A46 Coventry Junctions (Walsgrave) Scheme number: TR010066

6.3 Environmental Statement Appendices

Appendix 8.8 Bat Hibernation Report

APFP Regulations 5(2)(a)

Planning Act 2008

Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009

Volume 6

November 2024

Infrastructure Planning

Planning Act 2008

The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009

A46 Coventry Junctions (Walsgrave)
Development Consent Order 202[x]

ENVIRONMENTAL STATEMENT APPENDICES
Appendix 8.8 Bat Hibernation Report

Regulation Number	Regulation 5(2)(a)
Planning Inspectorate Scheme Reference	TR010066
Application Document Reference	TR010066/APP/6.3
Author	A46 Coventry Junctions (Walsgrave) Project Team, National Highways

Version	Date	Status of Version
Rev 0	November 2024	Application Issue

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1. Introduction

1.1. Scheme overview

1.1.1. The A46 is part of the strategic road network forming a significant trade and export route between the east and west Midlands. As part of the Government's Road Investment Strategy (RIS2) 2020-2025, the A46 Walsgrave junction is being improved with the realignment of the carriageway and a new grade separated junction (the Scheme). This aims to increase the roads capacity to cater for future developments across the region and promote safety by separating local and long-distance traffic and reducing congestion.

1.1.2. Sweco were commissioned by Octavius Infrastructure on behalf of the Applicant to undertake bat roost hibernation surveys of trees within the Scheme.

1.2. Site description

1.2.1. The Scheme comprises an area of approximately 25ha of natural habitat located to the east of Coventry (Figure 1, Annex A).

1.2.2. The habitats within the Scheme comprise woodland, scrub, arable farmland and hedgerows.

1.3. Previous surveys

1.3.1. Surveys previously undertaken in relation to bats and reported within the option selection stage Environmental Assessment Report (EAR) (National Highways, 2022) include a desk study undertaken in 2020 which identified no Special Areas of Conservation designated for bats within 30km of the Scheme. As part of the desk study, bat records from within 2km of the Scheme were provided by Warwickshire Biological Records Centre. Records were returned for the following winter tree-dwelling species[1]:

- Common pipistrelle *Pipistrellus pipistrellus*
- Soprano pipistrelle *Pipistrellus pygmaeus*
- Nathusius' pipistrelle *Pipistrellus nathusii*
- Brown long-eared bat *Plecotus auritus*
- Natterer's bat *Myotis nattereri*
- Noctule bat *Nyctalus noctula*

[1] Species that have been found in tree roosts in January and February (Bat Tree Habitat Key, 2018)

1.3.2. Ground-level preliminary roost assessments (PRAs) of trees within the Scheme were undertaken in March 2022. In June 2022, tree climbing inspections were undertaken on trees identified as having potential roost features (PRF) of moderate or high bat roost potential (National Highways, 2022). The surveys identified three trees as having hibernation potential and recommended further surveys.

1.4. Purpose of report

1.4.1. This report has been prepared by Sweco on behalf of the Applicant and will be used to inform the Environmental Statement (ES) at the preliminary design stage for the A46 Walsgrave Junction.

1.4.2. All bats are protected in the UK under the Conservation of Habitats and Species Regulations 2017 (as amended), as European protected species (EPS), and Schedule 5 of the Wildlife & Countryside Act 1981 (as amended).

1.4.3. The report details the results of bat hibernation roost surveys of trees, undertaken in January and February 2024.

1.5. Limitations

1.5.1. It should be noted that because tree-roosting bats move between roosts, it is very difficult to establish absence. It can also be difficult to find evidence of bats, such as droppings, because they do not persist in trees in the same way as they do in buildings, and decay much quicker.

1.6. Surveyors

1.6.1. Surveys were undertaken by Natural England WML-A34 - Level 2 (Class Licence) ecologists, [redacted] (Class Licence Registration Number: 2015-15201-CLS-CLS) and [redacted] (Class Licence Registration Number: 2017-27699-CLS-CLS).

2. Methodology

2.1. Tree Climbing Inspections

2.1.1. Surveys were undertaken in accordance with guidance set out in *Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th Edition)* (Collins, 2023) and *Bat Roosts in Trees* (Bat Tree Habitat Key, 2018).

2.1.2. Tree climbing inspections were undertaken on trees identified as containing features which could support potential hibernation roosts (T22, T114 and T152), during summer tree climbing inspections (National Highways, 2022). The surveys were undertaken on 30 January and 15 February 2024 by Tailored Ecology Limited. Overnight temperatures preceding the surveys were 7°C and 12°C respectively. The locations of the trees are shown in Figure 1 (Annex A).

2.1.3. All PRFs were inspected by the climber using an endoscope. Further assessment of the suitability of the potential roosting opportunities was also undertaken to allow for any changes to the condition of PRF since the summer survey in 2022.

3. Results

3.1. Tree climbing inspections

3.1.1. The survey found no hibernating bats, or evidence of, in trees T22, T114 or T152.

3.1.2. The PRFs recorded were synonymous with those recorded during summer surveys in 2022 (National Highways, 2022). The trees continue to have potential to support hibernating bats.

3.1.3. The information recorded during the survey, including a description of each PRF, is given in Annex B. Photographs of the trees inspected for hibernating bats are shown in Annex C.

4. Discussion and recommendations

4.1.1. Although trees T22, T114 and T152 were assessed as being suitable for both summer and winter roosting bats, no bats (or evidence of) were identified during surveys undertaken in 2022 and 2024. Given the trees contain suitable features for roosting bats and that bats regularly switch tree roosts throughout the season (including winter), it is difficult to conclude absence of roosting bats where roost potential exists. Therefore, it is recommended that the following precautionary approach is taken, should these trees be felled.

4.2. Tree felling precautionary approach

4.2.1. Where trees T22, T114 and T152 cannot be retained, it is recommended that they are felled between September and October, to avoid hibernation and maternity seasons, when bats are most vulnerable to disturbance.

4.2.2. A bat licensed ecologist should undertake a full check of the trees and all PRFs prior to felling (or partial felling) via aerial assessment (using ladders, climbing techniques or a mobile elevating work platform (MEWP) and endoscope) to ensure that bats are not present. Felling activities should then take place immediately after or at least on the same day.

4.2.3. If any bats or new evidence are discovered prior to felling or whilst felling is in progress, work should be paused immediately, and a licensed bat ecologist consulted for guidance.

4.2.4. Construction is programmed to commence in September 2026. It is recommended that update surveys are undertaken in January and February 2026.

5. References

Bat Tree Habitat Key. (2018). Bat Roosts in Trees: A Guide to Identification and Assessment for Tree-Care and Ecology Professionals. Pelagic Publishing, Exeter.

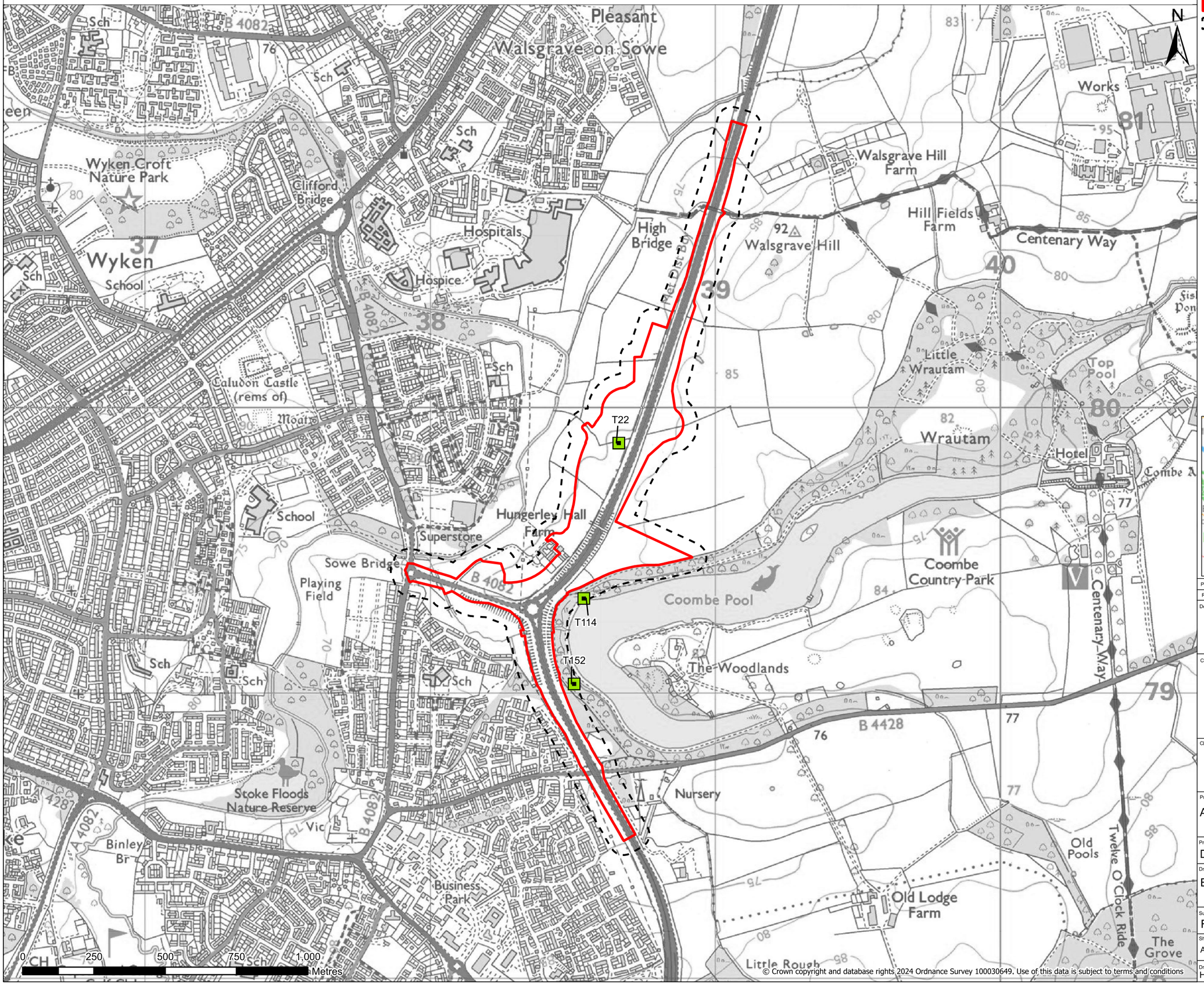
CIEEM (2019). Advice Note on the Lifespan of Ecological Reports and Surveys. Available at https://cieem.net/wp-content/uploads/2019/04/Advice-Note.pdf. (Accessed March 2024).

Collins, J. (ed). (2023). Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th Edition). The Bat Conservation Trust, London.

National Highways. (2022). A46 Coventry Junctions (Walsgrave): Bat Roost Report.

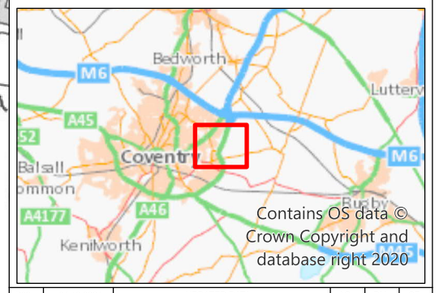
Annex A.

Location of surveyed trees



Legend

- Order Limits
- Order Limits - 50m Buffer
- Surveyed Trees



REV	DATE	REVISION NOTE	ORG	CHK'D	APP
P02	04.10.2024	UPDATED DATA	AC	BM	CF

Designer

Contractor

Client

national highways

Project Title

A46 COVENTRY JUNCTIONS (WALSGRAVE)

Project Stage

DCO APPLICATION

Drawing Title

BAT HIBERNATION SURVEYS

Suitability

FOR INFORMATION

Sheet Size	Scale	Status	Revision
A3	1:12,500	S3	P02

Drawing Number

HE604820-OIL-EBD-00-DR-LB-30042

Annex B.

Hibernation bat survey results

Table 1.1: results of hibernation inspections of trees (undertaken on 30 January and 15 February 2024)

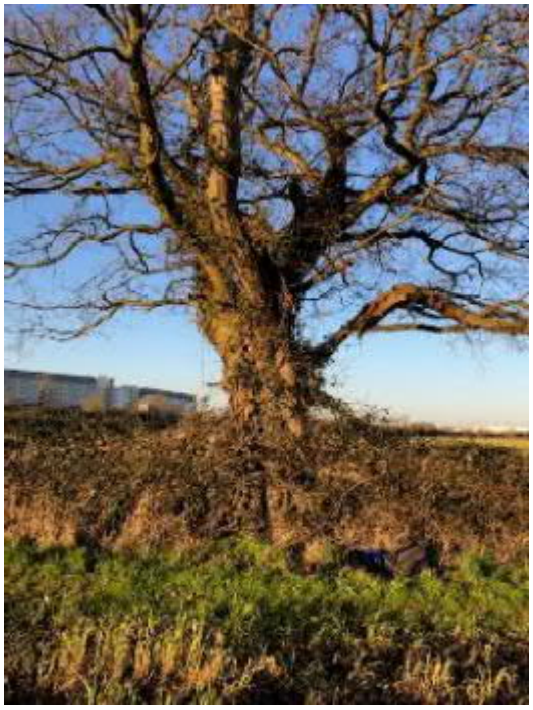
	Tree information							PRF location						Entrance size (cm)		Internal dimensions (cm)			
Surveyor	Tree ref.	Species	DBH (cm)	Height (m)	Status	Grid ref.	Overall hibernation suitability	PRF ref.	PRF location	PRF type	PRF height (m)	PRF faces	Multiple entrances?	PRF width	PRF height	PRF width	PRF height	PRF depth	Description
[redacted]	22	Oak	100	8	Alive	SP38664 79876	High	A	limb	TO	2.5	E	No	7	5	8	4	40	Wedge shaped with multiple chambers
								B	stem	LS	3	N	Yes	20	3	25	3	2	Inner conditions variable, some clean areas, others with dust & debris
								C	stem	LS	1	N	Yes	40	4	70	40	40	Large open cavity at base of trunk, accessed by narrow fissures on exposed heartwood
[redacted]	114	Oak	112	18	Alive	SP38541 79331	High	A	stem	KH	3	S	No	3	4	10	8	6	
								B	limb	TO	3	SW	No	8	5	3	8	5	
								C	limb	W	4	W	No	10	4	50	4	8	Extends both down and up, mouse nest in lower section. Lower side of upper section has layer of dust but otherwise fissure is clean
								D	limb	LB	5	N	No	70	3	70	3	10	
								E	limb	W	6	E	No	10	2	30	2	2	Goes up 30cm and down 15cm
								F	limb	C	6	E	No	15	4	60	2	4	Goes up 60cm with multiple chambers, complex difficult to fully assess
[redacted]	152	Oak	110	17	Alive	SP38506 79032	High	A	stem	KH	10	W	No	20	15	26	20	0	Domed cavity, 25x25cm, tube extending up 60cm is 15cm wide, birds nest present with plenty of feathers

								B	stem	KH	12	N	No	5	7	25	20	70	Extends down 40cm to flat base with bird's nest in base, also has a cavity extending up 25cm from right side of callus at opening of knothole
								C	stem	WP	13	SE	No	5	5	15	4	2	Chambers inside with multiple fissures that extend up and in
								D	stem	WP	14	NW	No	6	6	25	10	1	Domed top cavity in deadwood
								E	limb	W	11	NE	No	40	4	15	2	3	Several small internal chambers
								F	stem	KH	8	NW	No	20	20	20	25	0	Flat base with domed roof, bird feathers present but no obvious nest
								G	stem	LS	6	NW	No	35	5	25	10	20	
								H	stem	LS	2	W	Yes	5	5	1	1	2	Multiple crevices along lighting strike on main stem largest opening of 5x5cm, all with lots of debris
KEY																			
Surveyors: [redacted]																			
PRF type: TO = tear out; LS = lightning strike; KH = knothole; W = wound; LB = lifted bark; C = callus; WP = woodpecker hole																			
PRF faces: N = north; E = east; S = south; W = west																			

Annex C.

Hibernation bat survey photographs

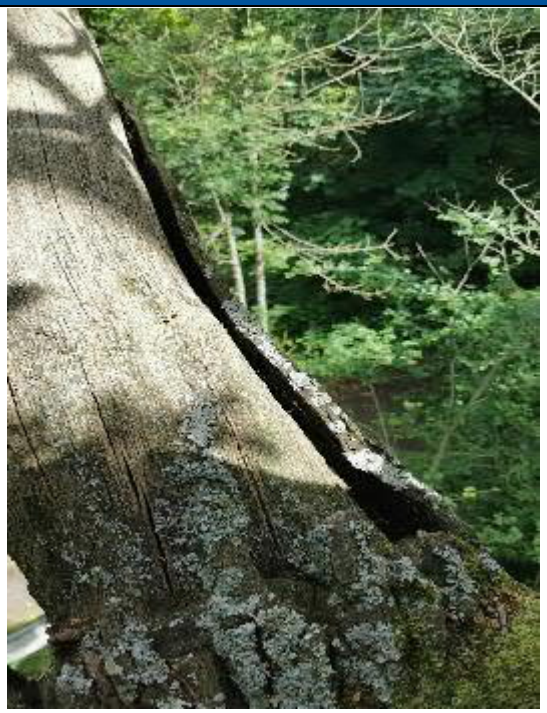
Table B.1: photographs of hibernation inspections of trees

Tree ref.	PRF ref.	Photograph
22	N/A	
	A	

Tree ref.	PRF ref.	Photograph
	B	
	C	

Tree ref.	PRF ref.	Photograph
114	N/A	
	A	

Tree ref.	PRF ref.	Photograph
	B	
	C	

Tree ref.	PRF ref.	Photograph
	D	
152	N/A	

Tree ref.	PRF ref.	Photograph
	A	
	B	

Tree ref.	PRF ref.	Photograph
	C	
	D	

Tree ref.	PRF ref.	Photograph
	E	
	F	

Tree ref.	PRF ref.	Photograph
	G	
	H