5	3	49	0	0	1	0	0	0	58
October	**24**	5	0	0	0	0	0	101	66	2	5	0	0	0	179
Total		**13**	**3**	**1**	**0**	**47**	**7**	**7352**	**523**	**7**	**47**	**3**	**7**	**2**	**8012**
Combined total		**64**	**3**	**4**	**2**	**89**	**17**	**15465**	**1193**	**18**	**94**	**8**	**43**	**4**	**17004**

Table 34. Summary of bat recording analysis, Statics 17 and 18 (Transect 8).

Month	Static	Bat Species Recordings													Total Bats Recorded
		B.bar	E.ser	N.lei	E.ser/ N.lei	N.noc	P.nat	P.pip	P.pyg	P.aur	*Myo. sp.*	*Nyc. sp.*	*Pip. sp.*	Bat sp.	
April	**17**	5	0	0	0	12	7	940	143	3	12	0	0	0	1122
May	**17**	1	0	0	0	2	7	1311	174	1	3	0	0	0	1499
June	**17**	0	0	0	0	8	0	478	100	0	11	0	1	1	599
July	**17**	3	0	0	0	24	4	555	340	0	74	1	4	1	1006
August	**17**	1	0	0	0	26	0	896	149	3	0	0	0	0	1075
September	**17**	1	0	0	0	4	1	126	60	0	0	0	1	0	193
October	**17**	6	0	0	0	4	0	2917	412	0	8	0	0	0	3347
Total		17	0	0	0	80	19	7223	1378	7	108	1	6	2	8841
April	**18**	11	0	0	0	17	1	46	51	0	30	0	0	0	156
May	**18**	3	0	0	0	7	10	2957	612	0	21	0	0	0	3610
June	**18**	1	0	0	0	0	0	103	14	3	3	0	0	0	124
July	**18**	0	0	0	0	14	5	783	118	0	9	0	4	0	933
August	**18**	1	1	0	0	15	0	854	461	3	18	1	1	0	1355
September	**18**	5	0	0	0	5	3	259	325	0	8	1	10	0	616
October	**18**	3	0	0	0	5	1	645	39	2	1	0	0	0	696
Total		24	1	0	0	63	20	5647	1620	8	90	2	15	0	7490
Combined total		**41**	**1**	**0**	**0**	**143**	**39**	**12870**	**2998**	**15**	**198**	**3**	**21**	**2**	**16331**

Table 35. Summary of bat recording analysis, Statics 13 and 14 (Transect 9).

Month	Static	Bat Species Recordings													Total Bats Recorded
		B.bar	E.ser	N.lei	E.ser/ N.lei	N.noc	P.nat	P.pip	P.pyg	P.aur	*Myo. sp.*	*Nyc. sp.*	*Pip. sp.*	Bat sp.	
April	**13**	0	0	0	0	25	3	741	191	0	3	0	0	0	963
May	**13**	1	0	0	0	2	11	3016	2905	0	1	1	1	0	5938
June	**13**	0	0	0	0	2	12	379	19	0	0	0	0	0	412
July	**13**	0	0	0	0	10	16	1360	181	0	1	0	0	0	1568
August	**13**	1	0	0	0	6	0	4722	132	0	1	0	2	0	4864
September	**13**	1	0	0	0	1	2	109	43	7	0	0	0	0	163
October	**13**	0	0	0	0	0	0	55	33	0	1	0	0	0	102
Total		3	0	0	0	62	44	10874	3488	7	8	1	3	0	14486
April	**14**	10	0	0	0	49	1	740	408	5	31	0	0	0	1244
May	**14**	20	0	0	0	3	4	2249	997	44	17	0	1	0	3335
June	**14**	0	0	0	0	1	10	75	53	0	1	0	3	0	143
July	**14**	0	0	0	0	16	0	583	411	0	6	0	6	0	1022
August	**14**	4	0	0	0	18	1	873	259	2	10	0	2	0	1169
September	**14**	1	0	0	0	5	2	601	27	0	1	2	0	0	639
October	**14**	19	0	0	0	12	0	989	1710	2	24	19	0	0	2744
Total		**54**	**0**	**0**	**0**	**88**	**18**	**5618**	**3881**	**53**	**89**	**21**	**12**	**0**	**9820**
Combined total		**57**	**0**	**0**	**0**	**150**	**62**	**16492**	**7369**	**60**	**97**	**25**	**15**	**0**	**24306**

Table 36. Summary of bat recording analysis, Statics 7 and 8 (Transect 10).

Month	Static	Bat Species Recordings													Total Bats Recorded
		B.bar	E.ser	N.lei	E.ser/ N.lei	N.noc	P.nat	P.pip	P.pyg	P.aur	*Myo. sp.*	*Nyc. sp.*	*Pip. sp.*	Bat sp.	
April	**7**	5	0	0	0	17	14	1986	581	9	91	0	0	0	2703
May	**7**	2	0	0	0	5	27	6547	1534	3	6	0	0	0	8124
June	**7**	2	0	0	0	5	6	360	109	15	6	0	14	0	517
July	**7**	0	0	0	0	31	12	734	166	19	18	2	8	0	990
August	**7**	4	0	2	0	38	1	491	75	8	5	1	1	2	628
September	**7**	1	0	0	0	2	2	3	1	0	1	2	2	0	12
October	**7**	1	0	0	0	5	0	63	84	3	14	1	0	0	171
Total		**15**	**0**	**2**	**0**	**103**	**62**	**10184**	**2550**	**57**	**141**	**4**	**25**	**2**	**13145**
April	**8**	2	0	0	0	3	7	343	96	0	1	0	0	0	452
May	**8**	11	0	0	0	0	0	166	41	1	0	0	0	0	219
June	**8**	1	0	0	0	4	12	91	23	0	0	0	5	0	136
July	**8**	1	0	0	0	5	3	156	86	1	8	1	10	1	272
August	**8**	13	0	0	1	39	0	240	2038	4	12	1	18	2	2368
September	**8**	1	0	0	0	1	1	11	2	1	2	1	0	0	19
October	**8**	2	0	0	0	2	0	57	17	4	1	0	0	0	83
Total		**31**	**0**	**0**	**1**	**54**	**23**	**1064**	**2303**	**11**	**24**	**2**	**33**	**3**	**3549**
Combined total		**46**	**0**	**2**	**1**	**157**	**85**	**11248**	**4853**	**68**	**165**	**6**	**58**	**5**	**16694**

Table 37. Summary of bat recording analysis, Statics 9 and 10 (Transect 11).

Month	Static	Bat Species Recordings													Total Bats Recorded
		B.bar	E.ser	N.lei	E.ser/ N.lei	N.noc	P.nat	P.pip	P.pyg	P.aur	*Myo. sp.*	*Nyc. sp.*	*Pip. sp.*	Bat sp.	
April	**9**	0	0	0	0	19	11	1788	293	1	9	0	2	0	2123
May	**9**	0	0	0	0	0	11	2922	498	8	18	0	0	0	3457
June	**9**	0	0	0	0	5	36	343	74	0	3	0	12	0	473
July	**9**	0	0	0	0	31	6	217	1359	0	42	0	29	0	1684
August	**9**	6	0	0	2	196	29	1103	1158	4	163	0	47	1	2709
September	**9**	0	2	2	0	36	1	35	88	0	23	0	1	0	188
October	**9**	1	0	0	0	0	2	9	15	3	0	0	0	0	30
Total		**7**	**2**	**2**	**2**	**287**	**96**	**6417**	**3485**	**16**	**258**	**0**	**91**	**1**	**10664**
April	**10**	1	0	0	0	5	13	1284	968	11	5	0	3	0	2290
May	**10**	0	0	0	0	5	22	1490	424	8	13	0	1	0	1963
June	**10**	Static detector corrupted and did not record.													
July	**10**	0	0	0	0	4	2	238	44	1	0	0	1	0	290
August	**10**	1	0	0	0	72	0	1053	189	17	8	0	13	0	1353
September	**10**	0	0	0	0	3	0	65	19	3	1	0	0	0	91
October	**10**	0	0	0	0	0	0	30	0	0	1	0	0	0	31
Total		2	0	0	0	89	37	4160	1644	40	28	0	18	0	6018
Combined total		**7**	**2**	**2**	**2**	**376**	**133**	**10577**	**5129**	**56**	**286**	**0**	**109**	**1**	**16682**

Table 38. Summary of bat recording analysis, Statics 11 and 12 (Transect 12).

Month	Static	Bat Species Recordings													Total Bats Recorded
		B.bar	E.ser	N.lei	E.ser/ N.lei	N.noc	P.nat	P.pip	P.pyg	P.aur	*Myo. sp.*	*Nyc. sp.*	*Pip. sp.*	Bat sp.	
April	**11**	5	0	0	0	2	4	136	12	0	8	0	0	0	167
May	**11**	1	0	0	0	2	11	814	43	0	4	0	0	0	875
June	**11**	0	0	1	1	0	37	202	38	0	1	0	0	0	280
July	**11**	0	0	0	0	2	2	544	586	2	1	0	0	0	1137
August	**11**	3	0	0	0	15	0	1328	238	3	9	0	18	0	1614
September	**11**	2	0	0	0	0	5	176	26	1	5	0	0	0	215
October	**11**	2	0	0	0	0	0	15	6	2	1	2	0	0	43
Total		**8**	**0**	**1**	**1**	**21**	**59**	**3215**	**949**	**8**	**29**	**2**	**18**	**0**	**4331**
April	**12**	2	0	0	0	0	3	1395	1879	0	0	0	0	0	3279
May	**12**	0	0	0	0	0	117	2514	4358	0	0	0	0	0	6989
June	**12**	0	0	0	0	2	5	483	630	0	1	0	13	0	1134
July	**12**	0	0	0	0	1	2	251	1781	2	1	0	4	0	2042
August	**12**	2	0	2	0	15	0	1065	508	5	7	1	81	1	1687
September	**12**	2	0	0	2	4	7	479	422	4	119	0	16	0	1055
October	**12**	17	0	0	0	1	0	50	27	0	4	1	0	0	85
Total		**28**	**0**	**2**	**2**	**23**	**134**	**6237**	**9605**	**11**	**132**	**2**	**114**	**1**	**16271**
Combined total		**36**	**0**	**3**	**3**	**44**	**193**	**9452**	**10554**	**19**	**161**	**4**	**132**	**1**	**20602**

Table 39. Summary of bat recording analysis, Statics 15 and 16 (Transect 13).

Month	Static	Bat Species Recordings													Total Bats Recorded
		B.bar	E.ser	N.lei	E.ser/ N.lei	N.noc	P.nat	P.pip	P.pyg	P.aur	*Myo. sp.*	*Nyc. sp.*	*Pip. sp.*	Bat sp.	
April	**15**	15	0	0	0	1	16	293	55	0	11	0	0	0	391
May	**15**	17	0	19	0	97	9	183	53	0	2	0	0	0	380
June	**15**	2	0	0	0	0	1	87	36	0	4	0	0	0	130
July	**15**	9	0	0	0	0	0	330	63	2	4	0	5	0	413
August	**15**	3	0	2	0	13	0	3933	5849	9	19	1	1260	0	11089
September	**15**	0	0	0	0	0	0	158	296	1	5	0	16	0	476
October	**15**	3	0	0	0	1	1	189	146	2	23	0	0	0	365
Total		**49**	**0**	**21**	**1**	**112**	**27**	**5173**	**6498**	**14**	**68**	**112**	**1281**	**0**	**13244**
April	**16**	26	0	0	0	1	10	1044	62	12	3	0	0	0	1158
May	**16**	10	0	0	1	0	24	2179	121	6	5	0	0	0	2346
June	**16**	4	0	0	0	0	12	104	29	0	1	0	2	0	152
July	**16**	2	0	0	0	5	11	1363	3814	1	600	0	136	1	5933
August	**16**	1	0	0	0	0	0	2368	6048	7	51	0	28	3	8506
September	**16**	0	0	0	0	1	0	45	217	3	3	1	21	0	290
October	**16**	21	0	0	0	1	1	172	111	1	288	0	0	0	595
Total		**64**	**0**	**0**	**0**	**8**	**58**	**7275**	**10402**	**30**	**951**	**8**	**187**	**4**	**18980**
Combined total		**113**	**0**	**21**	**1**	**120**	**85**	**12448**	**16900**	**44**	**1019**	**120**	**1468**	**4**	**32224**

Table 40. Summary of bat recording analysis, Statics 31 and 32 (Transect 14).

Month	Static	Bat Species Recordings													Total Bats Recorded
		B.bar	E.ser	N.lei	E.ser/ N.lei	N.noc	P.nat	P.pip	P.pyg	P.aur	*Myo. sp.*	*Nyc. sp.*	*Pip. sp.*	Bat sp.	
April	**31**	N/A													
May	**31**	0	0	0	0	2	1	757	28	1	2	0	0	0	791
June	**31**	8	0	0	0	1	0	307	306	0	0	0	2	0	624
July	**31**	0	0	0	0	2	2	119	185	2	0	1	9	0	320
August	**31**	2	0	7	2	46	0	542	237	22	7	1	13	0	879
September	**31**	0	0	0	0	0	0	39	89	0	2	0	60	0	190
October	**31**	No access													
Total		**10**	**0**	**7**	**2**	**51**	**3**	**1764**	**845**	**25**	**11**	**2**	**84**	**0**	**2804**
April	**32**	N/A													
May	**32**	0	0	0	0	8	0	1665	434	2	6	0	0	0	2115
June	**32**	12	0	0	0	0	0	1488	1884	2	3	0	0	0	3389
July	**32**	1	0	0	0	0	0	474	174	0	0	0	3	0	652
August	**32**	324	0	1	0	26	0	2733	190	20	26	0	59	0	3379
September	**32**	0	0	0	0	2	1	30	33	1	0	0	32	0	99
October	**32**	No access													
Total		337	0	1	0	36	1	6390	2715	25	35	0	94	0	9634
Combined total		**347**	**0**	**8**	**2**	**87**	**4**	**8154**	**3560**	**50**	**46**	**2**	**178**	**0**	**12438**

Table 41. Summary of bat recording analysis, Statics 29 and 30 (Transect 15).

Month	Static	Bat Species Recordings													Total Bats Recorded
		B.bar	E.ser	N.lei	E.ser/ N.lei	N.noc	P.nat	P.pip	P.pyg	P.aur	*Myo. sp.*	*Nyc. sp.*	*Pip. sp.*	Bat sp.	
April	**29**	N/A													
May	**29**	15	0	0	0	0	4	4857	204	0	19	0	0	0	5110
June	**29**	12	0	0	0	0	1	951	509	1	0	0	6	0	1560
July	**29**	0	0	0	0	1	0	1093	1409	0	1	0	0	0	2585
August	**29**	4	0	2	1	15	0	775	712	5	16	0	201	0	5940
September	**29**	0	0	0	2	3	0	237	152	1	2	0	15	0	412
October	**29**	0	0	0	0	0	0	144	1	0	0	0	0	0	145
Total		**31**	**0**	**2**	**3**	**19**	**5**	**8057**	**2987**	**7**	**38**	**0**	**222**	**0**	**11371**
April	**30**	N/A													
May	**30**	12	0	0	0	0	6	548	56	1	13	0	0	1	694
June	**30**	0	0	0	0	0	0	88	69	0	0	0	1	0	248
July	**30**	7	0	0	0	3	5	1790	43	107	17	2	0	1	2090
August	**30**	0	0	1	0	3	0	244	96	3	0	0	38	0	2237
September	**30**	1	0	0	1	6	11	254	275	27	393	2	27	0	997
October	**30**	0	0	0	0	0	1	38	0	0	1	0	0	0	40
Total		**20**	**0**	**1**	**1**	**12**	**23**	**2962**	**539**	**138**	**424**	**4**	**66**	**2**	**4192**
Combined total		**51**	**0**	**3**	**4**	**31**	**28**	**11019**	**3526**	**145**	**462**	**4**	**288**	**2**	**15563**

Table 42. Summary of bat recording analysis, Statics 27 and 28 (Transect 16).

Month	Static	Bat Species Recordings													Total Bats Recorded
		B.bar	E.ser	N.lei	E.ser/ N.lei	N.noc	P.nat	P.pip	P.pyg	P.aur	*Myo. Sp.*	*Nyc. Sp.*	*Pip. Sp.*	Bat sp.	
April	**27**	N/A													
May	**27**	1	0	0	0	0	0	330	40	0	0	0	0	0	371
June	**27**	15	0	0	0	0	1	1436	4017	0	3	0	3	0	5475
July	**27**	1	0	0	0	1	8	301	733	2	1	0	20	0	1067
August	**27**	0	0	0	1	3	1	927	293	0	2	0	239	0	1466
September	**27**	56	0	0	0	5	3	132	35	16	0	0	2	0	249
October	**27**	1	0	0	0	0	0	267	110	0	1	1	0	0	380
Total		74	0	0	1	9	13	3393	5228	18	7	1	264	0	9008
April	**28**	N/A													
May	**28**	9	0	0	0	0	11	387	16	15	0	0	0	0	438
June	**28**	0	0	0	0	0	0	149	103	2	2	0	1	0	257
July	**28**	0	0	0	0	4	0	362	1266	0	0	1	0	0	1633
August	**28**	1	0	0	0	1	0	1612	618	0	22	1	197	0	2452
September	**28**	0	0	0	0	0	1	184	27	0	1	0	0	0	213
October	**28**	6	0	0	0	0	0	109	21	8	6	0	0	0	150
Total		16	0	0	0	5	12	2803	2051	25	31	2	198	0	5143
Combined total		**90**	**0**	**0**	**1**	**14**	**25**	**6196**	**7279**	**43**	**38**	**3**	**462**	**0**	**14151**

Table 43. Summary of bat recording analysis, Statics 25 and 26 (Transect 17).

Month	Static	Bat Species Recordings													Total Bats Recorded
		B.bar	E.ser	N.lei	E.ser/ N.lei	N.noc	P.nat	P.pip	P.pyg	P.aur	*Myo. sp.*	*Nyc. sp.*	*Pip. sp.*	Bat sp.	
April	**25**	N/A													
May	**25**	0	0	0	0	1	0	2404	1837	0	1	0	0	0	4243
June	**25**	3	0	0	0	0	1	202	374	1	1	0	20	0	602
July	**25**	0	0	0	0	1	1	1376	360	0	0	0	3	0	1741
August	**25**	0	0	0	0	3	0	541	131	0	11	0	35	0	721
September	**25**	0	0	0	0	0	0	201	511	5	7	0	84	0	808
October	**25**	0	0	0	0	1	0	790	467	0	0	0	2	0	1264
Total		**3**	**0**	**0**	**0**	**6**	**2**	**5514**	**3680**	**6**	**24**	**0**	**144**	**0**	**9379**
April	**26**	N/A													
May	**26**	1	0	0	0	0	2	224	27	7	0	0	0	0	261
June	**26**	3	0	0	0	0	0	606	1702	0	0	0	11	0	2322
July	**26**	2	0	0	0	1	0	812	4661	0	15	0	20	0	5511
August	**26**	0	0	0	0	4	0	61	14	0	1	0	78	0	158
September	**26**	0	0	0	0	0	0	94	68	1	2	0	49	0	214
October	**26**	0	0	0	0	0	32	463	368	1	1	0	4	0	874
Total		7	0	0	0	5	34	2260	6840	9	23	0	162	0	9340
Combined total		**10**	**0**	**0**	**0**	**11**	**36**	**7774**	**10520**	**15**	**47**	**0**	**306**	**0**	**18719**

Table 44. Summary of bat recording analysis, Statics 35 and 36 (lone statics, not on transect).

Month	Static	Bat Species Recordings													Total Bats Recorded
		B.bar	E.ser	N.lei	E.ser/ N.lei	N.noc	P.nat	P.pip	P.pyg	P.aur	*Myo. sp.*	*Nyc. sp.*	*Pip. sp.*	Bat sp.	
April	**35**	Not in scope													
May	**35**	N/A													
June	**35**	N/A													
July	**35**	0	0	0	0	15	3	1748	17	1	0	2	1	0	1787
August	**35**	0	0	0	0	19	1	151	7	1	2	0	1	0	182
September	**35**	0	0	0	0	5	3	13	0	0	1	0	1	0	23
October	**35**	Detector corrupted													
Total		0	0	0	0	39	7	1912	24	2	3	2	3	0	1992
April	**36**	Not in scope													
May	**36**	N/A													
June	**36**	N/A													
July	**36**	0	0	0	0	14	5	232	15	0	3	4	2	0	275
August	**36**	0	0	0	0	15	3	1374	13	0	5	0	1	0	1411
September	**36**	0	0	0	0	4	2	42	4	0	1	0	0	0	53
October	**36**	0	0	0	0	0	0	20	0	0	1	0	0	0	21
Total		0	0	0	0	33	10	1668	32	0	10	4	3	0	2760
Combined total		**0**	**0**	**0**	**0**	**144**	**34**	**7160**	**112**	**4**	**26**	**12**	**12**	**0**	**7504**

3.3 Results by Species

A comparison of bat calls analysed from transect and static survey data is provided in Tables 45 and 46.

Table 45. Combined total counts for bat species for transect and static detector surveys, 2022.

Bat species	Total recordings from transects (Apr-Oct)	% of total calls recorded from transects (Apr-Oct)	Total recordings from statics (Apr-Oct)	% of total calls recorded from statics (Apr-Oct)
B.bar	30	0.81	1040	0.38
E.ser	4	0.11	14	0.01
N.lei	7	0.19	55	0.02
E.ser/ N.lei	11	0.30	25	0.01
N.noc	97	2.63	2202	0.81
P.nat	4	0.11	886	0.33
P.pip	2633	71.51	173453	64.15
P.pyg	795	21.59	85024	31.44
P.aur	14	0.38	702	0.26
Myotis sp.	44	1.20	3559	1.32
Nyctalus sp.	0	0	187	0.07
Pipistrellus sp.	43	1.17	3221	1.19
Bat sp.	0	0	25	0.01

Table 46. Summary of species record locations (Transects T4-17) from combined static and transect surveys (T = recorded on transect; S = recorded on static detector).

Bat species	Location of species records													
	T4	T5	T6	T7	T8	T9	T10	T11	T12	T13	T14	T15	T16	T17
B.bar	T, S	T, S	T, S	T, S	T, S	S	T, S	S	S	T, S	S	S	S	T, S
E.ser	S	N/A	S	S	S	N/A	N/A	S	T	N/A	N/A	N/A	N/A	N/A
N.lei	S	S	T, S	S	N/A	N/A	S	S	S	S	S	S	N/A	N/A
E.ser/ N.lei	T, S	S	T, S	S	N/A	N/A	S	S	T, S	S	S	S	S	N/A
N.noc	T, S	T, S	T, S	T, S	T, S	T, S	T, S	T, S	S	S	T, S	S	T, S	S
P.nat	S	S	S	S	S	S	S	S	T, S	S	S	T, S	S	S
P.pip	T, S	T, S	T, S	T, S	T, S	T, S	T, S	T, S	T, S	T, S	T, S	T, S	T, S	T, S
P.pyg	T, S	T, S	T, S	T, S	T, S	T, S	T, S	T, S	T, S	T, S	T, S	T, S	T, S	T, S
P.aur	S	T, S	T, S	T, S	T, S	S	T, S	S	S	S	T, S	S	T, S	S
Myotis sp.	T, S	T, S	T, S	T, S	T, S	S	S	T, S	T, S	T, S	S	S	S	S
Nyctalus sp.	S	S	S	S	S	S	S	N/A	S	S	S	S	S	N/A
Pipistrellus sp.	T, S	T, S	S	S	T, S	S	T, S	T, S	T, S	S	T, S	S	S	T, S
Bat sp.	S	S	N/A	S	S	N/A	S	S	S	S	N/A	S	N/A	N/A

Barbastelle bats recorded during April-October transect surveys were recorded at higher numbers (totals of eight and nine individuals) at Transect 5 by Tendring Brook and Transect 13 by Holland Haven Marshes SSSI.

Barbastelle were also noted in higher numbers above 45, at static IDs 5, 14, 15, 16, 20, 23, with the highest two totals being at Static IDs 26 (74 passes) and 32 (337 passes) both located near woodlands (Great Holland Pits and Horsley Cross respectively). At the latter location, 324 passes were in August.

Myotis totals recorded during transect surveys were highest at Transect 5 (12 individuals) and Transect 11 (14 individuals). During static deployments, the highest total occurrences (more than 100 passes) of Myotis species were recorded at static IDs 6, 7, 9, 12, 17, 19, and 20. Static ID 30 located east of Tendring Green and northwest of Tendring Brook recorded 424 passes, with 393 of those in September. Static ID 16 located on Short Lane bordering Holland Haven Marshes SSSI recorded a total of 951 passes of Myotis species with 600 of those in July and 288 in October.

Brown long-eared (BLE) *Plecotus auritus* during transect surveys were not recorded in large numbers, however, Transect 5 saw the most total recordings at five individuals. Static IDs 4, 7, 10, 14, 20 recorded BLE over 25 times and Static ID 30 recorded BLE a total of 138 times in total, of which 107 passes were in July.

Leisler's bat were not recorded on any transect apart from Transect 6 where six individuals were observed and/or heard across all seven surveys. Serotine was also not recorded on any transect apart from Transect 12 where four individuals were observed and/or heard. Due to the difficulty of separating *Nyctalus* bats from serotine in cluttered environments, the species were grouped when 100% certainty could not be applied.

A total of one bat within this group was recorded on Transect 4, another on Transect 6, and nine more on Transect 12. Static detectors recorded Leisler's bat, serotine, and *Nyctalus/Eptesicus* very few times at one to four passes totalled from April-October. Static IDs 5, 10, 13, 14, 16, 17, 25, 26, 28, 35, and 36 however, did not record these bats at all. Static ID 31 located by the A120 recorded 7 Leisler's bats in August, and Static ID 15 on Clacton Road, south of Great Holland, recorded 21 Leisler's bats in total where 19 of those passes were in May.

Nathusius' pipistrelles were only recorded on Transect 12 (one individual) and Transect 15 (three individuals) during the April-October transect surveys. Higher numbers (over a total of 40 passes) of Nathusius' pipistrelle were recorded on Static IDs 7, 11, 13, and 16. Static ID 9 east of Thorpe-le-Soken recorded 96 passes, and Static ID 12 by a pond west of Great Holland recorded a total of 134 passes, where 117 were in May.

More common bats such as common pipistrelle *Pipistrellus pipistrellus,* soprano pipistrelle *Pipistrellus pygmaeus,* and noctule *Nyctalus noctula* were recorded in large quantities (hundreds to thousands of individuals) across the whole route during both transect and static surveys.

Noctules were recorded during Transect 13, 15, or 17 surveys. Static IDs 7, 9, and 15 had the highest total counts of noctule passes at 103, 287, and 112 respectively, whereas Static IDs 16, 25, 26, 27, and 28 all had recorded lower than ten noctule passes between April-October.

The highest total recordings of common pipistrelles were at Static IDs 5 (15,548), 7 (10,184), and 13 (10,874), and the highest total recordings of soprano pipistrelles was at Static ID 16 (10,402). The only times soprano pipistrelles were totalled under 100 passes was at Static IDs 35 and 36 (July-October) where only 24 and 32 total passes were recorded respectively.

4. CONCLUSION

The most frequently recorded bat species was common pipistrelle (72% of all calls recorded on transect surveys and 64% of all calls recorded from static detectors), followed by soprano pipistrelle.

The Annex II species barbastelle bat was recorded along all survey areas (detected on eight of the 13 transect surveys and from all static detector surveys).

The Myotis species group contains the Annex II species Bechstein's bat and other rare species to Essex. Myotis were recorded along all survey areas (detected on seven of the 13 transects and from all static detector surveys).

Other rare Essex species such as Leisler's bat, serotine, and the group *Nycatlus/Eptesicus* were absent from Static IDs 5, 10, 13, 14, 16, 17, 25, 26, 28, 35, and 36 and most transect surveys; only recorded as few individuals from Transect 4, 6, and 12.

Nathusius' pipistrelle, the final rare Essex species, was recorded along all survey areas (all static detector surveys, but only on Transect 12 and 15 during transect surveys).

5. REFERENCES

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

SLR Consulting Ltd. (2022) Five Estuaries Offshore Wind Farm Preliminary Ecological Appraisal.

APPENDIX A: Transect and Static Detector Locations – Figures 1.1-1.10

LEGEND

- VE Onshore Cable Route
- 100m Buffer
- Static detectors
- Transect 13

BAT TRANSECT AND STATIC DETECTOR LOCATIONS FIGURE 1.1

PROJECT TITLE:
Five Estuaries Offshore Wind Farm

CLIENT:
Royal HaskoningDHV

DATE:
24.01.2023

PRODUCED BY:
J. McMahon

REF: 22043

ECOLOGY RESOURCES

LEGEND

- VE Onshore Cable Route
- 100m Buffer
- Static detectors
- Transect 12
- Transect 16
- Transect 17

BAT TRANSECT AND STATIC DETECTOR LOCATIONS FIGURE 1.2

PROJECT TITLE:
Five Estuaries Offshore Wind Farm

CLIENT:
Royal HaskoningDHV

DATE:
24.01.2023

PRODUCED BY:
J. McMahon

REF: 22043

ECOLOGY RESOURCES

LEGEND

- VE Onshore Cable Route
- 100m Buffer
- Static detectors
- Transect 11
- Transect 12
- Transect 16

BAT TRANSECT AND STATIC DETECTOR LOCATIONS FIGURE 1.3

PROJECT TITLE:
Five Estuaries Offshore Wind Farm

CLIENT:
Royal HaskoningDHV

DATE:
24.01.2023

PRODUCED BY:
J. McMahon

REF: 22043

ECOLOGY RESOURCES

LEGEND

- VE Onshore Cable Route
- 100m Buffer
- Static detectors
- Transect 9
- Transect 10
- Transect 11
- Transect 16

BAT TRANSECT AND STATIC DETECTOR LOCATIONS FIGURE 1.4

PROJECT TITLE:
Five Estuaries Offshore Wind Farm

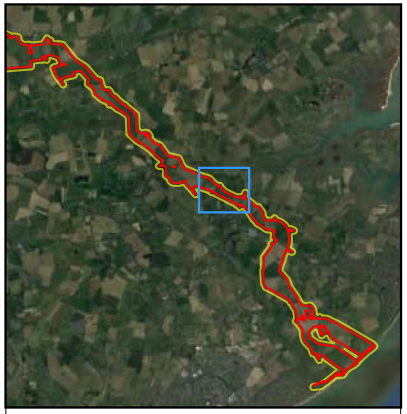
CLIENT:
Royal HaskoningDHV

DATE:
24.01.2023

PRODUCED BY:
J. McMahon

REF: 22043

ECOLOGY RESOURCES



LEGEND

- VE Onshore Cable Route
- 100m Buffer
- Static detectors
- Transect 6
- Transect 8
- Transect 9
- Transect 10

BAT TRANSECT AND STATIC DETECTOR LOCATIONS FIGURE 1.5

PROJECT TITLE:
Five Estuaries Offshore Wind Farm

CLIENT:
Royal HaskoningDHV

DATE:
24.01.2023

PRODUCED BY:
J. McMahon

REF: 22043

ECOLOGY RESOURCES

LEGEND

- VE Onshore Cable Route
- 100m Buffer
- Static detectors
- Transect 6
- Transect 7
- Transect 8
- Transect 9

BAT TRANSECT AND STATIC DETECTOR LOCATIONS FIGURE 1.6

PROJECT TITLE:
Five Estuaries Offshore Wind Farm

CLIENT:
Royal HaskoningDHV

DATE:
24.01.2023

PRODUCED BY:
J. McMahon

REF: 22043

ECOLOGY RESOURCES

LEGEND

- VE Onshore Cable Route
- 100m Buffer
- Static detectors
- Transect 5
- Transect 15

BAT TRANSECT AND STATIC DETECTOR LOCATIONS FIGURE 1.7

PROJECT TITLE:
Five Estuaries Offshore Wind Farm

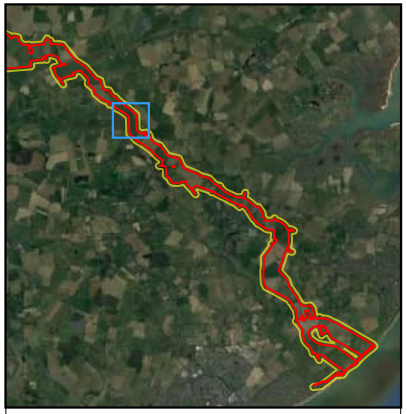
CLIENT:
Royal HaskoningDHV

DATE:
24.01.2023

PRODUCED BY:
J. McMahon

REF: 22043

ECOLOGY RESOURCES



LEGEND

- VE Onshore Cable Route
- 100m Buffer
- Transect 4
- Transect 15
- Transect 5
- Static Detectors

BAT TRANSECT AND STATIC DETECTOR LOCATIONS
FIGURE 1.8

PROJECT TITLE:
Five Estuaries Offshore Wind Farm

CLIENT:
Royal HaskoningDHV

DATE:
24.01.2023

PRODUCED BY:
J. McMahon

REF: 22043

ECOLOGY RESOURCES

LEGEND

- VE Onshore Cable Route
- 100m Buffer
- Static detectors
- Transect 4
- Transect 15

BAT TRANSECT AND STATIC DETECTOR LOCATIONS
FIGURE 1.9

PROJECT TITLE:
Five Estuaries Offshore Wind Farm

CLIENT:
Royal HaskoningDHV

DATE:
24.01.2023

PRODUCED BY:
J. McMahon

REF: 22043

ECOLOGY RESOURCES

LEGEND

- VE Onshore Cable Route
- 100m Buffer
- Transect 14
- Static Detecors

BAT TRANSECT AND STATIC DETECTOR LOCATIONS
FIGURE 1.10

PROJECT TITLE:
Five Estuaries Offshore Wind Farm

CLIENT:
Royal HaskoningDHV

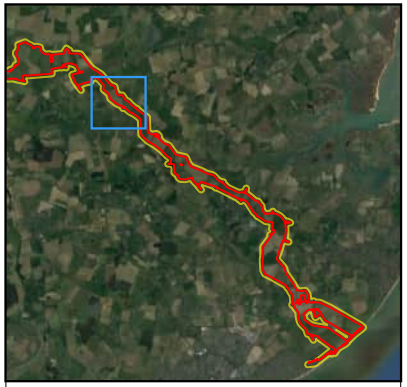
DATE:
24.01.2023

PRODUCED BY:
J. McMahon

REF: 22043

ECOLOGY RESOURCES

APPENDIX B: Transect Survey Results – Figures 2.1-2.14



LEGEND

- VE Onshore Cable Route
- 100m Buffer
- Transect 4

P.pip
- April
- June
- July (dusk)
- July (dawn)
- August
- September

N.noc
- April
- September

E.ser
- September

P.pyg
- June
- July (dusk)
- July (dawn)
- September

B.bar
- September

Myo.sp
- July (dusk)
- September

BAT TRANSECT 4 RESULTS PER MONTH
FIGURE 2.1

PROJECT TITLE:
Five Estuaries Offshore Wind Farm

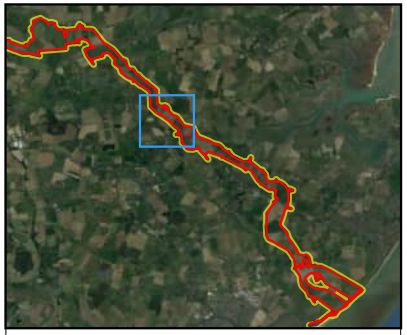
CLIENT:
Royal HaskoningDHV

DATE:
08.02.2023

PRODUCED BY:
J. McMahon

REF: 22043

ECOLOGY RESOURCES



LEGEND

- VE Onshore Cable Route
- 100m Buffer
- Transect 5

P.pip
- April
- May
- June
- July (dusk)
- July (dawn)
- August
- September
- October

N.noc
- July (dusk)
- July (dawn)

P.aur
- July (dawn)
- August
- October

B.bar
- April
- August
- September
- October

P.pyg
- April
- July (dusk)
- July (dawn)
- August
- September
- October

Myo.sp
- July (dawn)
- August
- September
- October

BAT TRANSECT 5 RESULTS PER MONTH
FIGURE 2.2

PROJECT TITLE:
Five Estuaries Offshore Wind Farm

CLIENT:
Royal HaskoningDHV

DATE:
14.02.2023

PRODUCED BY:
J. McMahon

REF: 22043

ECOLOGY RESOURCES

LEGEND

VE Onshore Cable Route
100m Buffer
Transect 6

P.pip
- April
- June
- July (dusk)
- July (dawn)
- August
- September
- October

N.noc
- July (dusk)
- August
- September

N.lei
- September

Nyc/E.ser
- October

P.aur
- September

B.bar
- October

Myo.sp
- July (dawn)

P.pyg
- June
- July (dusk)
- July (dawn)
- August
- September
- October

BAT TRANSECT 6 RESULTS PER MONTH
FIGURE 2.3

PROJECT TITLE:
Five Estuaries Offshore Wind Farm

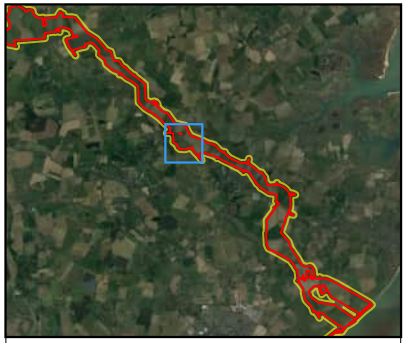
CLIENT:
Royal HaskoningDHV

DATE:
14.02.2023

PRODUCED BY:
J. McMahon

REF: 22043

ECOLOGY RESOURCES



LEGEND

VE Onshore Cable Route
100m Buffer
Transect 7

P.pip
- May
- June
- July (dusk)
- July (dawn)
- August
- September
- October

P.pyg
- May
- June
- July (dusk)
- July (dawn)
- September
- October

N.noc
- May
- July (dusk)
- July (dawn)
- August

P.aur
- July (dawn)
- August
- September

B.bar
- September
- October

Myo.sp
- May
- July (dusk)
- July (dawn)
- August
- October

BAT TRANSECT 7 RESULTS PER MONTH
FIGURE 2.4

PROJECT TITLE:
Five Estuaries Offshore Wind Farm

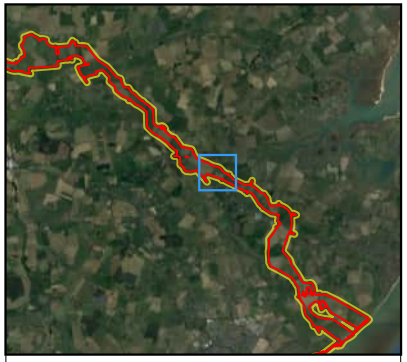
CLIENT:
Royal HaskoningDHV

DATE:
14.02.2023

PRODUCED BY:
J. McMahon

REF: 22043

ECOLOGY RESOURCES



LEGEND

VE Onshore Cable Route
100m Buffer
Transect 8

P.pip
- April
- May
- June
- July (dusk)
- July (dawn)
- August
- September
- October

N.noc
- June
- July (dusk)
- July (dawn)
- August

N.lei
- October

P.pyg
- April
- May
- July (dusk)
- July (dawn)
- August
- September
- October

B.bar
- July (dusk)
- September
- October

Myo.sp
- July (dusk)
- August

BAT TRANSECT 8 RESULTS PER MONTH
FIGURE 2.5

PROJECT TITLE:
Five Estuaries Offshore Wind Farm

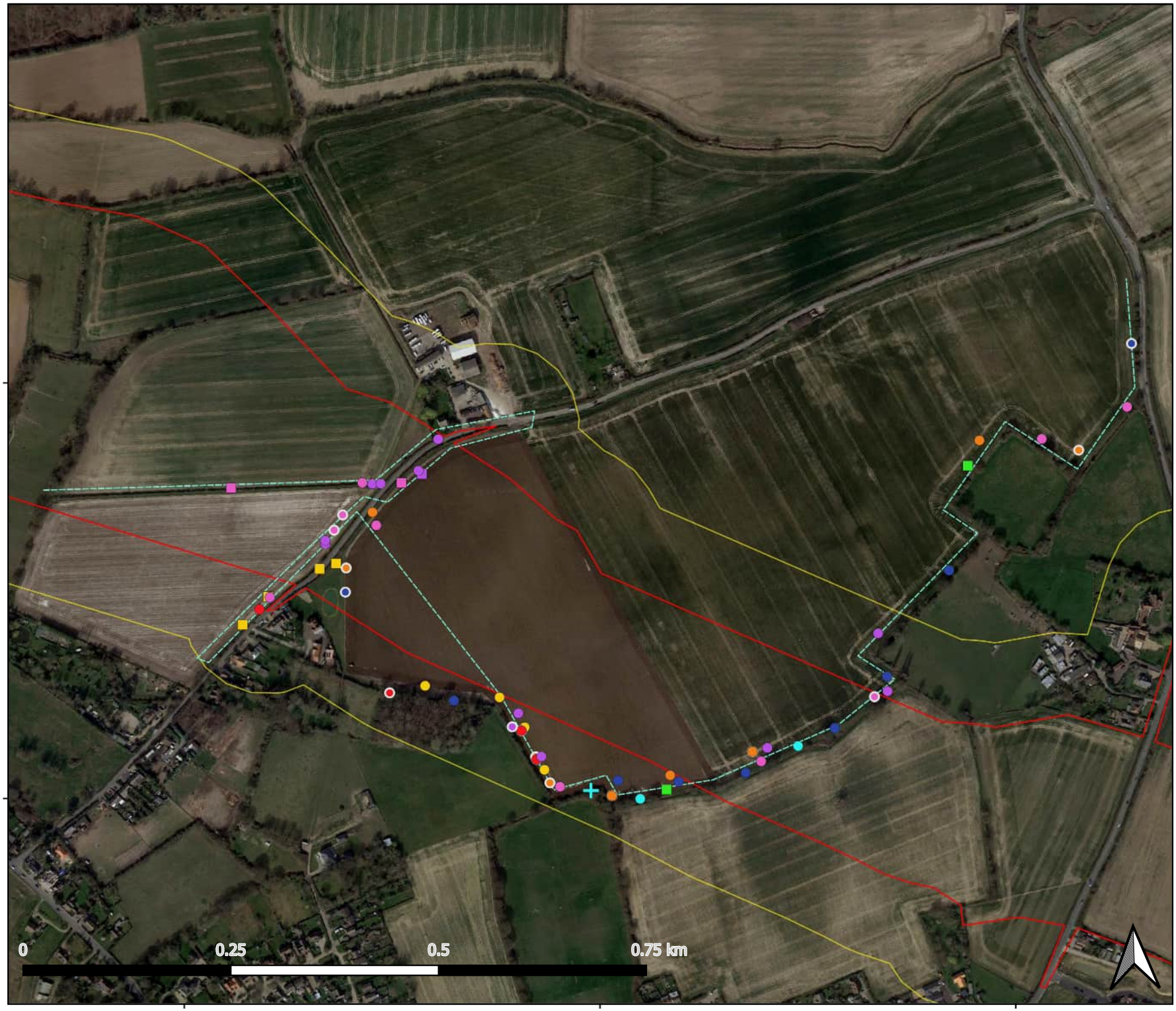
CLIENT:
Royal HaskoningDHV

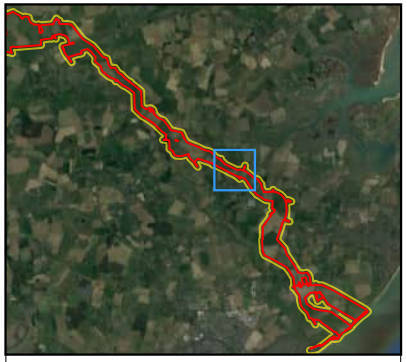
DATE:
14.02.2023

PRODUCED BY:
J. McMahon

REF: 22043

ECOLOGY RESOURCES





LEGEND

- VE Onshore Cable Route
- 100m Buffer
- Transect 9

P.pip
- May
- June
- July (dusk)
- July (dawn)
- August
- September
- October

Myo.sp
- May

N.noc
- April
- May
- June
- August
- September

P.pyg
- July (dusk)
- July (dawn)
- August
- September
- October

BAT TRANSECT 9 RESULTS PER MONTH
FIGURE 2.6

PROJECT TITLE:
Five Estuaries Offshore Wind Farm

CLIENT:
Royal HaskoningDHV

DATE:
14.02.2023

PRODUCED BY:
J. McMahon

REF: 22043

ECOLOGY RESOURCES

LEGEND

- VE Onshore Cable Route
- 100m Buffer
- Transect 10

P.pip
- April
- June
- July (dusk)
- July (dawn)
- August
- September
- October

P.aur
- August

N.noc
- April
- May
- September

P.pyg
- April
- July (dusk)
- July (dawn)
- August
- September
- October

B.bar
- August

BAT TRANSECT 10 RESULTS PER MONTH
FIGURE 2.7

PROJECT TITLE:
Five Estuaries Offshore Wind Farm

CLIENT:
Royal HaskoningDHV

DATE:
14.02.2023

PRODUCED BY:
J. McMahon

REF: 22043

ECOLOGY RESOURCES

LEGEND

VE Onshore Cable Route
100m Buffer
Transect 11

P.pip
- April
- May
- June
- July (dusk)
- July (dawn)
- August
- September
- October

N.noc
- June
- July (dusk)
- August
- September
- October

P.pyg
- April
- May
- June
- July (dusk)
- July (dawn)
- August
- September
- October

Myo.sp
- April
- June
- August
- September
- October

BAT TRANSECT 11 RESULTS PER MONTH
FIGURE 2.8

PROJECT TITLE:
Five Estuaries Offshore Wind Farm

CLIENT:
Royal HaskoningDHV

DATE:
14.02.2023

PRODUCED BY:
J. McMahon

REF: 22043

ECOLOGY RESOURCES

LEGEND

- VE Onshore Cable Route
- 100m Buffer

P.pip
- April
- May
- June
- July (dusk)
- August
- September
- October

N.noc
- June
- August

P.nat
- May

Nyc/E.ser
- June

P.aur
- August

Myo.sp
- April

P.pyg
- April
- May
- July (dusk)
- August

- Transect 12

BAT TRANSECT 12 RESULTS PER MONTH
FIGURE 2.9

PROJECT TITLE:
Five Estuaries Offshore Wind Farm

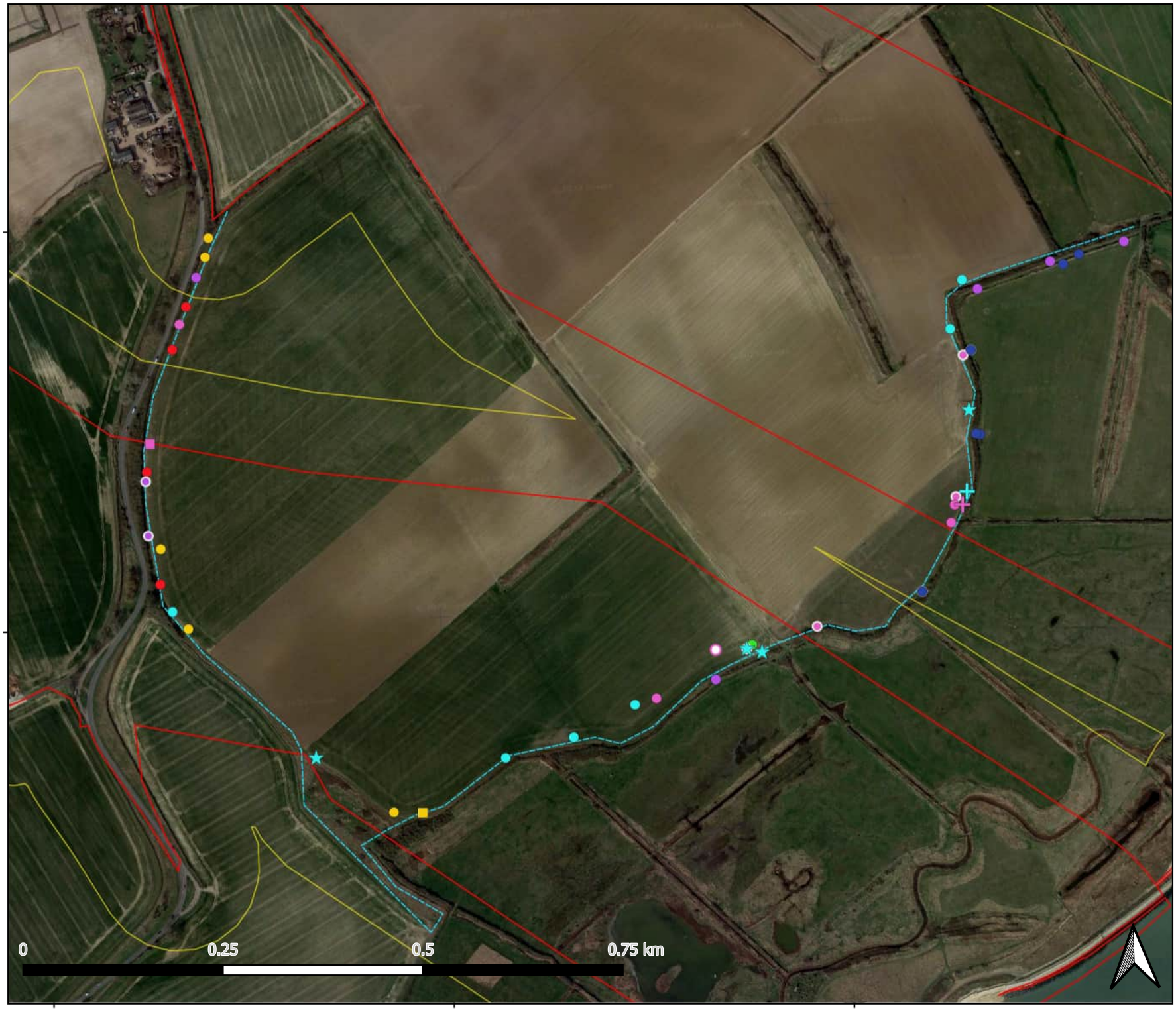
CLIENT:
Royal HaskoningDHV

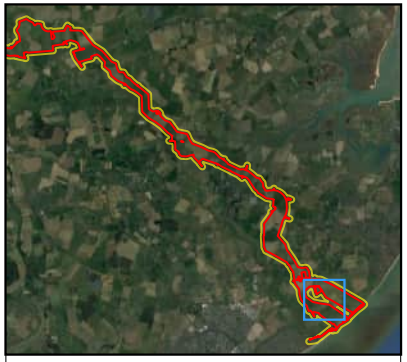
DATE:
09.02.2023

PRODUCED BY:
J. McMahon

REF: 22043

ECOLOGY RESOURCES





LEGEND

- VE Onshore Cable Route
- 100m Buffer

P.pip
- April
- May
- June
- July (dawn)
- August
- September
- October

P.pyg
- August
- September
- October

P.nat
- August

N.noc
- June
- August

B.bar
- May

Myo.sp
- May
- August

- Transect 13

BAT TRANSECT 13 RESULTS PER MONTH
FIGURE 2.10

PROJECT TITLE:
Five Estuaries Offshore Wind Farm

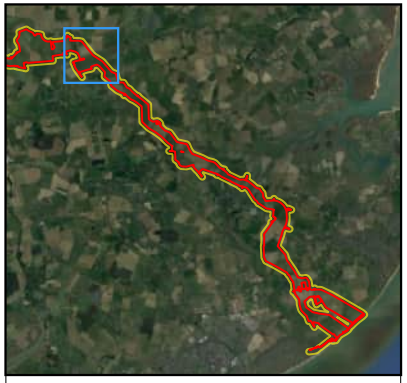
CLIENT:
Royal HaskoningDHV

DATE:
09.02.2023

PRODUCED BY:
J. McMahon

REF: 22043

ECOLOGY RESOURCES



LEGEND

- VE Onshore Cable Route
- 100m Buffer
- Transect 14

P.pip
- May
- June
- August
- September

P.pyg
- May
- June
- July
- August
- September

N.noc
- July
- August
- September

N.lei
- June
- July
- August

P.aur
- May
- August

Myo.sp
- September

BAT TRANSECT 14 RESULTS PER MONTH
FIGURE 2.11

PROJECT TITLE:
Five Estuaries Offshore Wind Farm

CLIENT:
Royal HaskoningDHV

DATE:
14.02.2023

PRODUCED BY:
J. McMahon

REF: 22043

ECOLOGY RESOURCES

LEGEND

VE Onshore Cable Route
100m Buffer

P.pip
May
June

Transect 15

P.pyg
May
June

P.nat
May
June

N.noc
June

BAT TRANSECT 15 RESULTS PER MONTH
FIGURE 2.12

PROJECT TITLE:
Five Estuaries Offshore Wind Farm

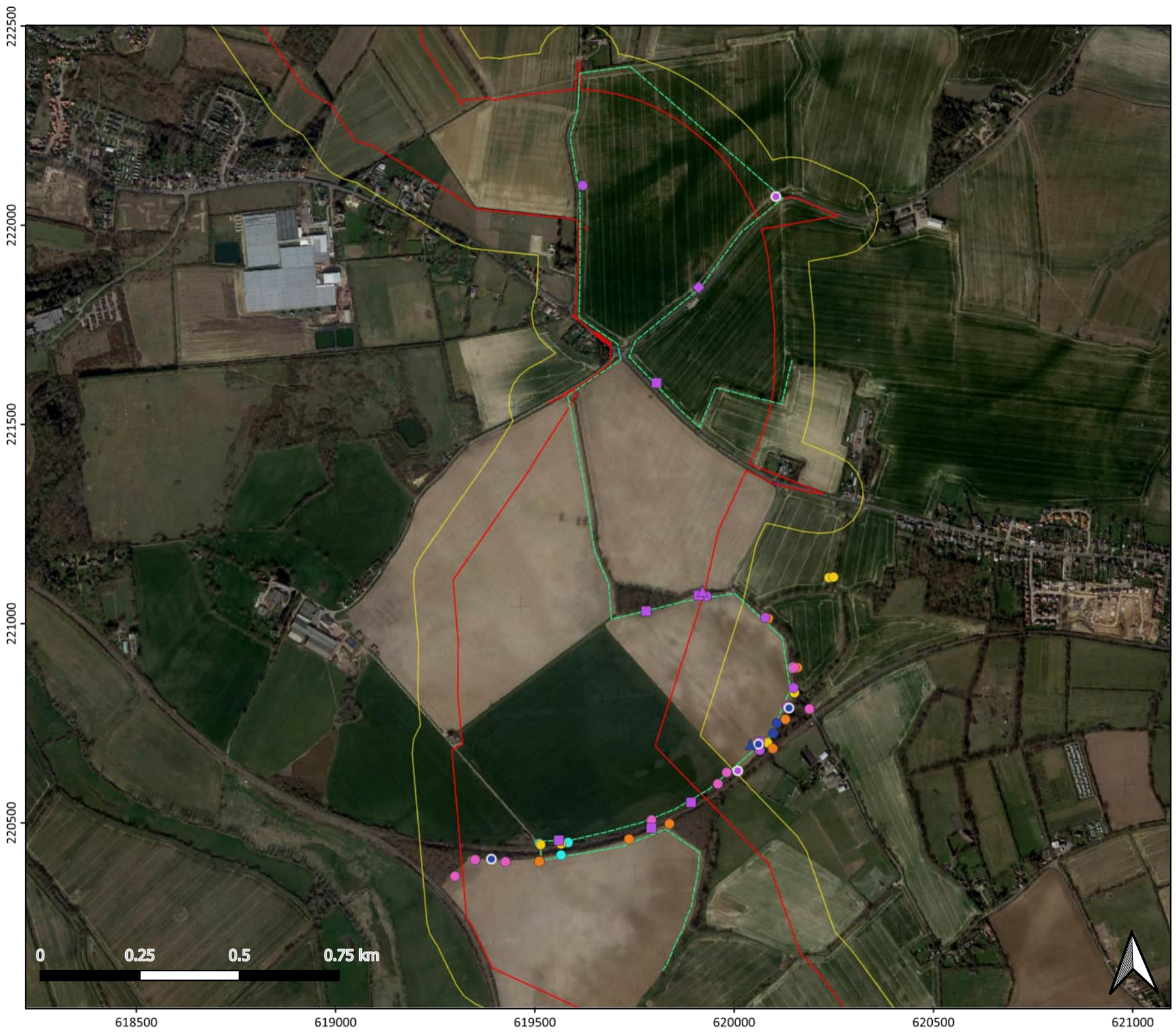
CLIENT:
Royal HaskoningDHV

DATE:
09.02.2023

PRODUCED BY:
J. McMahon

REF: 22043

ECOLOGY RESOURCES



LEGEND

- VE Onshore Cable Route
- 100m Buffer

P.pip
- May
- June
- July
- August
- September
- October

P.pyg
- July
- September
- October

N.noc
- September

N.lei
- September

P.aur
- September
- October

- Transect 16

BAT TRANSECT 16 RESULTS PER MONTH
FIGURE 2.13

PROJECT TITLE:
Five Estuaries Offshore Wind Farm

CLIENT:
Royal HaskoningDHV

DATE:
09.02.2023

PRODUCED BY:
J. McMahon

REF: 22043

ECOLOGY RESOURCES

LEGEND

- VE Onshore Cable Route
- 100m Buffer
- Transect 17

P.pip
- May
- June
- August
- September
- October

P.pyg
- May
- June
- August
- September
- October

N.noc
- June

B.bar
- May

BAT TRANSECT 17 RESULTS PER MONTH
FIGURE 2.14

PROJECT TITLE:
Five Estuaries Offshore Wind Farm

CLIENT:
Royal HaskoningDHV

DATE:
09.02.2023

PRODUCED BY:
J. McMahon

REF: 22043

ECOLOGY RESOURCES

APPENDIX C: Bat Activity Data Completion – Figures 3.1-3.10

LEGEND

- VE Onshore Cable Route
- 100m Buffer

Bat Transects

- Complete Dataset

Bat Statics

- Complete Dataset

BAT ACTIVITY DATA COMPLETION FIGURE 3.1

PROJECT TITLE:
Five Estuaries Offshore Wind Farm

CLIENT:
Royal HaskoningDHV

DATE:
15.02.2023

PRODUCED BY:
J. McMahon

REF: 22043

ECOLOGY RESOURCES

LEGEND

- VE Onshore Cable Route
- 100m Buffer

Bat Transects

- Complete Dataset
- Incomplete Dataset

Bat Statics

- Complete Dataset
- Incomplete/Partially Corrupted Dataset

BAT ACTIVITY DATA COMPLETION
FIGURE 3.2

PROJECT TITLE:
Five Estuaries Offshore Wind Farm

CLIENT:
Royal HaskoningDHV

DATE:
15.02.2023

PRODUCED BY:
J. McMahon

REF: 22043

ECOLOGY RESOURCES

LEGEND

- VE Onshore Cable Route
- 100m Buffer

Bat Transects

- Complete Dataset
- Incomplete Dataset

Bat Statics

- Incomplete/Partially Corrupted Dataset

BAT ACTIVITY DATA COMPLETION
FIGURE 3.3

PROJECT TITLE:
Five Estuaries Offshore Wind Farm

CLIENT:
Royal HaskoningDHV

DATE:
15.02.2023

PRODUCED BY:
J. McMahon

REF: 22043

ECOLOGY RESOURCES

LEGEND

- VE Onshore Cable Route
- 100m Buffer

Bat Transects

- Complete Dataset
- Incomplete Dataset

Bat Statics

- Complete Dataset
- Incomplete/Partially Corrupted Dataset

BAT ACTIVITY DATA COMPLETION FIGURE 3.4

PROJECT TITLE:
Five Estuaries Offshore Wind Farm

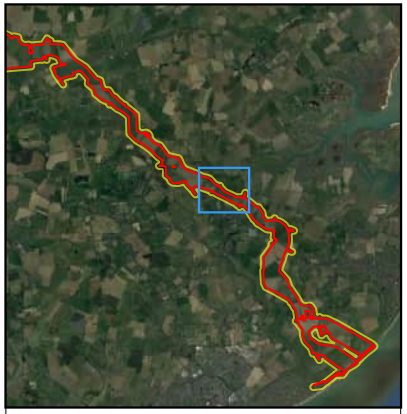
CLIENT:
Royal HaskoningDHV

DATE:
15.02.2023

PRODUCED BY:
J. McMahon

REF: 22043

ECOLOGY RESOURCES



LEGEND

- VE Onshore Cable Route
- 100m Buffer

Bat Transects
- Complete Dataset

Bat Statics
- Complete Dataset
- Incomplete/Partially Corrupted Dataset

BAT ACTIVITY DATA COMPLETION FIGURE 3.5

PROJECT TITLE:
Five Estuaries Offshore Wind Farm

CLIENT:
Royal HaskoningDHV

DATE:
15.02.2023

PRODUCED BY:
J. McMahon

REF: 22043

ECOLOGY RESOURCES

LEGEND

- VE Onshore Cable Route
- 100m Buffer

Bat Transects

- Complete Dataset
- Incomplete Dataset

Bat Statics

- Complete Dataset
- Incomplete/Partially Corrupted Dataset

BAT ACTIVITY DATA COMPLETION
FIGURE 3.6

PROJECT TITLE:
Five Estuaries Offshore Wind Farm

CLIENT:
Royal HaskoningDHV

DATE:
15.02.2023

PRODUCED BY:
J. McMahon

REF: 22043

ECOLOGY RESOURCES

LEGEND

- VE Onshore Cable Route
- 100m Buffer

Bat Transects

- Complete Dataset
- Incomplete Dataset

Bat Statics

- Complete Dataset
- Incomplete/Partially Corrupted Dataset

BAT ACTIVITY DATA COMPLETION FIGURE 3.7

PROJECT TITLE:
Five Estuaries Offshore Wind Farm

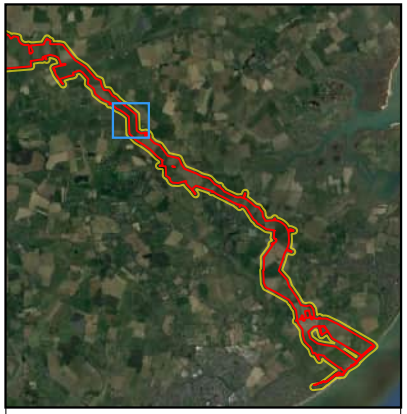
CLIENT:
Royal HaskoningDHV

DATE:
15.02.2023

PRODUCED BY:
J. McMahon

REF: 22043

ECOLOGY RESOURCES



LEGEND

- VE Onshore Cable Route
- 100m Buffer

Bat Transects

- Complete Dataset
- Incomplete Dataset

Bat Statics

- Incomplete/Partially Corrupted Dataset

BAT ACTIVITY DATA COMPLETION
FIGURE 3.8

PROJECT TITLE:
Five Estuaries Offshore Wind Farm

CLIENT:
Royal HaskoningDHV

DATE:
15.02.2023

PRODUCED BY:
J. McMahon

REF: 22043

ECOLOGY RESOURCES

LEGEND

- VE Onshore Cable Route
- 100m Buffer

Bat Transects

- Incomplete Dataset

Bat Statics

- Complete Dataset
- Incomplete/Partially Corrupted Dataset

BAT ACTIVITY DATA COMPLETION FIGURE 3.9

PROJECT TITLE:
Five Estuaries Offshore Wind Farm

CLIENT:
Royal HaskoningDHV

DATE:
15.02.2023

PRODUCED BY:
J. McMahon

REF: 22043

ECOLOGY RESOURCES

LEGEND

- VE Onshore Cable Route
- 100m Buffer

Bat Transects

- Incomplete Dataset

Bat Statics

- Incomplete/Partially Corrupted Dataset

BAT ACTIVITY DATA COMPLETION FIGURE 3.10

PROJECT TITLE:
Five Estuaries Offshore Wind Farm

CLIENT:
Royal HaskoningDHV

DATE:
15.02.2023

PRODUCED BY:
J. McMahon

REF: 22043

ECOLOGY RESOURCES

APPENDIX D: Transect Survey Metadata

Transect 4						
Survey number	Date	Weather conditions		Sunrise/ sunset	Start time	End time
		Start	Finish			
1	20/04/2022	12 ˚C. Cloud 3. Wind 2. Rain 0	11 ˚C. Cloud 4. Wind 1. Rain 0	20:03	20:03	22:03
2	15/05/2022	12 ˚C. Cloud 2. Wind 2. Rain 0	12 ˚C. Cloud 2. Wind 1. Rain 0	20:40	20:30	22:30
3	06/06/2022	13 ˚C. Cloud 8. Wind 0. Rain 0	12 ˚C. Cloud 8. Wind 1. Rain 0	21:09	21:09	23:09
4 - dusk	07/07/2022	17 ˚C. Cloud 1. Wind 0. Rain 0	15 ˚C. Cloud 0. Wind 0. Rain 0	21:14	21:14	23:14
4 - dawn	08/07/2022	14 ˚C. Cloud 0. Wind 0. Rain 0	14 ˚C. Cloud 0. Wind 0. Rain 0	04:46	02:46	04:46
5	25/08/2022	18 ˚C. Cloud 4. Wind 3. Rain 0	16 ˚C. Cloud 3. Wind 3. Rain 0	19:56	19:56	22:45
6	10/09/2022	18 ˚C. Cloud 5. Wind 3. Rain 0	17 ˚C. Cloud 7. Wind 4. Rain 2	19:22	19:10	21:28
Transect 5						
Survey number	Date	Weather conditions		Sunrise/ sunset	Start time	End time
		Start	Finish			
1	24/04/2022	12 ˚C. Cloud 2. Wind 1. Rain 0	12 ˚C. Cloud 0. Wind 1. Rain 0	20:08	19:53	22:08
2	15/05/2022	14 ˚C. Cloud 2. Wind 1. Rain 0	12 ˚C. Cloud 0. Wind 1. Rain 0	20:44	20:30	22:30
3	15/06/2022	20 ˚C. Cloud 1. Wind 3. Rain 0	15 ˚C. Cloud 1. Wind 3. Rain 0	21:18	21:10	23:15
4 – dusk	08/07/2022	19 ˚C. Cloud 2. Wind 0. Rain 0	18 ˚C. Cloud 1. Wind 0. Rain 0	21:14	21:14	23:14
4 – dawn	09/07/2022	16 ˚C. Cloud 1. Wind 1. Rain 0	15 ˚C. Cloud 1. Wind 1. Rain 0	04:47	02:47	04:47
5	11/08/2022	17 ˚C. Cloud 5. Wind 3. Rain 0	15 ˚C. Cloud 6. Wind 2. Rain 0	19:26	19:15	21:55
6	29/09/2022	13 ˚C. Cloud 5. Wind 1. Rain 0	12 ˚C. Cloud 5. Wind 0. Rain 0	18:37	18:37	20:37
7	03/10/2022	15 ˚C. Cloud 2. Wind 1. Rain 0	14 ˚C. Cloud 7. Wind 1. Rain 0	18:37	18:37	20:37
Transect 6						
Survey number	Date	Weather conditions		Sunrise/ sunset	Start time	End time
		Start	Finish			
1	26/04/2022	11 ˚C. Cloud 1, Wind 1. Rain 0	11 ˚C. Cloud 0. Wind 1. Rain 0	20:11	19:56	22:11
2	15/05/2022	13 ˚C. Cloud 3. Wind 1. Rain 0	10 ˚C. Cloud 2. Wind 1. Rain 0	20:44	20:30	22:30
3	14/06/2022	16 ˚C. Cloud 1. Wind 1. Rain 0	14 ˚C. Cloud 1. Wind 1. Rain 0	21:15	21:15	23:15
4 – dusk	10/07/2022	19 ˚C. Cloud 2. Wind 1. Rain 0	18 ˚C. Cloud 1. Wind 0. Rain 0	21:12	21:12	23:12
4 - dawn	11/07/2022	17 ˚C. Cloud 1. Wind 1. Rain 0	16 ˚C. Cloud 1. Wind 0. Rain 0	04:49	02:49	04:49
5	03/08/2022	24 ˚C. Cloud 3. Wind 0. Rain 0	23 ˚C. Cloud 2. Wind 0. Rain 0	20:41	20:41	22:41
6	17/09/2022	14 ˚C. Cloud 2. Wind 3. Rain 0	11 ˚C. Cloud 4. Wind 2. Rain 0	19:06	18:50	22:15
Transect 7						
Survey number	Date	Weather conditions		Sunrise/ sunset	Start time	End time
		Start	Finish			
1	29/05/2022	15 ˚C. Cloud 3. Wind 1. Rain 0	13 ˚C. Cloud 3. Wind 1. Rain 0	20:57	20:50	23:03
2	22/06/2022	16 ˚C. Cloud 5. Wind 1. Rain 0	13 ˚C. Cloud 7. Wind 0. Rain 0	21:20	21:15	23:10
3 – dusk	11/07/2022	19 ˚C. Cloud 3. Wind 0. Rain 0	19 ˚C. Cloud 7. Wind 1. Rain 0	21:11	21:11	23:11
3 – dawn	12/07/2022	18 ˚C. Cloud 3. Wind 0. Rain 0	17 ˚C. Cloud 5. Wind 0. Rain 0	04:50	02:50	04:50

4	04/08/2022	19 ˚C. Cloud 5. Wind 1. Rain 0	18 ˚C. Cloud 7. Wind 0. Rain 0	20:29	20:39	22:39
5	18/09/2022	14˚C. Cloud 4. Wind 4. Rain 0	10 ˚C. Cloud 3. Wind 3. Rain 0	19:03	19:03	21:05
6	05/10/2022	15 ˚C. Cloud 6. Wind 2. Rain 0	14 ˚C. Cloud 1. Wind 3. Rain 0	18:25	18:25	20:25
Transect 8						
Survey number	Date	Weather conditions		Sunrise/ sunset	Start time	End time
		Start	Finish			
1	26/04/2022	10 ˚C. Cloud 1. Wind 1. Rain 0	11 ˚C. Cloud 0. Wind 1. Rain 0	20:11	19:56	22:11
2	26/05/2022	16 ˚C. Cloud 5. Wind 1 Rain 0	16 ˚C. Cloud 5. Wind 1. Rain 0	20:57	20:55	23:08
3	20/06/2022	16 ˚C. Cloud 1. Wind 1. Rain 0	14 ˚C. Cloud 0. Wind 1. Rain 0	21:18	21:10	23:30
4 – dusk	13/07/2022	18 ˚C. Cloud 7. Wind 1. Rain 0	17 ˚C. Cloud 3. Wind 0. Rain 0	21:10	21:10	23:10
4 – dawn	14/07/2022	16 ˚C. Cloud 6. Wind 0. Rain 0	14 ˚C. Cloud 3. Wind 0. Rain 0	04:50	02:50	24:50
5	05/08/2022	18 ˚C. Cloud 4. Wind 0. Rain 0	17 ˚C. Cloud 4. Wind 0. Rain 0	20:38	20:38	22:38
6	19/09/2022	15 ˚C. Cloud 8. Wind 3. Rain 0	13 ˚C. Cloud 7. Wind 2. Rain 0	19:01	19:001	21:20
7	07/10/2022	17 ˚C. Cloud 4. Wind 2. Rain 0	14 ˚C. Cloud 8. Wind 3. Rain 0	18:20	18:32	19:55
Transect 9						
Survey number	Date	Weather conditions		Sunrise/ sunset	Start time	End time
		Start	Finish			
1	21/04/2022	12 ˚C. Cloud 1. Wind 1. Rain 0	12 ˚C. Cloud 5. Wind 1. Rain 0	20:04	19:48	22:04
2	08/05/2022	12 ˚C. Cloud 1. Wind 1. Rain 0	12 ˚C. Cloud 5. Wind 1. Rain 0	20:32	20:15	22:20
3	27/06/2022	16 ˚C. Cloud 1. Wind 1. Rain 0	14 ˚C. Cloud 5. Wind 1. Rain 0	21:20	21:15	23:30
4 – dusk	14/07/2022	17 ˚C. Cloud 1. Wind 0. Rain 0	15 ˚C. Cloud 1. Wind 0. Rain 0	21:09	21:09	23:09
4 – dawn	15/07/2022	13 ˚C. Cloud 3. Wind 0. Rain 0	13 ˚C. Cloud 1. Wind 0. Rain 0	04:54	02:54	04:54
5	22/08/2022	20 ˚C. Cloud 7. Wind 2. Rain 0	19 ˚C. Cloud 8. Wind 2. Rain 1	20:11	20:11	22:05
6	20/09/2022	15 ˚C. Cloud 1. Wind 1. Rain 0	14 ˚C. Cloud 5. Wind 1. Rain 0	19:02	19:02	20:45
7	10/10/2022	14 ˚C. Cloud 1. Wind 1. Rain 0	11 ˚C. Cloud 0. Wind 0. Rain 0	18:12	18:12	20:12
Transect 10						
Survey number	Date	Weather conditions		Sunrise/ sunset	Start time	End time
		Start	Finish			
1	21/04/2022	12 ˚C. Cloud 1. Wind 1. Rain 0	12 ˚C. Cloud 5. Wind 1. Rain 0	20:04	19:48	22:04
2	08/05/2022	12 ˚C. Cloud 1. Wind 1. Rain 0	12 ˚C. Cloud 5. Wind 1. Rain 0	20:32	20:15	22:20
3	24/06/2022	18 ˚C. Cloud 2. Wind 2. Rain 0	15 ˚C. Cloud 6. Wind 1. Rain 0	21:20	21:20	23:20
4 - dusk	**19/07/2022**	26 ˚C. Cloud 2. Wind 2. Rain 0	24 ˚C. Cloud 6. Wind 1. Rain 0	21:06	21:06	23:06
4 – dawn	20/07/2022	22 ˚C. Cloud 7. Wind 1. Rain 0	21 ˚C. Cloud 7. Wind 2. Rain 1	03:00	03:00	05:00
5	23/08/2022	24 ˚C. Cloud 4. Wind 2. Rain 0	21 ˚C. Cloud 2. Wind 2. Rain 0	20:08	20:08	22:00
6	22/09/2022	12 ˚C.Cloud 1. Wind 1. Rain 0	12 ˚C. Cloud 5. Wind 1. Rain 0	18:58	18:58	20:45
7	12/10/2022	15 ˚C. Cloud 8. Wind 1. Rain 1	14 ˚C. Cloud 8. Wind 0. Rain 0	18:08	18:08	20:08
Transect 11						
Survey number	Date	Weather conditions		Sunrise/ sunset	Start time	End time
		Start	Finish			
1	22/04/2022	11 ˚C. Cloud 5. Wind 1. Rain 0	11 ˚C. Cloud 5. Wind 1. Rain 0	20:04	19:48	22:04
2	03/05/2022	13 ˚C. Cloud 8. Wind 1. Rain 0	12 ˚C. Cloud 7. Wind 1. Rain 0	20:22	20:08	22:22

3	23/06/2022	18 ˚C. Cloud 0. Wind 1. Rain 0	16 ˚C. Cloud 1. Wind 1. Rain 0	21:19	21:15	23:20
4 - dusk	20/07/2022	23 ˚C. Cloud 8. Wind 1. Rain 0	22 ˚C. Cloud 8. Wind 1. Rain 0	21:02	21:02	23:02
4 – dawn	21/07/2022	18 ˚C. Cloud 8. Wind 1. Rain 0	17 ˚C. Cloud 7. Wind 1. Rain 1	05:01	03:01	05:01
5	24/08/2022	22 ˚C. Cloud 2. Wind 3. Rain 0	19 ˚C. Cloud 3. Wind 2. Rain 0	20:06	20:06	22:06
6	21/09/2022	12 ˚C. Cloud 5. Wind 1. Rain 0	12 ˚C. Cloud 5. Wind 1. Rain 0	19:00	19:00	20:47
7	14/10/2022	15 ˚C. Cloud 8. Wind 1. Rain 1	14 ˚C. Cloud 8. Wind 0. Rain 0	18:04	18:22	19:52

Transect 12

Survey number	Date	Weather conditions		Sunrise/ sunset	Start time	End time
		Start	Finish			
1	22/04/2022	12 ˚C. Cloud 6. Wind 1. Rain 0	12 ˚C. Cloud 6. Wind 1. Rain 0	20:04	19:48	22:04
2	29/05/2022	9 ˚C. Cloud 1. Wind 0. Rain 0	5 ˚C. Cloud 0. Wind 0. Rain 0	21:02	21:02	23:48
3	21/06/2022	19 ˚C. Cloud 2. Wind 1. Rain 0	18 ˚C. Cloud 1. Wind 1. Rain 0	21:18	21:15	23:20
4 – dusk	21/07/2022	18 ˚C. Cloud 7. Wind 2. Rain 0	17 ˚C. Cloud 8. Wind 1. Rain 0	21:01	21:01	23:01
4 – dawn	22/07/2022	16 ˚C. Cloud 8. Wind 2. Rain 0	15 ˚C. Cloud 8. Wind 2. Rain 0	05:03	03:03	05:03
5	27/08/2022	19 ˚C. Cloud 4. Wind 3. Rain 0	17 ˚C. Cloud 2. Wind 2. Rain 0	19:53	19:53	21:55
6	24/09/2022	15 ˚C. Cloud 7. Wind 0. Rain 0	13 ˚C. Cloud 5. Wind 1. Rain 0	18:49	18:49	20:49
7	15/10/2022	15 ˚C. Cloud 8. Wind 1. Rain 1	14 ˚C. Cloud 8. Wind 0. Rain 0	18:04	18:22	19:52

Transect 13

Survey number	Date	Weather conditions		Sunrise/ sunset	Start time	End time
		Start	Finish			
1	24/04/2022	10 ˚C. Cloud 6. Wind 1. Rain 0	10 ˚C. Cloud 6. Wind 1. Rain 0	20:09	19:57	22:02
2	26/05/2022	14 ˚C. Cloud 6. Wind 1. Rain 0	14 ˚C. Cloud 6. Wind 1. Rain 0	20:57	20:50	23:03
3	27/06/2022	16 ˚C. Cloud 1. Wind 0. Rain 0	14 ˚C. Cloud 1. Wind 0. Rain 0	21:13	20:56	23:20
4 – dusk	25/07/2022	19 ˚C. Cloud 8. Wind 2. Rain 0	19 ˚C. Cloud 8. Wind 3. Rain 0	20:55	20:55	22:55
4 – dawn	26/07/2022	14 ˚C. Cloud 8. Wind 2. Rain 1	15 ˚C. Cloud 8. Wind 1. Rain 1	05:08	03:08	05:08
5	28/08/2022	18 ˚C. Cloud 7. Wind 3. Rain 0	17 ˚C. Cloud 8. Wind 2. Rain 0	19:51	19:51	21:55
6	24/09/2022	14 ˚C. Cloud 7. Wind 1. Rain 0	13 ˚C. Cloud 2. Wind 1. Rain 0	18:49	18:49	20:49
7	18/10/2022	13 ˚C. Cloud 1. Wind 0. Rain 0	12 ˚C. Cloud 1. Wind 0. Rain 0	18:16	18:16	20:16

Transect 14

Survey number	Date	Weather conditions		Sunrise/ sunset	Start time	End time
		Start	Finish			
1	27/05/2022	15 ˚C. Cloud 1. Wind 2. Rain 0	14 ˚C. Cloud 1. Wind 2. Rain 0	20:59	20:59	23:01
2	23/06/2022	20 ˚C. Cloud 1. Wind 1. Rain 0	19 ˚C. Cloud 1. Wind 2. Rain 0	21:18	21:18	23:18
3	26/07/2022	17 ˚C. Cloud 7. Wind 0. Rain 0	16 ˚C.Cloud 2. Wind 0. Rain 0	20:54	20:54	22:54
4	29/08/2022	18˚C. Cloud 6. Wind 3. Rain 0	17˚C. Cloud 7. Wind 3. Rain 0	19:49	19:49	22:20
5	24/09/2022	14˚C. Cloud 5. Wind 3. Rain 0	13 ˚C. Cloud 5. Wind 3. Rain 0	18:49	18:49	21:06

Transect 15

Survey number	Date	Weather conditions		Sunrise/ sunset	Start time	End time
		Start	Finish			
1	26/05/2022	18 ˚C. Cloud 7. Wind 1. Rain 0	16 ˚C. Cloud 7. Wind 1. Rain 0	20:57	20:57	23:01
2	24/06/2022	19 ˚C. Cloud 7. Wind 2. Rain 0	18 ˚C. Cloud 7. Wind 1. Rain 0	21:18	21:18	23:18

Transect 16						
Survey number	Date	Weather conditions		Sunrise/ sunset	Start time	End time
		Start	Finish			
1	31/05/2022	12 ˚C. Cloud 7. Wind 3. Rain 0	10 ˚C. Cloud 8. Wind 1. Rain 0	21:03	21:03	23:05
2	25/06/2022	16 ˚C. Cloud 7. Wind 3. Rain 0	19 ˚C. Cloud 1. Wind 2. Rain 3	21:18	21:18	23:18
3	27/07/2022	17 ˚C. Cloud 8. Wind 1. Rain 0	17 ˚C. Cloud 8. Wind 2. Rain 0	20:51	20:51	22:51
4	29/08/2022	17 ˚C. Cloud 7. Wind 2. Rain 0	16 ˚C. Cloud 7. Wind 1. Rain 0	19:51	19:51	21:51
5	25/09/2022	15˚C. Cloud 6. Wind 3. Rain 0	13˚C. Cloud 7. Wind 3. Rain 0	18:47	18:47	21:10
6	19/10/2022	13 ˚C. Cloud 1. Wind 0. Rain 0	12 ˚C. Cloud 1. Wind 0. Rain 0	17:55	17:55	19:55
Transect 17						
Survey number	Date	Weather conditions		Sunrise/ sunset	Start time	End time
		Start	Finish			
1	30/05/2022	14 ˚C. Cloud 8. Wind 2. Rain 1	12 ˚C. Cloud 8. Wind 2. Rain 1	21:02	21:02	23:05
2	26/06/2022	18 ˚C. Cloud 1. Wind 2. Rain 0	15 ˚C. Cloud 6. Wind 1. Rain 0	21:18	21:18	23:18
3	28/07/2022	18 ˚C. Cloud 5. Wind 1. Rain 0	17 ˚C. Cloud 6. Wind 1. Rain 0	20:51	20:51	22:51
4	28/08/2022	18 ˚C. Cloud 5. Wind 1. Rain 0	17 ˚C. Cloud 3. Wind 1. Rain 0	19:51	19:51	21:51
5	28/05/2022	12 ˚C. Cloud 5. Wind 0. Rain 0	10 ˚C. Cloud 7. Wind 0. Rain 0	18:40	18:40	20:40
6	24/10/2022	16 ˚C. Cloud 1. Wind 1. Rain 0	15 ˚C. Cloud 1. Wind 1. Rain 0	17:44	17:44	19:10

LEGEND

- VE Onshore Cable Route
- 100m Buffer
- Static detectors
- Transect 13

BAT TRANSECT AND STATIC DETECTOR LOCATIONS FIGURE 1.1

PROJECT TITLE:
Five Estuaries Offshore Wind Farm

CLIENT:
Royal HaskoningDHV

DATE:
24.01.2023

PRODUCED BY:
J. McMahon

REF: 22043

ECOLOGY RESOURCES

LEGEND

- VE Onshore Cable Route
- 100m Buffer
- Static detectors
- Transect 12
- Transect 16
- Transect 17

BAT TRANSECT AND STATIC DETECTOR LOCATIONS FIGURE 1.2

PROJECT TITLE:
Five Estuaries Offshore Wind Farm

CLIENT:
Royal HaskoningDHV

DATE:
24.01.2023

PRODUCED BY:
J. McMahon

REF: 22043

ECOLOGY RESOURCES

LEGEND

- VE Onshore Cable Route
- 100m Buffer
- Static detectors
- Transect 11
- Transect 12
- Transect 16

BAT TRANSECT AND STATIC DETECTOR LOCATIONS FIGURE 1.3

PROJECT TITLE:
Five Estuaries Offshore Wind Farm

CLIENT:
Royal HaskoningDHV

DATE:
24.01.2023

PRODUCED BY:
J. McMahon

REF: 22043

ECOLOGY RESOURCES

LEGEND

- VE Onshore Cable Route
- 100m Buffer
- Static detectors
- Transect 9
- Transect 10
- Transect 11
- Transect 16

BAT TRANSECT AND STATIC DETECTOR LOCATIONS FIGURE 1.4

PROJECT TITLE:
Five Estuaries Offshore Wind Farm

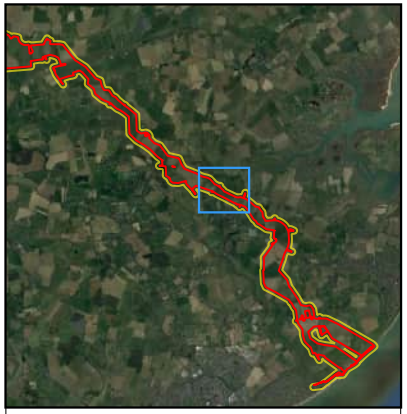
CLIENT:
Royal HaskoningDHV

DATE:
24.01.2023

PRODUCED BY:
J. McMahon

REF: 22043

ECOLOGY RESOURCES



LEGEND

- VE Onshore Cable Route
- 100m Buffer
- Static detectors
- Transect 6
- Transect 8
- Transect 9
- Transect 10

BAT TRANSECT AND STATIC DETECTOR LOCATIONS FIGURE 1.5

PROJECT TITLE:
Five Estuaries Offshore Wind Farm

CLIENT:
Royal HaskoningDHV

DATE:
24.01.2023

PRODUCED BY:
J. McMahon

REF: 22043

ECOLOGY RESOURCES

LEGEND

- VE Onshore Cable Route
- 100m Buffer
- Static detectors
- Transect 6
- Transect 7
- Transect 8
- Transect 9

BAT TRANSECT AND STATIC DETECTOR LOCATIONS FIGURE 1.6

PROJECT TITLE:
Five Estuaries Offshore Wind Farm

CLIENT:
Royal HaskoningDHV

DATE:
24.01.2023

PRODUCED BY:
J. McMahon

REF: 22043

ECOLOGY RESOURCES

LEGEND

- VE Onshore Cable Route
- 100m Buffer
- Static detectors
- Transect 5
- Transect 15

BAT TRANSECT AND STATIC DETECTOR LOCATIONS FIGURE 1.7

PROJECT TITLE:
Five Estuaries Offshore Wind Farm

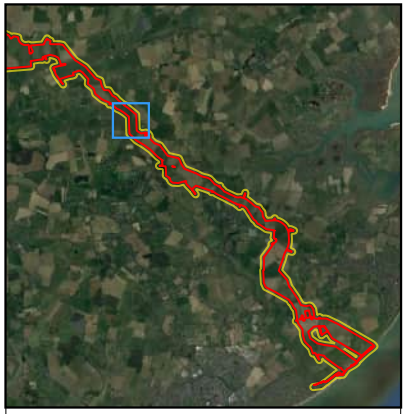
CLIENT:
Royal HaskoningDHV

DATE:
24.01.2023

PRODUCED BY:
J. McMahon

REF: 22043

ECOLOGY RESOURCES



LEGEND

- VE Onshore Cable Route
- 100m Buffer
- Transect 4
- Transect 15
- Transect 5
- Static Detectors

BAT TRANSECT AND STATIC DETECTOR LOCATIONS
FIGURE 1.8

PROJECT TITLE:
Five Estuaries Offshore Wind Farm

CLIENT:
Royal HaskoningDHV

DATE:
24.01.2023

PRODUCED BY:
J. McMahon

REF: 22043

ECOLOGY RESOURCES

LEGEND

- VE Onshore Cable Route
- 100m Buffer
- Static detectors
- Transect 4
- Transect 15

BAT TRANSECT AND STATIC DETECTOR LOCATIONS
FIGURE 1.9

PROJECT TITLE:
Five Estuaries Offshore Wind Farm

CLIENT:
Royal HaskoningDHV

DATE:
24.01.2023

PRODUCED BY:
J. McMahon

REF: 22043

ECOLOGY RESOURCES

LEGEND

- VE Onshore Cable Route
- 100m Buffer
- Transect 14
- Static Detecors

BAT TRANSECT AND STATIC DETECTOR LOCATIONS
FIGURE 1.10

PROJECT TITLE:
Five Estuaries Offshore Wind Farm

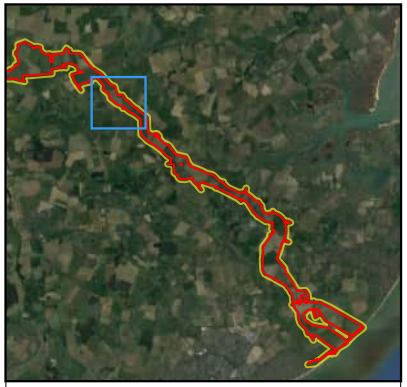
CLIENT:
Royal HaskoningDHV

DATE:
24.01.2023

PRODUCED BY:
J. McMahon

REF: 22043

ECOLOGY RESOURCES



LEGEND

- VE Onshore Cable Route
- 100m Buffer
- Transect 4

P.pip
- April
- June
- July (dusk)
- July (dawn)
- August
- September

N.noc
- April
- September

E.ser
- September

P.pyg
- June
- July (dusk)
- July (dawn)
- September

B.bar
- September

Myo.sp
- July (dusk)
- September

BAT TRANSECT 4 RESULTS PER MONTH
FIGURE 2.1

PROJECT TITLE:
Five Estuaries Offshore Wind Farm

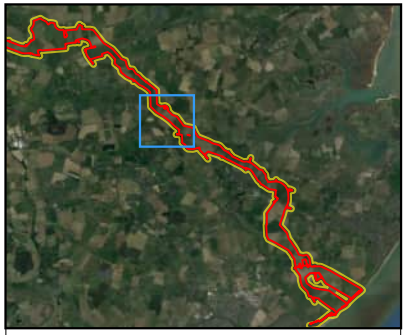
CLIENT:
Royal HaskoningDHV

DATE:
08.02.2023

PRODUCED BY:
J. McMahon

REF: 22043

ECOLOGY RESOURCES



LEGEND

- VE Onshore Cable Route
- 100m Buffer
- Transect 5

P.pip
- April
- May
- June
- July (dusk)
- July (dawn)
- August
- September
- October

N.noc
- July (dusk)
- July (dawn)

P.aur
- July (dawn)
- August
- October

B.bar
- April
- August
- September
- October

P.pyg
- April
- July (dusk)
- July (dawn)
- August
- September
- October

Myo.sp
- July (dawn)
- August
- September
- October

BAT TRANSECT 5 RESULTS PER MONTH
FIGURE 2.2

PROJECT TITLE:
Five Estuaries Offshore Wind Farm

CLIENT:
Royal HaskoningDHV

DATE:
14.02.2023

PRODUCED BY:
J. McMahon

REF: 22043

ECOLOGY RESOURCES

LEGEND

VE Onshore Cable Route
100m Buffer
Transect 6

P.pip
- April
- June
- July (dusk)
- July (dawn)
- August
- September
- October

N.noc
- July (dusk)
- August
- September

N.lei
- September

Nyc/E.ser
- October

P.aur
- September

B.bar
- October

Myo.sp
- July (dawn)

P.pyg
- June
- July (dusk)
- July (dawn)
- August
- September
- October

BAT TRANSECT 6 RESULTS PER MONTH
FIGURE 2.3

PROJECT TITLE:
Five Estuaries Offshore Wind Farm

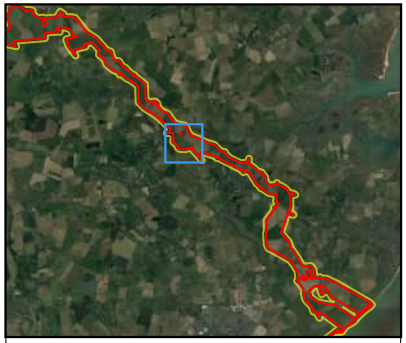
CLIENT:
Royal HaskoningDHV

DATE:
14.02.2023

PRODUCED BY:
J. McMahon

REF: 22043

ECOLOGY RESOURCES



LEGEND

VE Onshore Cable Route
100m Buffer
Transect 7

P.pip
- May
- June
- July (dusk)
- July (dawn)
- August
- September
- October

P.pyg
- May
- June
- July (dusk)
- July (dawn)
- September
- October

N.noc
- May
- July (dusk)
- July (dawn)
- August

P.aur
- July (dawn)
- August
- September

B.bar
- September
- October

Myo.sp
- May
- July (dusk)
- July (dawn)
- August
- October

BAT TRANSECT 7 RESULTS PER MONTH
FIGURE 2.4

PROJECT TITLE:
Five Estuaries Offshore Wind Farm

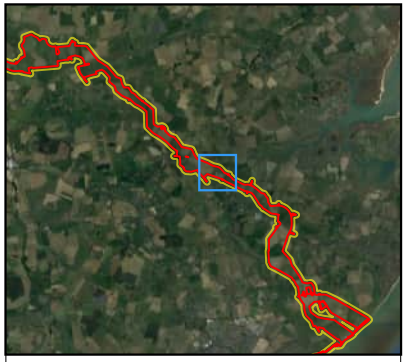
CLIENT:
Royal HaskoningDHV

DATE:
14.02.2023

PRODUCED BY:
J. McMahon

REF: 22043

ECOLOGY RESOURCES



LEGEND

VE Onshore Cable Route
100m Buffer
Transect 8

P.pip
- April
- May
- June
- July (dusk)
- July (dawn)
- August
- September
- October

N.noc
- June
- July (dusk)
- July (dawn)
- August

N.lei
- October

P.pyg
- April
- May
- July (dusk)
- July (dawn)
- August
- September
- October

B.bar
- July (dusk)
- September
- October

Myo.sp
- July (dusk)
- August

BAT TRANSECT 8 RESULTS PER MONTH
FIGURE 2.5

PROJECT TITLE:
Five Estuaries Offshore Wind Farm

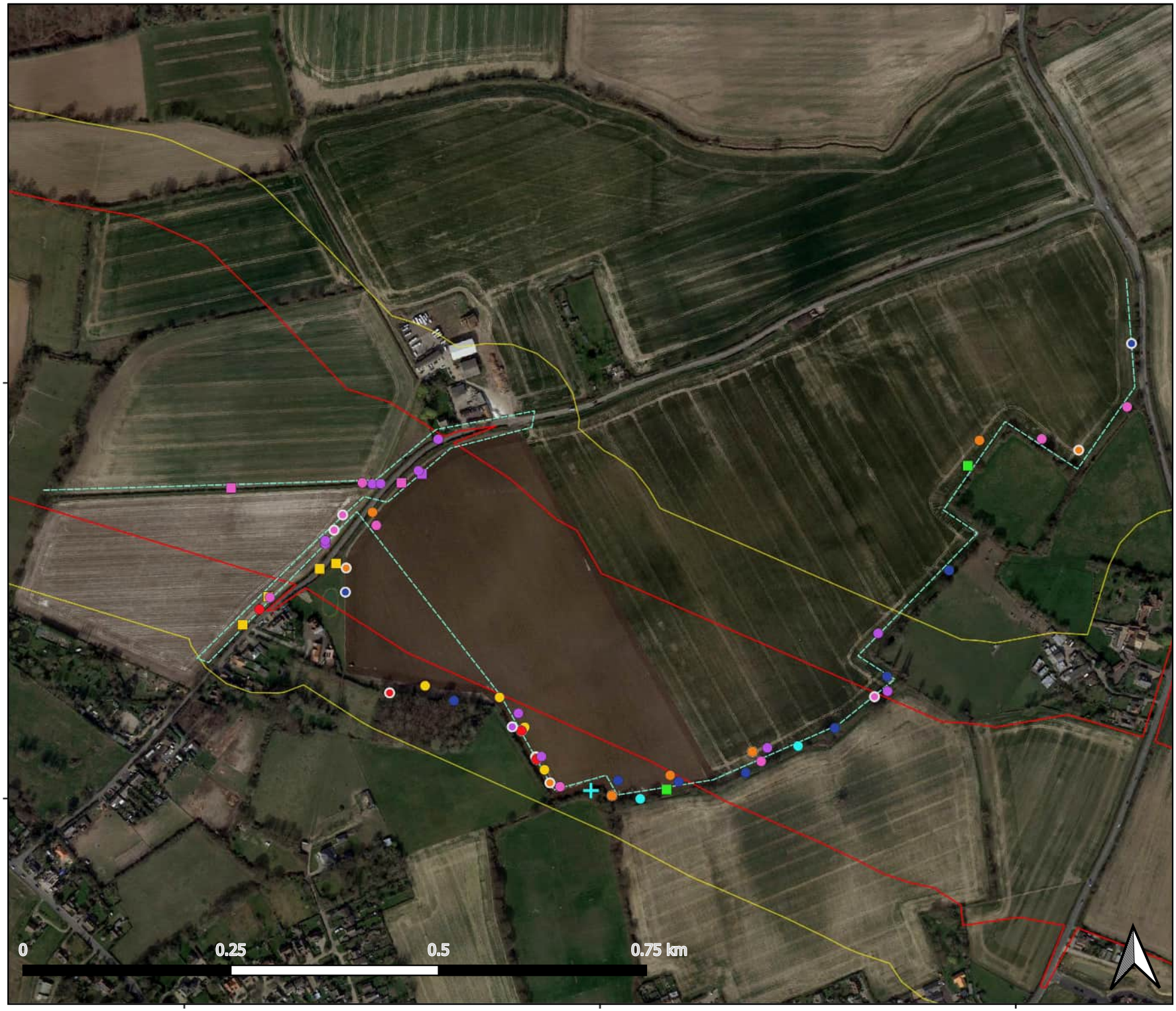
CLIENT:
Royal HaskoningDHV

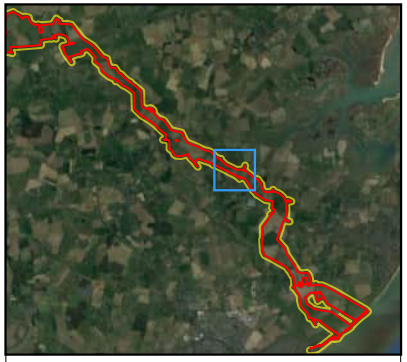
DATE:
14.02.2023

PRODUCED BY:
J. McMahon

REF: 22043

ECOLOGY RESOURCES





LEGEND

- VE Onshore Cable Route
- 100m Buffer
- Transect 9

P.pip
- May
- June
- July (dusk)
- July (dawn)
- August
- September
- October

Myo.sp
- May

N.noc
- April
- May
- June
- August
- September

P.pyg
- July (dusk)
- July (dawn)
- August
- September
- October

BAT TRANSECT 9 RESULTS PER MONTH
FIGURE 2.6

PROJECT TITLE:
Five Estuaries Offshore Wind Farm

CLIENT:
Royal HaskoningDHV

DATE:
14.02.2023

PRODUCED BY:
J. McMahon

REF: 22043

ECOLOGY RESOURCES

LEGEND

- VE Onshore Cable Route
- 100m Buffer
- Transect 10

P.pip
- April
- June
- July (dusk)
- July (dawn)
- August
- September
- October

P.aur
- August

N.noc
- April
- May
- September

P.pyg
- April
- July (dusk)
- July (dawn)
- August
- September
- October

B.bar
- August

BAT TRANSECT 10 RESULTS PER MONTH
FIGURE 2.7

PROJECT TITLE:
Five Estuaries Offshore Wind Farm

CLIENT:
Royal HaskoningDHV

DATE:
14.02.2023

PRODUCED BY:
J. McMahon

REF: 22043

ECOLOGY RESOURCES

LEGEND

VE Onshore Cable Route
100m Buffer
Transect 11

P.pip
- April
- May
- June
- July (dusk)
- July (dawn)
- August
- September
- October

N.noc
- June
- July (dusk)
- August
- September
- October

P.pyg
- April
- May
- June
- July (dusk)
- July (dawn)
- August
- September
- October

Myo.sp
- April
- June
- August
- September
- October

BAT TRANSECT 11 RESULTS PER MONTH
FIGURE 2.8

PROJECT TITLE:
Five Estuaries Offshore Wind Farm

CLIENT:
Royal HaskoningDHV

DATE:
14.02.2023

PRODUCED BY:
J. McMahon

REF: 22043

ECOLOGY RESOURCES

LEGEND

- VE Onshore Cable Route
- 100m Buffer

P.pip
- April
- May
- June
- July (dusk)
- August
- September
- October

N.noc
- June
- August

P.nat
- May

Nyc/E.ser
- June

P.aur
- August

Myo.sp
- April

P.pyg
- April
- May
- July (dusk)
- August

- Transect 12

BAT TRANSECT 12 RESULTS PER MONTH
FIGURE 2.9

PROJECT TITLE:
Five Estuaries Offshore Wind Farm

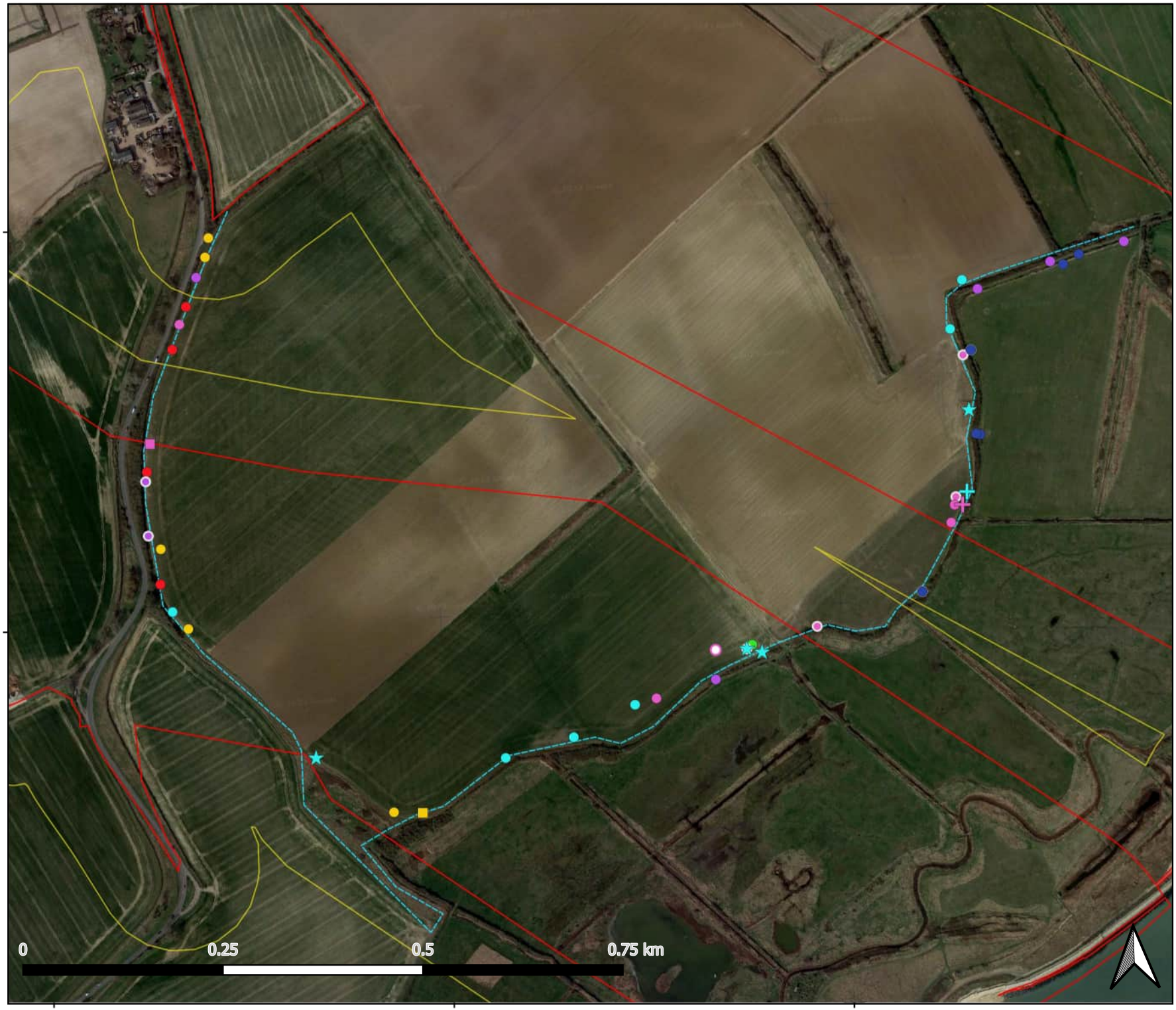
CLIENT:
Royal HaskoningDHV

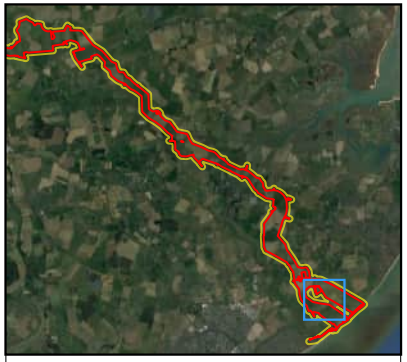
DATE:
09.02.2023

PRODUCED BY:
J. McMahon

REF: 22043

ECOLOGY RESOURCES





LEGEND

- VE Onshore Cable Route
- 100m Buffer

P.pip
- April
- May
- June
- July (dawn)
- August
- September
- October

P.pyg
- August
- September
- October

P.nat
- August

N.noc
- June
- August

B.bar
- May

Myo.sp
- May
- August

- Transect 13

BAT TRANSECT 13 RESULTS PER MONTH
FIGURE 2.10

PROJECT TITLE:
Five Estuaries Offshore Wind Farm

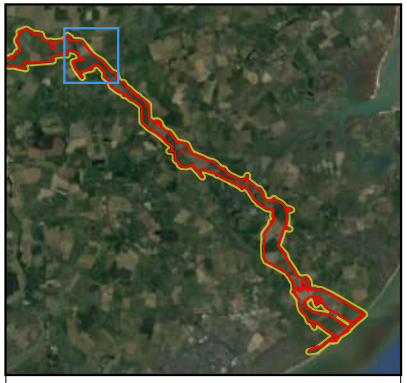
CLIENT:
Royal HaskoningDHV

DATE:
09.02.2023

PRODUCED BY:
J. McMahon

REF: 22043

ECOLOGY RESOURCES



LEGEND

- VE Onshore Cable Route
- 100m Buffer
- Transect 14

P.pip
- May
- June
- August
- September

P.pyg
- May
- June
- July
- August
- September

N.noc
- July
- August
- September

N.lei
- June
- July
- August

P.aur
- May
- August

Myo.sp
- September

BAT TRANSECT 14 RESULTS PER MONTH
FIGURE 2.11

PROJECT TITLE:
Five Estuaries Offshore Wind Farm

CLIENT:
Royal HaskoningDHV

DATE:
14.02.2023

PRODUCED BY:
J. McMahon

REF: 22043

ECOLOGY RESOURCES

LEGEND

VE Onshore Cable Route
100m Buffer

P.pip
May
June

Transect 15

P.pyg
May
June

P.nat
May
June

N.noc
June

BAT TRANSECT 15 RESULTS PER MONTH
FIGURE 2.12

PROJECT TITLE:
Five Estuaries Offshore Wind Farm

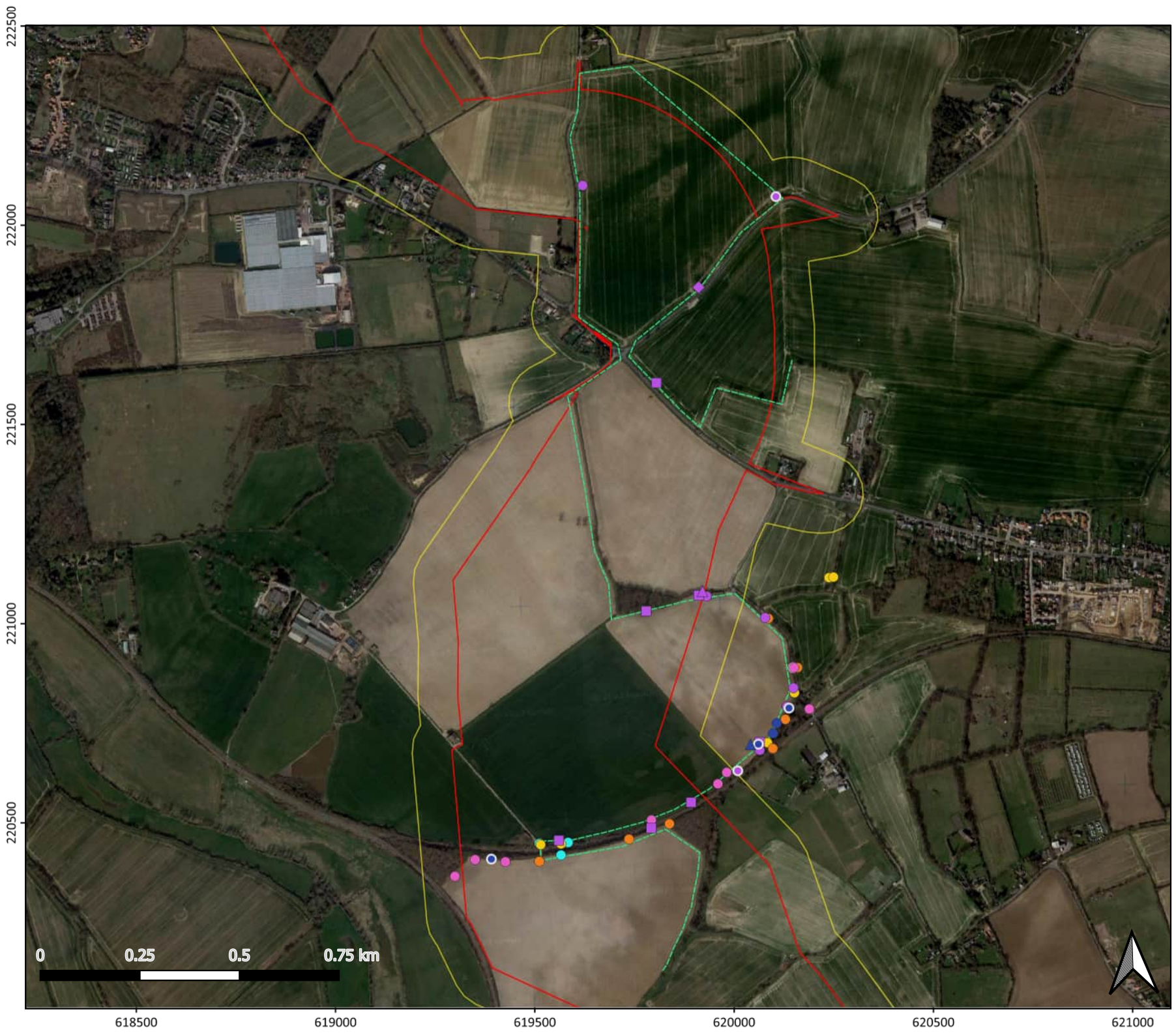
CLIENT:
Royal HaskoningDHV

DATE:
09.02.2023

PRODUCED BY:
J. McMahon

REF: 22043

ECOLOGY RESOURCES



LEGEND

- VE Onshore Cable Route
- 100m Buffer

P.pip
- May
- June
- July
- August
- September
- October

P.pyg
- July
- September
- October

N.noc
- September

N.lei
- September

P.aur
- September
- October

- Transect 16

BAT TRANSECT 16 RESULTS PER MONTH
FIGURE 2.13

PROJECT TITLE:
Five Estuaries Offshore Wind Farm

CLIENT:
Royal HaskoningDHV

DATE:
09.02.2023

PRODUCED BY:
J. McMahon

REF: 22043

ECOLOGY RESOURCES

LEGEND

- VE Onshore Cable Route
- 100m Buffer
- Transect 17

P.pip
- May
- June
- August
- September
- October

P.pyg
- May
- June
- August
- September
- October

N.noc
- June

B.bar
- May

BAT TRANSECT 17 RESULTS PER MONTH
FIGURE 2.14

PROJECT TITLE:
Five Estuaries Offshore Wind Farm

CLIENT:
Royal HaskoningDHV

DATE:
09.02.2023

PRODUCED BY:
J. McMahon

REF: 22043

ECOLOGY RESOURCES

LEGEND

- VE Onshore Cable Route
- 100m Buffer

Bat Transects

- Complete Dataset

Bat Statics

- Complete Dataset

BAT ACTIVITY DATA COMPLETION FIGURE 3.1

PROJECT TITLE:
Five Estuaries Offshore Wind Farm

CLIENT:
Royal HaskoningDHV

DATE:
15.02.2023

PRODUCED BY:
J. McMahon

REF: 22043

ECOLOGY RESOURCES

LEGEND

- VE Onshore Cable Route
- 100m Buffer

Bat Transects

- Complete Dataset
- Incomplete Dataset

Bat Statics

- Complete Dataset
- Incomplete/Partially Corrupted Dataset

BAT ACTIVITY DATA COMPLETION
FIGURE 3.2

PROJECT TITLE:
Five Estuaries Offshore Wind Farm

CLIENT:
Royal HaskoningDHV

DATE:
15.02.2023

PRODUCED BY:
J. McMahon

REF: 22043

ECOLOGY RESOURCES

LEGEND

- VE Onshore Cable Route
- 100m Buffer

Bat Transects

- Complete Dataset
- Incomplete Dataset

Bat Statics

- Incomplete/Partially Corrupted Dataset

BAT ACTIVITY DATA COMPLETION
FIGURE 3.3

PROJECT TITLE:
Five Estuaries Offshore Wind Farm

CLIENT:
Royal HaskoningDHV

DATE:
15.02.2023

PRODUCED BY:
J. McMahon

REF: 22043

ECOLOGY RESOURCES

LEGEND

- VE Onshore Cable Route
- 100m Buffer

Bat Transects

- Complete Dataset
- Incomplete Dataset

Bat Statics

- Complete Dataset
- Incomplete/Partially Corrupted Dataset

BAT ACTIVITY DATA COMPLETION FIGURE 3.4

PROJECT TITLE:
Five Estuaries Offshore Wind Farm

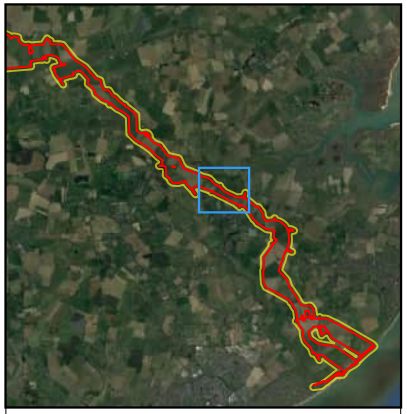
CLIENT:
Royal HaskoningDHV

DATE:
15.02.2023

PRODUCED BY:
J. McMahon

REF: 22043

ECOLOGY RESOURCES



LEGEND

- VE Onshore Cable Route
- 100m Buffer

Bat Transects
- Complete Dataset

Bat Statics
- Complete Dataset
- Incomplete/Partially Corrupted Dataset

BAT ACTIVITY DATA COMPLETION FIGURE 3.5

PROJECT TITLE:
Five Estuaries Offshore Wind Farm

CLIENT:
Royal HaskoningDHV

DATE:
15.02.2023

PRODUCED BY:
J. McMahon

REF: 22043

ECOLOGY RESOURCES

LEGEND

- VE Onshore Cable Route
- 100m Buffer

Bat Transects

- Complete Dataset
- Incomplete Dataset

Bat Statics

- Complete Dataset
- Incomplete/Partially Corrupted Dataset

BAT ACTIVITY DATA COMPLETION
FIGURE 3.6

PROJECT TITLE:
Five Estuaries Offshore Wind Farm

CLIENT:
Royal HaskoningDHV

DATE:
15.02.2023

PRODUCED BY:
J. McMahon

REF: 22043

ECOLOGY RESOURCES

LEGEND

- VE Onshore Cable Route
- 100m Buffer

Bat Transects

- Complete Dataset
- Incomplete Dataset

Bat Statics

- Complete Dataset
- Incomplete/Partially Corrupted Dataset

BAT ACTIVITY DATA COMPLETION FIGURE 3.7

PROJECT TITLE:
Five Estuaries Offshore Wind Farm

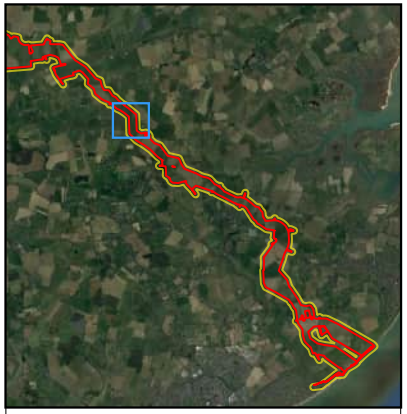
CLIENT:
Royal HaskoningDHV

DATE:
15.02.2023

PRODUCED BY:
J. McMahon

REF: 22043

ECOLOGY RESOURCES



LEGEND

- VE Onshore Cable Route
- 100m Buffer

Bat Transects

- Complete Dataset
- Incomplete Dataset

Bat Statics

- Incomplete/Partially Corrupted Dataset

BAT ACTIVITY DATA COMPLETION
FIGURE 3.8

PROJECT TITLE:
Five Estuaries Offshore Wind Farm

CLIENT:
Royal HaskoningDHV

DATE:
15.02.2023

PRODUCED BY:
J. McMahon

REF: 22043

ECOLOGY RESOURCES

LEGEND

- VE Onshore Cable Route
- 100m Buffer

Bat Transects

- Incomplete Dataset

Bat Statics

- Complete Dataset
- Incomplete/Partially Corrupted Dataset

BAT ACTIVITY DATA COMPLETION FIGURE 3.9

PROJECT TITLE:
Five Estuaries Offshore Wind Farm

CLIENT:
Royal HaskoningDHV

DATE:
15.02.2023

PRODUCED BY:
J. McMahon

REF: 22043

ECOLOGY RESOURCES

LEGEND

- VE Onshore Cable Route
- 100m Buffer

Bat Transects

- Incomplete Dataset

Bat Statics

- Incomplete/Partially Corrupted Dataset

BAT ACTIVITY DATA COMPLETION FIGURE 3.10

PROJECT TITLE:
Five Estuaries Offshore Wind Farm

CLIENT:
Royal HaskoningDHV

DATE:
15.02.2023

PRODUCED BY:
J. McMahon

REF: 22043

ECOLOGY RESOURCES

FIVE ESTUARIES
OFFSHORE WIND FARM

PHONE 0333 880 5306
EMAIL fiveestuaries@rwe.com
WEBSITE www.fiveestuaries.co.uk
ADDRESS Five Estuaries Offshore Wind Farm Ltd
Windmill Hill Business Park
Whitehill Way, Swindon, SN5 6PB
COMPANY NO Registered in England and Wales
company number 12292474