

Edginswell Business Park, Torquay, Devon

Shadow Habitat Regulations Assessment

March 2021

A report on behalf of TDA

Ref: 1229-sHRA-FM

Site Details

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Site Location	Torquay, Devon
Central OS Grid Reference	SX 8885 6631
Client	TDA

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Contents

1	Introduction	1
1.1	Description of Proposed Development	1
1.2	Scope and Aims	1
1.3	Consultation	1
2	HRA Requirement	2
2.1	National Site Network	2
2.2	Legislative Context	2
2.3	HRA Process	2
3	European Sites Scoped into Assessment.....	2
4	Screening Assessment	4
4.1	Factors Affecting the European Sites	4
4.2	Likely Significant Effect (LSE) Test	4
5	Further Information – Greater Horseshoe Bats	8
5.1	Existing Bat Activity Information	8
5.2	Suitability of Site for Greater Horseshoe Bats	8
5.3	Overall Assessment.....	9
6	Assessment of Potential Impacts	9
7	Cumulative Assessment	10
8	Conclusion	10
9	References.....	11

1 INTRODUCTION

This report has been prepared on behalf of TDA in relation to a proposed planning application at Edginswell Business Park, Torquay, Devon (central OS grid reference: SX 8885 6631).

The application site, hereafter referred to as the 'Site', extends to approximately 2.4 hectares (ha) and is located off Orchard Way on the outskirts of Torquay. A separate Ecological Impact Assessment has been produced (GE Consulting, 2021) and accompanies the planning application.

1.1 Description of Proposed Development

The Site and surrounding land have outline planning consent, granted in 2008 (reference P/2007/1743) and then varied under consent P/2016/0955, for a *'Mixed Use Development Comprising Business Use Class B1, Car Showroom, Retail Warehouse And Residential And Public House/Restaurant (Class A3/A4) With Associated Highway Works And Car Parking'*. Various parts of the business park have been developed under subsequent applications and amendments/ variations to existing consents including offices, a mixed-use building, a pub and a car showroom (see KTA Summary Document, 2020 for detailed application history).

The applicant is seeking full planning permission for enabling works to reprofile the Site, allowing level surfaces for three business/ commercial units to be created, along with necessary infrastructure. The proposal will result in:




- The loss of grassland habitats across the Site to facilitate levelling of the slope;
- The loss of a broadleaved plantation strip along the south-western boundary to allow a retaining wall to be constructed. This area will be replanted following construction;
- The retention and enhancement of a neglected orchard in the western corner.

Planning applications with full details of the units are to be submitted at a later date.

1.2 Scope and Aims

This shadow Habitats Regulations Assessment (sHRA) has been produced to provide Torbay Council with technical information to undertake their HRA, as the competent authority.

It is based on the Proposed Enabling Works Site Layout produced by KTA (dwg 2047_SK1003A) and should be read in conjunction with the corresponding application documents and drawings, in particular the:

-  Ecological Impact Assessment (GE Consulting, January 2021)
-  Landscape Masterplan (Redbay Design, dwg 736_03)
-  Landscape Details and Notes (Redbay Design, dwg 736_02).

1.3 Consultation

Pre-application advice was sought from the LPA in January 2021 and the following comment was provided:

"As the site/s is/are undeveloped and in the landscape connectivity zone (and historically a strategic flyway) associated within the South Hams SAC the ecology assessment and shadow HRA for each development should no doubt cover this."

2 HRA REQUIREMENT

2.1 National Site Network

European Council Directive 92/43/EEC (known as the Habitats Directive) and Council Directive 2009/147/EC (codified version of Directive 79/409/EEC as amended) the Wild Birds Directive established a network of internationally important sites (i.e. Special Areas of Conservation (SACs) and Special Protection Areas (SPAs)) designated for their ecological status. These sites combine to create the Europe-wide 'Natura 2000' network of sites.

In the UK, these formerly EU-protected sites have been merged into a National Site Network by the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019.

2.2 Legislative Context

The Conservation of Habitats and Species Regulations 2017 (as amended) provides protection to the National Site Network.

Under Part 6 'Assessment of Plans and Projects', Regulation 63 (1) of these regulations, an appropriate assessment needs to be undertaken by the competent authority in respect of any plan or project which:

- 👉 Is likely to have a significant effect on a European site or a European offshore marine site (either alone or in combination with other plans or projects); and,
- 👉 Is not directly connected with or necessary to the management of that site.

As the application is not necessary to the management of the site for nature conservation, Torbay Council, as the relevant competent authority, is required to carry out an HRA to ensure that the development decision does not adversely affect the integrity of European sites.

2.3 HRA Process

The HRA comprises:

- 👉 An initial assessment, 'screening', of whether the proposal either alone or in combination with other plans or projects is likely to have a significant effect on the European site. This screening process is focused on the 'Likely Significant Effect' (LSE) test. This is essentially a risk assessment process that seeks to understand whether there are any mechanisms for identified impacts arising from the project to adversely affect the European site (e.g. cause-effect pathway); and,
- 👉 If a likely significant effect cannot be ruled out, an Appropriate Assessment to determine whether the proposal will adversely affect the integrity of the European site.

A significant effect can be defined as an 'effect that is likely to undermine the site's conservation objectives'.

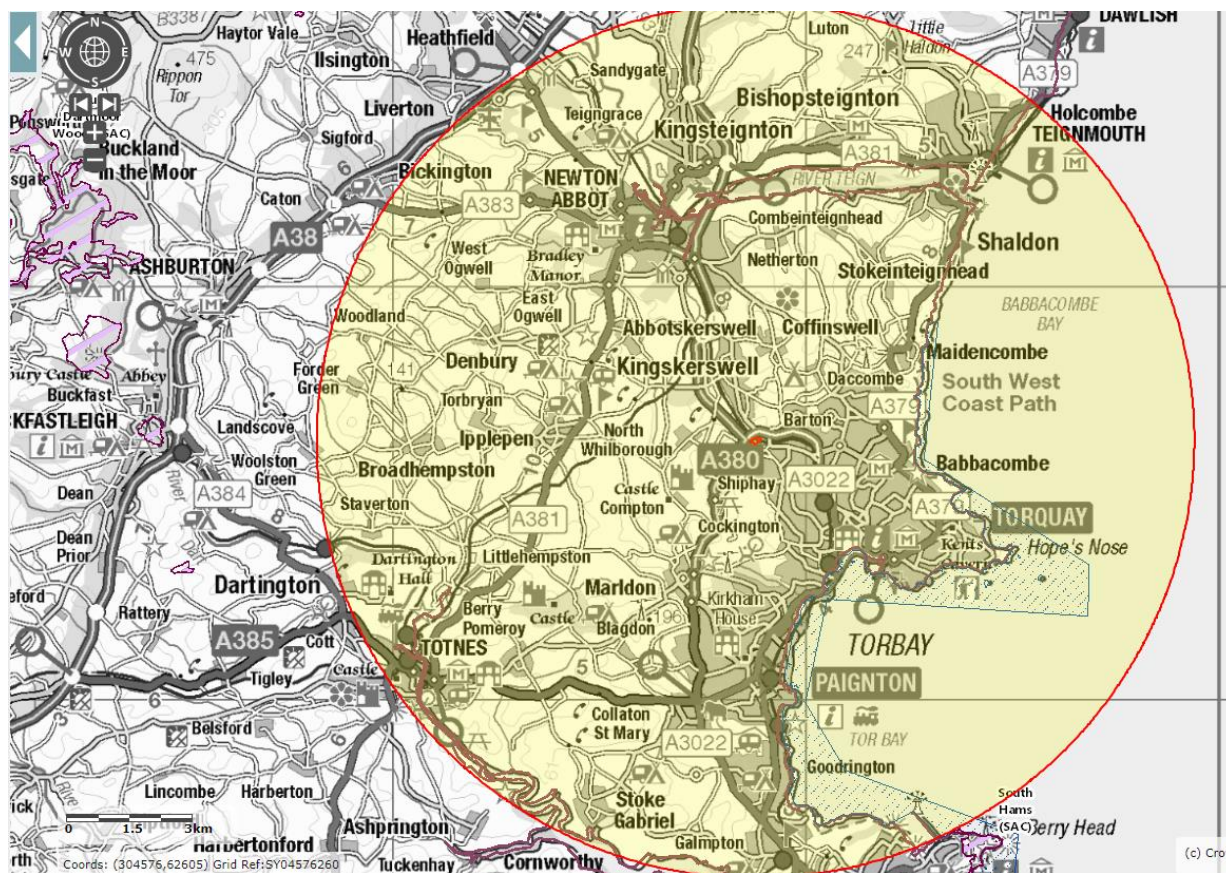
Following the People Over Wind ruling (case C323/17) in April 2018, 'it is not appropriate, at the screening stage, to take account of the measures intended to avoid or reduce the harmful effects of the plan or project on that site' and therefore this screening is undertaken in the absence of standard mitigation.

3 EUROPEAN SITES SCOPED INTO ASSESSMENT






Two European sites (National Site Network) have been scoped into the assessment:

- 👉 Lyme Bay and Torbay SAC (marine component) SAC, which lies 3.7km east; and
- 👉 South Hams SAC, with components lying 10.5km south-east and 13 – 14km west.

European site locations in relation to the application site are shown below (provided by MAGIC¹). Application site shown in red with 10.5km buffer.



The South Hams SAC consists of five discrete SSSI's:

-  Haytor and Smallacombe Iron Mines SSSI;
-  Berry Head to Sharkham Point SSSI;
-  Buckfastleigh Caves SSSI;
-  Chudleigh Caves and Woods SSSI; and
-  Bulkamore Iron Mines SSSI.

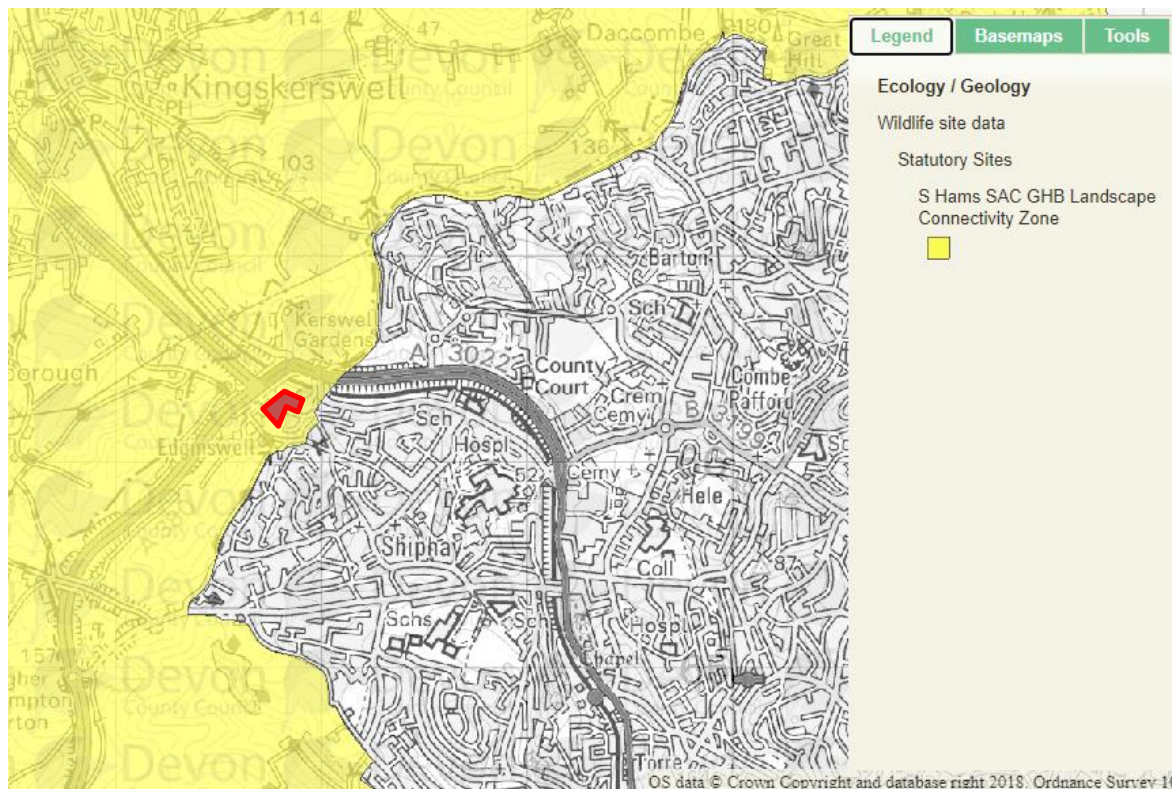
The Berry Head to Sharkham Point SSSI component of the South Hams SAC, adjacent to Brixham, is considered of most relevance to this assessment.

The Site is within the South Hams SAC Landscape Connectivity Zone (LCZ), detailed within the South Hams SAC Greater Horseshoe Bat HRA Guidance (Devon County Council, 2019). This is an area that includes a complex network of commuting routes used by the SAC population of greater horseshoe bats which provides connectivity between the designated roosts at the above SSSI's. The Site is not in or near a sustenance zone, radio-tracked flyway or pinch point.

These zones in relation to the Site are shown below.

¹ <https://magic.defra.gov.uk/home.htm>

Map from Devon Environment Viewer. Application site shown in red.



4 SCREENING ASSESSMENT

This is a 'risk assessment' of whether the proposal will, on its own or in-combination with other plans or projects, have a likely significant effect on the National Site Network before avoidance or reduction measures have been taken into account. The South Hams SAC HRA Guidance (Devon County Council, 2019) was consulted with respect to greater horseshoe bats.

4.1 Factors Affecting the European Sites

The Assessment takes into account the current state of the National Site Network, the main sensitivities and the range and scale of potential impacts from the proposed development.

During the screening exercise, Standard Data Forms produced by JNCC have been used to identify threats, pressures and activities with high impacts on the European site's designated features. In addition, Site Improvement Plans (SIP) which have been developed by Natural England for each European site, have been used to identify current and predicted issues affecting the condition of the qualifying features.

4.2 Likely Significant Effect (LSE) Test

Table 1 below details the characteristics of the European Sites and identifies potential pathways for Likely Significant Effects (LSEs) as a result of the proposed development.

The assessment process found that the proposed development will not involve any direct land take of any of the European sites, however indirect LSEs on the South Hams SAC cannot be ruled out.

Table 1: Screening Assessment for LSEs

Site Name	Distance from Site	Qualifying Features	Conservation Objectives	SSSI Condition Assessment	Threats, pressures and activities with negative impacts on the site (taken from Standard Data Form and SIP)	Risk of Significant Effect?
Lyme Bay and Torbay SAC (Marine site)	3.7km east	Annex I habitats (primary reason for site selection): <ul style="list-style-type: none"> 👉 1170 Reefs. 👉 8330 Submerged or partially submerged sea caves. 	Ensure that, subject to natural change, the integrity of the site is maintained or restored as appropriate, and that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring: <ul style="list-style-type: none"> 👉 the extent and distribution of qualifying natural habitats and habitats of the qualifying species; 👉 the structure and function (including typical species) of qualifying natural habitats; 👉 the structure and function of the habitats of the qualifying species; 👉 the supporting processes on which qualifying natural habitats and the habitats of qualifying species rely; 👉 the populations of qualifying species; and, 👉 the distribution of qualifying species within the site². 	No information available	F02 - Fishing and harvesting aquatic resources	No – development highly unlikely to impact fishing/harvesting
					Public access/ disturbance – sea caves (identified in SIP)	No – proposal type will not increase visitor numbers.
South Hams SAC	10.5km south-east and within LCZ.	Annex I habitats that are a primary reason for selection of this site: <ul style="list-style-type: none"> 👉 4030 European dry heaths; 👉 6510 Semi-natural 	Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring: <ul style="list-style-type: none"> 👉 The extent and distribution of qualifying 	The SAC comprises five component SSSIs. Berry Head to Sharkham Point SSSI is of relevance, its	Greater horseshoe bat Impact on roost sites (including small roosts on land between the SAC components ⁴). Removal, severance or disturbance of linear features	No – development will not directly impact roosts. No – no net loss of linear features.

² <https://designatedsites.naturalengland.org.uk/Marine/MarineSiteDetail.aspx?SiteCode=UK0030372&SiteName=&countyCode=&responsiblePerson=&SeaArea=&IFCAAArea=#hlco>

⁴ <http://publications.naturalengland.org.uk/publication/5900395054366720>

Site Name	Distance from Site	Qualifying Features	Conservation Objectives	SSSI Condition Assessment	Threats, pressures and activities with negative impacts on the site (taken from Standard Data Form and SIP)	Risk of Significant Effect?
		<p>dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) (*important orchid sites).</p> <p>Annex I habitats present as a qualifying feature, but not a primary reason for site selection:</p> <ul style="list-style-type: none"> 1230 Vegetated sea cliffs of the Atlantic and Baltic Coasts 8310 Cave not open to the public 9180 Tilio-Acerion forests of slopes, screes and ravines <p>Annex II species that are a primary reason for selection of this site:</p> <ul style="list-style-type: none"> Greater horseshoe bat <i>Rhinolophus ferrumequinum</i> 	<p>natural habitats and habitats of qualifying species;</p> <ul style="list-style-type: none"> The structure and function (including typical species) of qualifying natural habitats; The structure and function of the habitats of qualifying species; The supporting processes on which qualifying natural habitats and the habitats of qualifying species rely; The populations of qualifying species; and, The distribution of qualifying species within the site³. 	<p>condition is currently:</p> <ul style="list-style-type: none"> 86.59% favourable. 13.41% unfavourable recovering. 	<p>used for navigation and commuting⁵.</p> <p>Disturbance from new illumination causing bats to change their use of an area.⁵</p> <p>Physical injury by wind turbines.⁵</p> <p>Change in habitat structure and composition (loss or change in quality of foraging habitat).⁵</p> <p>Heathland/ grassland</p> <p>According to the SIP⁴, the intensive use of the grasslands of the Berry Head SSSI by thousands of walkers and dogs each year is affecting grassland growth and nutrient balance.</p> <p>Air pollution: The SAC habitats are naturally low in nutrients and are therefore susceptible</p>	<p>Habitats poorly connected and no greater horseshoe bats recorded.</p> <p>Yes – new lighting could impact commuting routes/ foraging beyond site boundary (see <i>Further Information</i> below).</p> <p>No – not applicable.</p> <p>No – No greater horseshoe bats recorded on site. Site not within sustenance zone.</p> <p>No – the proposed development will not increase recreational use.</p> <p>No – the Site is sufficiently distant from the SAC.</p>

³ <http://publications.naturalengland.org.uk/publication/6279422093033472?category=5374002071601152>

⁵ Identified in the SAC Technical Guidance (Natural England, 2010)

Site Name	Distance from Site	Qualifying Features	Conservation Objectives	SSSI Condition Assessment	Threats, pressures and activities with negative impacts on the site (taken from Standard Data Form and SIP)	Risk of Significant Effect?
					to eutrophication. Nitrogen deposition exceeds the site-relevant critical load for ecosystem protection and hence there is a risk of harmful effects, but the sensitive features are currently considered to be in favourable condition on the site.	

5 FURTHER INFORMATION – GREATER HORSESHOE BATS

5.1 Existing Bat Activity Information

A data request from Devon Biological Records Centre (DBRC) returned 126 individual records of greater horseshoe bats within 4km of the Site, 15 of which are roosting sites (hibernation, night and occasional roosts). These are all located in rural locations outside of Torquay and are considered likely to support bats associated with the South Hams SAC. The closest roost record is approximately 500m west and cited as an occasional roost.

Previous survey work at the Site identified no greater horseshoe bats using the Site or wider outline application area (Aspect Ecology, 2013). These surveys comprised 3-hour dusk and dawn activity surveys between April and September 2011 (excluding July) supplemented with two automated detectors. Similarly, no greater horseshoe bats were recorded during survey work in 2004 and 2005 (WSP, 2005).

Automated bat surveys for the nearby Marston's Pub in 2013 recorded a single greater horseshoe pass over 10 nights of survey effort (BSG, 2013). The detector was positioned along the southern boundary of the pub site, on a tree line located between Orchard Way and Edginswell Close. This feature lacks suitable habitat connectivity to the Site due to the level of street lighting along Orchard Way and Oak View Close and is considered to be of low value to greater horseshoe bats.


It is considered that there have been no major changes to the Site's habitats or connecting habitats since the previous survey work that would make the Site more suitable for greater horseshoe bats.

Various survey work was undertaken for the new South Devon Expressway, the southern end of which is located approximately 60m west of the Site. Monitoring surveys⁶ along the road since its completion has identified very low numbers of greater horseshoe bats between Edginswell and Kingskerswell. 2016 surveys showed that the two culverts closest to the Site are not used by greater horseshoe bats, which may be due to lighting at the Hamelin Way junction (JBA Consulting, 2017). Culvert 32, located 530m north of the Site (OS grid reference SX 8832 6667), was shown to be used by low numbers of greater horseshoe bats (4 passes over 8 survey periods). This culvert is located at Edginswell Farm County Wildlife Site (CWS) which was partially destroyed by the Link Road. This is also close to the 'occasional roost' for greater horseshoe bat in the data held by DBRC and may be of value for bats utilising the 'green gap' between Torquay and Kingskerswell.

5.2 Suitability of Site for Greater Horseshoe Bats

The Site itself comprises rank, tussocky, species-poor grassland, bare ground and patches of scattered scrub on a north-east facing slope. The Site is considered to offer poor foraging and commuting opportunities for bats, providing low invertebrate prey and being subject to light-spill from Orchard Way, adjacent car-parking and buildings and the South Devon Expressway Junction.

The boundaries are as follows:

-  Northern boundary. No delineation of boundary, however beyond the edge of the Site, as the land slopes north, the grassland becomes damp, with tall ruderal species and emergent marginal vegetation associated with a small stream alongside the railway. This area is identified by DBRC as part of the Mainline Railway 'Other Site of Wildlife Interest' (OSWI) for species rich grassland, tall herb, scrub, deciduous & mixed woodland.

⁶ Various bat monitoring reports available at https://www.devon.gov.uk/accesstoinformation/archives/information_request/bat-records-for-newton-abbot-area

- 🍌 Eastern boundary. Short section of hazel hedgerow, fencing and dry ditch alongside the Eden Vauxhall building. Well-lit.
- 🍌 Southern boundary. Mature rear gardens of dwellings along Edginswell Lane with shrubs and trees. Narrow block of mixed plantation woodland along boundary.
- 🍌 Western boundary. Fence with scattered scrub with a public footpath beyond and the Hamelin Way road embankment with young shrubs and trees.

The Site boundaries provide poor navigational features for commuting greater horseshoe bats but beyond this the wetter areas associated with the stream and railway to the north as well as the Hamelin Way road embankment to the west would ordinarily provide potential commuting habitat for greater horseshoe bats, which utilise 'hedgerows, woodland edge and vegetated watercourses for navigation' (DCC, 2019). However, the Site's location in the landscape, being bordered by built-up areas and major roads, all of which will be relatively well-lit significantly reduces its potential for greater horseshoe bats, which rely on dark, continuous corridors to navigate through the landscape.

The nearest component of the SAC is over 10km away and the Site is on the very edge of a Landscape Connectivity Zone for greater horseshoe bat. The landscape connectivity zone is understood to be based on the previous 'strategic flyways', of which the Site previously lay within a 500m buffer, which comprised a 'dead end' leading off from landscape features to the north-west. The built-up areas of Torquay lie to the east, offering poor habitat for greater horseshoe bats.

5.3 Overall Assessment

Overall the Site is considered to be of extremely low value to greater horseshoe bats and is unlikely to provide an important route between high quality foraging habitats and any key roost site.

However, it is considered that a precautionary approach should be adopted in the absence of more recent survey data, in which the railway and road embankment corridors beyond the Site boundary (to the north and west) are assumed to be of some value to greater horseshoe bats. Furthermore, if the recommendations of the South Devon Expressway Ecological Monitoring Annual Report (JBA, 2017) to reduce lighting at the Hamelin Way junction are adopted in future, the area may become more favourable for greater horseshoe bats.

Both the railway and road embankment corridors meet outside the northern corner and there are opportunities for bats to fly beneath the Hamelin Way bridge at this point, to access further habitat along the railway corridor and South Devon Expressway to the west.

6 ASSESSMENT OF POTENTIAL IMPACTS

6.1.1 Lighting

Lighting has been shown to cause avoidance behaviours in greater horseshoe bats (Jones and Morton, 1992; Jones et al., 1995) and is considered to have a negative impact on roosting, emergence, commuting and foraging (Stone, 2013). This can have the same 'barrier' effects as removal of linear features and reduction in foraging areas.

During the works required to level the application site, construction and security lighting could increase light levels on linear features outside the boundary (the railway and road corridors), therefore preventing greater horseshoe bats from commuting. Due to the nature of the proposal, there will be no operational impacts from this application.

6.1.2 Mitigation

The following measures will be implemented to prevent any adverse impacts to greater horseshoe bats and is recommended to form a condition of the planning consent:

- No construction will take place between sunset and sunrise;
- No lighting (including security lighting) will be directed at the two potential commuting features beyond the northern and western boundaries.

Future development proposals for the Site will need to take into account greater horseshoe bat requirements with lighting designed in accordance with ILP/ BCT guidance (2018).

7 CUMULATIVE ASSESSMENT

If the above measures are implemented to protect the offsite features, it is considered that there will be no in-combination effects with other developments in the area.

8 CONCLUSION

Given the above mitigation measures, the proposal will not restrict the movement of greater horseshoe bats at a landscape scale and therefore no likely significant effects on the SAC greater horseshoe bat population are predicted.

The HRA guidance states that *“greater horseshoe bats commuting through the Landscape Connectivity Zone are dispersed and found in relatively low numbers compared to within the Sustenance Zones. It is therefore considered that only proposals which could severely restrict the movement of bats at a landscape scale (impacting on landscape scale permeability) may have a likely significant effect on the SAC greater horseshoe bat population”*. Exceptions are pinch points and known/ potential commuting routes; however none have been identified in this location.

Based on the above information it is considered highly unlikely that the proposal could restrict the movement of bats at a landscape scale.

9 REFERENCES

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