

Preliminary Ecological Appraisal

Survey site:

Berkshire County Sports Club, Sonning Lane, Sonning, Reading RG4 6ST

Client:

HP Architecture

Survey date:

19th September 2024

Project:

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

The construction of three sheltered paddle courts, three tennis courts and additional parking.

[242913]

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

Site Location and Context					
The rectangular survey site is centred on National Grid Reference SU 75684 75020 and has an area of approximately 0.48ha. The site consists of hardstanding surrounded by a decorative privet hedgerow on the south and western boundaries and a beech hedgerow to the north and eastern boundaries. There are also 2 areas of grassland located within the site with the largest an area to the eastern aspect of site and a small parcel to the south-western aspect of site. An asphalt road provides access to the site from the main road. The site is surrounded by recreational fields to the north and west of the site, agricultural fields to the south of the site and Caversham lakes to the east. The wider landscape consists of broadleaved woodland, agricultural fields, residential properties and watercourses. The River Thames passes site 500 m to the east of site.					
Amendment Summary					
Following feedback from Wokingham Borough Council’s Ecology Officer and WBC Ecology Newts this PEA has been updated to take into account their concerns and feedback. Previous planning applications on and around the site have been taken into further consideration and the findings have been incorporated into the appropriate sections below. Further details have been provided for the great crested newt and reptile precautionary working method statements as per feedback. The Hedgerow Regulations have been considered, which found that SRNH1 meets the criteria for 7. (1) (a) and is therefore considered an important hedgerow. Although this hedgerow will be retained, and its 2m vegetated buffer, during the development, the recommendations have been updated to include mitigation actions to limit potential impacts. While reviewing the status of the hedgerows, it has become apparent that two of the hedgerows were classified incorrectly in the previous version of the report. Therefore, the beech hedgerows along the north and east of the existing tennis courts have been reclassified as non-native and ornamental hedgerows as they fit the description provided in UKHab.					
Survey Details					
The site survey was undertaken by Blair McNicol BSc (hons), MSc, with 5 years ecology experience.					
Date of survey	Temperature (°C)	Humidity (%)	Cloud Cover (%)	Wind (km/h)	Rain
19/09/2024	16	83	40	0	None
Executive Summary					

Report Validity:

The survey results and recommendations contained within this report are valid for 18 months. An updated site visit may be required if the report is to be used any longer than 18 months after completion.

Recommended Mitigation Requirements:On-site habitats:

- Retained trees should be protected in line with the British Standards.
- Hedgerow SRNH1 is designated a habitat of principle importance under Section 41 Native Hedgerows. The hedgerow, and a 2m buffer from the centreline, need to be protected from degradation through a mitigation plan.

Bats:

- A low impact lighting strategy will be adopted for the site during post-development to limit the impact on bat commuting and foraging habitats.

Birds, Reptiles, Amphibians, Badgers, Other (Hedgehogs):

- Precautionary Working Methods to be applied during site preparation and construction.

Survey limitations

It should be noted that whilst every effort has been made to describe the baseline conditions within the survey area, and evaluate these features, this report does not provide a complete characterisation of the site. This assessment provides a preliminary view of the likelihood of protected species being present. This is based on suitability of the habitats on the site and in the wider landscape, the ecology and biology of species as currently understood, and the known distribution of species as recovered during the searches of historical biological records.

A biological records data search has not been undertaken. However, given the location of the site, the nature of the habitats present and the assessed suitability of the site for protected or notable species, it is not anticipated that the purchase of biological records data will add any significant weight or alter the conclusions and recommendations outlined in this report.

There were no specific limitations to the survey.

Ecological Survey Factor Conclusion, Impact or Recommendations	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.
Habitats and plants (see habitat map in appendix 1, location plan in appendix 2, proposal plan in appendix 3 and photos in appendix 4). Botanical species are described with reference to the DAFOR scale (D = Dominant; A = Abundant, F = Frequent, O = Occasional, R = Rare).	
<i>Summary of Survey Findings</i> <i>(UKHab codes used)</i>	The site contains Species rich native hedgerow which is listed as a habitat of principal importance under Section 41 of the Natural Environment and Rural Communities (NERC) Act (2006). Other habitats within the site are common and widespread and have low ecological value. Further notable habitats are present within 2km. On-site habitat descriptions <u>u1b – Developed land/sealed surface</u> The main body of site is a sealed surface currently being used as tennis courts. The site also includes the access road leading from the main road to the tennis courts which is a sealed surface. <u>g3c – Other neutral grassland</u> The survey site has 3 areas of other neutral grassland, with the largest area to the east and southeast of the site. These sections where frequently managed and mowed regularly with average sword height <5cm with some larger unmanaged strips in the area to the east. There is another small area of other neutral grassland just outside of the redline boundary to the south-east of site, that has also been assessed for potential BNG enhancements. All areas were dominated with cocksfoot (D), timothy (D), and common bent (D). With frequent species consisting of creeping buttercup (F), spear thistle (F), red clover (F), white clover (F), ragwort, hawks beard, red campion (F), dandelion (O) and rare occurrences of lemon balm (R) and mallow (R). <u>h2a5 – Species-rich native hedgerow</u> <u>SRNH1</u> The eastern boundary of site consists of a species-rich hedgerow with blackthorn (D) and hawthorn (D) being the dominant species and other species present sessile oak (O), horse chestnut (O), ash (F), holly (O) and sycamore (F). The ground flora consisted of cocks foot (D), common nettle (D), knapweed (O), bramble (F) and night shade (O).

	<u>h2b – Non-native and ornamental hedgerow</u> <u>OH1-4</u> Surrounding the hardstanding which forms the main body of site there is an ornamental privet (D) hedgerow to the west, south and north-west boundaries. Ground flora was sparse with occasional ruderal flora consisting of ground ivy (D), ragwort (O), dandelion (O), common ivy (A) and creeping thistle (F). <u>BH1-2</u> The north-eastern and eastern boundaries of the hard standing consist of a beech (D) hedgerow with occasional bramble (O). The ground flora consisted of ruderal species such as mallow (O), common nettle (D) and one specimen of small nettle (R) and lemon balm (R). <u>Hedgerows Regulations Assessment:</u> The hedgerows on-site have been against the eight criteria listed in Part II of Schedule 1 of the Hedgerow Regulations. The criteria cover archaeological/heritage (1-5) and ecological (6-8) components. Comments have been provided below where one or more of the hedgerows present on-site have been assessed to meet the criteria. 7. (1) (a) SRNH1 contains seven woody species, so was assessed to meet this criterion. OH1-4 and BH1-2 do not meet this criterion. SRNH1 was assessed to be important hedgerows, as it meets one or more of the required criteria. Additionally, SRNH1 contain native species and is therefore representative of the Section 41 Native Hedgerows, which are a habitat of principle importance. <u>32 – Scattered trees</u> Outside the northern boundary of the site there is an area of scattered horse chestnut (D), these are within 6 m of the proposed developments. <u>Local notable habitats</u> Patches of lowland mixed deciduous woodland (LMDW) are present in close proximity to the site. The closest is located ~0.1km to the west, with a second patch of LMDW ~0.1km to the southeast. The trees on-site likely have functional connectivity to these patches of woodland, given their proximity to the site and the presence of numerous trees throughout the landscape. LMDW is classed as a priority habitat under Section 41 of the Natural Environment and Rural Communities (NERC) Act, 2006. Further priority habitats are present within 2km of the site, including mosaic habitat, wood pasture and parkland, ponds and lakes, fens, and traditional orchards.
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<i>Foreseen Impacts</i>	On-site habitats The habitats on-site are widespread and not notable; however, the proposed development will result in the loss of ~0.05ha vegetated habitat. This is likely to have minimal impact on biodiversity considering the small area of commonplace habitat (other neutral grassland and non-native and ornamental hedgerow) being lost. SRNH1 is considered a habitat of principle importance, which includes a 2m vegetated buffer from the centre of the hedgerow. Although the proposed works are outside this buffer, there is a potential for negative impacts to the hedgerow through pollution and disturbance. Notable habitats No direct impacts to any notable habitats will occur as a result of the proposed development. However, due to the proximity of the site to LMDW (0.1km northwest and 0.1k southeast), indirect effects (e.g. pollution, dust, litter, surface run off, etc.) could occur during construction.
<i>Recommendations</i>	On-site habitats Retained trees 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). Any hardstanding areas should be limited as much as possible in favour of planting areas and are recommended to use grasscrete or other porous surface treatment with as much botanical, vegetative elements as possible. To minimise the risk of impacts to the species rich native hedgerow, an Ecological Management Plan (EMP) should be adopted for the site. To compensate for the proposed habitat losses at the site, the following habitat creation measures should be incorporated: • All sections of beech hedgerow that are lost should be compensated by planting a native hedgerow with a minimum of 4 woody species. Notable habitats Best practice measures to minimise the possibility of pollution affecting the nearby woodland must be implemented during construction. Biodiversity net gain The Environment Act (2021) requires all developments (excluding exemptions) to deliver a 10% net gain in biodiversity. Therefore, the planning application must be accompanied by a landscaping/habitat creation and enhancement strategy, biodiversity net gain calculations and a habitat management and monitoring plan to ensure the proposed development delivers a 10% net gain.

Locality and Designated Sites	
<i>Summary of Survey Findings</i>	On-site designations The site is not subject to any designation. Statutory designated sites (within 2km) The Local Nature Reserve (LNR) Ali's Pond is located 0.2km north of the site, this site has historically been a Great Crested Newt (GCN) breeding pond and there is a confirmed presence of GCN within Ali's Pond Nature Reserve. Statutory designated sites (within 10km) No national network sites (SAC, SPA, Ramsar) are located within 10km. Non-statutory designated sites The presence of non-statutory designated sites within 2km of the site cannot be established without data from Thames Valley Environmental Records Centre.
<i>Foreseen Impacts</i>	On-site designations No impacts foreseen. Statutory and non-statutory designated sites No impacts to designated sites are anticipated due to the small scale and distance of the proposed development from such sites (where known) as well as the recreationally developed location of the site with surrounding physical barriers such as playing field, buildings, car parks and tennis courts. There is limited potential for GCN to commute through the site, from Ali's Pond Nature Reserve and adjacent ponds with a confirmed presence of GCN. Their presence on the site therefore cannot be completely discounted.
<i>Recommendations</i>	On-site designations None required. Statutory and non-statutory designated sites A GCN precautionary working method statement should be adopted for the site to limit the impact on local GCN populations, in the unlikely event that they are present on the site. This is detailed in the amphibian section below.
Invasive / Non-native species	
<i>Summary of Survey Findings</i>	No problematic invasive and non-native species recorded on site.

Foreseen Impacts	N/A																															
Recommendations	No further surveys but remain vigilant.																															
Invertebrates																																
Summary of Survey Findings	The habitats present on-site, including grassland, hedgerows and trees, likely provide common invertebrates with opportunities to forage and shelter. The site contains no further notable habitats which may provide niches for specialised or protected invertebrates.																															
Foreseen Impacts	Other native hedgerow and grassland will be removed during construction. The loss of such habitats is likely to be inconsequential to local invertebrate populations owing to their low value and the presence of more extensive habitat locally.																															
Recommendations	No further surveys.																															
Bats																																
Summary of Survey Findings	EPSL and survey data A search of the magic.gov.uk database for granted EPSLs within a 2km radius of the site has been completed. Displaced bats from licensed sites <2km away from the survey site will find alternative habitat either within the mitigation measures implemented as part of the licence or will relocate to other known roosts sites in close proximity to the licensed site. There are 11 EPSLs within a 2km radius of site as detailed below: <table><tr><th>EPSL reference</th><th>Bat species affected</th><th>Distance from site</th><th>Impacts allowed by licence</th></tr><tr><td>2018-37707-EPS-MIT</td><td>Soprano Pipistrelle</td><td>0.3km east</td><td>Destruction of a resting place</td></tr><tr><td>2019-44293-EPS-MIT</td><td>Brown Long-eared Bat, Common Pipistrelle. Soprano Pipistrelle</td><td>0.4km south-east</td><td>Destruction of a resting place</td></tr><tr><td>2020-48093-EPS-MIT</td><td>Brown Long-eared Bat, Common Pipistrelle. Soprano Pipistrelle</td><td>0.5km south-east</td><td>Destruction of a resting place</td></tr><tr><td>2018-38132-EPS-MIT</td><td>Brown Long-eared Bat. Soprano Pipistrelle</td><td>0.7km south-east</td><td>Destruction of a resting place</td></tr><tr><td>2018-34839-EPS-MIT-1</td><td>Soprano Pipistrelle</td><td>0.7km south-west</td><td>Destruction of a resting place</td></tr><tr><td>2020-48694-EPS-MIT</td><td>Common Pipistrelle. Soprano Pipistrelle</td><td>0.75km south-west</td><td>Allow damage of a resting place and destruction of a resting place</td></tr></table>				EPSL reference	Bat species affected	Distance from site	Impacts allowed by licence	2018-37707-EPS-MIT	Soprano Pipistrelle	0.3km east	Destruction of a resting place	2019-44293-EPS-MIT	Brown Long-eared Bat, Common Pipistrelle. Soprano Pipistrelle	0.4km south-east	Destruction of a resting place	2020-48093-EPS-MIT	Brown Long-eared Bat, Common Pipistrelle. Soprano Pipistrelle	0.5km south-east	Destruction of a resting place	2018-38132-EPS-MIT	Brown Long-eared Bat. Soprano Pipistrelle	0.7km south-east	Destruction of a resting place	2018-34839-EPS-MIT-1	Soprano Pipistrelle	0.7km south-west	Destruction of a resting place	2020-48694-EPS-MIT	Common Pipistrelle. Soprano Pipistrelle	0.75km south-west	Allow damage of a resting place and destruction of a resting place
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	2015-17476-EPS-MIT	Brown Long-eared Bat, Soprano Pipistrelle	0.8km south	Destruction of a resting place
	2020-48353-EPS-MIT	Soprano Pipistrelle	0.9km south	Destruction of a resting place
	EPSM2012-4144	Common Pipistrelle. Soprano Pipistrelle	1km south	Destruction of a resting place
	2018-36568-EPS-MIT	Brown Long-eared Bat, Common Pipistrelle	1.6km south-east	Allow damage of a resting place
	2014-2526-EPS-MIT	Soprano Pipistrelle	1.9km north-east	Allow damage of a resting place
Ecological reports for neighbouring developments were reviewed to ascertain further information on amphibians in the surrounding area. Application 201422, for the erection of floodlighting to the tennis courts, was supported by Preliminary Ecological Appraisal (AE Ecology, 2020). The PEA found that expansive heavily managed grassland around the site provides limited foraging and commuting habitat for bats. Ali's Pond Nature Reserve, to the north of site, provides higher quality foraging habitat and connectivity to the high-quality bat foraging habitat near the River Thames to the north and west. Additionally, the line of trees to the south-east of site creates a vegetated dark corridor for any bats roosting in the residential areas to the east of site. The PEA found that the four buildings to the west of site provided negligible roosting habitat for bats. The residential building to the east of site (off-site), despite being considered in a fair condition, provided moderate-to-high bat roost suitability. Comments by the Council's Ecologist on previous applications at the site identified nearby bat roosts. The PEA concluded no buildings with bat roosting potential will be impacted by the development. However, once operational, the flood lighting has the potential to impact foraging and commuting habitats, along the eastern species rich native hedgerow to the east in particular. However, existing lighting to the adjacent tarmac footpath and sports pitches would likely limit bat use of this boundary feature. As there is a potential impact to bat commuting and foraging habitat, the proposed lighting was required to be highly directional to prevent illumination to the residential areas and tree line. Application 223824, for the creation of 3G artificial grass pitch to the south of the proposed development, was supported by Preliminary Ecological Appraisal (BJ Collins, 2022). The record search for the PEA found 265 bat records within 1km of the centre of the sport grounds, comprising 10 species however, none of the records originate from the site. Of these 265 records, 66 were for "light averse" bat species 58 of the records were for emerging or roosting bats. Potential connectivity between the bat roosts and the site was identified via hedgerows and vegetated boundaries. Along the opposite side of the road on western boundary of the sports ground, a habitat corridor connects to wetlands and the River Thames further west. The site was considered to have low potential for commuting and foraging bats, principally due to the extent of floodlighting to existing sports pitches. Additionally, the amenity grassland covering the majority of the sports ground provides a buffer to the western corridor. The PEA concludes that the potential impact to commuting and foraging bats is negligible due to the existing artificial lighting. However, as artificial light has an impact on bat species, a lighting mitigation plan was required to limit potential impacts.				

	Foraging and commuting habitat Habitats recorded on site are assessed to provide foraging and commuting opportunities for bats in the form of grassland and species-rich hedgerow with trees. These habitats are likely to provide micro-climatic conditions that support invertebrates that will in turn provide foraging opportunities for local bat populations. Most notably, the hedgerows on site are mature and extend beyond the site adding to the continuity of vegetated linear features present in the wider landscape. Bats are well known to utilise linear features to aid navigation whilst travelling between foraging resources and roost sites. Roosting habitat None noted at site.
<i>Foreseen Impacts</i>	Foraging and commuting habitat The proposed development will result in the loss of the grassland and beech hedgerow which provide a buffer to the species rich native hedgerow. The dark corridor to the east of site provides limited value for foraging and commuting bats as the areas to west and south are dominated by heavily managed grassland, lit pathways and 3G pitches do not provide suitable foraging habitat for bats. There are more suitable habitats and corridors present to the north, east and south-east through treelines, hedgerows and residential gardens. Meaning that the small area of corridor to be affected is not of principle importance to local bat populations. The loss of non-native and ornamental hedgerows and grassland will have negligible impact for foraging or commuting bats due to their proximity to existing external lighting and the surrounding heavily managed grassland and developed land, which provides negligible foraging and commuting habitat for bats. The proposed development will result in negligible impact on the foraging and commuting corridor to the west of site. No additional lighting along the access road will be provided as a result of this development. Additionally, while the trees to the immediate north of the access road provide some opportunity for commuting and foraging bats, the corridor is fragmented, with large gaps between the trees and more suitable habitat present to the north through Ali's Pond LNR, away from the lighting already present on the site. Artificial lighting 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.
<i>Recommendations</i>	Foraging and commuting habitat No further surveys are required.

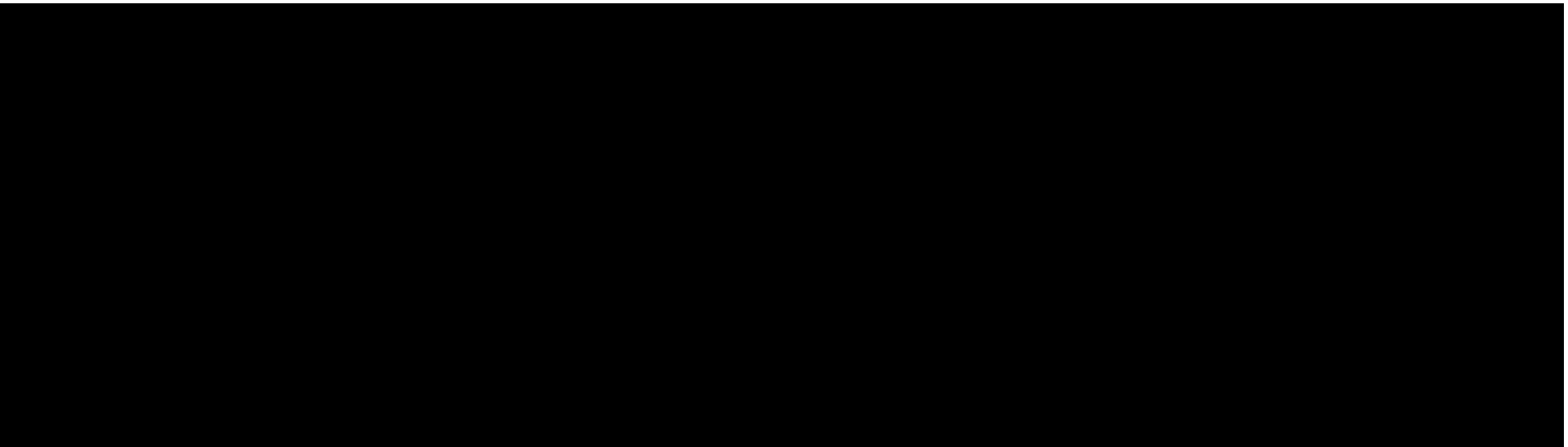
	Artificial lighting A low impact lighting strategy will be adopted for the site during post-development which outlines the areas of the site that will be retained as dark corridors and provide mitigation, such as directional lighting, to limit the impact on bat commuting and foraging habitat. Parameters can be found on the Bat Conservation Trust website: https://www.bats.org.uk/our-work/buildings-planning-and-development/lighting-2
Birds	
<i>Summary of Survey Findings</i>	Trees and vegetation No bird nests were identified within the vegetation on-site; however, they all offer nesting opportunities and nest-building resources for birds. No habitat for schedule 1 birds was observed. Barn owls The site does not appear to provide any suitable nesting sites for barn owls. Overwintering birds Due to the small size of the site and the extent and type of the habitats recorded, the site not considered suitable to support a significant assemblage of protected and/or notable birds.
<i>Foreseen Impacts</i>	Buildings/trees The proposed development could result in the destruction or the disturbance and subsequent abandonment of active bird nests. Barn owls None foreseen. Overwintering birds None foreseen.
<i>Recommendations</i>	Buildings/trees 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. Barn owls None required. Overwintering birds None required.
Reptiles	
<i>Summary of Survey Findings</i>	EPSL data A review of the MAGIC database returned no granted EPSL records for protected reptiles within 2km of the site. Habitat suitability The hedgerows at site provide suitable habitat to support reptiles. However, the site is surrounded heavily managed recreational grassland with a sward height of <5cm and by urban development (i.e. roads and buildings) which is considered sub-optimal for reptile migration and therefore reptiles are considered unlikely to migrate from any nearby suitable habitats to the development site. As such it is likely that reptiles are absent from the development site. Wider landscape The sections of the woodland in the wider landscape are of elevated ecological value within the wider landscape and may represent important resources for local reptile populations. These adjacent habitats provide optimal foraging, commuting, and refuge opportunities for reptiles and are well connected to further suitable habitat in the wider landscape. The presence of reptiles utilising these adjacent habitats cannot be discounted.
<i>Foreseen Impacts</i>	Although a small area of suitable habitat is being removed as part of the development, there is a low risk that a low number of reptiles could be present in the vicinity of the works. These could be injured or killed without mitigation.
<i>Recommendations</i>	A precautionary working method will be implemented for widespread reptiles during construction, including the following measures: • Vegetation will be maintained at a short sward (5cm) to discourage reptiles. • Sensitive timing of the vegetation and hedge clearance will be adopted to minimise the risk of reptile presence and impact. • Any excavations will be covered overnight, or a ramp will be installed to enable any trapped animals to escape.

	• Best practice pollution prevention measures will be implemented to minimise impacts to nearby habitats. • Any chemicals or pollutants used or created by the development should be stored and disposed of correctly according to COSHH regulations. • If any reptiles 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. • In the unlikely event that a reptile is identified, works must cease and advice must be sought from a suitably qualified ecologist. Suggested biodiversity enhancements The site could be enhanced for reptiles post-development with the inclusion of log piles (created from felled materials) and planting of areas of native shrubs, to provide sheltering opportunities.
Amphibians	
<i>Summary of Survey</i> <i>Findings</i>	EPSL and survey data A review of the MAGIC database returned no granted EPSL records for great crested newts within 2km of the site. However, 1 positive class survey licence return or DLL historic survey data (2017 – 2019) were present within 2km of the site. Ecological reports for neighbouring developments were reviewed to ascertain further information on amphibians in the surrounding area. Application 201422, for the erection of floodlighting to the tennis courts, was supported by Preliminary Ecological Appraisal (AE Ecology, 2020). The PEA found that the tennis courts themselves, and the surrounding heavily managed grassland offer negligible resting or foraging habitat for GCN. Further, it was found that although the hedges surrounding the tennis courts provide some limited suitability for shelter, they are isolated from areas of suitable terrestrial habitat by the expanses of heavily managed grassland and hardstanding. AE Ecology concluded a likely GCN absence from the tennis courts and their immediate surroundings. Application 223824, for the creation of 3G artificial grass pitch to the south of the proposed development, was supported by Preliminary Ecological Appraisal (BJ Collins, 2022). The PEA found that GCN dispersal to the site, across the intensively mown grassland is avoided by dispersing amphibians, due to a lack of cover. The PEA concluded the presence of GCN on the site is unlikely. They did however recommend precautionary measures to protect amphibians in the unlikely event one was found on the site during construction. Aquatic habitat suitability (including ponds within 500m) Great crested newts (GCN) exist in metapopulations and are known to utilise ponds and their connecting terrestrial habitat during their life cycle; great crested newts are typically found within terrestrial habitats up to 500m from breeding ponds (Langton et al. 2001).

	There are no ponds on the site, but a review of aerial imagery (MAGIC and OS Maps) indicates the presence of a two ponds within 500m; the pond in the LNR Ali's Pond (P1) is located ~0.1km north of the site and the other pond (P2) is located 0.15km north of the site. There is a car park, grassland and hedgerow margins between the ponds and site, which creates habitat connectivity for great crested newts. A pond map showing approximate pond locations is provided in Appendix 4. Terrestrial habitat suitability The site provides limited suitable terrestrial habitat for amphibians given the lack of optimal habitat (i.e. scrub, rank grassland). The areas of hard standing and heavily managed amenity grass offer sub-optimal habitat for terrestrial amphibians. The hedgerows may offer refuge for these species, however given the urban nature of the surrounding landscape (i.e. dominated by roads, hard standing and heavily managed amenity grassland, which are sub-optimal for amphibians) it is unlikely that amphibians will migrate on to site. However, there is suitable terrestrial habitat across the wider landscape so amphibians may commute through site to optimal habitat in surrounding area.																								
Foreseen Impacts	When georeferencing the proposed development plans over scaled mapping of the site, it is noted that the development area is likely to result in the loss or significant disturbance of 0.35ha of grassland, hedgerow and hardstanding. With great crested newts present within the pond 125m to the north of the site, 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 (see below). <table><tr><th>Component</th><th>Likely effect (select one for each component; select the most harmful option if more than one is likely; lists are in order of harm, top to bottom)</th><th>Notional offence probability score</th></tr><tr><td>Great crested newt breeding pond(s)</td><td>No effect</td><td>0</td></tr><tr><td>Land within 100m of any breeding pond(s)</td><td>No effect</td><td>0</td></tr><tr><td>Land 100-250m from any breeding pond(s)</td><td>0.1 - 0.5 ha lost or damaged</td><td>0.1</td></tr><tr><td>Land >250m from any breeding pond(s)</td><td>No effect</td><td>0</td></tr><tr><td>Individual great crested newts</td><td>No effect</td><td>0</td></tr><tr><td></td><td>Maximum:</td><td>0.1</td></tr><tr><td>Rapid risk assessment result:</td><td colspan="2">GREEN: OFFENCE HIGHLY UNLIKELY</td></tr></table>	Component	Likely effect (select one for each component; select the most harmful option if more than one is likely; lists are in order of harm, top to bottom)	Notional offence probability score	Great crested newt breeding pond(s)	No effect	0	Land within 100m of any breeding pond(s)	No effect	0	Land 100-250m from any breeding pond(s)	0.1 - 0.5 ha lost or damaged	0.1	Land >250m from any breeding pond(s)	No effect	0	Individual great crested newts	No effect	0		Maximum:	0.1	Rapid risk assessment result:	GREEN: OFFENCE HIGHLY UNLIKELY	
Component	Likely effect (select one for each component; select the most harmful option if more than one is likely; lists are in order of harm, top to bottom)	Notional offence probability score																							
Great crested newt breeding pond(s)	No effect	0																							
Land within 100m of any breeding pond(s)	No effect	0																							
Land 100-250m from any breeding pond(s)	0.1 - 0.5 ha lost or damaged	0.1																							
Land >250m from any breeding pond(s)	No effect	0																							
Individual great crested newts	No effect	0																							
	Maximum:	0.1																							
Rapid risk assessment result:	GREEN: OFFENCE HIGHLY UNLIKELY																								

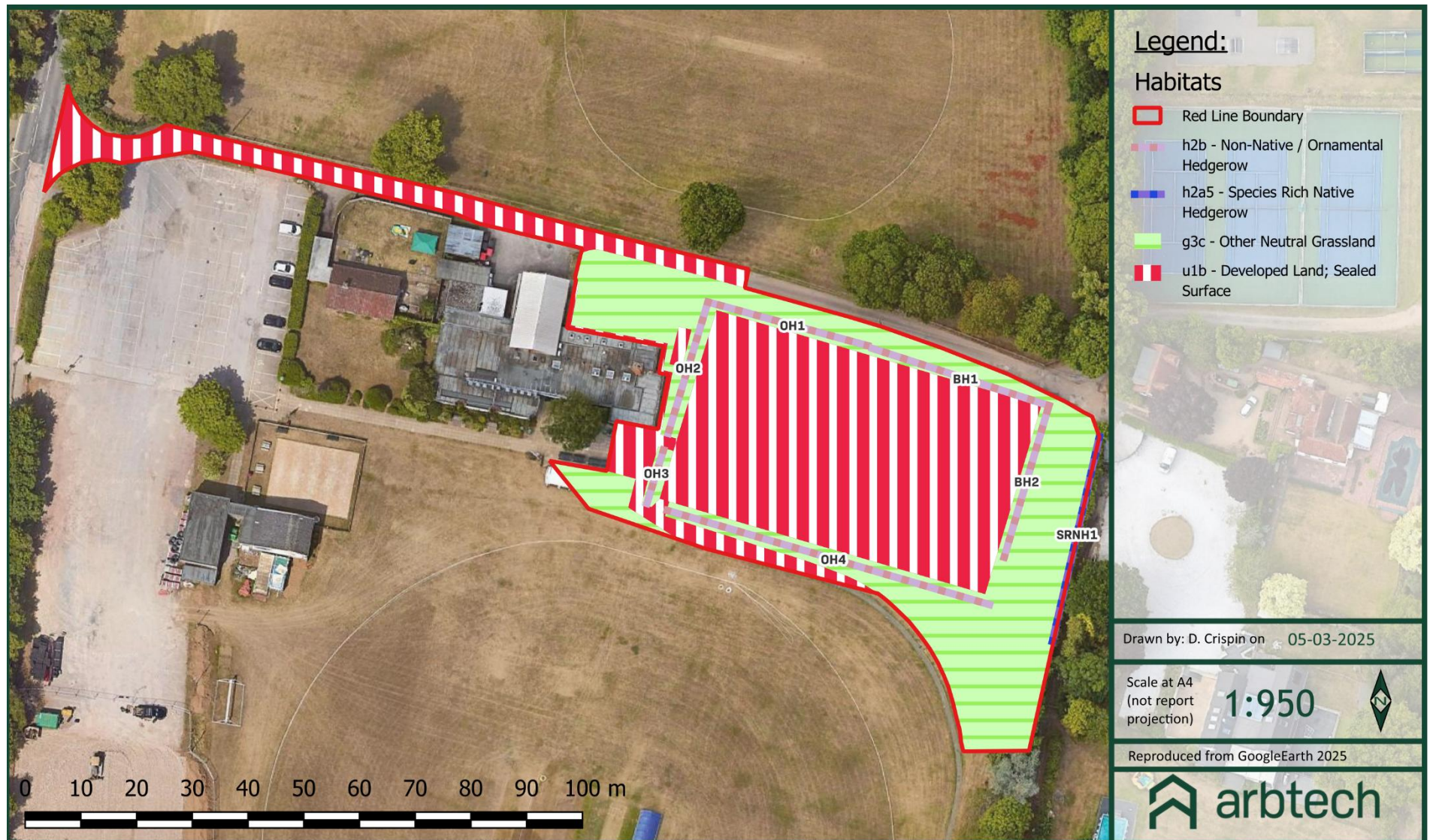
<i>Recommendations</i>	Owing to the nature of the proposed development and the low potential for impacts to great crested newts, further surveys are considered to be disproportionate. A precautionary working method will be implemented for common amphibians during construction, including the following measures: • A staged approach will be adopted for vegetation and hedge clearance, whereby a fingertip search will be conducted immediately prior to the clearance works, the vegetation and hedges will then be trimmed or cut to 15cm and left overnight to allow any amphibians to disperse. The vegetation can then be cleared to ground level and must be maintained at this level for the duration of construction to deter amphibians from the working area. • Sensitive timing of the vegetation and hedge clearance will be adopted to minimise the risk of great crested newt presence and impact. • A suitably qualified ecologist will be present on-site during vegetation and hedge clearance to oversee the work. • Prior to the commencement of work, a “toolbox talk” will be delivered by a suitably qualified ecologist. • Any rubble piles will be dismantled by hand, and debris and brash will be stored on pallets or removed from the site to prevent amphibians from utilising these areas. • Best practice pollution prevention measures will be implemented to minimise impacts to nearby aquatic habitats that amphibians could use. • Any excavations will be covered overnight, or a ramp will be installed to enable any trapped animals to escape. • Any chemicals or pollutants used or created by the development should be stored and disposed of correctly according to COSHH regulations. • If any common amphibians 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. • In the unlikely event that a great crested newt is identified, works must cease and advice must be sought from a suitably qualified ecologist. 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
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Riparian animals	
<i>Summary of Survey Findings</i>	A review of the MAGIC database returned no granted EPSL records for otters or water voles within 2km of the site. There are no water courses on or connected to the site. There are also no riparian habitats present on site or within an influencing distance.
<i>Foreseen Impacts</i>	No impacts are anticipated on riparian animals as a result of the proposed development.
<i>Recommendations</i>	None required.
Hazel dormouse	
<i>Summary of Survey Findings</i>	EPSL data and local records A review of the MAGIC database returned no granted EPSL records for hazel dormice within 2km of the site. Habitat suitability Habitats on site are assessed to provide foraging, commuting, and nest building opportunities for dormice in the form of the species-rich hedgerows with trees. However, the site is enclosed by urban infrastructure including roads and significant residential development. These landscape features fragment suitable dormice habitat in the wider landscape and are likely to limit dispersal opportunities to the site.

<i>Foreseen Impacts</i>	Species rich hedgerow will be removed during construction. The loss of such habitats is likely to be inconsequential to local dormouse populations owing to their low value and the presence of more extensive habitat locally. However, site clearance could result in the death or injury of dormice, if present.
<i>Recommendations</i>	None foreseen.
Other e.g. hedgehog	
<i>Summary of Survey Findings</i>	The hedgerow onsite provides foraging and commuting opportunities for hedgehogs, with woodland habitat nearby.
<i>Foreseen Impacts</i>	Hedgerow will be removed during construction. The loss of such habitats is likely to be inconsequential to local hedgehog populations owing to their low value and the presence of more extensive habitat locally. 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: • Planting fruit bearing trees and species-rich grassland to increase foraging opportunities. • Creation of brash piles or installation of hedgehog houses in shady areas. • Installation of gaps under boundary fencing to enable hedgehogs to move freely through the site.

Appendix 1: Survey/Habitat map



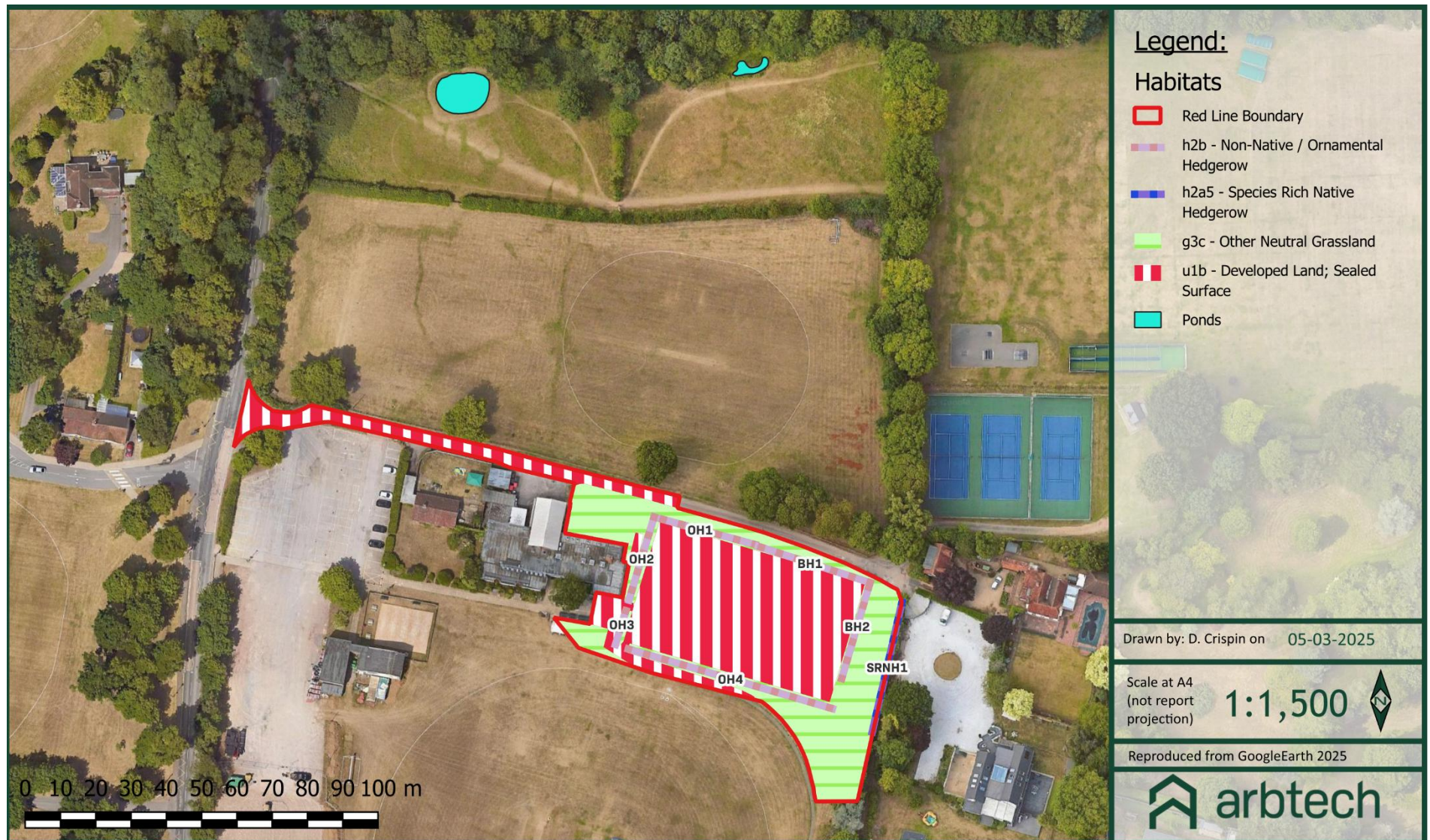
Appendix 2: Location map



Appendix 3: Proposed plan



Appendix 4: GCN Pond Map within 500m



Appendix 4: Habitat Photos

South-West Corner of Site	
Photograph	Description
	Figure 1: Facing north-west, showing ornamental hedgerow, grassland and hardstanding boundary.

Northern Boundary	
Photograph	Description
	Figure 2: Facing west, showing the northern boundary and beech hedgerow and tarmac road outside the site boundary.)

Northern Boundary	
Photograph	Description
	Figure 3: Facing east, showing the northern boundary and tarmac access road to the site boundary.)

North-Eastern Boundary	
Photograph	Description
	Figure 4: Facing east, showing the north-eastern boundary where the tarmac access road joins the main road at the site boundary.)

Other Neutral Grassland and Hedgerow	
Photograph	Description
	Figure 5: Facing south, showing area of neutral grassland, species-rich native hedgerow and ornamental beech hedgerow to the east of site

Grassland and Species rich hedgerow	
Photograph	Description
	Figure 6: Facing North, showing species-rich hedgerow and neutral grassland

Other neutral Grassland and Ornamental hedgerow	
Photograph	Description
	Figure 7: Facing east, showing southern boundary of site.

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