



**MERTHYR MOTOR AUCTIONS, PANT ROAD, DOWLAIS,
MERTHYR TYDFIL**

ECOLOGICAL ASSESSMENT

AUGUST 2019

ISSUE 2 1VB

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Merthyr Motor Auctions

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Ecological Assessment

Document control

Issue	Stage	Author	Checked	Approved	Date
1	Issue 1	BE	HD	BE	01.08.19
1	Issue 2	BE	RC	BE	27.08.20

Contents Amendment Record

This report has been issued and amended as follows:

Issue	Revision	Description	Approved by	Date
1	A	Minor amendments	BE	01.08.19
	B	Minor amendments	BE	03.10.19
	C	Minor amendments	BE	15.10.19
2	A	Updated	BE	27.08.20
2	B	Updated	BE	16.10.20

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NON-TECHNICAL SUMMARY

A protected species assessment was undertaken of a valeting bay at Merthyr Motor Auctions in support of an appeal to remove a condition which restricts the use of floodlights on the valeting yard. The client is wanting to lift the condition in order to be able to keep the lights on permanently overnight for security reasons.

The work was based on assessments of the habitats present in respect of their potential to provide habitat for protected species. The floodlights are already in situ, as such, the only species they have the potential to affect are listed below:

- Bats

Activity transects were undertaken in respect of bats. Automated detector surveys were undertaken in respect of bats.

There are no buildings or other structures within the land development application boundary that could offer bat roosting habitat although there are hedges on the peripheries of the site which could offer bats with foraging or commuting habitat. There were no potential roosting features identified at this location. There are records of brown long-eared, pipistrelle and lesser horseshoe bats roosting within a tunnel approximately 700m from the site.

A very small number bats and bat species were found to using the site for foraging and commuting purposes. It is considered that with mitigation, there will be a negligible potential on roosting bats.

1 INTRODUCTION

1.1 OBJECTIVE

The objectives of this report are to:

- identify the potential for bats to be present on site;
- undertake species specific assessments and surveys as necessary;
- using the information gathered to determine whether there will be any impacts (both positive and negative) on bat species present;
- provide recommendations for further survey as necessary; and
- suggest outline mitigation and enhancement ideas and principles

1.2 METHODOLOGY

To achieve the objectives set out above, the following actions were taken:

- Field based assessments in respect of
 1. Bats;

1.3 SITE DESCRIPTION

The red line development site boundary encloses an area of approximately 0.45ha and is located between Pant and Dowlais on the northern edge of Merthyr in South Wales (centred on NGR SO 06500838) (Figure 1). The site forms part of the larger Merthyr Motor Auctions site and is surfaced (tarmac) with very small areas of gravelled hardstanding located in a cutting on the line of a former railway. The site is bounded by mature shrub vegetation on its eastern, and western boundaries; the southern boundary is fenced with palisade fencing. The ground to the north is also surfaced and part of the auctions site.

The vegetation on the eastern boundary is dominated by conifer hedge planting with occasional willow (*Salix* sp.) and bramble (*Rubus fruticosus* agg.) scrub. The western boundary is vegetated with hazel (*Corylus avellana*), butterfly bush (*Buddleia davidii*), willow and bramble with occasional ash (*Fraxinus excelsior*), laurel (*Prunus laurocerasus*) and honeysuckle (*Lonicera periclymenum*).

The site is located in a wholly urban area, being surrounded to the north, west and south by housing, roads and associated infrastructure. There is an area of grass and scrub to the east on the site of the former Ifor Works / Dowlais Ironworks site.

Photos are at Appendix A.

Figure 1 – Detailed view of the area to be lit by floodlights (boxed red)



Figure 2 - aerial overview of the area to be affected by floodlights (arrowed red)



1.4 PROPOSED DEVELOPMENT

The content of the report with is to be used for planning application P/14/0258 for the removal of condition h attached to appeal decisions APP6410/C/95/508749 and 508750 which currently restricts the use of the floodlights at Merthyr Motor Auctions Pant Road Dowlais Merthyr Tydfil CF48 3SH. The lighting is currently restricted to no later than 18:30pm. The client is proposing to keep the lights on permanently overnight for security purposes.

1.5 STUDY AREA

The field survey looked at the red line development area itself. In addition to this, a walked transect was undertaken by BE Ecological Ltd to undertake a survey of the Ifor Works Site to determine if bats were using this site and to determine whether the lights would have any impact on bat species using this area also.

2 REGULATORY FRAMEWORK

2.1 INTERNATIONAL

European Union legislation requires that member states designate sites for the protection of habitats and species included in the annexes of both Council Directive 92/43/EC on the Conservation of Natural Habitats and of Wild Flora and Fauna (the Habitats Directive) and Council Directive 79/409/EEC on the Conservation of Wild Birds (the Birds Directive). This legislation is implemented in the UK by the Conservation of Habitats and Species Regulations 2017 ("the Habitat Regulations"). This results in sites being designated as Special Areas of Conservation (SACs) and Special Protection Areas respectively (SPAs).

2.2 NATIONAL (UK)

The Wildlife and Countryside Act 1981 (as amended) allows sites to be designated as Sites of Special Scientific Interest (SSSI) for one or all of the following categories:

- Flora;
- Fauna;
- Habitat; and
- Geological importance.

European designated sites are automatically designated as SSSIs prior to their designation.

The relevant legislation includes:

- The Town and Country Planning (Environmental Impact Assessment) (England and Wales) Regulations 1999 (as amended);
- The Conservation of Habitats and Species Regulations 2017
- The Wildlife and Countryside Act 1981 (as amended);
- Countryside and Rights of Way Act 2000;
- Environment (Wales) Act 2016
- Wild Mammals (Protection) Act 1996;
- The Protection of Badgers Act 1992; and
- The Hedgerow Regulations 1997.

Section 40 of the Natural Environment and Rural Communities Act 2006 (as amended) requires all public bodies to have regard wherever possible to conserving biodiversity. Section 42 of the Act requires that a list of habitats and species of Principle Importance for the Conservation of Biological Diversity in Wales be produced.

The Environment (Wales) Act 2016 requires that all public authorities, when carrying out their functions in Wales, seek to "maintain and enhance biodiversity" where it is within the proper exercise of their functions. In doing so, public authorities must also seek to "promote the resilience of ecosystems".

This ensures that biodiversity is an integral part of the decisions that public authorities take in relation to Wales. It also links biodiversity with the long term health and functioning of our ecosystems, therefore helping to align the biodiversity duty with the framework for sustainable natural resource management provided in the Act.

In Wales, this legislation replaces and enhances the Natural Environment and Rural Communities Act (2006) which sought to raise the profile of biodiversity and to make sure that it is considered in all local authority decisions by ensuring that "Every public authority must, in

exercising its functions, have regard, so far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity.”.

Other elements of NERC 2006 may still apply.

Biodiversity Action Plans (BAPs) are tools which are used to monitor, manage and enhance those habitats and species which are of significance to an area or organisation, The United Kingdom BAP lists a number of priority habitats and species which are of conservation concern.

2.3 NATIONAL (WALES)

Planning Policy Wales (Welsh Government, 2018) and Planning Policy Wales Technical Advice Note 5: Nature Conservation and Planning (Welsh Assembly Government, September 2009) set out the protection given to wildlife (sites, habitats and species) by the planning system operational in Wales.

2.4 LOCAL AND REGIONAL

The proposed development is wholly within the Merthyr Tydfil County Borough Council area of responsibility. Therefore, all policies adopted by the Council will apply, including policies which may not be specific to nature conservation or the natural environment that may apply or be relevant and should be considered during the planning process.

The Biodiversity Action Reporting System (BARS) shows that there are a number of habitats and species which are of a high priority to MTCBC. These have been determined following examination of the UK BAP, the Section 42 list of Species of Conservation Concern and those habitats and species determined to be locally important by the Local Biodiversity Partnership.

2.5 PLANNING FRAMEWORK

The proposed development will be undertaken wholly under the auspices of the Town and Country Planning Act 1990 (as amended).

3 DESK STUDY AND PROTECTED SITES (BATS)

3.1 METHODOLOGY

The South East Wales Biodiversity Records Centre (SEWBReC) were formerly requested to supply a Bat and Roof-nesting Birds (BARB) survey for the site. The survey to provide; bat records within a 2km buffer, roof nesting birds within 150m buffer plus a list of all Special Areas of Conservation (SAC) and sites of Special of Special Scientific Interest (SSSI) designated for bat species within a 10km site buffer. The reference for this date search is 0190-241.

3.2 DESK STUDY SUMMARY

There are no UK statutorily designated sites designated for their bat interest recorded within 10km of the development site. There were no non-statutorily designated sites designated for their bat interest recorded within 10km.

There were a total of 33 bat records within 2km of the site.

3.3 STATUTORY AND NON-STATUTORY SITES

There are no UK statutorily designated sites designated for their bat interest recorded within 10km of the development site. There were no non-statutorily designated sites designated for their bat interest recorded within 10km.

3.4 BAT RECORDS

The closest record to the site is that of an injured brown long-eared bat found approximately 570m from the site.

The closest roosting record is that of lesser horseshoe, brown long-eared, natterers and pipistrelle, roosts located in a tunnel approximately 700m from the site at its closest point.

It has since been confirmed by a local recorder that the lesser horseshoe bats have not been present within this roost since 2007. The bats appear to alternate between a cave system and the tunnel. When bats are not present within the tunnel, they are present within the cave (approximately 2km from the site). The horseshoes have been confirmed present within the cave, not the tunnel since 2007. The bats have been in low numbers (between 2 and 3 bats).

Other records refer to species in flight greater than 900m from the site. Species include serotine, pipistrelle, brown long-eared, noctule, lesser horseshoe and unknown bat.

4 PROTECTED SPECIES

4.1 BATS

4.1.1 Previous Reports

A bat survey was undertaken by The Countryman in 2015. The survey determined that the yard was not used by any bat species with not a single bat being detected foraging, roosting in or commuting across the yard.

4.1.2 Summary

The site is a concrete valeting yard which would ordinarily be classed as negligible potential for foraging and commuting bats in the context of the proposed development. However, due to the presence of the Ifor Works to the rear of the site and the relatively close proximity to a substantial bat roost (700m from the site), two activity surveys were undertaken at the site

The following bat surveys were undertaken at the site:

- walked transects (two dusk transects). The decision was made to undertake two dusk transects rather than a dusk and a dawn transect. Bat activity at dawn this year has been somewhat limited (experience across various sites). In addition to this, those species that are light intolerant (the species that would be affected by the extended lighting such as lesser horseshoe bats and brown long-eared bats) are often known to return to their roosts a lot earlier than the time frame a dawn survey would capture. As such, it was determined that dusk surveys would capture more information than a dusk and a dawn survey.
- Static detector surveys: Static bat detectors (Anabat SD2) were deployed on site for five days in August and a further five days in September.

The only bat species heard/observed within the red line boundary using the site for commuting common pipistrelle. No bats were observed roosting at the site.

4.1.3 Bat Ecology

British bats are small flying nocturnal mammals that feed exclusively upon insects. There are 18 species resident in Britain, ranging in size from the small pipistrelle species (*Pipistrellus* sp.) weighing in at approximately 5 g up to the larger noctule (*Nyctalus noctula*) weighing approximately 35 g. Bats are active from April through to October and hibernate when insects are in short supply in the winter months. Bats generally emerge from hibernation in late March - early April and move into transition roosts before the female bats move to maternity sites by the beginning of May where they give birth to a single baby between June and early July. The baby is reared solely by the mother and is weaned and independent by end of August. After breeding, bats move to transition roosts and females will visit males at mating roosts. During the autumn, bats feed intensively to gain sufficient weight for hibernation.

Although traditionally trees, caves and rock faces were used by roosting bats and are still used, many different structures are used nowadays by bats, which take advantage of readymade (manmade) roosts. Structures used frequently include bridges, ice-houses, pillboxes, disused railway tunnels, houses and barns etc. Bats do not hold territories but have foraging ranges which vary in size between species: from just 3-4km from the roost for the smaller bats while noctules may fly 20km or more. Threats to bats include habitat destruction and the severance of commuting routes, use of agricultural pesticides, intensification of farming methods and

deliberate persecution by man. Bats have few natural predators; the domestic cat probably accounts for most losses.

4.1.4 METHODOLOGY

4.1.4.1 Activity surveys – personnel

Activity surveys were undertaken by Beth Evans of BE Ecological Ltd. A maximum of two surveyors were used for each transect due to the small size of the site. Beth was assisted during the activity surveys by Hugh Dixon, Gavin Vella and Michael Kilner. Gavin and Michael are competent naturalists and have been training with Beth for commercial work during the current season.

4.1.4.2 Activity surveys – walked transects

Six walked bat activity transects were undertaken. A dusk transect was undertaken on 11th July, a second on the 29th July 2019 a third on 2nd October 2019, a fourth on 15th April 2020, a fifth on 14th June 2020 and a sixth on 15th June 2020.

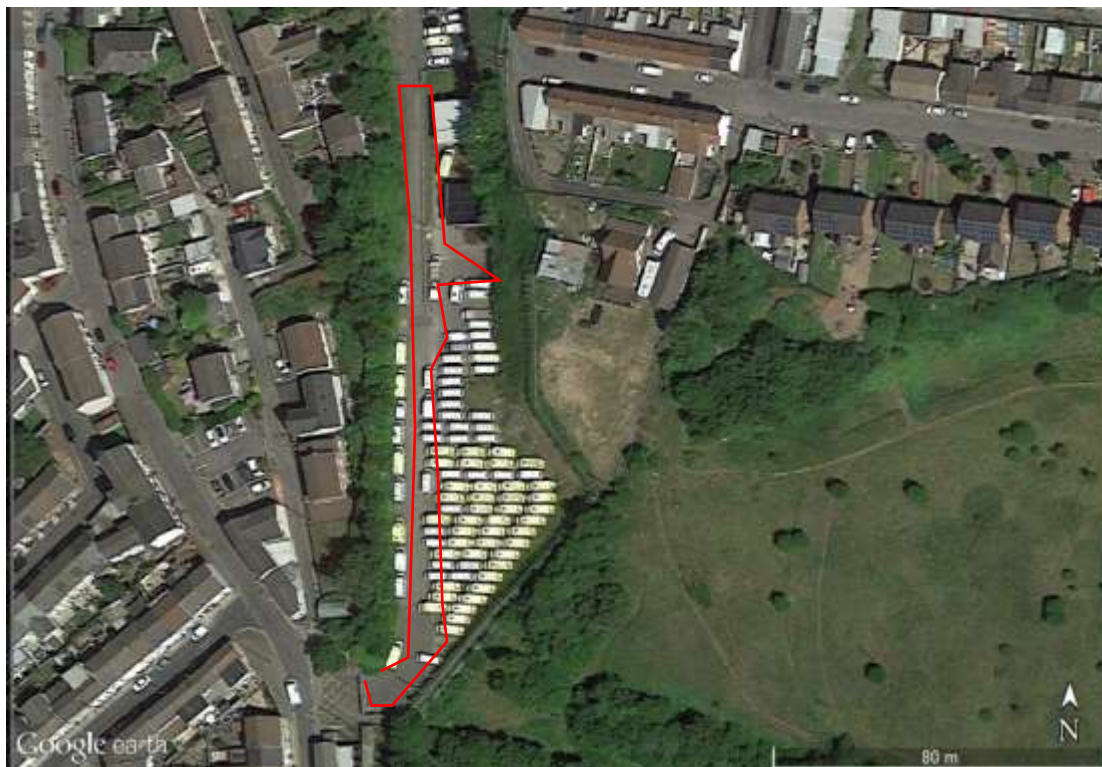
The surveys were designed to determine the bat species present on the site and whether any parts of the site were preferred (of a greater importance) by them for foraging and / or commuting.

The transect routes (Figure 3) were chosen to achieve good overall coverage of the site. Transects were carried out during periods of peak foraging, starting twenty minutes before dusk and continuing for up to 2.5 hours after dusk. A number of fixed point stops were also incorporated into the survey, interspersed along the chosen route. Each stop was between two and five minutes in length.

The survey on 11th July was walked in a clockwise direction; that on the 29th July was walked in an anticlockwise direction, the survey on 2nd October 2019 was walked in a clockwise direction. The direction was alternated for following surveys.

Batlogger M detectors were used by all surveyors.

Figure 3 – approximate route of walked transects (route shown walked on 11th July; reversed on 29th July etc) (approximate as position of cars were subject to change).



4.1.4.3 Automated bat detector surveys

The automated bat detector used was an Anabat SD2 detector. In line with guidance for low quality habitat, a single detector was placed within the transect (5 nights at a time) as per table 4 below. The detectors were placed in waterproof boxes connected by a 10m cable to a high frequency microphone which was then placed in the eastern hedgerow.

4.1.4.4 Constraints

Walking directly alongside the eastern hedge was difficult due to the presence of parked cars, as such, the transect was tailored around these areas. However, the yard is 37m at its widest point and all areas of hedgerows were able to be observed, so this is not thought to be a constraint.

4.1.5 Results

4.1.5.1 Habitat Assessment

The site is comprised solely of hard standing and is bounded by mature shrub planting to the east and west of the site. There is palisade fencing on all boundaries.

There are no potential roosting features in any of the mature vegetation bounding the site. There are two buildings to the north of the yard. These buildings are considered unsuitable for roosting bats due to their concrete construction under a sheet metal roof, the amount of noise

present and the number of long hours worked on servicing vehicles. There is no roosting potential on any of the sides that may be impacted by the extension of the lighting within the yard.

The boundary vegetation is suitable for use by foraging and commuting bats but is of low potential only

4.1.5.2 Activity surveys – walked transects

The surveys were undertaken on the dates and under the conditions listed in Table 3 below.

Table 3 - Summary details of walked activity transects

Date	Survey time	Sunset/sunrise	Timing	Weather
11 th July 2019	Dusk	21:29	Twenty minutes prior to sunset, up to 2.5 hours post sunset	Start: 22°C; end: 20°C. 60% cloud, dry. No wind.
29 th July 2019	Dusk	21:10	Twenty minutes prior to sunset, up to 2.5 hours post sunset	Start 19°C; end 18°C. No wind, dry. 70% cloud
2 nd October 2019	Dusk	18:50	Twenty minutes prior to sunset, up to 2.5 hours post sunrise	Start: 11 degrees, end 10 degrees, little wind
15 th April 2020	Dusk	20:11	Twenty minutes prior to sunset, up to 2.5 hours post sunrise	Start: 13 degrees, end 11 degrees, low wind, 50% cloud
14 th May 2020	Dusk	20:58	Twenty minutes prior to sunset, up to 2.5 hours post sunrise	Start: 14 degrees, end 13 degrees, little wind 40% cloud
15 th June 2020	Dusk	21:33	Twenty minutes prior to sunset, up to 2.5 hours post sunrise	Start: 18 degrees, end 18 degrees, little wind 20% cloud

Transect 1 – 11 July 2019

The survey was undertaken by two surveyors walking the route shown on Figure 3 in an anti-clockwise direction.

Activity was extremely low during the survey.

The first bat call heard was that of a common pipistrelle at 21:47. The bat was observed commuting from north west to south east at the southern end of the site (figure 4, arrowed red).

A second common pipistrelle was heard at 21:56. The bat was seen commuting high over the yard (figure 4, arrowed yellow).

Whilst not part of this planning application, the Ifor Works site was surveyed on the same date in order to ensure that bats using this area would not be affected by the floodlighting of the Merthyr Motor Auctions yard. All activity was focused along the vegetation/woodland to the south. Species heard were common pipistrelle, soprano pipistrelle, brown long-eared and noctule. None of these bats or bat calls were heard/seen using the other side of the boundaries of the Merthyr Motor Auctions yard.

Figure 4- Direction of bat flight lines (common pipistrelle arrowed red, common pipistrelle arrowed yellow, common pipistrelle arrowed blue)



No other bats were observed and no other bat calls were heard prior to survey termination. No bats were observed interacting with or emerging from any of the buildings on site.

Transect 2 – 29.07.19

A single bat call was heard at 21:31. The call belonged to a common pipistrelle that was seen commuting from north east to south west, in the same location that a common pipistrelle had done in the previous survey (figure 4 arrowed red).

No other bat calls were heard and no other bats were seen throughout the course of the survey.

Whilst not part of this planning application, the Ifor Works site was surveyed on the same date. All activity was focused along the vegetation/woodland to the south. Species heard were common pipistrelle, soprano pipistrelle, brown long-eared and noctule. None of these bats or bat calls were heard/seen from the other side of the boundaries of the Merthyr Motor Auctions yard.

Transect 3 – 02.10.19

A single bat call was heard at 19:12. The call belonged to a common pipistrelle that was seen commuting high over the yard, in the same location that a common pipistrelle had done in the previous survey (figure 4 arrowed yellow).

No other bat calls were heard and no other bats were seen throughout the course of the survey.

Transect 4 – 15.04.20

A single bat call was heard approximately 10 minutes post sunrise. The call belonged to a common pipistrelle. The bat was not seen by the surveyors, the call was extremely brief.

No other bat calls were heard and no other bats were seen throughout the course of the survey.

Transect 5– 14. 05.20

A single common pipistrelle bat was observed commuting from north to south (figure 4, arrowed blue)

No other bat calls were heard and no other bats were seen throughout the course of the survey.

Transect 6– 15.06.20

Two common pipistrelle bats were observed commuting from west to east (figure 4, arrowed yellow) at approximately 15 minutes post sunrise. A faint common pipistrelle bat call was heard immediately after this. This bat was not seen.

No other bat calls were heard and no other bats were seen throughout the course of the survey.

4.1.5.3 Automated bat detector survey

Please note, the weather conditions below were based on the forecast on deployment of detectors, conditions may have changed throughout individual nights.

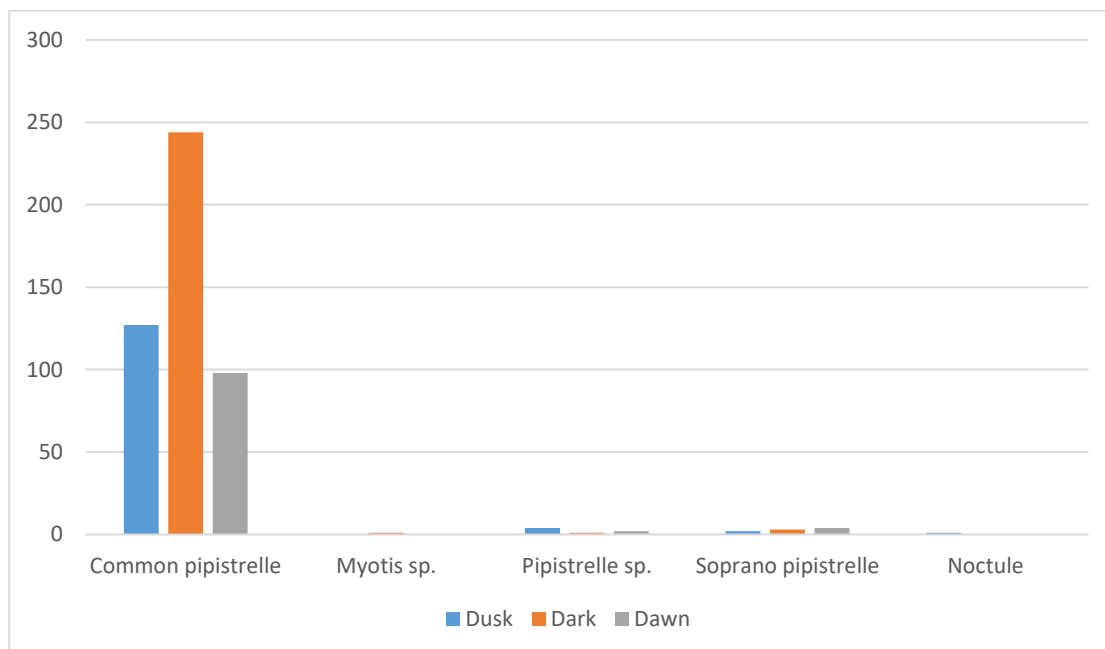
Table 4: number of individual species calls per night

Date	Weather	Common pipistrelle	Myotis sp.	Soprano pipistrelle	Pipistrelle sp.	Noctule
26.08.19	Dry	7	0	0	1	0
27.08.19	Dry/Drizzle	4	0	0	0	0
28.08.19	Some showers forecast	11	1	0	0	0
29.08.19	Dry	3	0	0	2	0
30.08.19	Dry	7	0	0	0	0
02.09.19	Some showers forecast	2	0	0	0	0
03.09.19	Dry, chance of rain	10	0	0	0	0
04.19.19	Dry	5	0	0	1	0
05.09.19	Dry chance of rain	2	0	0	3	0
06.09.19	Dry, chance of rain	0	0	0	0	0
15.04.20	Dry chance of rain	20	0	0	0	0
.16.04.20	showers	42	0	0	0	0
17.04.20	Dry	3	0	0	0	0
18.04.20	Cloudy	16		0		0
19.04.20	Dry chance of rain	4	0	0	2	0
22.05.20	Dry chance of showers	4	0	0	0	0
23.05.20	rain	32	0	0	0	0
24.05.20	showers	32	0	0	0	0
25.05.20	Cloudy and showers/dry	87	0	1	0	0
26.05.20	Dry/chance of showers	22	0	5	0	0
15.06.20	Dry	1	0		0	0
16.06.20	Dry	47	0		0	0
17.06.20	Dry	52	0	1	1	0
18.06.20	Dry	7	0		0	0
19.06.20	Dry	49	0	2	2	1

Please note, some calls were tagged as a pipistrelle species rather than to species level due to the fact that the sonograms had a peak frequency of 50KHz. The sonograms share characteristics with both soprano and common pipistrelle calls; unfortunately, there is insufficient information and a lack of clarity as to be able to ascribe the calls to one or other of the species.

The myotis call was poor and faint and as a result it has been labelled as myotis sp. There was some indication that the call may be a whiskered/brandts type bat, however, this cannot be said with any surety.

Graph 1: Number of bat calls at various intervals dusk (survey start to midnight), dark (midnight to 4am), dawn (4am to sunrise)



It can be seen from the results that the number of species using the site is generally low with only four common and widespread species confirmed. The amount of bat activity relative to the number of survey nights indicates that the area is not one favoured by bats and the results fall into the low potential category that the site was originally classified as.

4.1.6 Bats - evaluation

Bats are protected by international and domestic legislation, a reflection of their increasingly threatened status; bats are therefore of **high international** value.

There are no structures on the site suitable for use by roosting bats.

There are no trees on the site to be affected that have the potential to provide roosting habitat for bats.

Whilst a small number of common pipistrelles were observed commuting over and passed the site, no bats were identified using the site for foraging and commuting. The static detectors suggest that low numbers of bats may forage occasionally over the site but it is unlikely to be in large numbers.

Overall, within the context of the surrounding land use, it is considered that the proposed development site is of **low** value at a **local** level to and for bats.

4.1.7 Bats - impact characterisation

It is considered that the lighting of the yard at night can be appropriately mitigated for. The only species identified in close proximity to the yard was common pipistrelle, soprano pipistrelle, noctule and myotis sp. Pipistrelles are a relatively light tolerant species and given that bats observed on the site were flying over the site from well lit areas, it is considered that they will continue to do so if the site is lit at night. A single noctule and myotis sp. call was heard, however, this was a single call only and the survey results do not imply that this species is a frequent visitor to the site. Bats will be able to make use of the retained dark corridors (eastern and western boundaries should they wish) (please see Quoda lighting report for details of retained dark boundaries).

No bats were observed using the vegetation on either side of the yard side nor the Ifor Works side of the site.

There are roosts (approximately 700m) from the site that support bat roosts of light intolerant species, however, there is no evidence at all to suggest these species commute and forage in close proximity to the site, particularly the areas that will be impacted by lighting. The site is already surrounded by street lights to the west and there are streetlight present immediately to the east (lighting the public footpath). It is thought less likely that light sensitive species would fly through these areas to get to the site.

4.1.8 Bats – Mitigation

It is considered that mitigation is required to retain dark areas, in particular the vegetated boundaries so that bats can continue to use the site should they wish.

Mitigation revolves around changing the current lights but using the same columns to ensure there is no light spill on vegetated habitats.

Please see Quoda MMA lighting report for full details on lighting impacts, lighting and mitigation.

5 CONCLUSION AND RECOMMENDATIONS

Overall the site appears to be of little importance to bats both in terms of roosting and foraging/commuting.

During the transect surveys, only low numbers of pipistrelle bats were observed flying in close proximity to the site. None of the aforementioned bats were observed interacting with any features within the yard in any way.

A single myotis sp. call and a single noctule call was recorded using one of the automated detectors. However, there is no evidence to suggest that this species uses the site on a regular basis.

There is no evidence to suggest that any of the light intolerant species present within roosts within 2km of the site, use the site in any way shape or form.

The results of this survey are largely in line with the results of the survey undertaken by The Countryman in 2015.

It is anticipated that the increased duration of lighting at the site will not have any adverse impact on foraging, commuting or roosting bats providing that appropriate mitigation is implemented as per the lighting report (retention of dark areas, in particular, the vegetated boundaries).

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APPENDIX A - PHOTOS

PHASE 1 HABITAT SURVEY PHOTOS

Plate 1 – Example photograph of floodlights



Plate 2 – Photograph of southern end of the site



Plate 3 – photograph western hedge (location of floodlights)



Plate 4- Photograph of onsite buildings

