

Site:	Moorhill Road, West End
Client:	Highwood Homes Ltd
Job Number:	B029375
Survey Type(s):	Bat Roost Assessment
Date of Survey(s):	10 th November 2021
File Location:	I:\Projects\Projects 784-B000000\B029375 Moorhill Road West End\REPORTS

INTRODUCTION

Tetra Tech were appointed by Highwood Homes Ltd in May 2021 to complete a Bat Roost Assessment (BRA) of trees within the site off Moorhill Road, West End (OS Grid Reference – SU 47110 13549). The site comprises the grounds of a former residential property with areas of scrub and scattered trees.

The purpose of this assessment is to identify whether any trees whose removal is advised within the associated arboricultural assessment¹ and / or were identified as having potential suitability during the updated Ecological Appraisal² (EA) have features which could be suitable for roosting bats. The findings will inform the scope of further surveys if necessary.

METHODOLOGY

The ground-level and climbed assessment of trees within the site with potential to be removed was made by Tetra Tech Senior Ecologist John Simper (a registered user of a WML-CL18 :Level 2 Class Licence) and Project Ecologist Ben Cooke on 10th November 2021. Conditions were overcast, with some drizzle and a breeze. Both surveyors hold the City and Guilds NPTC Level 3 Award In Aerial Tree Rescue Operations (CS38).

Trees which were deemed unsafe to climb were inspected from all angles using binoculars and a bright torch with any potential roost features (PRF) noted and where accessible, inspected with an endoscope (Ridgid CA300).

Trees with PRF deemed safe were subject to a climbed inspection using rope access. Suitable trees were ascended by a single climber with the second remaining on the ground to perform an aerial rescue (if necessary), guide the climber to the PRFs and to watch for potential hazards.

¹ James Fuller Arboriculture (2021), Tree Survey Report. Written of behalf of Highwood Homes Ltd. Ref: JFA0289.

² Tetra Tech (2021), Moorhill Road, West End, Ecological Appraisal. Written on behalf of Highwood Homes Ltd. Project Number B029375.

RESULTS

Table 1 details the findings of the BRA on those trees whose removal is advised within the associated arboriculture assessment or were identified as having potential suitability during the updated EA. The locations of these trees and their associated target notes as detailed within the associated EA are shown on Figure 2. Photographs of the trees assessed are shown in Appendix A.

Target Note	Arboricultural Report Reference	Species	Potential Roosting Features	Bat Roosting Suitability	Tree Climbed	Post-Climbing Bat Roosting Suitability	Reason for Change in Suitability	Advised for Removal
TN3	38	Western red cedar	Split near the base of the trunk along the southern aspect.	Low	No	Negligible	The split was not considered deep enough to extend into the trunk to provide a suitable roosting feature.	Yes
TN7	33	Sweet chestnut	A broken limb (approx. 4 m above round level) with a knot hole the southern aspect of the tree.	Moderate	No	Negligible	Following inspection with high-powered binoculars the knothole was found not to extend deep enough into the trunk to provide a sufficient cavity to support roosting bats. The cavity within the broken limb was also not considered sufficient to support roosting bats.	No

Target Note	Arboricultural Report Reference	Species	Potential Roosting Features	Bat Roosting Suitability	Tree Climbed	Post-Climbing Bat Roosting Suitability	Reason for Change in Suitability	Advised for Removal
TN10	29	Sweet chestnut	A dead tree with a single knot hole (approx. 2 m above ground level) on the eastern aspect.	Moderate	Yes	Negligible	The knothole was considered too small and too shallow to allow access and provide a suitable roost space for bats.	No
TN11	30	Sweet chestnut	A single knot hole (approx. 4 m above ground level) on the eastern aspect.	Moderate	No	Low	Following inspection with high-powered binoculars the knothole was found not to extend as deep into the trunk as previously thought. The canopy was also considered to obscure the feature preventing a clear entrance or exit.	Yes
TN23	5	Narrow leaf ash	Two knotholes (approx. 1 m above ground) on the southern aspect	Moderate	No	Negligible	The lowest of the two knotholes we found to be too shallow to provide a sufficient roosting feature. The second was found to be filled with water due to the entrance	Yes

Target Note	Arboricultural Report Reference	Species	Potential Roosting Features	Bat Roosting Suitability	Tree Climbed	Post-Climbing Bat Roosting Suitability	Reason for Change in Suitability	Advised for Removal
							of the feature facing directly upwards. As a result, this feature was also not considered suitable.	
TN26	16	Pedunculate oak	A split within a limb on the southern aspect (approx. 4 m above ground level)	Low	No	Low	Following inspection with high-powered binoculars the cavity within the broken limbed was still considered to provide the potential as a roosting feature.	No
TN28	21	Sweet chestnut	Two woodpecker holes (approx. 2 and 3 m above ground level) on eastern aspect	Moderate	Yes	Low	The two woodpecker holes were both found to be sufficient to be used as potential roosting features. However, the features were both found to be quite wet with a large number of invertebrates present. Water was seen to be leeching from within the trunk	Yes

Target Note	Arboricultural Report Reference	Species	Potential Roosting Features	Bat Roosting Suitability	Tree Climbed	Post-Climbing Bat Roosting Suitability	Reason for Change in Suitability	Advised for Removal
							possibly from an access point within the crown of the tree.	
TN29	23	Common lime	Single woodpecker hole (approx. 1.5 m above ground level) on southern aspect	Moderate	Yes	Low	The woodpecker hole was found to be sufficient used as a potential roosting feature. However, the feature was found to be quite damp with water appearing to be leeching from within the trunk above in addition to use by nesting birds.	No
TN30	24	Sycamore	Large cavity at base of tree and cavity within trunk (approx. 4 m above ground level) on northern aspect	Moderate	Yes	Low	The cavity at the base of the tree was not found to extend vertically beyond the initial entrance to the feature and was therefore not considered suitable as a roosting feature.	Yes

Target Note	Arboricultural Report Reference	Species	Potential Roosting Features	Bat Roosting Suitability	Tree Climbed	Post-Climbing Bat Roosting Suitability	Reason for Change in Suitability	Advised for Removal
TN31	26	Sweet chestnut	Four woodpecker holes, two along southern aspect (approx. 2 and 4 m above ground level) and two along the western aspect (approx. 4 and 5 m above ground level)	Moderate	Yes	Moderate	A further two woodpecker holes were identified following the EA. All four of the knotholes extended at least 10 cm into the trunk and were found to be dry.	No
TN36	13	Sweet chestnut	A single woodpecker hole (approx. 3.5 m above ground level) on northern aspect	Low	Yes	Low	The knothole was found to be sufficient to be used by bats as a roosting feature however there was evidence of use by nesting birds. This is corroborated with the sighting of a blue tit flying from the feature during the EA.	No

SUMMARY AND RECOMMENDATIONS

During the ground-level and climbed assessment, eleven trees were inspected. Four trees were assessed as providing negligible suitability, six were assessed as providing low suitability and one was assessed as providing moderate suitability.

The roosting suitability of eight of the trees (TN3, TN7, TN10, TN11, TN23, TN28, TN29 and TN30) on site were downgraded from the suitability assigned to them during the EA. The PRFs identified within these trees were found not to provide a sufficient and / or suitable crevice or access to a cavity to support roosting bats.

Three of the trees, all of which were considered to have low roosting suitability (TN11, TN28 and TN30) were advised for removal. As such it is recommended that these trees are soft-felled. This is a generic term used to describe more cautious felling approaches. Where possible, cross cutting in proximity to cavities or hollows should be avoided, and any sections felled containing cavities should be lowered carefully using rope and cushioning techniques to reduce the impact of felling limbs which may still have bats within cavities. The felled sections should be left on the ground (preferably for up to 48 hours) with the openings clear. Split limbs that are under tension may need to be wedged open to prevent their closure when pressure is released, to avoid trapping bats.

The procedure is to be completed under supervision of an ecologist holding a WML-CL18: Level 2 Class Licence.

The tree designated as TN31 was assessed as having moderate roosting suitability, although the tree will not be directly impacted (i.e., removed as part of the proposed development) there is potential for indirect disturbance on roosting bats. It is therefore recommended that mitigation and avoidance measures are implemented during the construction phase of the development.

To reduce disturbance, it is recommended that all construction works in proximity to the tree cease 30 minutes prior to dusk.

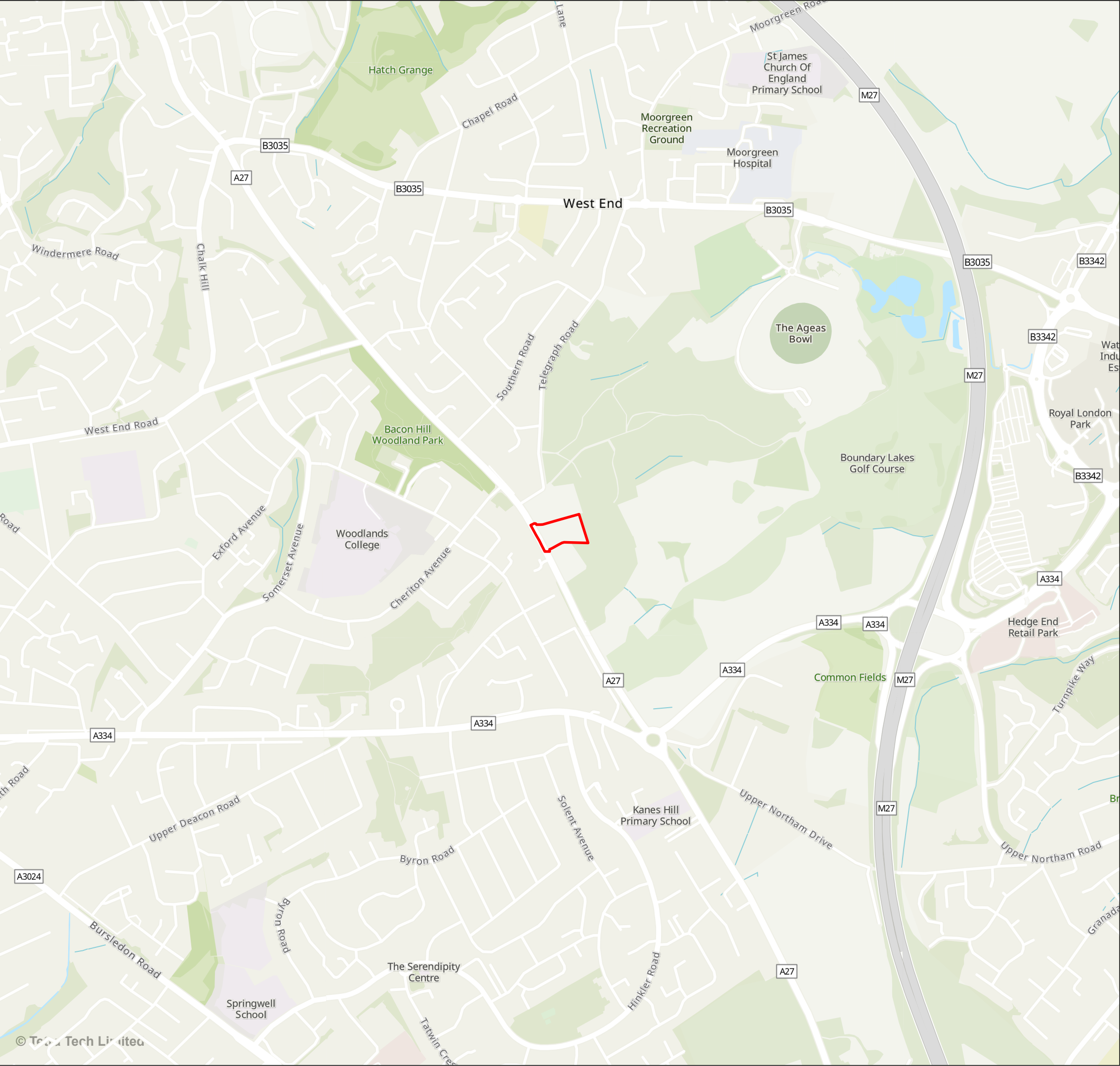
It is also recommended that the lighting across the development footprint be sensitively designed with bats in mind, so that valuable foraging and commuting areas are retained and existing roost sites are not impacted by ambient light. Lighting mitigation comprising the installation of cowls, hoods or louvers into those lamps located close to hedgerows will help mitigate the effects of light spill into the surrounding environment

Document Control			
Revision:	V1	Status:	FINAL
Date:	January 2022		
Prepared by: Project Ecologist Ben Cooke		Checked / Approved by: Principal Ecologist Kevin Wood	

Figures

Figure 1 – Site Location Plan

Figure 2 – Phase 1 Habitat Plan



Site Location Plan
Moorhill, Moorhill Road, West End

Highwood Homes Ltd

Legend

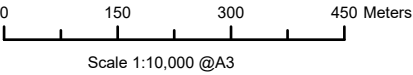
 Site boundary



Notes:

Drawn by: CL
Checked by: BC
Office: Southampton

Figure No. 1
Revision No. A



29 October 2021
NGR: 447101E 113538N

© Crown Copyright All rights reserved. Licence number: 100019980



The Pavilion, 1st Floor
Botleigh Grange
Office Campus
Hedge End
Southampton
Hampshire, SO30 2AF



Phase 1 Habitat Plan
Moorhill, Moorhill Road, West End

Highwood Homes Ltd



Legend

- Site boundary
- Bare ground
- Scrub - dense/continuous
- Scrub - scattered
- Tall ruderal
- Target Notes
- Scattered tree - broad-leaved
- Fence

Notes:

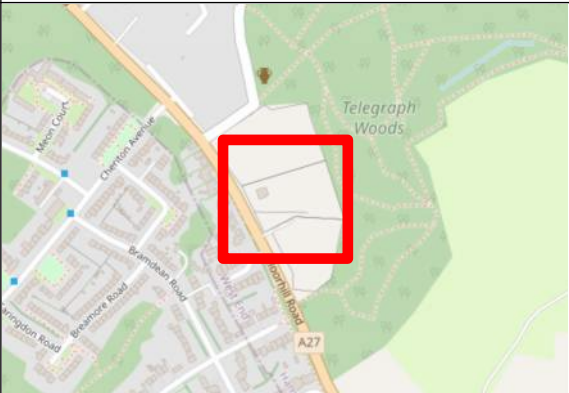
Drawn by: CL
Checked by: BC
Office: Southampton

Figure No. 2
Revision No. A

0 8 16 24 Meters
Scale 1:550 @A3

29 October 2021
NGR: 447101E 113538N

© Crown Copyright All rights reserved. Licence number: 100019980



The Pavilion, 1st Floor
Botleigh Grange
Office Campus
Hedge End
Southampton
Hampshire, SO30 2AF

APPENDIX A – TREES

TN3



TN7



TN10



TN11



TN23



TN26



TN28



TN29



TN30



TN31



TN36

