

K4 Keppel
Daedalus Park
Daedalus Drive
Lee on the Solent
PO13 9FX

14th May 2024

RE: Land Adjoining 4 Brookfields, Providence Hill, Bursledon

This letter report serves the purpose of supporting a planning application to Eastleigh Borough Council for the erection of a Residential Care Community, comprising a 69 bed care home (Use Class C2) and 5 x close care cottages (Use Class C2) with associated access, internal access roads, parking, landscaping and infrastructure. Ecosupport Ltd. were commissioned by Colten Care Ltd. to undertake an Ecological Impact Assessment of the site known as 'Land Adjoining 4 Brookfields, Providence Hill' in Bursledon (**Fig 1**) which identified a single Yew tree as supporting Potential Roosting Features (PRFs) and requiring further inspection. This letter details the results of the PRF Inspection Survey and outlines the necessary mitigation measures required to avoid adverse impacts to roosting bats.

Figure 1. Redline boundary of the site (Google Satellite, 2024).



Methodology

PRF Inspection Survey

A PRF Inspection Survey of all PRFs present on the single Yew tree to be affected by the proposed works was undertaken by Louise Davies on the 2nd May 2024 under class level 2 survey licence number (2015-13366-CLS-CLS). This followed BCT (Collins (ed) 2023) best practice survey guidelines which includes recording the following information:

- the diameter of the stem or limb where the PRF is;
- whether there are multiple entrances to the PRF;
- the PRF entrance width;
- the internal height, width and depth of the PRF;
- the substrate within the PRF;
- the PRF apex shape;
- whether the PRF is dry, damp or wet;
- whether any competitors are present;
- whether bats are absent or present;
- whether droppings are absent or present;
- if evidence of bats is lacking; if present – bat species, number of bats, whether bats are awake or torpid, location of bats, distance of bats from entrance; and m any odour.

Results

The single Yew tree (T22 as per accompanying Tree Protection Plan (ACD Environmental, 2024)) located along the northern boundary of the site was identified as supporting several PRFs (**Figs 2-3**). These were subject to a PRF inspection survey and classified according to **Table 1** with the results of the survey detailed in **Table 2** below.

Figure 2. View of the single Yew tree (T22) along the northern boundary of the site to be removed (taken May 2024).



Figure 3. View of PRFs A-C (top row, left to right) and D-E (bottom row, left to right) on the single Yew tree (taken May 2024).



Table 1. Categorisation of PRFs (from Table 6.2 (Collins (ed), 2023)).

Suitability	Description
PRF-I	PRF is only suitable for individual bats or very small numbers of bats either due to size or lack of suitable surrounding habitats.
PRF-M	PRF is suitable for multiple bats and may therefore be used by a maternity colony.

Table 2. Results of the PRF Inspection Survey carried out on the single Yew tree (PRF lettering is as per **Fig 3** above).

GROUNDSMAN*	SITE NAME			Providence Hill, Bursledon		
	DATE			2 nd May 2024		
	HABITAT (Phase 1 where known)			Line of Trees		
	O.S. GRID REFERENCE					
	Tag number			-		
	TREE SPECIES			Yew		
	TREE ALIVE/DEAD			Alive		
	DBH (Diameter at Breast Height)			Multi-stemmed		
	PRF on STEM/LIMB			A) Stem B) Stem C) Stem D) Stem E) Stem		
	PRF TYPE			A-D) Fluting E) Gap between two stems		
	DIRECTION PRF FACES			A) East B) East C) East D) East E) North-south		
2CLIMBER	MEASUREMENTS	PRF HEIGHT (m)		A) 1.87 B) 2.3 C) 1.9 D) 1.9 E) 1.0		
		DPH (Diameter at PRF Height)		A) 0.54 B) 1.1 C) 0.55 D) 0.1 E) 0.5		
		ENTRANCE	Height (cm)	A) 16 B) 10 C) 7 D) 7 E) 6		
			Width (cm)	A) 2.5 B) 6 C) 4.5 D) 12 E) 2		
		INTERNAL	Height (cm)	A) 16 B) 0.5 C) 5 D) 6 E) 6		
			Width (cm)	A) 3 B) 3 C) 0.5 D) 0.5 E) 1-2		
			Depth (cm)	A) 8 B) 9 C) 6 D) 0.5 E) 50		
	ROOSTING EVIDENCE 	Droppings: yes or no? (look in base)			No	
		Bats (look in cavity)	Species		N/A	
			Number of bats		N/A	
			Torpid or awake		N/A	
			Above/below/to side of entrance		N/A	
			Distance from entrance (cm)		N/A	
	INTERNAL CONDITIONS:	SMELL	None (A,B,C,D & E)	Pleasant	Not unpleasant	Unpleasant
		SUBSTRATE	Smooth	Bobbly	Bumpy	Rough (A,B,C,D & E)
			Clean** = (A)	Waxy	Blackened (D)	Polished
			Dirty** = (C)	Dusty	Debris (E)	Sludgy (B)
		HUMIDITY	Dry (C,E)	Damp (A,B,D)	Wet	Mildew
		APEX SHAPE	Dome	Spire (D)	Peak/wedge (A, B & C)	Flat
			Chambered		Tube (E)	
		COMPETITORS (invertebrates, birds, mammals?)		-		

Evaluation

PRFs A-D on the single Yew tree were considered to provide only very small areas of actual use to roosting bats and consequently were classified as PRF-Is (only suitable for individual / very small numbers of bats).

PRF E was initially thought to be a PRF-M however on closer inspection the feature was found to be particularly narrow

and relatively low to the ground with openings on both sides of the stem. Therefore, it was considered that only small numbers of bats could utilise PRF E and it was classified as a PRF-I.

Given that the Yew tree holds potential for roosting bats and is set to be removed, it is considered that the development works could result in the loss of bat roosts as well as the potential disturbance of, harm to or even death of bats. Therefore, in the absence of mitigation, an ***adverse impact is possible***.

Recommendations

Precautionary Working Method Statement

The single Yew tree was found to possess 5 No. PRF-Is with no evidence of roosting bats identified. Therefore, the following Precautionary Working Method Statement (PWMS) will be adhered to during any works to this tree.

- PRFs A-E will be inspected using an endoscope under the supervision of a suitably qualified ecologist immediately prior to tree felling/works.
- These works will be conducted between March and October (dependent on suitable weather conditions).
- If all features have been fully inspected and no evidence of bats is identified, the tree must be immediately felled.
- If any features cannot be fully inspected, the tree must be soft-felled (however it is expected that it will be possible to fully inspect all features given the small size of the tree).
- If evidence of bats is identified, further survey work will be required. In particular, if bats are found to be present, roost characterisation surveys will be carried out to inform a European Protected Species Licence and a full mitigation strategy will be required.

Conclusion

This letter outlines the results of the PRF inspection surveys carried out on the single Yew tree (T22) which is due to be removed as part of the development. 5 No. PRF-Is were identified with no evidence of roosting bats found. Consequently, a Precautionary Working Method Statement will need to be adhered to during any works to the Yew tree as detailed within this letter.

Kind regards,

Louise Davies BSc (Hons)



Project Ecologist