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Ecological Impact Assessment (EcIA)

Survey site:

UYS building, Garsington Road Cowley Oxfordshire OX4 2BW

Client:

Charterhouse House Property Group (Oxford) Ltd

Survey date:

22nd January and 4th March 2024

Project:

The survey was required to inform a planning application for the demolition of the existing buildings (hereafter referred to as “the proposed development”).

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

Reviewed by Mel Reid BSc (Hons) MRes MRSB, Senior Consultant on 05/03/2024

The site survey was undertaken by Leah Cook (Accredited Agent on Natural England Bat Licence Number: 2018-37888-CLS-CLS).					
Date of survey	Temperature (°C)	Humidity (%)	Cloud Cover (%)	Wind (km/h)	Rain
22/01/2024	10	71	10	20	None
04/03/2024	9	71	20	16	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).	
Summary of Survey Findings (UKHab codes used)	<p><u>Surrounding Landscape</u></p> <p>The site is located to the west of Oxford and is located within 2km of priority habitats (ordered by closest) including Deciduous woodland (bordering the site to the north and south), Traditional orchard (900m southwest), Lowland meadows (1.1km northwest), Lowland dry acid grassland (1.4km north), and Lowland heathland (1.9km northwest). There are no priority habitats within the site boundary. Soil type on the site is slowly permeable, seasonally wet, slightly acidic but base rich loamy and clayey.</p> <p>The site is located at National Grid Reference SP 56830 04297 and has an area of approximately 2.5ha comprising one commercial warehouse, a temporary building, hardstanding, woodland, grassland, ornamental shrubs and scattered trees. It is surrounded by agricultural land and scattered trees with an industrial park directly to the west and Horspath village to the north. The wider landscape comprises of Oxford to the west, an area of woodland to the north and Wheatley village and the M40 to the east. A site location plan is provided in Appendix 2.</p> <p>UKHabs Codes:</p> <ul style="list-style-type: none"> • Buildings (u1b5) • Developed land; sealed surface (u1b) – Secondary codes: scattered trees (32) & introduced shrubs (847) • Lowland mixed deciduous woodland (w1f) • Other neutral grassland (g3c) – Secondary code: scattered scrub (10)

Buildings (u1b5)

There are two vacant commercial buildings onsite consisting of the main warehouse at the centre of the site and a temporary structure to the north of the site. These buildings are described in further detail later within the report.

Developed land; sealed surface (u1b) – Secondary codes scattered trees (32) & introduced shrubs (847)

The site is dominated by hard standing which includes tarmac road surrounding the buildings in addition to a tarmac carpark to the north of the site. There are patches of ornamental shrubs around the car park and to the east of the site. Within the ornamental shrubs are also a number of semi mature trees with species including Ash (*Fraxinus excelsior*) and Alder (*Alnus glutinosa*).



Figure 1 - View of western car park with parcels of shrubs and scattered trees.



Figure 2 - View of hard standing to the north of the site also showing area of introduced shrubs and scattered trees.



Figure 3 - Area of introduced shrubs to the southeast of the site.

Lowland mixed deciduous woodland (w1f)

To the east of the site is a parcel of woodland with species including Oak (*Quercus robur*), Hawthorn (*Crataegus monogyna*), Field Maple (*Acer campestre*), Ash (*Fraxinus excelsior*), and Hazel (*Corylus avellana*). The canopy is dense with no understory,

scrub or field layers. All trees are mature/semi-mature and there are no ancient or veteran trees. Trees are in good health with no dead wood.



Figure 4 - View of dense woodland to the north of the site showing lack of understory.




Figure 5 - View of woodland to the north of the site.

Other neutral grassland (g3c) – Secondary code: scattered scrub (10)

A small strip of grassland is present to the south of the site with species including Timothy (*Phleum pratense*), False Oat Grass (*Arrhenatherum elatius*), Creeping Thistle (*Cirsium arvense*), Dandelion (*Taraxacum officinale*), Daisy (*Bellis perennis*), Ragwort (*Jacobaea vulgaris*), Ground Ivy (*Glechoma hederacea*), Ivy-Leaved Speedwell (*Veronica hederifolia*), Perennial Rye Grass (*Lolium perenne*), Lesser Celandine (*Ficaria verna*), Yarrow (*Achillea millefolium*), Cut Leaved Cranesbill (*Geranium dissectum*), Bramble (*Rubus fruticosus*), and Mosses. The grassland has been left unmanaged and scrub has begun to dominate.



Figure 6 - View of grassland to the east of the site in a long strip.

	 <p>Figure 7 - Close up view of grassland showing scarce areas and bramble cover.</p>
Foreseen Impacts	<p>No direct impacts to any notable habitats will occur as a result of the proposed development as all habitats as all habitats surrounding the buildings will be retained. However, due to the proximity of the site to priority deciduous woodland, indirect effects such as pollution or tree damage could occur during construction.</p>
Recommendations	<p>Best practice measures to minimise the possibility of pollution must be implemented during construction.</p> <p>Additionally, retained trees and woodland should be protected in line with the measures outlined in the British Standard "Trees in Relation to Design, Demolition and Construction to Construction - Recommendations" (BS 5837) (2012).</p>
Locality and Designated Sites	
Summary of Survey Findings	Table 1 - Statutory designated sites within 2km radius of the site

	Designated site name	Distance from site	Reasons for notification from Natural England
	Braenose Wood and Shotover Hill Site of Special Scientific Interest (SSSI)	~890m to the north	Brasenose Wood has a well-defined coppice-with-standards structure and is one of the few English woods which is still actively managed by this traditional method. The greater part of the wood is an ancient remnant of Shotover Forest with a documented history dating back to the thirteenth century. The flora is exceptionally rich for a wood of this size with 221 recorded vascular plant species including 46 which are characteristic of ancient woodland. Further variety is provided by a network of sinuous rides, with glades at the intersections, and two small ponds. Shotover Hill is also of local importance for breeding and wintering birds.
	Oxford Meadows Special Area of Conservation (SAC)	~7100m to the northwest	Primary reason for selection; Lowland hay meadows and creeping marshwort. No bat qualifying features.
	Cothill Fen SAC	~10000m to the southwest	Primary reason for selection; Alkaline fens and Alluvial forests. No bat qualifying features.
Foreseen Impacts	No impacts to designated sites are anticipated due to the small scale and distance of the proposed development from such sites, as well as the urban location of the site with surrounding physical barriers.		
Recommendations	No further recommendations.		
Invasive / Non-native species			
Summary of Survey Findings	No Schedule 9 species under the Wildlife and Countryside Act 1981 were recorded during the walkover. There were several areas of introduced shrubs.		
Foreseen Impacts	No foreseen impacts.		
Recommendations	The replacement of nonnative species on site with native scrub would enhance the site for native wildlife.		
Invertebrates			
Summary of Survey Findings	No habitat for protected or notable invertebrates is found on site.		
Foreseen Impacts	None foreseen.		

Recommendations	No further surveys.										
Bats											
Summary of Survey Findings	<p><u>Limitations</u> Internal access could not be gained on building 2. This is not considered to be a significant limitation due there being no external potential roosting or access points on the building.</p> <p><u>Historical records</u> Table 2 - Granted EPSLs for bats within 2km of the site.</p> <table border="1" data-bbox="544 459 1939 608"> <thead> <tr style="background-color: #e1f5fe;"> <th data-bbox="544 459 965 496">EPSL reference</th> <th data-bbox="965 459 1547 496">Bat species affected</th> <th data-bbox="1547 459 1939 496">Impacts allowed by licence</th> </tr> </thead> <tbody> <tr> <td data-bbox="544 496 965 533">EPSM2011-2743 (1.4km west)</td> <td data-bbox="965 496 1547 533">Common pipistrelle</td> <td data-bbox="1547 496 1939 533">Destruction of a resting place</td> </tr> <tr> <td data-bbox="544 533 965 608">2015-13852-EPS-MIT (1.9km northwest)</td> <td data-bbox="965 533 1547 608">Common pipistrelle and brown long-eared bat</td> <td data-bbox="1547 533 1939 608">Damage of a resting place</td> </tr> </tbody> </table> <p><u>Foraging and commuting bats</u> The building is immediately surrounded by hard standing in the form of a car park and road/access to the building. There is a line of trees to the northwest and northeast of the site and a group of trees to the southeast. Trees are of commuting and foraging value to bats. To the southwest of the site is sparsely vegetated land which offers low foraging value to bats. The wider surrounding landscape is a mosaic of agricultural grassland, urban habitats, lines of trees, hedgerows and a parcel of woodland to the north. The urban and agricultural land is of low foraging value to bats. The hedgerows, lines of trees and woodland are of high value to commuting and foraging bats.</p> <p><u>Building 1 (main warehouse)</u> The building was constructed of corrugated metal sheets with insulation between an inner and outer wall. The building is flat roofed with the only windows being located on either side of the main entrance to the northwest of the building. There are large shutters to the northeast of the building in addition to the southwest. All panels, doors, shutters and windows are well sealed with no gaps present other than areas of damage to the panels which are described in further detail below.</p> <p>On the eastern corner of the building there is an area of damage to the external metal panel located approximately 1.5m above ground level. This gap leads into the insulation between the external and internal panels.</p> <p>To the northwest of the site, there are two areas of damage to the panel between two of the shutters. The higher of the two is located at approximately 2m above ground level and the lower at approximately 1.5m above ground level. Both gaps lead to the cavity between the inner and outer panels with minimal insulation recorded visible within these gaps.</p>		EPSL reference	Bat species affected	Impacts allowed by licence	EPSM2011-2743 (1.4km west)	Common pipistrelle	Destruction of a resting place	2015-13852-EPS-MIT (1.9km northwest)	Common pipistrelle and brown long-eared bat	Damage of a resting place
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On the northern corner of the building there are four small holes located within the external metal panel. One located approximately 2m above ground level and the lower three located approximately 1.5m above ground level. The gaps lead to the cavity between the internal and external panels.

The interior of the building consists of several small office spaces in addition to large warehouse areas. There were no internal loft spaces and no evidence of bat presence within the building. There were also no clear potential points of entry to bats recorded inside the building.

All potential roosting features on the building are located at 2m or below which is considered the minimal favourable height for roosting bats. The building is also constructed of corrugated metal which is considered to be unfavourable to roosting bats due to the lack of temperature stability that the material offers and the lack of area with which the bats can cling to when attempting to roost. The immediate surroundings of the building consisted of hard standing which is of negligible potential to foraging and commuting bats offering no refuge for emerging bats and there is a high population of gulls in the area which are a natural predator of bats. With all points considered, the building is considered to hold low value to roosting bats.



Figure 8 - View of western face of building 1.



Figure 9 - View of internals of building 1.



Figure 10 - View of northeast of building 1 with red circle showing location of potential roosting feature.



Figure 11 - Close up view of PRF circled in figure 10.



Figure 12 - View of southern elevation of building 1 with red circle showing location of potential roosting features.




Figure 13 - Close up photo showing PRFs circled on figure 12.



Figure 14 - View of southeastern elevation of building 1 with red circle highlighting location of PRFs.



Figure 15 - Close up photo of PRFs shown in figure 14.

	<p><u>Building 2 (temporary structure)</u> Building 2 is a large temporary structure comprising a canvas roof and walls of an unknown material that is made up of large sheets. There are no external potential roosting features or potential access points on the building.</p>  <p>Figure 16 - View of southern elevation of building 2.</p>
<p>Foreseen Impacts</p>	<p><u>Foraging and commuting bats</u> No habitats considered to hold value for commuting and foraging bats will be removed as part of the proposed development. If there is to be an increase of light spill onto the trees following the proposed development, this could impact the behavioural patterns of nocturnal animals such as bats.</p> <p><u>Roosting bats B1</u> The cladding will be removed and replaced on the building. If bats are roosting beneath the cladding during the removal, they would be at risk of disturbance, harm, or death. If machinery or equipment is placed leaning against the building at any point during construction, any bats roosting between the two layers would be at risk of disturbance, harm, or death. There are only 3 potential access points across the building which are all located below 2m which is the minimum height considered favourable to roosting bats.</p> <p><u>Roosting bats B2</u></p>

	<p>Due to the absence of potential roosting features on the structure, there are not considered to be any foreseen impacts on bats as a result of the proposed development.</p>
<p>Recommendations</p>	<p><u>Foraging and commuting bats</u></p> <p>A low impact lighting strategy will be adopted for the site during and post-development, which will include the following measures:</p> <ul style="list-style-type: none"> • Light spill on to the line of trees to the northeast and northwest in addition to light spill onto the parcel of trees to the southeast should be avoided. • Use narrow spectrum light sources to lower the range of species affected by lighting. • Use light sources that emit minimal ultra-violet light. • Avoid white and blue wavelengths of the light spectrum to reduce insect attraction and where white light sources are required in order to manage the blue shortwave length content they should be of a warm / neutral colour temperature <4,200 kelvin. • Not use bare bulbs and any light pointing upwards. The spread of light will be kept in line with or below the horizontal. • Light spill will be reduced via the use of low-level lighting used in conjunction with hoods, cowls, louvers and shields. Lights will also be directional to ensure that light is directed to the intended areas only. • External lighting will be on PIR sensors that are sensitive to large objects only (so that they are not triggered by passing bats) and will be set to the shortest time duration to reduce the amount of time the lights are on. • Wall lights and security lights will be ‘dimmable’ and set to the lowest light intensity settings. There are several products on the market that allow the control of the light intensity and the duration that the lights are on. All lighting on the developed site will make use of the most up to date technology available. <p><u>Roosting bats B1</u></p> <p>As stipulated in professional survey guidance, low value buildings typically require one bat emergence or re-entry survey to be completed during the active bat season (optimal May to August, suboptimal September) to confirm presence or likely absence of a bat roost. However, a single bat emergence or re-entry survey has a low detection rate for bat roosts and is often an unreliable way of identifying the presence of bat roosts. Given the limited suitable bat habitat on the site it is considered unlikely that bat roosts would be present and that further bat surveys would be disproportional to the anticipated risk posed to bats as a result of the proposed development. It is anticipated that any risk to bats can be reduced to an acceptably low level though the implementation of a Bat Mitigation Plan which would include a precautionary working method conducted under the supervision of a suitably trained ecologist.</p> <p>Acceptance of this approach would be at the discretion of the Local Planning Authority, given that this would be a deviation from standard survey guidance.</p>

	<p><u>Roosting bats B2</u> 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.</p>
<p>Birds</p>	
Summary of Survey Findings	No evidence of breeding birds or other species was recorded on site. The building is of nesting value for gull species. The scattered trees, introduced shrubs and dense woodland are all of nesting value to a wide variety of bird species.
Foreseen Impacts	The proposed development could result in the destruction or the disturbance and subsequent abandonment of active bird nests.
Recommendations	Any vegetation removal should be undertaken outside the period 1st March to 31st August. If this timeframe cannot be avoided, a close inspection of the vegetation should be undertaken immediately, by a qualified ecologist, prior to the commencement of work. All active nests will need to be retained until the young have fledged. 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.
<p>Reptiles</p>	
Summary of Survey Findings	The habitats on site are considered to be of negligible value to reptiles due to the absence of a field layer within the woodland and the short sward height and sparsity of the grassland.
Foreseen Impacts	There are no foreseen impacts on reptiles as a result of the proposed development.
Recommendations	The grassland to the south of the site could be enhanced to provide foraging, commuting and refuge value for reptiles.
<p>Amphibians</p>	
Summary of Survey Findings	There is 1 pond located within 500m of the site and it is situated 100m to the northwest of the site. The habitats on site are of negligible value to great crested newts (GCN) and other common species of amphibians due to habitats onsite comprising buildings, hard standing, sparse grassland and woodland which lacks the field layer required by GCN.
Foreseen Impacts	There are no foreseen impacts on reptiles as a result of the proposed development.
Recommendations	No further recommendations.

Riparian animals	
Summary of Survey Findings	There are no watercourses on or connected to the site.
Foreseen Impacts	No impacts are anticipated on riparian animals as a result of the proposed development.
Recommendations	N/A
Hazel dormouse	
Summary of Survey Findings	There is woodland to the north of the woodland which has foraging and commuting value for dormice. It lacks the hazel coppice that is favoured by breeding dormice and does not have the area or connectivity to other local woodlands to support an isolated population of dormice. Therefore, dormice are considered to be absent from the site.
Foreseen Impacts	No impacts are anticipated on hazel dormice as a result of the proposed development.
Recommendations	No further recommendations.
Other e.g. hedgehog	
Summary of Survey Findings	The woodland and grassland have low value as commuting and foraging habitat in addition to the introduced shrubs offering refuge value for hedgehogs.
Foreseen Impacts	Construction activities could result in the death or injury of hedgehogs, if present.
Recommendations	<p>██████████ a precautionary working method will be implemented during construction, including the following measures:</p> <ul style="list-style-type: none"> • 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. <p>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.</p>

Appendix 1a: Habitat Plan



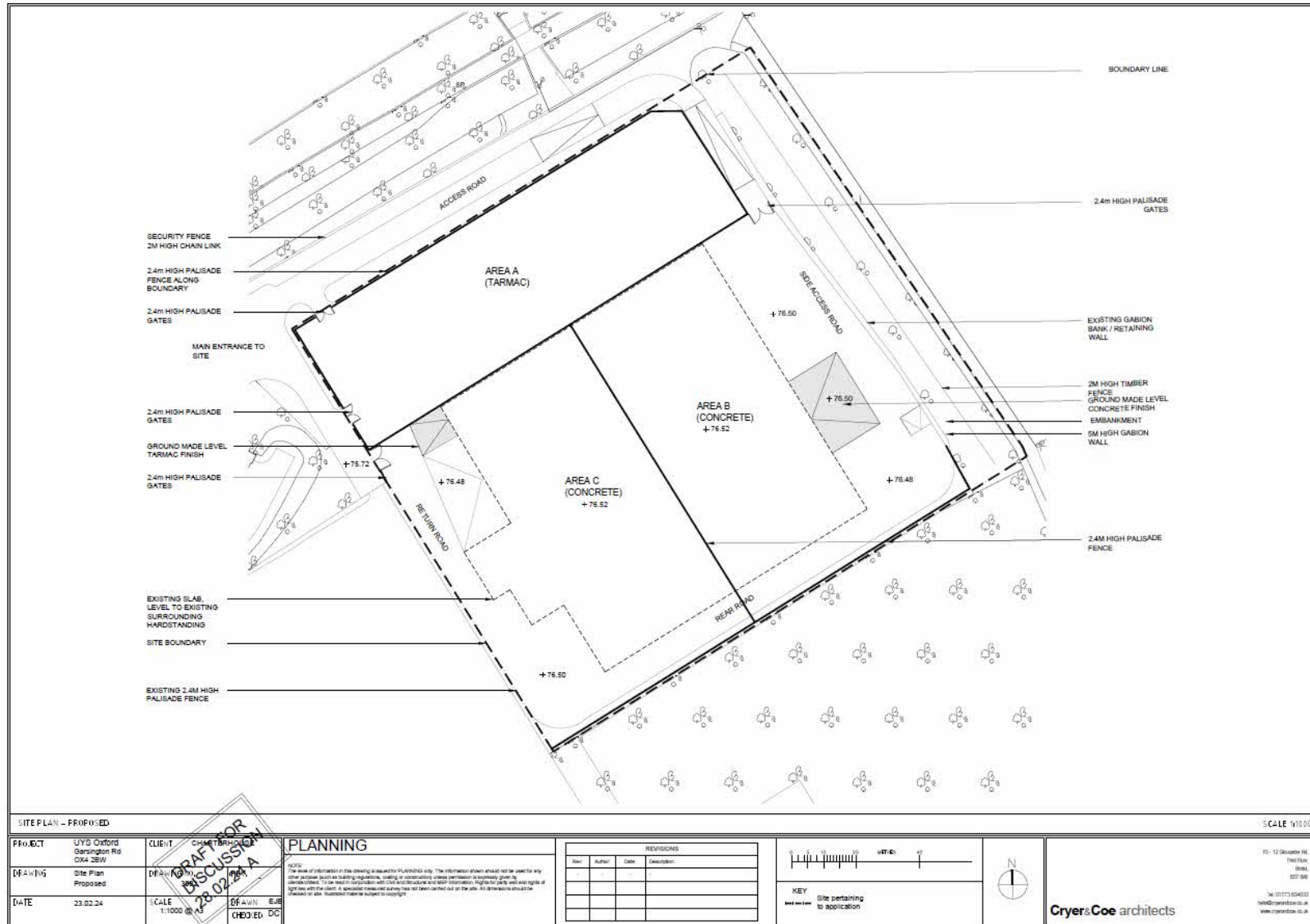
Appendix 1b: PRA Plan



Appendix 2: Location map



Appendix 3: Proposed plan



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