

Preliminary Ecological Appraisal

Survey site:

Premier Inn Merthyr Tydfil, Duffryn, Pentrebach, Merthyr Tydfil, CF48 4BB

Client:

Premier Inn Hotels

Survey date:

1st May 2024

Project:

This report is prepared to inform a planning application with the Merthyr Tydfil County Borough Council. The proposal is described as:

The construction of an extension to the hotel for the construction of 16 additional rooms.

[unsubmitted]

PEA survey methodology and legislation can be found in the Arbtech Supplement: [PEA Methodology and Legislation - 2024.](#)

PRA survey methodology and legislation can be found in the Arbtech Supplement: [PRA Methodology and Legislation - 2024.](#)

The site survey was undertaken by Katy Perry, BSc (Hons), MCIEEM, Senior Consultant (Natural England Bat Licence Number: 2022-10404-CL18-BAT, NRW (S092694/1, GCN Licence 2018-35157-CLS-CLS and Dormouse Licence 2020-49929-CLS-CLS).					
Date of survey	Temperature (°C)	Humidity (%)	Cloud Cover (%)	Wind (km/h)	Rain
01/05/2024	12	93	100	13	None

Ecological Survey Factor	Detailed using desk study and site survey (carried out under good weather conditions). Any specific limitations noted within relevant section. This table may include further work you will need to commission (if any) to obtain planning permission or comply with legislation for other consent. All clients are expected to read and understand this section, or to contact the lead surveyor for advice.
Conclusion, Impact or Recommendations	
Habitats and plants (see habitat map in appendix 1, location plan in appendix 2, photos in appendix 3 and proposal plan in appendix 4). Botanical species are described with reference to the DAFOR scale (D = Dominant; A = Abundant, F = Frequent, O = Occasional, R = Rare).	
Summary of Survey Findings UKHab codes: - Buildings (u1b5) - Hard standing (u1b) - Modified grass (g4) - Introduced shrubs (u1 867) - Scattered trees (u1 32) - Woodland (w1)	Site Context The site, situated at the National Grid Reference SO 06176 03795, has a site area of approximately 1.1ha. The grounds hold a large hotel, B1, and a public house/restaurant, B2. The buildings are surrounded by car parking, modified grass, introduced shrubs, scattered trees, and to the west of the site there is deciduous woodland. The site is surrounded by residential buildings to the east, west and south, industrial units and warehouses to the north-west and south-east and the river Taff to the south-west in the wider landscape, west of the railway line and main roads. A small storm flow/tributary of the river is present along the west of the site to the south. There are no ponds within 500m. The river has priority habitat deciduous woodland along the embankments, likely a locally designated wildlife site and therefore the wider landscape has a moderate level of biodiversity. A site location map is provided in Appendix 2. Limitations A biological records data search has not been undertaken.

	B2 and its interior was not surveyed due to no impact on this building. The whole of the site trees were not individually assessed for their suitability for roosting bats as the works is impacting the south end of B1 and hard standing car park. The trees closest to this were assessed. These limitations have been taken into account during the evaluation of the site and requirement for further surveys and mitigation. On-site habitat descriptions • Buildings (u1b5) • Hard standing (u1b) • Modified grass (g4) • Introduced shrubs (u1 867) • Scattered trees (u1 32) • Woodland (w1) <u>Buildings (u1b5)</u> There are two buildings on site. The hotel, B1, and the associated public house and restaurant, B2. B2 is not due to be impacted by the proposed works. B1 is assessed for its suitability for supporting roosting bats in the appropriate section below. The building had scaffolding at one location to enable a close-up inspection of the roof tiles. <u>Hard standing (u1b)</u> The majority of the site has tarmac car parking and access roads around the buildings. There are paved pathways around the site too. The hard standing has negligible ecological value. <u>Modified grass (g4)</u>
--	---

	The site has areas of well-managed, short, mown grass around the parking and introduced shrubs. Amongst the dominant perennial rye, common daisy, yarrow, and vetch was observed. Along the site edges and hedge boundaries and introduced shrubs, there is taller vegetation including herb robert, cleaver, and nettle. <u>Introduced shrubs (u1 867)</u> There are introduced shrubs and managed shrubs and hedges around the site. There is yew, snowberry, laurel, holly, crocosmia and there are also stands of Japanese knotweed. <u>Scattered trees (u1 32) and Woodland (w1)</u> Around the site, there are birch, cherry and Scots pine planted around the site, with mature beech present on site. To the west of the site is a woodland, which comprises field maple, alder, and sycamore, and it is fenced off from the main site. Local notable habitats Notable habitats are present within 2km of site, with the closest being deciduous woodland located to the west of the site, fenced off from the car park. The woodland is in close proximity to the site, but there is hard standing present. It is likely works in that area will not impact tree roots. There is a storm flow/tributary of the river Taff to the south-west of the site, near to the proposed working area.
<i>Foreseen Impacts</i>	On-site habitats The proposed development will result in the loss of hard standing, but could impact some modified grass also. A silver birch and Scots pine will need to be removed to facilitate the works. This could result in a net loss in biodiversity at the site. However, the site has areas to improve and enhance. Notable habitats The proposed development is unlikely to impact the notable habitats due to the surrounding barriers in the form of carparks and secure fencing. The loss of habitat on site will not have a material impact on the much larger and better-quality habitats nearby

	as any species utilising both sites will still have ample habitat in the surrounding area. Pollution from works could impact the woodland and the watercourses.
<i>Recommendations</i>	On-site habitats Scrub, trees and flowering species should be retained, replacing with native species where possible. Notable habitats Best practice measures to minimise the possibility of pollution must be implemented during construction. Controlled working measures to prevent any diffuse pollution or waste to the deciduous woodland or canal. Suggested biodiversity enhancements The planting of native tree and shrub species would be beneficial for wildlife, through the provision of sheltering and foraging habitats.
Locality and Designated Sites	
<i>Summary of Survey Findings</i>	On-site designations The site is not subject to any designation, and there are no known statutory sites adjacent to the site. Statutory designated sites (within 2km) Cwm Glo a Glyndyrys Site of Special Scientific Interest – SSSI (~1.2km northwest) – is designated for species-rich neutral grassland and acid grassland, and for the association of these habitats with others including woodland and heath. It is also of special interest for its assemblage of grassland fungi, including 32 species of waxcap.
<i>Foreseen Impacts</i>	On-site designations None Statutory designated sites

	None. The SSSI is sufficiently far from the site and has considerable barriers between the two that the proposed development will not impact the designated site.
<i>Recommendations</i>	On-site designations None Statutory designated sites Best practice measures to minimise the possibility of pollution must be implemented during construction.
Invasive / Non-native species	
<i>Summary of Survey Findings</i>	Immediately adjacent to the proposed extension of the building, Japanese knotweed is present on site.
<i>Foreseen Impacts</i>	Any disturbance or damage to the plant or the soil could result in the spread of the plant – which is an offence. The visible stands above ground can have rhizomes underground which spread as far as 7m.
<i>Recommendations</i>	Visible stands of JPK should have secure fencing installed with a buffer of 7m from the visible stands to prevent machinery, materials or persons entering the zones and to prevent accidental spread. An invasive species management plan will be required to control and/or eradicate Japanese knotweed which will likely include the injection of strong herbicides and will require a waste permit for removal of hazardous waste from site. Specialist contractors should be contacted for treatment and removal of JPK.
Invertebrates	
<i>Summary of Survey Findings</i>	No habitat for protected or notable invertebrates is found on site. The site will provide habitat value for common assemblages of invertebrates which could exploit the flowering shrubs onsite, woodland outside the fencing, watercourses, and trees.
<i>Foreseen Impacts</i>	None foreseen as the proposed works is due to impact the building and the hard standing for the works.
<i>Recommendations</i>	No further surveys. Suggested biodiversity enhancements

	The following habitat creation and enhancement opportunities could be incorporated into the proposed development to provide additional opportunities for invertebrates on site: • beetle banks • dead wood piles • floral borders • Bee bricks
Bats	
<i>Summary of Survey Findings</i>	EPSL data The MAGIC.gov database does not hold EPSL data in Wales. However, with the presence of the river Taff, and areas of mixed woodland in all directions within the local landscape in addition the trees present on the southern site boundary, there is moderate value for commuting and foraging bats. Roosting habitat – Building 1 B1, is a two-storey L-shaped hotel building. The brickwork is covered by render, which is in excellent condition, no cracks, or visible crevices. The windows and doors are UPVC and in very good condition with no gaps around at all and no means of ingress. There are two chimneys, the flashing around them is also in very good condition. The roof is pitched and has slate tiles and lead flashing at the ends, which are mostly in excellent condition. The roof tiles are all present, with no slipped, missing, raised or broken tiles. The ridge tiles are present, with one small gap which can be utilised by crevice dwelling bat species to the north of the building, unconnected from the proposed works. One loft space was accessible during the time of the survey, which was inspected for evidence of bats. The loft was located within the southern section of the building and comprised of two sections separated by a fire door and wall. The loft was approximately 14m x 40m and had two storeys within so was approximately 4-5m from ridge to ground level. Roof structures were timber, and the roof lining was plastic, with an area of breathable lining at the north end of the loft. There was a central timber walk space

	along the centre of the loft, with a ladder to an elevated level which contained water tanks. The remaining spaces were covered in loose wool insulation. The loft was mostly secure. There were areas of gaps within the lining, particularly near the ridge of the loft (see Appendix 1b for approximate locations). The presence of undisturbed cobwebs along this area can indicate that bats are not using this area as an access or roosting point. With the exterior roof tiles being so well sealed, it is unlikely that bats could utilise these features to access the loft for roosting. No light entered either of the spaces and there were no droppings or feeding remains seen within. In addition, there is a bright green fire safety light permanently on within the loft space, the lux level lowers the suitability for roosting bats significantly. Based on this information, the building is concluded to have suitably low value for supporting roosting bats, but based on the proposals, the section of the building has negligible value for roosting bats. Roosting habitat – Building 2 There is another building (B2) within the red line boundary, a two-storey multipitch restaurant bar. The brickwork is covered by render, which is in excellent condition, no cracks, or visible crevices. There are three chimneys present. The windows and doors are UPVC and in very good condition with no gaps around at all and no means of ingress. The roof is pitched and has slate tiles and lead flashing at the ends, which are mostly in excellent condition. The roof tiles are all present, although there are some raised tiles around the chimney areas which crevice dwelling species may utilise. The internal of this building could not be accessed during the survey. Based on this information, the building is considered to have “low” value to support roosting bats
--	---

	Roosting habitat – T1 and T2 There are multiple trees on site. Some which have roosting features for bats to utilise, but only two are due to be removed for the proposed works and therefore were assessed for their suitability. T1, a Scott's pine has a limb torsion split on its east facing stem approximately 3m up. This crevice is open to the elements making this feature suboptimal. In addition, the feature is easily inspected and therefore can be checked prior to felling. There are no other features present on the tree. T2, is a silver birch with no suitable features on this tree for supporting roosting bat species. Associated images of the buildings and trees can be found at the end of the report, Appendix 4 Foraging and commuting habitat Bats could use the woodland and watercourse for foraging along the boundaries within the local landscape for foraging and commuting and could also be used by bats dispersing from nearby roosts outside of the site and commuting around the area.
<i>Foreseen Impacts</i>	Roosting habitat The buildings both have low value for roosting bats. B2 is not being impacted by the proposed development. The extension of B1 is not expected to impact the northern aspect of the building in which the only roosting feature was observed. Therefore, no impacts on bats are foreseen on these buildings during the proposed works. T1 and T2 are due to be removed as part of the development. This could potentially destroy a roost if any bats are roosting within T1. No impacts on bats are foreseen from the removal of T2. The proposed development may lead to an increase in the amount of current lighting of surrounding habitats or the retained building without mitigation. This may disturb commuting bats.

	Artificial lighting The proposed development may lead to an increase in the amount of current lighting of surrounding habitats or the retained buildings without mitigation. This may disturb commuting bats.
<i>Recommendations</i>	Foraging and commuting habitat No further surveys are recommended for the buildings on site. Prior to the felling of T1, a close-up inspection of the roosting feature will be undertaken by a licensed ecologist to determine the presence or likely absence of roosting bats. In the unlikely event that a bat or evidence of bats is discovered during the development all work must stop and a bat licensed ecologist contacted for further advice. Artificial lighting A low impact lighting strategy will be adopted for the site during post-development which outlines the areas of the site that will be retained as dark corridors. Parameters can be found on the Bat Conservation Trust website: https://www.bats.org.uk/our-work/buildings-planning-and-development/lighting-2 Suggested biodiversity enhancements The installation of two bat boxes at the site will provide additional roosting habitat for bats. The bat boxes will be installed on the hotel or on mature trees within the woodland, or incorporated into the design. Bat boxes should be positioned 3-5m above ground level facing in a south or south-westerly direction with a clear flight path to and from the entrance, away from artificial light. The bat box will be a specification suitable for crevice dwelling species such as Woodstone bat box or a similar alternative brand, or Ibstock bat bricks.
Birds	

<i>Summary of Survey Findings</i>	Habitats on site No evidence of nesting birds was identified on the building or hard standing; however, birds could use the vegetation adjacent for nesting or foraging. No habitat for schedule 1 birds was observed. Magpies, wood pigeon, blackbird, and carrion crows were observed on or flying over site. Barn owls The site does not provide any suitable nesting sites for barn owls.
<i>Foreseen Impacts</i>	The proposed development could result in the destruction or the disturbance and subsequent abandonment of active bird nests adjacent to the building.
<i>Recommendations</i>	Precautions should be taken with machinery and noise levels when working close to any retained nests so as not to disturb any nearby nesting birds during construction works. At least a 3-5m buffer should be created between any machinery and active nests until the young have fledged. Suggested biodiversity enhancements The installation of two bird boxes at the site will provide additional nesting habitat for birds. The bird boxes will be installed on the newly constructed hotel extension and/or the mature trees in the woodland. General purpose bird boxes should be positioned 3m above ground level where they will be sheltered from prevailing wind, rain, and strong sunlight. Species-specific bird boxes should be installed in line with manufacturers specifications. Sparrow terraces or swift cups are advised to be installed.
Reptiles	
<i>Summary of Survey Findings</i>	EPSL data A review of the MAGIC database returns no granted EPSL records for protected reptiles within 2km of the site within Wales. On-site habitats

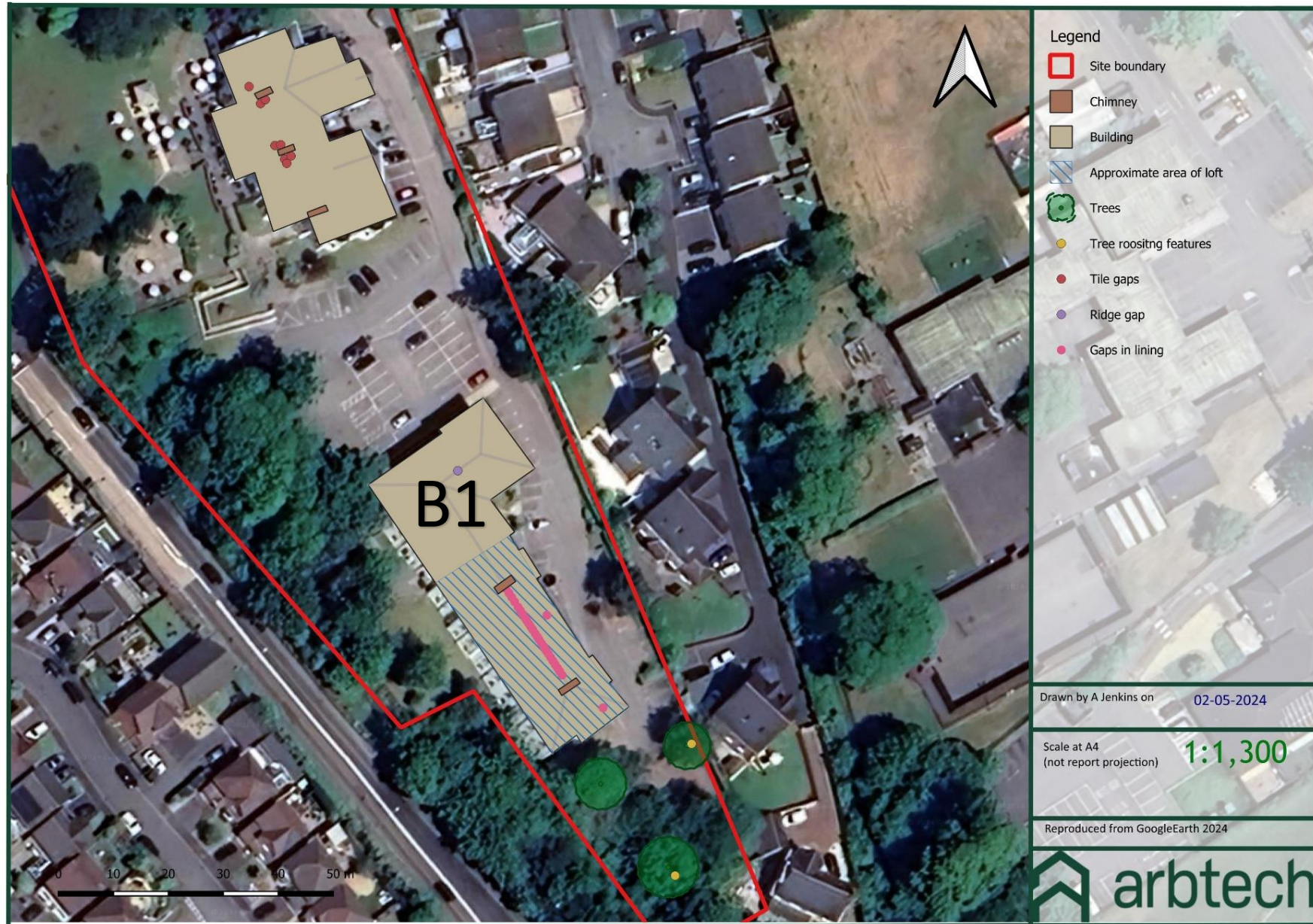
	The proposed development site overall does not present high suitability for reptiles due to a lack of suitable habitat, in particular as the working area is only due to impact the hard standing and the existing building. The woodland and watercourse offer suitability for supporting reptiles, but not the habitats due to be worked within.
<i>Foreseen Impacts</i>	Buildings and hard standing will be impacted during construction. The loss of such habitats is likely to be inconsequential to local reptile populations owing to their low value and the presence of more extensive habitat locally.
<i>Recommendations</i>	None. Suggested biodiversity enhancements The following habitat creation and enhancement opportunities could be incorporated into the proposed development which would be beneficial for reptiles but also small animals within the landscape such as hedgehogs: • Creation of reptile refugia and hibernacula using debris and brash from site clearance. • Planting of native scrub and grassland to increase foraging opportunities.
Amphibians	
<i>Summary of Survey Findings</i>	EPSL data The MAGIC database does not show granted EPSL, class licence or pond survey records for great crested newts within 2km of the site due to being located within Wales. On-site habitats A review of aerial imagery indicates the absence of ponds within 500m. The river and tributary are close to site, but flowing water can act as a barrier to dispersal of amphibians. The hard standing and building are suboptimal for great crested newts and common amphibians due to a lack of refuge from predation, and lack of connectivity. However, the woodland and watercourse offer suitability.
<i>Foreseen Impacts</i>	Hard standing and the building will be impacted during construction. When completing the rapid risk assessment published by Natural England (Natural England 2015), the proposed development produces a Green risk score , which states: Offence Highly Unlikely .

<i>Recommendations</i>	No further surveys are required. Suggested biodiversity enhancements The site could be enhanced for amphibians' post-development through creation of amphibian hibernacula using rubble and logs from site clearance. Information on how to construct a hibernaculum can be found here: https://www.wiltshirewildlife.org/hibernaculum
Badger	
<i>Summary of Survey Findings</i>	No evidence of badgers (e.g. latrines, snuffle holes, hairs) or badger setts were identified on or within influencing distance (30m radius) of the site. Furthermore, the topography of site (and surrounding area as viewed by google earth) is broadly level. Furthermore, the site itself is predominately hard standing which is suboptimal for badgers.
<i>Foreseen Impacts</i>	Modified grass and hard standing will be removed during the works. The loss of such habitats is likely to be inconsequential to local badger populations owing to their low value and the presence of more extensive habitat locally. However, with the canal and woodland, badgers may be present in the habitats adjacent to site.
<i>Recommendations</i>	A basic precautionary mitigation during works is recommended: - Any excavations will be covered overnight, or a ramp will be installed to enable any trapped animals to escape. - The use of night-time lighting will be avoided, or sensitive lighting design will be implemented to avoid light spill on to habitats which badgers could use. South and west boundaries. - Any chemicals or pollutants used or created by the development should be stored and disposed of correctly according to COSHH regulations. - In the unlikely event that a badger sett is identified within 30m, works must cease and advice must be sought from a suitably qualified ecologist. Suggested biodiversity enhancements The following habitat creation and enhancement opportunities could be incorporated into the proposed development which would be beneficial for badgers:

	Planting fruit bearing trees and species-rich grassland to increase foraging opportunities.
Riparian animals	
<i>Summary of Survey Findings</i>	The river tributary or storm flow to the south and west of the site has heavily shaded banks due to the woodland and has reduced suitability for water voles. However, the watercourse could be used for commuting otter, but as this is a branch off the main river and therefore reduced suitability for otters in the landscape being located next to the main road and landscaped adjacent to the development as likely urban drainage run-off channels.
<i>Foreseen Impacts</i>	No impacts are anticipated on riparian animals as a result of the proposed development as the works is impacting hard standing and B1.
<i>Recommendations</i>	Precautionary measures for pollution are required during construction.
Hazel dormouse	
<i>Summary of Survey Findings</i>	EPSL data MAGIC does not return EPSLs within Wales. On-site and surrounding habitats No evidence of dormice was found within the site. It is not anticipated that dormice are present on the site due to the lack of suitable habitats present. For isolated habitats in the UK, research indicates that dormice require 20ha of woodland habitat to support a viable population (Bright et al. 1994). There are no areas of woodland on the site that are big enough (20ha) to support a dormouse population.
<i>Foreseen Impacts</i>	No impacts are anticipated on hazel dormice as a result of the proposed development.
<i>Recommendations</i>	None.
Other e.g. hedgehog	
<i>Summary of Survey Findings</i>	The habitat recorded onsite provides a small area of suitable, albeit limited commuting and foraging opportunities for hedgehogs in the form of shrubs and a more optimal habitats with the fenced off woodland. However, this habitat is surrounded by main roads and residential housing with secure fencing. Although no evidence indicating the presence of hedgehogs was

	recorded, access to on-site habitats is available for hedgehogs. The future presence of foraging and commuting hedgehogs for transient periods cannot be discounted.
<i>Foreseen Impacts</i>	The proposed development will result in the loss hard standing. The loss of such habitats is likely to be inconsequential to local hedgehog populations owing to their low value. However, construction activities could result in the death or injury of hedgehogs, if present.
<i>Recommendations</i>	Similar to the badgers, a precautionary working method will be implemented during construction, including the following measures: • Any excavations will be covered overnight, or a ramp will be installed to enable any trapped animals to escape. • The use of night-time lighting will be avoided, or sensitive lighting design will be implemented to avoid light spill on to retained habitats which hedgehogs could use. • Any chemicals or pollutants used or created by the development should be stored and disposed of correctly according to COSHH regulations. • If any hedgehogs are found in the working area these should be allowed to disperse of their own accord or, if at immediate risk, should be moved by hand to a sheltered, vegetated area away from disturbance. Suggested biodiversity enhancements The following habitat creation and enhancement opportunities could be incorporated into the proposed development which would be beneficial for hedgehogs: • Creation of brash piles or installation of hedgehog houses in shady areas. • Installation of gaps under new boundary fencing to enable hedgehogs to move freely through the site.

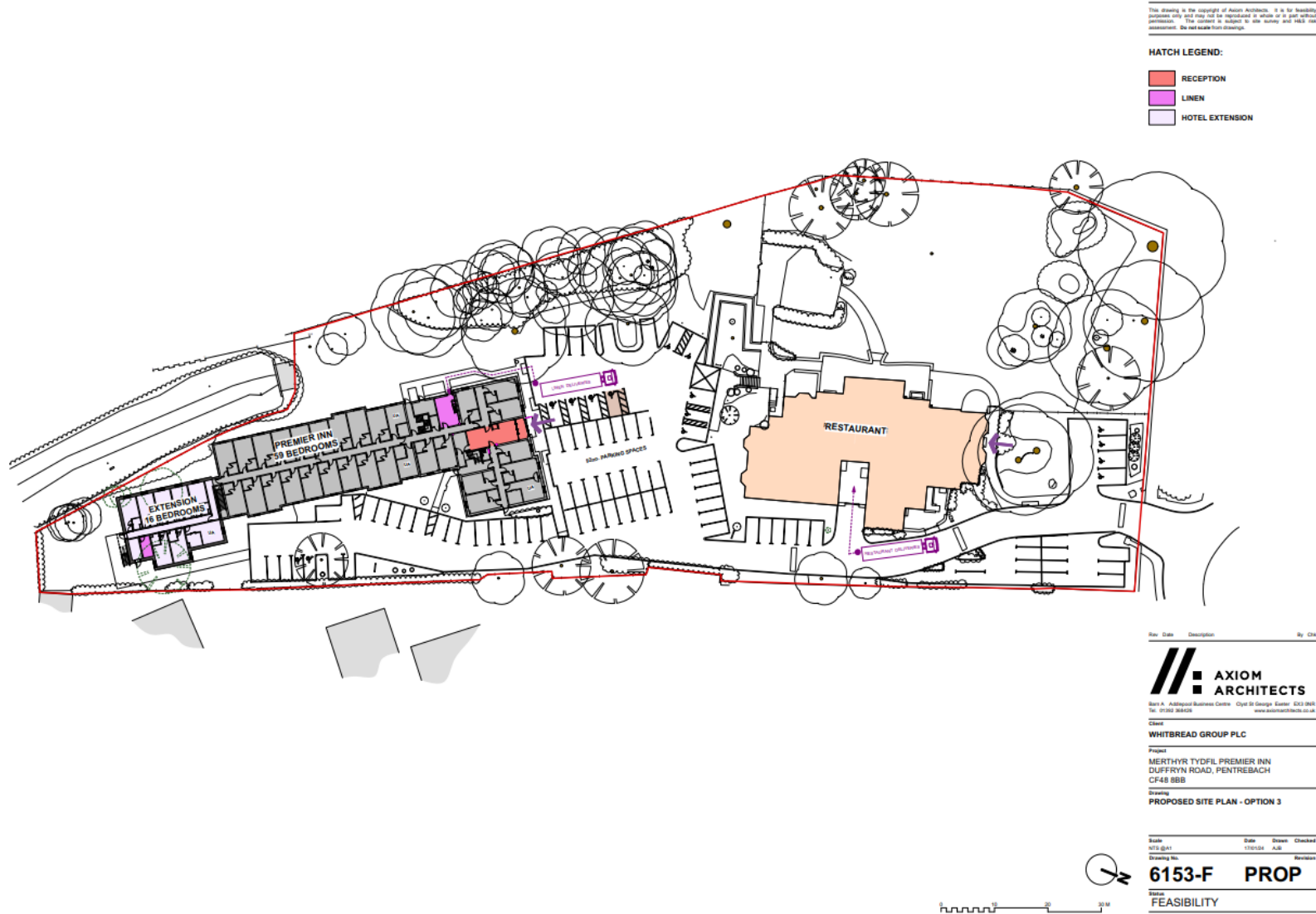
Appendix 1: Survey/Habitat map



Appendix 2: Location map



Appendix 3: Proposed plan



Appendix 4: Photos

	< Image 1: North elevation of B1 with rendered brickwork and secure slate roof tiles. > Image 2: East elevation of B1, showing the scaffolding for a closer inspection above the buttress wall edge around the building edge.	
	< Image 3: A close up of the field tiles on the east elevation of B1. They are in excellent condition. > Image 4: The local landscape east of the site, ideal for foraging and commuting bats.	

	< Image 5: Looking northwest at the field tiles on the L of the building. > Image 6: A close up of the minor, narrow, ridge gap on this northern elevation.	
	< Image 7: South elevation of B1 and T2 in front of it, which has no features present. > Image 8: The exterior of B2. The west facing elevation.	

	< Image 9: South and east elevations of B2. > Image 10: The loft space of B1. There are undisturbed cobwebs along the ridge.	
	< Image 11: Close-up of some gaps along the ridge internally, but with no connection to the exterior of the building. > Image 12: Green fire exit light on permanently within the loft space.	

	< Image 13: internal walls were secure with no external light entering, no evidence of bats or droppings found inside. > Image 14: The limb feature on T1 which can be inspected prior to felling.	
	< Image 15: T3, an alder, is further south of T1 and T2 and not due to be impacted by the works but has some features present. > Image 16: The limb feature on T3 close-up.	

	< Image 17: Mature beech trees, willow trees and short modified grass on site. > Image 18: A large stand of JPK adjacent to the south-west corner of the building to be developed.	
---	--	---

Legal

Arbtech Consulting Limited has prepared this report for the sole use of the above-named client or their agents in accordance with our General Terms and Conditions, under which our services are performed. It is expressly stated that no other warranty, expressed or implied, is made as to the professional advice included in this report or any other services provided by us. This report may not be relied upon by any other party without the prior and express written agreement of Arbtech Consulting Limited. The conclusions and recommendations contained in this report are based upon information provided by third parties. Information obtained from third parties has not been independently verified by Arbtech Consulting Limited.

© This report is the copyright of Arbtech Consulting Limited. Any unauthorised reproduction or usage by any person other than the addressee is strictly prohibited.