

**SOUTHLEIGH PARK HOUSE, EASTLEIGH ROAD,
HAVANT, HAMPSHIRE**

**UPDATING GROUND LEVEL TREE ASSESSMENT
AND BAT EMERGENCE/RE-ENTRY SURVEY
SUMMARY REPORT**

Final Document

December 2020

Preliminary Ecological Appraisals • Protected Species Surveys and Licensing • NVC • EcIA • HRA • Management Plans
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ECOSA Quality Assurance Record

This report has been produced in accordance with the CIEEM Guidelines for Ecological Report Writing 2017 (CIEEM, 2017). Survey work has been undertaken in line with references within CIEEM's Source of Survey Guidance (CIEEM, 2020).

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1.0 INTRODUCTION

1.1 Background

Ecological Survey & Assessment Limited (ECOSA) have been appointed by Bargate Homes to undertake an updating bat assessment of a number of trees identified with suitability for roosting bats during the Ecological Assessment undertaken by ECOSA¹ in 2018, for the proposed redevelopment works at Southleigh Park House, Eastleigh Road, Havant, Hampshire, PO9 2PE (hereafter referred to as the site) (Error! Reference source not found.).

Planning consent was granted for the proposed redevelopment of Southleigh Park House on 30th January 2019 under Havant Borough Council application reference number APP/17/00863, for the demolition of the 1983 office building and development of up to 70 residential units. As part of the Ecological Assessment undertaken by ECOSA in 2018, a number of trees were identified with suitability for roosting bats which would be affected by the proposals. Two mature pedunculate oak *Quercus robur* trees (within Group 15 and Group 17) located along the northern site boundary were assessed as having high suitability for potential roosting bats, whilst Tree 52 (T52), a mature Wellingtonia *Sequoiadendron giganteum*, was assessed as having moderate suitability for roosting bats.

These trees were subject to bat emergence/re-entry surveys during July and September 2016 in which no evidence of roosting bats were recorded.

Subsequently, in 2020 ECOSA were instructed to undertake an updating ground level tree assessment of trees to be affected by the proposals. Since the previous surveys undertaken in 2016 the proposals had been amended to provide a wider visibility splay at the site access and therefore two additional trees (T27 and T30), which now require removal, were scoped into the updating assessment.

Given the time that has elapsed since the surveys were undertaken, there is potential for bats to have colonised the potential roosting features identified during the intervening period and an updating bat emergence/re-entry surveys have been undertaken in 2020.

This report presents the results of the updating ground level tree assessment and bat emergence/re-entry surveys undertaken in 2020.

¹ ECOSA (2018). *Southleigh Park House, Havant – Ecological Assessment*. Ecological Survey and Assessment Limited. North Baddesley, Hampshire.

2.0 METHODOLOGY

2.1 Ground Level Tree Assessment Methodology

The ground level tree assessment was undertaken in line with current best practice guidelines (Collins, 2016). An assessment was made of the suitability of the new trees affected by the proposals (T27 and T30) (**Map 2**) to support roosting bats based on the presence of Potential Roost Features such as holes, cracks, splits, loose bark and ivy cladding. The assessment of the potential for trees on the site to support roosting bats is based on a four-point scale as detailed in **Table 1**.

Table 1: Criteria used to Assess Suitability of Roosting Habitat for Bats

Suitability	Description of roosting habitats
High	A structure or tree with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions and surrounding habitat.
Moderate	A structure of tree with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions and surrounding habitat but unlikely to support a roost of high conservation status.
Low	A structure with one or more potential roost sites that could be used by individual bats opportunistically/structure that does not provide enough space, shelter, protection, appropriate conditions and/or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats (i.e. unlikely to be suitable for maternity or hibernation). A tree of sufficient size and age to contain potential roost features but with none seen from the ground or features seen with only very limited roosting potential.
Negligible	Negligible habitat features on site likely to be used by roosting bats.

2.2 Ground Level Tree Assessment Details

The ground level tree assessment was undertaken by Georgina Timmis, Principal Ecologist of ECOSA (Natural England Class Licence 2016-26971-CLS-CLS) on 30th June 2020. During the survey the surveyor was equipped with binoculars, a high powered torch and a digital camera.

2.3 Ground Level Tree Assessment Limitations

There were no limitations to the ground level tree assessment or bat emergence/re-entry surveys.

2.4 Bat Emergence/Re-entry Survey Methodology

The bat emergence/re-entry survey was undertaken in line with current best practice guidelines (Collins, 2016). In accordance with guidelines for trees assessed as having suitability to support roosting bats a single dusk emergence survey and a single dawn re-entry survey was undertaken for trees assessed as having medium suitability for

roosting bats, and two dusk emergence surveys and a single dawn re-entry survey were undertaken for trees with high suitability to support roosting bats, in order to ascertain the presence/likely absence of roosting bats from within the trees. Where the presence of roosting bats is confirmed the data also allows for an assessment of the status of the roost present. The status of roosts (where appropriate) has been based on standard terminology as detailed in Error! Reference source not found..

The dusk emergence surveys commenced approximately 15 minutes before sunset until approximately two hours after sunset. The dawn re-entry surveys commenced approximately two hours before sunrise until just after sunrise.

2.5 Bat Emergence/Re-entry Survey Details

The surveys were carried out with up to six ECOSA surveyors, with two surveyors positioned around each high or moderate suitability tree to ensure sufficient coverage of the previously identified suitable roosting features (see **Map 2**). **Table 2** provides details of the bat survey visits.

Table 2: Bat Survey Details

Survey Date	Tree(s) Surveyed	Duration	Weather Conditions	Sunset / Sunrise Time
19 th August 2020	Grp 15, Grp 17, T52	20:01 - 22:16	Dry (recent rain), 100% cloud cover, 20°C, a light breeze	20:16
27 th August 2020	Grp 15, Grp 17	04:11 – 06:26	Dry and cool, 100% cloud cover, 15 - 14°C, still	06:11
7 th September 2020	Grp 15, Grp 17	19:20 – 21:15	Dry, 40% cloud cover, 18 - 17°C, a moderate breeze	19:35
11 th September 2020	T52	04:33 – 06:48	Dry and cool, 100% - 50% cloud cover, 13 - 10°C, a light breeze	06:33

During the bat surveys each surveyor recorded the time, species, location, and direction of flight for each bat encountered, with particular attention being paid to establishing bat egress locations.

The bat surveys were co-ordinated by Georgina Timmis, Principal Ecologist of ECOSA (Natural England Class Licence 2016-26971-CLS-CLS), assisted by suitably qualified and experienced ECOSA surveyors Richard Chilcott, Samantha Munslow, Hugh Turner, Olivia Walton, David Miller, Andrey Sukhorukov, Kate Dey, Phil Budd, Norman Binsted and Alessandro Ravi Antonielli.

During the bat survey each surveyor was equipped with a Pettersson D240x time expansion bat detector. The Pettersson detectors were connected to Edirol R-05 recorders for the full duration of the surveys. Recordings made with the Pettersson

detectors were later analysed using Sonobat® (v2.9.7) to confirm the identity of any species encountered.

2.6 Bat Emergence/Re-entry Survey Limitations

There were no limitations to the bat emergence/re-entry surveys.

3.0 RESULTS

3.1 Ground Level Tree Assessment Results

The results of the ground level tree assessment of T27 and T30 (**Map 2**) are provided in **Table 3**. Both trees continue to have low suitability for roosting bats.

Table 3: Ground level tree assessment results

Tree Number	Species and Description	Description of Features	Suitability for Bats
27	Oak - mature	No visible features, however the tree is of a suitable size and age to support roosting features and heavy ivy cladding could be obscuring them.	Low
30	Oak - mature	No visible features, however the tree is of a suitable size and age to support roosting features and heavy ivy cladding could be obscuring them.	Low

3.2 Bat Emergence/Re-entry Survey Results

No bats were recorded emerging or re-entering the high suitability (Group15 and Group17) and moderate suitability (T52) trees during the surveys, therefore roosting bats are considered likely absent from these trees. The survey recorded at least six species of bat; common pipistrelle *Pipistrellus pipistrellus*, soprano pipistrelle *Pipistrellus pygmaeus*, noctule *Nyctalus noctule*, serotine *Eptesicus serotinus*, long-eared bat *Plecotus* species², and *Myotis*³ bat species. **Table 4** provides details of the species, numbers and locations of bats recorded foraging/commuting during the bat surveys.

² There are two species of long-eared bat, the brown long-eared bat *Plecotus auritus* and the grey long-eared bat *Plecotus austriacus*. These species can only be separated by examination of physical characteristics and Phylogenetic Analysis Identification of bat droppings. Unless confirmation of identification has been made by visual identification the two species shall be referred to in this report as long-eared bat. The brown long-eared bat is the commonest of the two species typically being found roosting within large roof voids although small voids and trees are also utilised. The grey long-eared bat is rare and confined to southern England and like the brown long-eared typically roosts in roof voids.

³ There are seven species of *Myotis* bats in Britain. *Myotis* bats are very difficult to identify specifically, this can generally only be done by examination of physical features and Phylogenetic Analysis Identification of bat droppings. Many of these bats are common and will utilise buildings for roosting often occupying small and inaccessible voids. For the purpose of this report all species shall be referred to as *Myotis* bats unless a specific identification has been possible.

Table 4: Bat Survey Results

Visit 1 - Survey Details	
Survey Date:	19 th August 2020
Structures Surveyed:	Grp 15, Grp 17 and T52
Survey Type:	Dusk Emergence Survey
Time of Sunset:	20:16
Recorded Bat Roosts	
No roosting bats were recorded.	
General Bat Activity	
Low numbers of soprano pipistrelle and noctule registrations were recorded from passing individuals in the east of the site near T52. In the north of the site a relatively higher level of activity was recorded with constant pipistrelle and <i>Myotis</i> foraging along the corridor between the tree belts in the north of the site.	

Visit 2 - Survey Details	
Survey Date:	27 th August 2020
Structures Surveyed:	Grp 15 and Grp 17
Survey Type:	Dawn Re-entry Survey
Time of Sunset:	06:11
Recorded Bat Roosts	
No roosting bats were recorded.	
General Bat Activity	
Low numbers of foraging and commuting bats were recorded during the survey, with soprano pipistrelle the most frequently recorded species. Common pipistrelle and long-eared bat species were also heard but not seen during the survey.	

Visit 3 - Survey Details	
Survey Date:	7 th September 2020
Structures Surveyed:	Grp 15 and Grp 17
Survey Type:	Dusk Emergence Survey
Time of Sunset:	19:35
Recorded Bat Roosts	
No roosting bats were recorded.	
General Bat Activity	
Moderate levels of foraging and commuting were recorded during the survey. Common pipistrelle were seen continuously foraging around Group 15 for approximately half an hour from the beginning of the survey. Other species recorded included soprano pipistrelle, <i>Myotis</i> bat species and serotine.	

Visit 4 - Survey Details	
Survey Date:	11 th September 2020
Structures Surveyed:	T52
Survey Type:	Dawn Re-entry Survey
Time of Sunrise:	06:33
Recorded Bat Roosts	
No roosting bats were recorded.	
General Bat Activity	
Very low levels of foraging and commuting were recorded during the survey, with 3 registrations of soprano pipistrelle made throughout the entire survey, with none of these bats visualised only heard on the bat detectors.	

4.0 CONCLUSIONS AND RECOMMENDATIONS

4.1 Conclusions and Recommendations

There has been no change in the status of the trees surveyed since the surveys undertaken in 2018. Trees 27 and 30 were found to have low suitability for roosting bats. No bats were recorded roosting within any of the trees during the emergence/re-entry surveys and are therefore considered likely absent from Group 15, Group 17 and T52. As the trees continue to provide suitability for roosting bats, and may be used opportunistically, as a precautionary measure it is recommended that all of these trees are subject to sectional felling under the supervision of an ecologist.

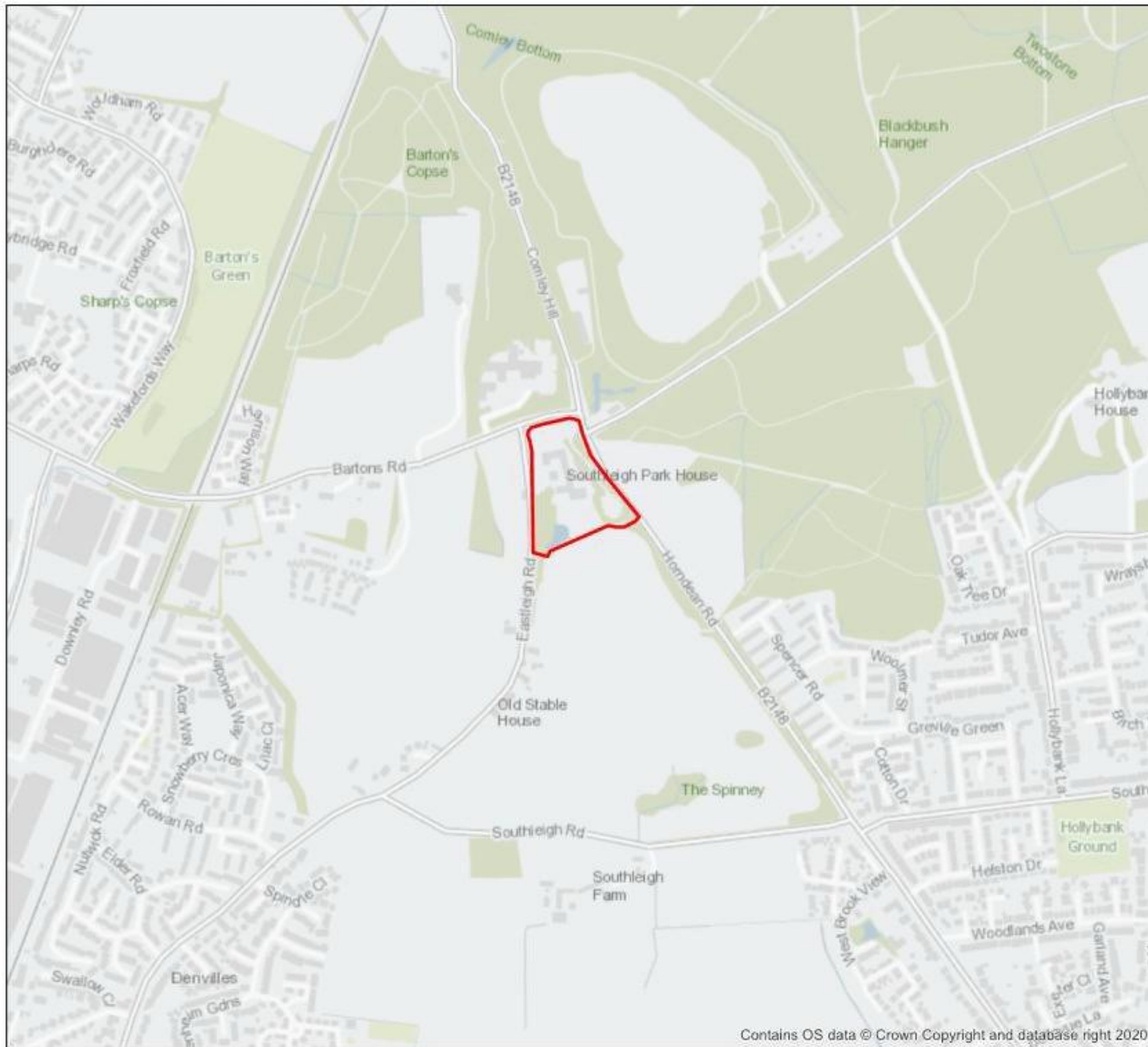
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Map 1 Location Plan



SOUTHLEIGH PARK HOUSE, EASLEIGH ROAD, HAVANT, HAMPSHIRE

UPDATING BAT ASSESSMENT

Map 1 - Site Location Plan

Client:	Bargate Homes
Date:	November 2020
Status:	Final

KEY
 Site Boundary



Source: Esri, DeLorme, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and

Scale at A4: 1:10,000
0 100 200 400 Metres



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Map 2 Bat Ground Level Tree Assessment and Bat Emergence/Re-entry Survey Plan

**SOUTHLEIGH PARK HOUSE,
EASTLEIGH ROAD, HAVANT,
HAMPSHIRE**

UPDATING BAT ASSESSMENT

Map 2 - Bat GLTA and Survey Plan

Client: Bargate Homes

Date: December 2020

Status: Final

KEY

-  Site boundary
-  Surveyor locations, 2 emergence/re-entry surveys undertaken
-  Surveyor locations, 3 emergence/re-entry surveys undertaken
-  Trees subject to emergence/re-entry surveys
-  Trees subject to GLTA

N.B. Grp15 and Grp17 were subject to two dusk emergence re-entry surveys on 19th August and 7th September 2020 and one dawn re-entry survey on 27th August 2020. T52 was subject to one dusk emergence survey on 19th August 2020 and one dawn re-entry survey on 11th September 2020. No bats were recorded emerging or re-entering from any of the trees during the surveys undertaken. T27 and T30 were subject to a Ground Level Tree Assessment on 30th June 2020. Both were assessed as having low suitability for roosting bats.

Scale at A4: 1:1,500

0 15 30 60 Metres



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