

The Sizewell C Project

6.13 Additional Ecology Survey Report (September 2021)

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SIZEWELL C PROJECT – ADDITIONAL ECOLOGY SURVEY REPORT (SEPTEMBER 2021)

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Additional Ecology Survey Report (September 2021)



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BAT CROSSING POINT SURVEY REPORT 2 - 2021



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Contents

1.	SUMMARY	1
2.	OVERVIEW	1
2.1.	The Aims of the 2021 Survey Updates	1
2.2.	Site Description	1
2.3.	Definitions	1
3.	METHODS	2
3.1.	Survey Methodology	2
3.2.	Survey dates	2
3.3.	Survey Limitations	2
4.	RESULTS	4
4.2.	Two Village Bypass:	7
4.3.	Sizewell Link Road1	3
4.4.	Main Development Site1	9
5.	DISCUSSION2	1
	1A - BAT CROSSING POINT SURVEY REPORT 2021 - MDS ng Point Locations2	8
	1B - BAT CROSSING POINT SURVEY REPORT 2021 - SLR Crossing ocations	
_	1C - BAT CROSSING POINT SURVEY REPORT 2021 - TVB Crossing ocations	_



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Tables

Table 4-1: Summary of first two survey to identify the crossing points forward	-
Table 4-2: Crossing Point 1	7
Table 4-3: Crossing Point 2	8
Table 4-4: Crossing Point 3	g
Table 4-5: Crossing Point 4	10
Table 4-6: Crossing Point 5	11
Table 4-7: Crossing Point 8	12
Table 4-8: Crossing Point 11	13
Table 4-9: Crossing Point 12	14
Table 4-10: Crossing Point 13	15
Table 4-11: Crossing Point 20	16
Table 4-12: Crossing Point 21	17
Table 4-13: Crossing Point 22	18
Table 4-14: Crossing Point 24	19
Table 4-15: Crossing Point 25	20
Table 5-1: Crossing Point Survey Information	23

FIGURES

Figure 1A - BAT CROSSING POINT SURVEY REPORT 2021 – Main Development Site Crossing Point Locations

Figure 1B - BAT CROSSING POINT SURVEY REPORT 2021 – Sizewell Link Road Crossing Point Locations

Figure 1C - BAT CROSSING POINT SURVEY REPORT 2021 – Two Village Bypass Crossing Point Locations



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1. SUMMARY

- 1.1.1. Bat Crossing Survey Report 1 [REP7-027] provided the results of the initial 2021 bat crossing point surveys conducted between April and June/July on the Sizewell C Project's Sizewell link road, two village bypass and main development site.
- 1.1.2. This Bat Crossing Survey Report 2 has been produced following the completion of the July/August surveys. A final update of this report will be provided after the completion of the surveys in September 2021. These surveys will not be completed by D10, therefore this information will be shared with stakeholders once finalised.

2. **OVERVIEW**

2.1. The Aims of the 2021 Survey Updates

- 2.1.1. The overall aims of the 2021 bat survey update were to:
 - Provide a baseline for future monitoring of the Sizewell C project (especially the success of any bat crossing point mitigation).
 - Establish the locations of any important bat commuting routes present within the proposed Sizewell link road, two village bypass and main development site sites to enable mitigation in these locations to be optimised.

2.2. Site Description

A description of the sites is provided within **Bat Crossing Survey Report** 2.2.1. 1 [REP7-027].

2.3. **Definitions**

- 2.3.1. The following terms are used in this report:
 - **Crossing Point** Location of a commuting feature (e.g. continuous woodland or hedgerow) that would be severed by the proposed works.
 - Bat Pass In the context of this report, it is assumed that a bat pass is a bat call or observation made of a bat flying in the vicinity of the linear feature. This is used as a measure of bat activity.
 - **Probable** Bats calls that could not be identified to species level due to range in call parameters were assigned 'Probable' before the species identification at genus level. For example, 'Probable Myotis



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- sp.'. Probable is when a bat is very likely to be a given species but this cannot be definitively confirmed.
- **Possible** Bats calls that could not be identified to species level due to range in call parameters were assigned 'Possible' before the species identification. This is where a call can be identified as a bat but there is significant uncertainty in the identification of a species.

METHODS

- 3.1. Survey Methodology
- 3.1.1. Details of the survey methodology, data analysis methodology, survey limitations and analysis limitations are set out in the **Bat Crossing Point Survey Report 1** [REP7-027].
- 3.2. Survey dates
- 3.2.1. Details of survey dates in which crossing point surveys were conducted are detailed in **Appendix A**, **Table 1**.
- 3.3. Survey Limitations
- 3.3.1. The following limitations and constraints were identified.
- 3.3.2. Observations of bats can be restricted by low light levels, meaning flight patterns cannot be determined as bats cannot be seen by surveyors; this limitation affects crossing point surveys in general, as observational data is required. Bats heard but not seen comprises a substantial amount of the total number of bat observations data recorded across the 2021 survey season. Infrared cameras were used during crossing point surveys as visual aids and reduced the amount of partial information collected as they allow a visual identification of bats beyond when it has become too dark for human eyes unaided to observe behaviour. Despite the infrared cameras, bats heard but not seen still comprise a significant amount of the total number of bat observations data recorded across the 2021 survey season. However, this is not considered a significant limitation as a certain number of heard not seen calls is always expected during nocturnal bat surveys, and comparable limitations will be experienced in subsequent surveys (so the data can be compared). Bats may have been flying in vegetation adjacent to the surveyor so may have been outside of the crossing point area being surveyed.
- 3.3.3. Due to detector and SD card malfunctions and / or access issues, on some occasions data was not recorded by one of the batloggers at a crossing point. In these instances, the data from the other batlogger (the equipment



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was paired) was utilised for the survey. This is not considered a limitation to the assessment.

- 3.3.4. Some of the surveys were conducted in weather conditions considered to be sub-optimal for bat activity (i.e. temperatures below 10 degrees C), see. This was not a limitation where bat activity met the threshold for further surveys, however any locations in sub-optimal conditions where the threshold was not met were carried forward for at least one further survey regardless of the results, as a precautionary measure, and only the survey visits in suitable weather conditions were considered in the assessment. As such this is not considered to have impacted the value of the results.
- Bat species that have been identified as Myotis sp. during field surveys and 3.3.5. subsequent data analysis have not been identified to species level and most observations remain grouped to the level of genus. This is recognised as standard practice and as such is not considered a limitation. This is also the case for species which could not be confirmed to species level during the sound analysis and therefore, bat calls have been identified to genus level.
- 3.3.6. The sound analysis for noctule, Leisler's bat and Serotine have been grouped together and labelled "Big Bat" during the sound analysis. This is not a significant constraint as the differentiation of these calls is unlikely to impact upon the identification of important commuting routes.
- 3.3.7. The terms 'Probable' and 'Possible' were used where identification of a bat call could not confirm the species due to range in call parameters. This approach was taken from a BCT bat conference workshop, given by Dr Dean Waters and Dr Kate Barlow in 2012. Although, the terms are defined clearly in the report and analysis of bat call the terms can be subjective. This is not deemed a significant limitation to the results, as these terms are only applied before the identification of a bat at genus level. This is a precautionary approach which aims to reduce incorrect identification at species level.
- When transforming the activity information, consistent information was 3.3.8. inferred from the recording, taking into account the lack of visual or contextual information provided by this survey data type. This may have underrepresented the actual number of passes by an individual bat, for example, if it were 'foraging'. Where the data had no identifiable associated behaviour information, the data was transformed to one 'pass' unless a specific number was stated. This is not considered a significant limitation. Where a high volume of pipistrelle sp. activity was identified during the sound analysis, species calls with the same time stamp were reduced to 1 pass or where continuous activity from one time stamp until a later time stamp was noted. Where sound analysis has been undertaken and



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identified several calls for rarer species, the number of passes provided has been retained and not transformed.

- 3.3.9 When transforming the activity information, comments such as 'Heard Not Seen' have been included in the results section of this report, where applicable.
- 3.3.10. The relative index of activity used in this report has been used to determine how bats are using the crossing points within the Study Area both temporally and spatially.

4 RESULTS

- 4.1.1. The following section presents the findings of the crossing point surveys at those locations where the bat activity recorded reached or exceeded the threshold parameters (see Bat Survey Crossing Point Report 1 [REP7-027]). The findings of the surveys carried out at the locations that did not reach the threshold parameters (as outlined in **Bat Crossing Point Survey** 1 [REP7-027]) were scoped out of the requirement for further survey and their results are not included in this report. The locations which did and did not meet the threshold are outlined in the table below (Table 4-1).
- 4.1.2. The thresholds are as set out in Berthinussen and Altringham (2015). This states that in order to identify potential bat commuting routes before construction, it is advised to conduct two preliminary dusk / dawn surveys. At any site where more than 10 bats are recorded using a flight path (1-5 for rare species, depending upon rarity) or rare bat species were recorded (Barbastelle and Myotis sp.) a full set of surveys should be conducted (an additional 4 surveys).

Table 4-1: Summary of first two survey to identify the crossing points to carry forward

Crossing	Survey 1		Survey 2		Met the	Notes
Point	No of bat passes > 10		No of bat passes > 10		threshold for additional surveys?	
Two Villag	je Bypass					
CP1	x ·	x -	✓•	✓•	✓	
CP2	x •	✓•	x •	x •	✓	
CP3	x ·	✓•	x •	✓•	✓	
CP4	x ·	✓•	x •	✓•	✓	
CP5	x ·	x ·	✓•	✓•	✓	
CP6	x.	x-	x.	x-	x.	



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Crossing	Survey 1		Survey 2		Met the	Notes	
Point	No of bat passes > 10		No of bat		threshold for		
CP7	x •	x -	x -	x •	x-		
CP8	x •	x -	x •	✓•	\checkmark		
CP9	x •	x -	x •	x •	x +		
CP10	x •	x •	x •	x •	x +		
Sizwell Lir							
CP11	✓•	x •	*•	*•	√		
CP12	x •	x -	x -	✓•	✓		
CP13	x •	✓•	✓•	x -	✓		
CP14	x •	x •	x •	x •	x +		
CP15	x •	x •	x •	x •	x +		
CP16	x •	x •	x •	x •	x +		
CP17	x •	x -	x •	*•	x +		
CP18	x •	x -	x •	x •	x +		
CP19	x.	x -	x.	x •	x -		
CP20	x.	x -	x-	✓•	✓		
CP21	x -	x -	x -	x •		In one of the initial two surveys reported in [REP7-027], the survey was too cold. On the repeat survey, this location met the threshold and was subsequently progressed with additional surveys.	
CP22	x ·	x -	✓•	x ·	√	Carvoyo.	
CP23	x.	x -	x •	x ·	x.		
	lelopment S	Site		<u> </u>			
CP24	x.	x-	✓•	x-	✓		
CP25	×-	✓•	✓•	✓•	✓		
CP26	x.	x -	x •	x ·	x-		



- 4.1.3. All numbers in the tables below represent the number of bat passes recorded during the survey and are a conglomeration of the survey findings of both the surveyors present.
- The survey conditions of all the surveys are presented in **Appendix A**. 4.1.4.



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4.2. Two Village Bypass:

Table 4-2: Crossing Point 1

	Survey 1 (17	7.05.21)	Survey 2 (08	Survey 2 (08.06.21)		Survey 3 (05.07.21)		Survey 4 (24.08.21)	
Species	Total Passes	Heard not seen	Total Passes	Heard not seen	Total Passes	Heard not seen	Total Passes	Heard not seen	
Barbastelle	2	0	8	5	2	0	3	0	
Myotis sp.	8	2	20	8	0	0	2	0	
Nyctalus sp.	2	0	0	0	0	0	0	0	
Common pipistrelle	33	3	32	1	31	7	8	4	
Soprano pipistrelle	9	0	10	2	38	7	4	1	
Brown long-eared bat	2	0	2	0	1	0	0	0	
Serotine	0	0	4	1	16	1	11	2	
Noctule	0	0	3	1	9	3	7	2	
Plecotus sp.	0	0	0	0	3	0	1	1	
Grand Total	56	5	79	18	100	18	36		



Table 4-3: Crossing Point 2

	Survey 1 (17.05.21)		Survey 2 (09	Survey 2 (09.06.21)		5.07.21)	Survey 4 (24.08.21)	
Species	Total Passes	Heard not seen	Total Passes	Heard not seen	Total Passes	Heard not seen	Total Passes	Heard not seen
Barbastelle	1	0	0	0	0	0	0	0
Myotis spec.	22	4	0	0	0	0	0	0
Leisler's bat	1	0	0	0	0	0	0	0
Noctule	6	2	2	0	0	0	3	1
Common pipistrelle	4	3	4	3	2	1	33	10
Soprano pipistrelle	11	8	17	0	10	7	2	1
Possible Barbastelle	1	0	0	0	0	0	0	0
Possible Myotis sp.	1	0	0	0	0	0	0	0
Serotine	0	0	0	0	0	0	10	5
Myotis sp.	0	0	0	0	0	0	8	7
Plecotus sp.	0	0	0	0	0	0	1	1
Grand Total	47	17	23	3	12	11	57	26



Table 4-4: Crossing Point 3

	Survey 1 (24.08.21)		Survey 2 (02	Survey 2 (02.06.21)		Survey 3 (09.06.21)		Survey 4 (06.07.21)	
Species	Total Passes	Heard not seen	Total Passes	Heard not seen	Total Passes	Heard not seen	Total Passes	Heard not seen	
Barbastelle	10	0	4	0	11	3	29	3	
Big bat	7	0	2	0	0	0	0	0	
Serotine	4	0	0	0	0	0	0	0	
Myotis sp.	10	1	5	0	2	1	1	0	
Noctule	6	0	0	0	2	1	1	0	
Nyctalus sp.	13	0	0	0	0	0	0	0	
Common pipistrelle	27	13	37	0	9	5	16	0	
Soprano pipistrelle	9	3	35	0	10	0	62	10	
Brown long-eared bat	11	0	13	0	0	0	0	0	
Plecotus sp.	0	0	0	0	0	0	5	2	
Grand Total	97	17	96	0	34	10	114	15	



Table 4-5: Crossing Point 4

	Survey 1 (18.05.21)		Survey 2 (09	9.06.21)	Survey 3 (06	5.07.21)	Survey 4 (25.08.21)	
Species	Total Passes	Heard not seen	Total Passes	Heard not seen	Total Passes	Heard not seen	Total Passes	Heard not seen
Barbastelle	39	0	13	4	23	0	8	0
Myotis sp.	18	0	1	1	1	0	1	0
Leisler's bat	5	0	0	0	0	0	0	0
Noctule	8	0	1	1	6	0	16	0
Nyctalus sp.	3	0	0	0	0	0	10	0
Nathusius' pipistrelle	3	0	0	0	0	0	1	0
Common pipistrelle	53	0	21	10	76	5	58	0
Soprano pipistrelle	41	0	13	2	63	6	25	0
Pipistrellus sp.	1	0	1	0	0	0	0	0
Serotine	0	0	1	1	1	0	3	0
Brown long-eared bat	0	0	2	1	0	0	7	0
Plecotus sp.	0	0	0	0	1	0	0	0
Big bat	0	0	0	0	0	0	9	0
Possible Nyctalus sp.	0	0	0	0	0	0	2	0
Grand Total	171	0	53	20	171	11	140	0



Table 4-6: Crossing Point 5

	Survey 1 (18.05.21)		Survey 2 (08	Survey 2 (08.06.21)		7.07.21)	Survey 4 (25.08.21)	
Species	Total Passes	Heard not seen	Total Passes	Heard not seen	Total Passes	Heard not seen	Total Passes	Heard not seen
Noctule	1	0	1	0	0	0	12	5
Nyctalus sp.	14	3	0	0	0	0	0	0
Common pipistrelle	21	5	5	3	3	2	78	4
Soprano pipistrelle	27	5	31	10	5	4	29	8
Barbastelle	0	0	4	1	0	0	8	0
Big bat	0	0	0	0	0	0	2	0
Serotine	0	0	0	0	0	0	2	0
Brown long-eared bat	0	0	0	0	0	0	8	1
Grand Total	63	13	41	14	8	6	139	18



Table 4-7: Crossing Point 8

	Survey 1 (27.04.21)		Survey 2 (21	Survey 2 (21.06.21)		7.07.21)	Survey 4 (26.08.21)	
Species	Total Passes	Heard not seen	Total Passes	Heard not seen	Total Passes	Heard not seen	Total Passes	Heard not seen
Myotis sp.	2	1	0	0	1	0	6	0
Noctule	2	2	0	0	2	0	1	1
Nyctalus sp.	5	2	0	0	0	0	0	0
Common pipistrelle	16	5	6	6	17	5	68	9
Soprano pipistrelle	3	0	8	3	23	4	28	4
Big bat	2	0	1	0	0	0	0	0
Possible Nyctalus sp.	2	0	0	0	0	0	0	0
Pipistrellus sp.	0	0	1	1	0	0	0	0
Probable Myotis sp.	0	0	1	0	0	0	0	0
Barbastelle	0	0	0	0	3	1	11	0
Serotine	0	0	0	0	0	0	1	0
Grand Total	32	10	17	11	46	10	115	14



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4.3. Sizewell Link Road

Table 4-8: Crossing Point 11

	Survey 1 (19	9.05.21)	Survey 2 (22	2.06.21)	Survey 3 (19	9.07.21)	Survey 4 (06.09.21)	
Species	Total Passes	Heard not seen	Total Passes	Heard not seen	Total Passes	Heard not seen	Total Passes	Heard not seen
Barbastelle	0	0	5	3	0	0	1	0
Myotis sp.	0	0	1	1	0	0	0	0
Common pipistrelle	0	0	13	1	44	4	91	6
Soprano pipistrelle	0	0	19	3	31	2	12	2
Probable Myotis sp.	0	0	1	0	0	0	0	0
Big bat	0	0	0	0	1	0	1	0
Serotine	0	0	0	0	0	0	1	0
Nyctalus sp.	0	0	0	0	0	0	2	0
Grand Total	0	0	39	8	76	6	108	8



Table 4-9: Crossing Point 12

	Survey 1 (1	9.05.21)	Survey 2 (2	2.06.21)	Survey 3 (2	0.07.21)	Survey 4 (0	7.09.21)
Species	Total Passes	Heard not seen	Total Passes	Heard not seen	Total Passes	Heard not seen	Total Passes	Heard not seen
Barbastelle	1	0	9	3	0	0	2	1
Possible Common pipistrelle	2	0	0	0	0	0	0	0
Myotis sp.	0	0	2	0	0	0	0	0
Common pipistrelle	0	0	7	2	18	14	14	10
Soprano pipistrelle	0	0	3	2	2	0	7	4
Brown long-eared bat	0	0	1	1	0	0	0	0
Possible Barbastelle	0	0	4	4	0	0	1	0
Probable Myotis sp.	0	0	1	0	1	0	0	0
Probable Brown long-eared bat	0	0	1	0	0	0	0	0
Noctule	0	0	0	0	1	1	0	0
Grand Total	3	0	28	12	22	15	24	15



Table 4-10: Crossing Point 13

	Survey 1 (03.06.21)		Survey 2 (10.06.21)			
Species	Total Passes	Heard not seen	Total Passes	Heard not seen		
Barbastelle	13	1	1	0		
Myotis sp.	1	0	1	0		
Common pipistrelle	39	1	39	5		
Soprano pipistrelle	14	0	38	6		
Brown long-eared bat	2	0	0	0		
Serotine	0	0	3	0		
Nyctalus sp.	0	0	2	0		
Grand Total	69	2	84	11		



Table 4-11: Crossing Point 20

	Survey 1 (28	3.04.21)	Survey 2 (24	1.06.21)	Survey 3 (22	2.07.21)	Survey 4 (08	3.09.21)
Species	Total Passes	Heard not seen	Total Passes	Heard not seen	Total Passes	Heard not seen	Total Passes	Heard not seen
Barbastelle	0	0	3	0	11	0	3	1
Bat sp.	0	0	1	0	0	0	0	0
Big bat	0	0	2	1	0	0	0	0
Common pipistrelle	0	0	145	0	10	8	16	3
Myotis sp.	0	0	4	0	3	2	0	0
Nathusius' pipistrelle	0	0	16	0	0	0	0	0
Noctule	0	0	8	2	0	0	1	0
Soprano pipistrelle	0	0	17	0	4	1	2	2
Plecotus/Myotis sp.	0	0	0	0	6	1	0	0
Grand Total	0	0	196	3	34	12	22	6



Table 4-12: Crossing Point 21

	Survey 1 (28.04.	21)	Survey 2 (24.06.	21)	Survey 3 (23.08.	Survey 3 (23.08.21)		
Species	Total Passes	Heard not seen	Total Passes	Heard not seen	Total Passes	Heard not seen		
Myotis sp.	2	2	10	0	1	0		
Nyctalus sp.	1	0	0	0	0	0		
Common Pipistrelle	1	1	80	21	12	4		
Soprano Pipistrelle	3	2	12	5	14	6		
Noctule	0	0	3	2	1	0		
Possible Serotine	0	0	1	0	0	0		
Barbastelle	0	0	0	0	1	0		
Brown Long-eared bat	0	0	0	0	2	0		
Serotine	0	0	0	0	1	0		
Grand Total	7	5	106	28	32	10		



Table 4-13: Crossing Point 22

	Survey 1 (07.06.	21)	Survey 2 (01.07.	21)	Survey 3 (23.08.2	21)
Species	Total Passes	Heard not seen	Total Passes	Heard not seen	Total Passes	Heard not seen
Barbastelle	2	1	15	6	1	1
Big bat	1	0	0	0	0	0
Myotis sp.	3	1	1	0	2	1
Noctule	1	0	3	1	0	0
Common pipistrelle	17	10	32	6	36	19
Soprano pipistrelle	21	9	41	3	24	7
Plecotus sp.	0	0	2	0	0	0
Nathusius' pipistrelle	0	0	1	0	0	0
Nyctalus sp.	0	0	4	1	0	0
Serotine	0	0	1	0	2	1
Grand Total	45	21	100	17	65	29



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4.4. Main Development Site

Table 4-14: Crossing Point 24

	Survey 1 (08	3.06.21)	Survey 2 (23	3.06.21)	Survey 3 (26	5.07.21)	Survey 4 (08	Survey 4 (08.09.21)		
Species	Total Passes	Heard not seen	Total Passes	Heard not seen	Total Passes	Heard not seen	Total Passes	Heard not seen		
Nyctalus sp.	13	0	0	0	2	0	10	1		
Brown long-eared bat	1	0	0	0	0	0	0	0		
Common Pipistrelle	16	5	1	0	46	1	4	4		
Soprano Pipistrelle	13	5	0	0	19	0	5	4		
Barbastelle	0	0	0	0	1	0	0	0		
Big bat	0	0	0	0	3	0	0	0		
Serotine	5	0	0	0	1	0	1	1		
Noctule	0	0	0	0	9	2	2	1		
Nathusius' pipistrelle	0	0	0	0	0	0	2	2		
Grand Total	48	10	1	0	81	3	24	13		



Table 4-15: Crossing Point 25

	Survey 1 (29.06.	21)	Survey 2 (27.07.	21)	Survey 3 (13.09.	.21)
Species	Total Passes	Heard not seen	Total Passes	Heard not seen	Total Passes	Heard not seen
Barbastelle	4	0	2	0	7	0
Brown long-eared bat	1	0	0	0	0	0
Common pipistrelle	34	9	22	7	39	3
Myotis sp.	9	8	3	1	12	0
Serotine	2	0	5	0	8	1
Soprano pipistrelle	42	7	7	2	28	2
Big bat	0	0	12	2	3	0
Noctule	0	0	5	3	3	1
Nyctalus sp.	0	0	6	2	9	1
Long-eared sp.	0	0	0	0	2	0
Probable barbastelle	0	0	0	0	1	0
Probable long-eared sp.	0	0	0	0	4	0
Grand Total	92	24	62	17	116	8



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5. DISCUSSION

- 5.1.1. The crossing points surveys confirmed the presence of Barbastelle and Myotis bat species within each of the sites. Barbastelle are listed as Annex II species of the Habitats Directive and are categorised as Near Threatened¹ on the International Union for the Conservation of Nature Red List of Threatened Species. Both species are regarded a Rare in the United Kingdom². Their presence within the main development site and the two village bypass and Sizewell link road sites is of high conservation importance.
- 5.1.2. The data from the crossing point surveys suggest that a broad assemblage of bat species is present within the main development site and the two village bypass and Sizewell link road sites Barbastelle was recorded at all crossing point locations that were taken forward for a full six surveys. Myotis species were recorded at the majority of the surveyed crossing points.
- 5.1.3. At the locations where the full six surveys have been conducted (exceeding the threshold for continued surveying), this has informed the proposals to create bat 'hop-overs' in these locations, as detailed in the Two Village Bypass Landscape and Ecology Management Plan (LEMP) [REP8-074] and Sizewell Link Road LEMP [REP8-078]. These will be created using retained mature vegetation and / or transplanted / planted specimen trees. This approach has the best opportunity of permitting safe passage across the road for bats at the earliest opportunity. These 'hop-overs' will be linked into existing retained and newly proposed hedgerows and new woodlands. An image of an indicative 'hop-over' is presented as **Image 1**. These hopovers are secured through the site Requirement 22A.

¹ Piraccini, R. (2016). Barbastella barbastellus. The IUCN Red List of Threatened Species 2016: e.T2553A22029285. http://dx.doi.org/10.2305/IUCN.UK.2016-2.RLTS.T2553A22029285.en. Downloaded on 19 September 2019 and Paunović, M. 2016. Myotis bechsteinii. The IUCN Red List of Threatened Species 2016: e.T14123A22053752.

² Bat Conservation trust (2010) Species Factsheet http://www.bats.org.uk/data/files/barbastelle_11.02.13.pdf and barbastelle.indd (bats.org.uk). Downloaded on 19/09/21





Image 1: An example of a hop-over formed of tall vegetation across the existing B1122

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APPENDIX A: CROSSING POINT SURVEY INFORMATION (SURVEYS AT LOCATIONS CARRIED FORWARDS FOR THE FULL 6 SURVEYS)

Table 5-1: Crossing Point Survey Information

Scheme	Crossing Point	Survey Date	Dusk or Dawn Survey	Sunset / Sunrise Time	Survey Start Time	Survey End Time	Survey Duration	Weather Information: Temperature start-end (°C) / Wind (Beaufort scale) / Cloud cover (Oktas) / Precipitation
		17/05/2021	Dusk	21:17	21:00	22:45	01:40	12-10 / Bft 2 / 2/8 Okt / light rain at sunset becoming gradually heavier.
	CP1	08/06/2021	Dusk	21:12	20:50	22:45	01:55	17-14 / Bft 2 / 1/8 Okt / dry throughout
Bypass		05/07/2021	Dusk	21:16	21:01	22:37 ³	01:36	16-13 / Bft 4 / 8/8 Okt / heavy rain at end of survey
Byg		24/08/2021	Dusk	20:00	19:45	21:30	01:45	18-16 / Bft 2 / 8/8 Okt / dry throughout.
Two-Village		17/05/2021	Dusk	20:45	20:40	22:44	02:04	9-9 / Bft 2 / 7/8 Okt / intermittent, light rain showers.
V-0/	OD0	09/06/2021	Dusk	21:13	20:57	22:45	01:48	20-17 / Bft 1 / 0/8 Okt / dry throughout
Ě	CP2	05/07/2021	Dusk	21:16	21:24	22:45	01:21	16-13 / Bft 4 / 8/8 Okt / heavy rain at end of survey
		24/08/2021	Dusk	20:00	19:45	21:00	01:15	18-16 / Bft 2 / 8/8 Okt / dry throughout.
	CP3	02/06/2021	Dusk	21:16	21:01	22:49 ⁴	01:48	18-16 / Bft 3 / 0/8 Okt / dry throughout

³ Survey called off early because of heavy rain

⁴ Time estimated



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Scheme	Crossing Point	Survey Date	Dusk or Dawn Survey	Sunset / Sunrise Time	Survey Start Time	Survey End Time	Survey Duration	Weather Information: Temperature start-end (°C) / Wind (Beaufort scale) / Cloud cover (Oktas) / Precipitation
		09/06/2021	Dusk	21:13	20:50	22:43	01:53	20-17 / Bft 1 / 0/8 Okt / dry throughout
		06/07/2021	Dusk	21:16	21:00	22:49	01:49	17-15 / Bft 2 / 5/8 Okt / dry throughout
		24/08/2021	Dusk	20:00	19:45	21:30	01:45	18-16 / Bft 2 / 8/8 Okt / dry throughout.
		18/05/2021	Dusk	20:46	20:48	22:48	02:00	11-9 / Bft 1 / 6/8 Okt / dry throughout
	OD4	09/06/2021	Dusk	21:13	20:53	22:45	01:52	20-17 / Bft 1 / 0/8 Okt / dry throughout
	CP4	06/07/2021	Dusk	21:16	21:01	23:00	01:59	17-15 / Bft 2 / 5/8 Okt / dry throughout
		25/08/2021	Dusk	19:58	19:43	21:28	01:45	18-16 / Bft 2 / 8/8 Okt / dry throughout
		18/05/2021	Dusk	20:46	20:30	22:49	02:19	11-9 / Bft 1 / 6/8 Okt / dry throughout
	ODE	08/06/2021	Dawn	04:35	03:05	04:35	01:30	12-12 / Bft 0 / 1/8 Okt / dry throughout
	CP5	07/07/2021	Dawn	04:42	03:06	04:57	01:51	14-14 / Bft 5 / 1/8 Okt / dry throughout
		25/08/2021	Dusk	19:58	19:43	21:28	01:45	18-16 / Bft 2 / 8/8 Okt / dry throughout
		27/04/2021	Dusk	20:12	19:56	22:12	02:16	9-8 / Bft 2 / 2/8 Okt / dry throughout
	CP8	21/06/2021	Dusk	21:19	21:04	23:05	02:01	15-14 / Bft 2 / 8/8 Okt / drizzle for 5 minutes at start



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Scheme	Crossing Point	Survey Date	Dusk or Dawn Survey	Sunset / Sunrise Time	Survey Start Time	Survey End Time	Survey Duration	Weather Information: Temperature start-end (°C) / Wind (Beaufort scale) / Cloud cover (Oktas) / Precipitation
		07/07/2021	Dusk	21:15	21:05	22:46	01:41	17-16 / Bft 2 / 1/8 Okt / dry throughout
		26/08/2021	Dusk	19:56	19:41	21:26	01:45	16-15 / Bft 1 / 4/8 Okt / light rain at 20:10
		19/05/2021	Dawn	04:52	03:10	05:07 ⁵	01:57	8-8 / Bft 1 / 1/8 Okt / light rain towards end
	0044	22/06/2021	Dusk	21:19	21:06	22:53	01:47	13-12 / Bft 2 / 2/8 Okt / dry throughout
	CP11	19/07/2021	Dusk	21:05	20:50	22:35	01:45	18-16 / Bft 0 / 0/8 Okt / dry throughout
oad		06/09/2021	Dusk	19:30	19:20	21:00	01:40	20-18 / Bft 1 / 1/8 Okt / dry throughout
Sizewell Link Road		19/05/2021	Dawn	04:52	02:52	04:52	02:00	8-8 / Bft 1 / 1/8 Okt / dry throughout
well L	0040	22/06/2021	Dusk	21:19	21:04	22:50	01:46	13-12 / Bft 2 / 2/8 Okt / dry throughout
Size	CP12	20/07/2021	Dusk	21:03	20:48	22:33	01:45	19-17 / Bft 1 / 1/8 Okt / dry throughout
		07/09/2021	Dusk	19:28	19:13	20:58	01:45	22-21 / Bft 0 / 1/8 Okt / dry throughout
		03/06/2021	Dusk	21:07	20:52	22:37	01:45	20-17 / Bft 0 / 1/8 Okt / dry throughout
	CP13	10/06/2021	Dusk	21:14	20:58	22:49	01:51	17-16 / Bft 1 / 1/8 Okt / dry throughout

⁵ Time estimated



NOT PROTECTIVELY MARKED

Scheme	Crossing Point	Survey Date	Dusk or Dawn Survey	Sunset / Sunrise Time	Survey Start Time	Survey End Time	Survey Duration	Weather Information: Temperature start-end (°C) / Wind (Beaufort scale) / Cloud cover (Oktas) / Precipitation
		28/04/2021	Dusk	20:13	19:55	21:43	01:48	8-6 / Bft 5 / 8/8 Okt / dry throughout
	ODOO	24/06/2021	Dusk	21:19	21:10	22:55	01:45	16-16 / Bft 2 / 7/8 Okt / rain towards end of survey
	CP20	22/07/2021	Dusk	21:00	20:45	22:30	01:45	20-18 / Bft 0 / 0/8 Okt / dry throughout
		08/09/2021	Dawn	06:17	04:50	06:17	01:27	15-15 / Bft 1 / 0/8 Okt / dry throughout
		28/04/2021	Dusk	20:13	19:59	22:14	02:15	8-6 / Bft 5 / 8/8 Okt / dry throughout
	CP21	24/06/2021	Dusk	21:19	21:04	22:48	01:44	16-16 / Bft 2 / 7/8 Okt / rain between 21:23-21:29
		23/08/2021	Dusk	20:00	19:45	21:30	01:45	17-16 / Bft 3 / 2/8 Okt / dry throughout
		07/06/2021	Dusk	21:12	20:50	22:43	01:53	16-15 / Bft 1 / 3/8 Okt / dry throughout
	CP22	01/07/2021	Dusk	21:18	21:10	23:11	02:01	16-14 / Bft 0 / 8/8 Okt / dry throughout
		23/08/2021	Dusk	20:00	19:47	21:32	01:45	17-16 / Bft 3 / 2/8 Okt / dry throughout
e e		08/06/2021	Dusk	21:12	20:57	22:45	01:48	17-14 / Bft 2 / 1/8 Okt / dry throughout
Main Developm ent Site	CP24	24/06/2021	Dawn	04:33	03:03	04:48	01:45	9-9 / Bft 1 / 3/8 Okt / dry throughout
De De		26/07/2021	Dusk	20:55	20:40	22:25	01:45	19-17 / Bft 2 / 5/8 Okt / dry throughout

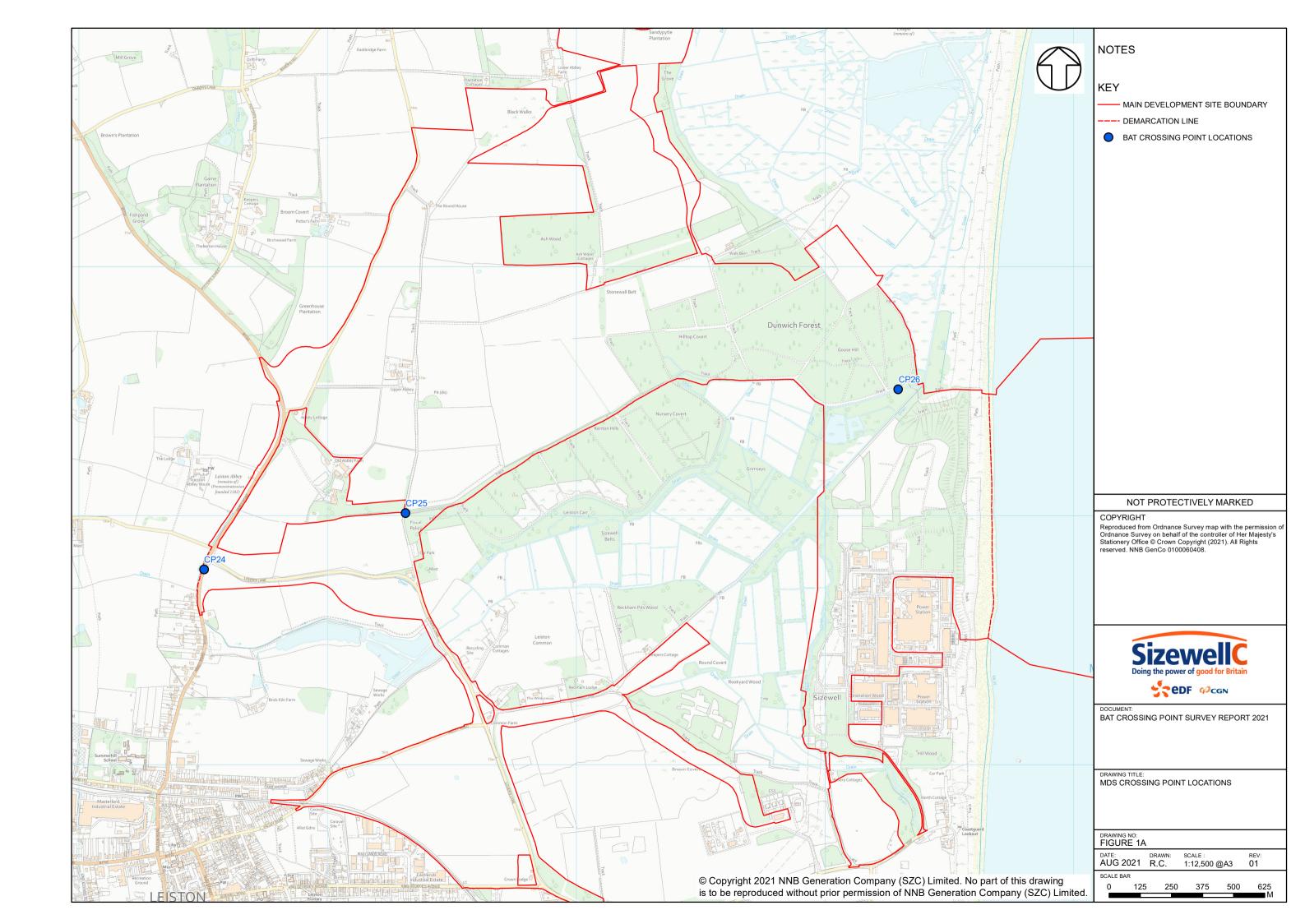


Scheme	Crossing Point	Survey Date	Dusk or Dawn Survey	Sunset / Sunrise Time	Survey Start Time	Survey End Time	Survey Duration	Weather Information: Temperature start-end (°C) / Wind (Beaufort scale) / Cloud cover (Oktas) / Precipitation
		08/09/2021	Dusk	19:26	19:11	20:56	01:45	22-21 / Bft 1 / 1/8 Okt / dry throughout
		29/06/2021	Dawn	04:36	03:06	04:36	01:30	14-12 / Bft 2 / 8/8 Okt / dry throughout
	CP25	27/07/2021	Dusk	20:53	20:38	22:23	01:45	19-17 / Bft 3 / 7/8 Okt / light rain during second half of survey
		13/09/2021	Dusk	19:14	18:59	20:44	01:45	17-17 / Bft 1 / 4/8 Okt / dry throughout



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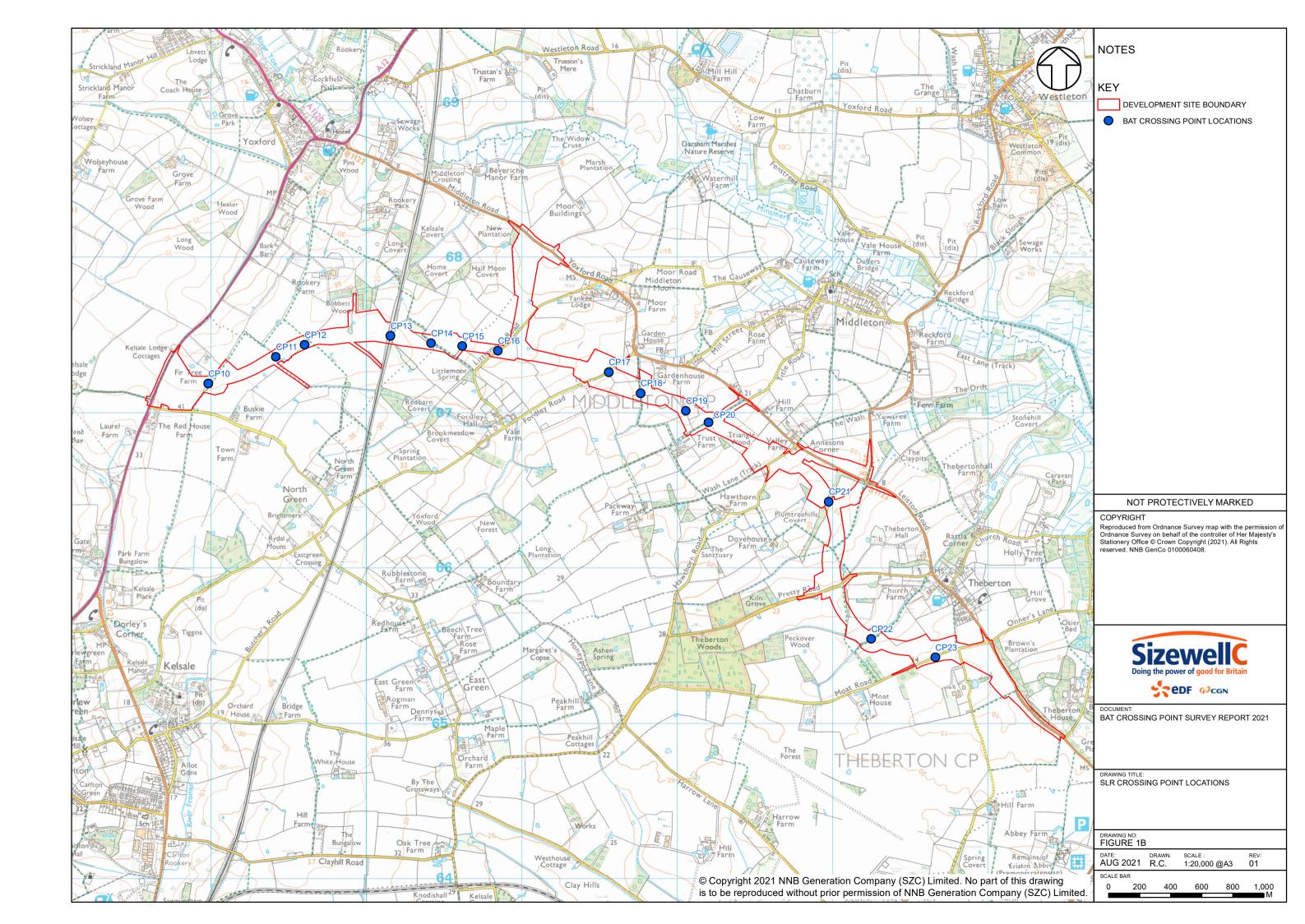
Figure 1A - BAT CROSSING POINT SURVEY REPORT 2021 - Main Development Site Crossing Point Locations





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Figure 1B - BAT CROSSING POINT SURVEY REPORT 2021 - Sizewell Link Road Crossing Point Locations.





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Figure 1C - BAT CROSSING POINT SURVEY REPORT 2021 Two Village Bypass Crossing Point Locations

