Osmondthorpe One Stop Centre

Bat Survey

31/08/2023

Leeds City Council

Report reference	ER-6869C-01 - Bat Survey
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Date	31/08/2023
Report duration	In accordance with CIEEM (2019), unless otherwise stated the findings of this report remain valid for a period of 18 months. After this period advice should be sought on the scope of any updating work required.

Summary Statement

The building has been assessed as providing features of **moderate** suitability for roosting bats. In line with guidance, two further surveys (dusk emergence/dawn re-entry) are recommended to determine the status of roosting.

Further survey has been undertaken and confirmed the likely absence of bat roosting within the surveyed building at Osmondthorpe One Stop Centre, Leeds.

Introduction

1. Brooks Ecological was commissioned by Leeds City Council to carry out a bat roost suitability assessment at Osmondthorpe One Stop Centre, Leeds, grid reference SE 336 334.
2. Following recommendations set out as a result of the above survey, Brooks Ecological was also commissioned to carry out a Bat Emergence Survey at the same site.
3. The application site, 'the Site', comprises the vacant job centre in Osmondthorpe, which was assessed as providing features with moderate bat roost suitability. In accordance with current best practice guidelines, buildings of moderate suitability need two evening emergence or dawn re-entry surveys in order to confirm the presence or likely absence of roosting bats.

Figure 1 The Site (red line boundary).

Method

Bat Roost Suitability Assessment

4. A thorough daytime inspection of the Site was made in June 2023 to look for evidence of bats and assess suitability for roosting. Evidence of bats may take the form of droppings, feeding remains, live bats, dead bats, stains on masonry or timber from the oils in bats' fur, and claw marks made by bats regularly roosting in the same location.

5. Bat roosting potential of the building was classified according to the following criteria set out in Table 1, taken from the Bat Conservation Trust Good Practice Guidelines (2016).

Table 1 Bat Roosting Suitability of Buildings and Trees.

Suitability	Criteria
Negligible	Negligible habitat features on site likely to be used by roosting bats.
Low	A structure with one or more potential roost sites that could be used by individual bats opportunistically. However, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions, and/or suitable surrounding habitat to be used on a regular basis or by a larger number of bats (i.e. unlikely to be suitable for maternity or hibernation). A tree of sufficient size and age to contain PRFs but with none seen from the ground or features seen with only very limited roosting potential.
Moderate	A structure or tree with one or more potential roost sites that could be used due to their size, shelter, protection, conditions, and surrounding habitat but unlikely to support a roost of high conservation status (with respect to roost type only - the assessments in this table are made irrespective of species conservation status, which is established after presence is confirmed).
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, protections, conditions and surrounding habitats.

Bat Emergence Survey

6. Brooks Ecological specialises in bat emergence surveys ranging from individual buildings through to complex sites requiring numerous visits with large teams. In terms of the survey effort, number of personnel and number of visits required to be able to properly evaluate the building's use by bats, we refer to the Bat Conservation Trust Survey Good Practice Guidelines (2016). However, these guidelines are not prescriptive, and we approach each site individually as required using our professional judgement and significant experience base.

7. To survey this building for roosting bats, two visits with teams of up to eight surveyors were deemed necessary to fully evaluate the potential use of the Site for roosting.

8. Surveys were carried out with surveyors positioned around the building to cover all aspects where bats could potentially emerge or return, and to establish activity levels around the Site.

9. The surveyors, using heterodyne detectors, an automated full spectrum bat detector (Echo Meter Touch 2), and a night vision aid (XInfrared T2 Pro), were in place at least 15 minutes before sunset and left once all species of bat would be expected to have left a roost and patterns of activity within the Site had been appraised. Conditions and dates are summarised in Table 2 below.

Table 2 Survey conditions.

Date	Survey Type	Temp. Start/End	Weather
19/07/2023	Emergence	13/13°C	Prev. rain. 30% cloud cover. calm (B0).
16/08/2023	Emergence	19/17°C	Dry, 70% humidity, 10% cloud cover, Light breeze (B2).

10. Survey directed by Olivia Benson BSc (Hons) ACIEEM. Olivia has over 6 years of experience conducting bat surveys in a professional capacity and is registered to use the Bat Survey Class Licence (Level 2) CL18.

Box 1 *Bat roosts*

Bats roost in buildings and trees in different locations depending upon time of year and environmental factors such as position of the sun, proximity to heat sources and feeding grounds. The following types are commonly referred to:

Transitional roosts

Bats frequently gather early in the season (March to April) before dispersing to summer roosts. Bats can be found in high numbers in these roosts for a very short period. Transitional roosts can also be found shortly before hibernation in August to October when bats (depending upon species) can gather in roosts not used earlier in the season.

Maternity roosts

These are among the most important roosts and are normally occupied from May to August. Depending on the species involved, some maternity roosts can contain a very significant proportion of the local population.

Summer (non-breeding) roosts

Small groups of non-breeding female and male bats can gather in these roosts or bats from a local population may choose to roost individually. There are normally a large number of suitable locations for summer non-breeding roosts and these may be routinely used or used only on an occasional basis. Irregularly used summer roosts can be very hard to find without unreasonable survey effort.

Mating roosts

Around September bats will gather in roost to mate; these are often in different locations than summer or breeding roosts.

Hibernation roosts

As bats in hibernation roosts are highly vulnerable to disturbance and bats can be present in large numbers these are considered to be among the most important bat roosts. Many species of bats roost in large and nationally important hibernation roosts associated with underground sites, many of which are well known and protected. However, the most common bat in the UK (the common pipistrelle) is largely unaccounted for in winter but thought to disperse and roost individually or in small groups in thermally stable cracks and crevices in thick walls or trees.

Box 2 *Legal background*

Bats are afforded full protection under The Wildlife and Countryside Act (1981) plus amendments, and the Conservation of Habitats and Species Regulations 2010. Under these Acts it is an offence among others, to recklessly kill, injure or disturb bats. It is also an offence to destroy or obstruct a roost even if bats are not in occupancy at the time of the action.

There are no defences against contravention of the Habitats Regulations 2010 which means that it is important for detailed and well-designed bat surveys to be carried out, prior to carrying out activities that may impact upon bat roosts such as demolition of buildings or removal of trees.

Where bats are found within a potential development site, a license from Natural England may need to be secured if works that could otherwise contravene legislation are to be carried out. These licences are only issued where Natural England is satisfied that works are unavoidable and would not have a negative impact on the favourable conservation status of bats. A Natural England license requires that the potential development site has full planning permission and that bats were a material consideration of the planning permission.

Records

11. The local records provider, in this case West Yorkshire Bat Group (WYBG), was asked to provide all records from within a 1km radius of the Site.

12. A number of records were returned, five detailing roosts of pipistrelle species and unidentified vesper bat species.

13. Three of the records relate to the Site itself, detailing possible and demolished roosts of pipistrelle species in 1986 and 1996, relating to the former primary and middle schools that occupied the Site. Roost abundances are not detailed.

14. A pipistrelle species maternity roost was recorded within 200m in 1997-1999; all other records are over 500m away.

National, Regional, and Local Status

15. The application Site lies within the natural range of 10 species of bat. These are summarised in Table 3 opposite, together with a note on each species' national status, relative abundance, and status within the 1km search area.

EPSM Licences

16. One European Protected Species Mitigation (EPSM) licence is found within 1km of the Site detailing the destruction of a common pipistrelle resting place in 2012. On mapping the licence appears ~150m north.

Table 3 List of bat species known to occur in West Yorkshire, ordered in increasing level of significance to their national proportion.

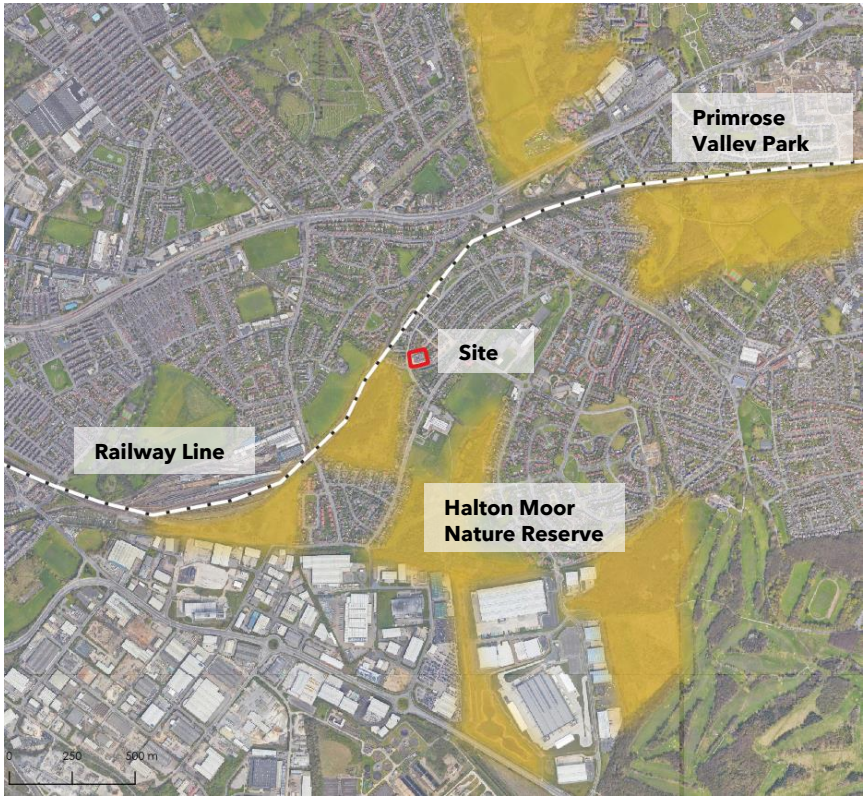
Species	**National Status**	**Within 1km radius**	
		Recorded	**Roosts known**
Common pipistrelle *Pipistrellus pipistrellus*	Common and increasing	Yes	Yes
Soprano pipistrelle *P. pygmaeus*	Common and stable	Possible	Possible
Daubenton's bat *Myotis daubentonii*	Common and increasing	-	-
Brown long-eared bat *Plecotus auritus*	Common and stable	-	-
Natterer's bat *M. nattereri*	Common and increasing	-	-
Whiskered bat *M. mystacinus*	Uncommon but stable	-	-
Noctule *Nyctalus noctula*	Uncommon but stable	-	-
Brandt's bat *M. brandtii*	Uncommon but stable	-	-
Leisler's bat *Nyctalus leisleri*	Uncommon and trend unknown	-	-
Nathusius's pipistrelle *P. nathusii*	Uncommon but stable	-	-

Site Context

17. The Site is located in Osmondthorpe, a suburb of Leeds c. 3.5km east of the city centre. The Site is bordered by Wykebeck Avenue and Wykebeck Mount to the south and east respectively, and residential housing in all other directions.

18. Beyond housing to the south, an area of open scrub/woodland is noted on mapping adjacent to the railway line, providing structured habitat in close proximity to the Site. Halton Moor Nature Reserve also lies 350m south. The railway line to the west provides a landscape-scale wildlife corridor, potentially connecting the Site to other structured habitat including Primrose Valley Park to the northeast.

Figure 2 Site context.



Survey Results

Bat Roost Suitability Assessment

19. The building comprises a collection of adjoining red brick buildings with slate pitched roofs.

20. Solid red brick walls make up the external elevations, which appear relatively well sealed and devoid of any gaps which may offer suitable roosting features

Figure 3 General view of building.

21. Wooden soffit boxes line the eaves and do not sit flush with the behind wall. The resulting gap may provide a potential roost feature (PRF) for crevice dwelling species such as pipistrelles. The gap may also provide access into a space within the soffit box or to the wall top, suited for bats roosting on more frequent basis.

22. Features such as these can be seen on most elevations of the building.

Figure 4 View of PRF .

Figure 5 Showing gap.

23. Slate roof tiles are mainly intact but uneven in places, offering PRFs between two uneven tiles where small numbers of crevice dwelling species may roost.

24. At the ridges of hipped sections of roof, tiles and flashing have been removed, leaving these areas exposed and with gaps that bats may use to access spaces beneath tiles.

25. To the gable end sections, tiles often do not sit flush again allowing bats to access a space beneath the tile, potentially leading into the roof space itself providing roosts suited to more regular use.

Figure 6 Exposed hipped ridge.

Figure 7 Uneven tiles at gable.

26. A number of windows have been boarded up across the building; gaps between boards and windows beneath may allow bats to access the space between, which provides a PRF for crevice dwelling species.

Figure 8 Boarded window close up.

Figure 9 Showing windows.

Recommendations

27. The building is assessed as providing features of **moderate** suitability for roosting.

28. There are historical records of roosts being present in this or an adjacent (now demolished) building. The walkover did not reveal any evidence of bats across the building externally.

29. Internal inspection was not undertaken due to health and safety concerns, given the building's current state and recent vandalism/break-ins.

<u>Further survey</u>

30. As per guidance, two dusk emergence/dawn re-entry surveys should be undertaken within the optimal season (May–August) and during suitable weather conditions to determine the status of roosting here.

31. These surveys were subsequently undertaken and findings are reported below.

Survey Results

Visit 1: Emergence – 19th June 2023 (sunset 21:24)

32. Surveyors were positioned so as to cover all features with bat roost suitability.

33. Overall, bat activity was considered to be moderate, with frequent contacts being made throughout the survey by up to two bats at a time.

34. The first contact was recorded at 21:53, when a single common pipistrelle was observed commuting from south to north, and then east to west, along the eastern and northern elevations.

35. This was then followed, at 21:55, by a common pipistrelle commuting back along the northern elevation from west to east, and foraging around the northeast corner of the building until 22:06. Foraging by up to two common pipistrelle was again recorded in this area from 22:10, intermittently until the end of the survey.

36. From 21:56 until 22:04, foraging by a single common pipistrelle was observed around the western elevation of the building, and around street lights on Wykebeck Mount.

37. An individual common pipistrelle was observed foraging along the eastern elevation from 21:56, with further foraging being heard in a similar area intermittently until the end of the survey.

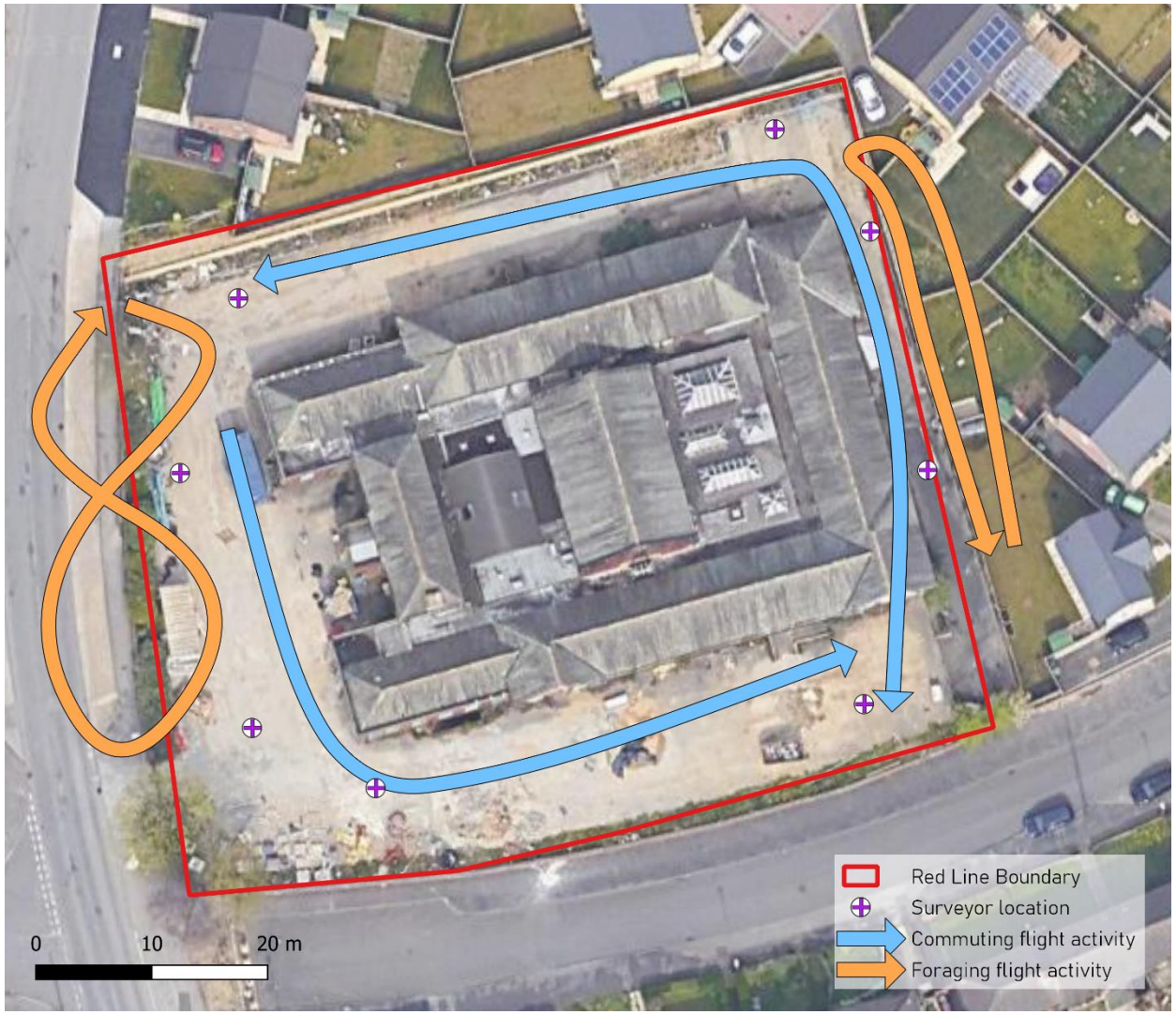
38. At 22:17, a common pipistrelle was observed simultaneously foraging and commuting north to south along the western elevation, then west to east along the southern elevation.

39. A single common pipistrelle foraging around the northwestern corner of the building was also observed at 22:17 until 22:19.

40. At 22:19 a solitary noctule was heard, but not seen, by surveyor in the south east corner of Site.

41. No roosts were identified, or suspected, within the surveyed building.

Figure 10 Summary of bat activity observed during emergence survey.



Visit 2: Emergence – 16th August 2023 (sunset 20:32)

42. Surveyors were positioned so as to cover all features with bat roost suitability.

43. As before, bat activity was considered to be moderate with frequent activity throughout the survey by up to three bats.

44. The first contact was logged at 20:48, when a common pipistrelle was heard by surveyors positioned on the western elevation. Common pipistrelle was also heard but not seen from here throughout the survey, likely commuting or foraging behind surveyors along Wykebeck Mount.

45. At 20:52, a single common pipistrelle was observed foraging along the eastern elevation of the building, and also over the gardens to the east of Site. Foraging by up to two individuals was then observed in this area regularly until the end of the survey.

46. At 20:56, two common pipistrelles and a single soprano pipistrelle were recorded coming from off-Site, commuting north–south over the centre of the building. A single common pipistrelle was then seen commuting to the southwest from over the building at 20:57, and then south to north along the western elevation at 20:59.

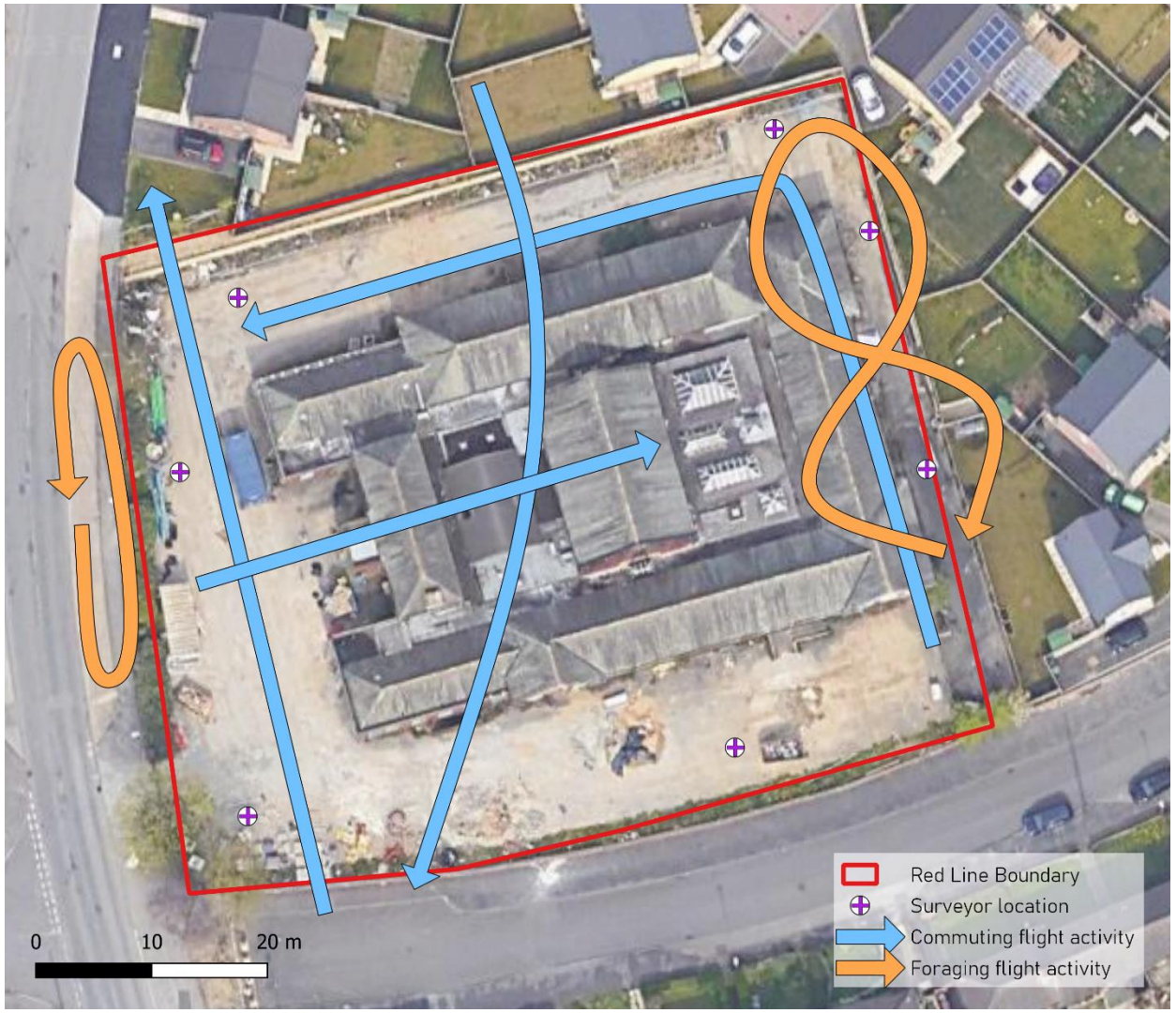
47. At 21:02 a common pipistrelle was observed commuting along the eastern and northern elevations, from south to north to west.

48. At 21:03 a solitary noctule was observed passing high above the Site.

49. A single common pipistrelle was observed briefly foraging over Wykebeck Mount and then commuting from west over the building at 21:09. The same was observed at 21:23.

50. No roosts were identified, or suspected, within the surveyed building.

Figure 11 Summary of bat activity observed during emergence survey.



Evaluation, Conclusions and Recommendations

51. Surveys at the Site have demonstrated likely absence of roosting bats within the survey building, and as such, the proposed works present little risk of impacting upon bats or their roosts.

52. The surrounding area is subject to moderate levels of bat activity; a sensitive lighting plan should be incorporated into any new development at the Site to ensure continued use of this area by bats.

Standard Precaution

53. Although no evidence of roosting has been found and the likely absence of roosting has been concluded, it must be noted that bats frequently move between roost sites, can be very casual in their choice of roosting location, and can turn up unexpectedly at any time.

54. On this basis the developer should always be mindful of bats as a potential constraint and have a protocol in place should any bats be seen or suspected during works: works should stop, a suitably licenced ecologist consulted, and their advice followed.

Enhancement

55. The NPPF puts emphasis on development delivering biodiversity enhancement above and beyond mitigating or compensating for any impacts. To this end any new development could include integral bat roost features to offer suitable habitat in the long term.

References

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