

ABBET SCHOOL ASTRO PAVILION

Preliminary Ecological Appraisal

for

Elsa Quinton

June 2021

THE **Landmark**
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The information which we have prepared and provided is true and has been prepared and provided in accordance with the Chartered Institute of Ecology and Environmental Management's Code of Professional Conduct. We confirm that the opinions expressed are our true and professional bona fide opinions.

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EXECUTIVE SUMMARY

The Landmark Practice was commissioned by Elsa Quinton in April 2021, to prepare a Preliminary Ecological Appraisal to assess the potential ecological impacts and opportunities associated with a proposed development at The Abbey School Astro Pavilion, Kendrick Road, Reading, RG1 5DZ, hereafter referred to as the 'application site.' This report describes ecological survey work undertaken, considers the potential impacts of the proposed development on the ecology of the site and environs and describes suitable avoidance, mitigation and enhancement measures to address predicted impacts.

A desk study was undertaken to find details of designated sites and legally protected and notable species records within the zone of influence of the site. A Phase 1 habitat survey was conducted of the application site in May 2021 to map the habitats present and highlight potential for protected species to occur.

The survey area predominantly comprises the multi-purpose AstroTurf pitch with associated access path and short-mown amenity grassland. Some limited areas of tall ruderal vegetation are present, and a number of scattered broadleaved trees are distributed to the west and north of the AstroTurf pitch, all within the amenity grassland. Two storage containers are situated adjacent to the eastern access path. The eastern boundary of the site is defined by an intact species-poor hedgerow.

The proposals relate to removals of sections of the eastern hedgerow only with other habitats on-site not scheduled to be altered. The hedgerow and adjacent features were considered to offer potential to support the following protected species: badgers, bats, hedgehog, stag beetle, nesting birds, and reptiles.

Furthermore, hedgerows are listed as a Habitat of Principal Importance (HPI) and are a UK Biodiversity Action Plan priority habitat. Losses incurred through removals will need to be compensated for elsewhere on-site with the same amount of hedgerow re-planted.

This may be achieved through the planting of a new species-rich hedgerow along the western site boundary. Consultation with the LPA is recommended to seek agreement on the proposed mitigation measures.

No impacts are anticipated on any statutory or non-statutory designated sites from the proposed development.

Summary of Recommended Mitigation/Compensation Measures and Further Surveys

- New hedgerow planting the same length to be removed, which is species rich and containing a high percentage of native species.
- Precautionary measures employed to safeguard hedgehog, reptiles, stag beetles and other species during vegetation removal phase; and
- Works to take place outside the nesting bird season (March to August inclusive) or immediately following a check by a suitably qualified ecologist if this is not possible.

Enhancement Measures have been provided.

CONTENTS

	Page
1.0 INTRODUCTION	1
Site Location and Description	1
Development Proposals.....	1
Scope of Assessment	1
2.0 LEGAL AND PLANNING CONTEXT.....	2
Legal Context	2
Planning Context.....	2
3.0 METHODS.....	2
Preliminary Ecological Appraisal.....	2
Notes and Limitations.....	5
Longevity of Baseline Data	5
Nomenclature	5
4.0 RESULTS	5
Designated Sites	6
Habitats.....	8
Species	10
5.0 DISCUSSION AND RECOMMENDATIONS.....	15
Designated Sites	15
Summary of Recommended Mitigation/Compensation Measures and Further Surveys .	17
6.0 ENHANCEMENT MEASURES	17
7.0 CONCLUSION	18

APPENDIX A: PROPOSED SITE PLAN

APPENDIX B: LEGAL CONTEXT

APPENDIX C: PLANNING CONTEXT

APPENDIX D: PHOTOGRAPHS AND TARGET NOTES

FIGURE 1: SITE LOCATION PLAN

FIGURE 2: DESIGNATED SITES

FIGURE 3: PHASE 1 HABITAT SURVEY

1.0 INTRODUCTION

- 1.1 The Landmark Practice (TLP) is an award winning multi-disciplinary consultancy offering bespoke and integrated services in ecology, environmental planning, landscape architecture and architectural graphics. We are independent and respected, working on a large range of development projects for our clients throughout the UK. Full details of the practice can be found at <http://thelandmarkpractice.com/>.
- 1.2 In April 2021 TLP was commissioned by Elsa Quinton to assess the potential ecological impacts and opportunities associated with a proposed development at The Abbey School Astro Pavilion, Kendrick Road, Reading, RG1 5DZ, hereafter referred to as the 'application site.'

Site Location and Description

- 1.3 The application site, which measures approximately 1.2 ha (Central Grid Ref: SU 72054 72574) is located on the west side of Kendrick Road (immediately south-west of the main Abbey School complex) Reading, (**Figure 1** refers). The Local Planning Authority is Reading Borough Council (RBC).
- 1.4 The site is situated in a landscape comprising predominantly residential and commercial properties with associated gardens and access roads. A number of playing fields are present within the immediate surroundings, most notably those belonging to the Abbey School, 80m east of the site, and that belonging to Reading Bowling club 40m south of the site. Whilst no clear pockets of woodland exist in close proximity to the site, the locality contain numerous scattered trees, including an avenue of London plane (*Platanus x hispanica*) trees spanning much of the length of Kendrick Road (adjacent to the site's east boundary). The Kennet and Avon Canal runs approximately 600m west of the site.
- 1.5 The survey area predominantly comprises the multi-purpose Astro-turf pitch with associated access path, and short-mown amenity grassland. Several scattered broad-leaved trees are situated close to the northern and western boundaries and some limited areas of tall ruderal vegetation are present. The eastern boundary of the site is defined by an intact species-poor hedgerow.

Development Proposals

- 1.6 The proposed Section 73 variation of condition application is associated with granted planning permission (reference 12/01629/FUL) for the development of an all-weather playing field with floodlights and fencing. Condition 6 relates to the maintenance of the hedgerow running along the eastern boundary, adjacent to Kendrick Road. The new proposals involve the removal of parts of this hedgerow for safeguarding purposes (it currently obscures and segregates the pavilion from the rest of the school). The proposed development can be seen in **Appendix A**.

Scope of Assessment

- 1.7 This Preliminary Ecological Appraisal sets out the findings of the desk based and field-based ecological assessment, undertaken by TLP during 2021. The report considers the potential for ecological impacts to occur and outlines opportunities for avoidance, mitigation and enhancement measures based upon the development proposals in the context of relevant legislation and planning policy.

1.8 The aims of this report are to:

- Define the ecological baseline, identifying important ecological features that are of relevance to the proposals;
- Detail avoidance, mitigation and compensation measures where necessary; and
- Identify potential opportunities to enhance and add to the biodiversity resource within the application site and surrounding landscape in line with local and national planning policy.

2.0 LEGAL AND PLANNING CONTEXT

Legal Context

- 2.1 A range of habitats and species that may actually or potentially be present at the site are afforded legal protection under domestic and European legislation (**Appendix B** refers).

Planning Context

- 2.2 National and Local Planning Policy have been considered within the assessment. The relevant policies are reproduced in **Appendix C**.

3.0 METHODS

- 3.1 The method for carrying out this assessment follows standard guidance published by the Chartered Institute of Ecology and Environmental Management (CIEEM, 2019). The assessment has been undertaken by an appropriately qualified ecologist using recognised best practice methodologies wherever possible and where these exist. Reasons for any deviation from best practice methodologies are provided below, but usually relate to timing of instruction, access restrictions and/or application of professional judgement, as appropriate.

Preliminary Ecological Appraisal

Desk Study

- 3.2 The desk study involved the collation and review of contextual information such as designated sites and past records of protected and priority species occurring within the potential zone of influence of the site.
- 3.3 The desk study involved collating information from the following sources:
- Thames Valley Environmental Records Centre (TVERC); and
 - Multi-Agency Geographic Information for the Countryside (MAGIC);
- 3.4 The desk study was undertaken during May 2021 and involved obtaining the following information:
- International statutory designations (5 km radius);
 - National statutory designations (5 km);
 - Non-statutory designated sites (1 km);
 - Section 41 Habitats of Principal Importance (1 km);
 - Protected/notable species records (1 km);
 - Bat species records (2 km); and
 - Granted European Protected Species Mitigation Licences (EPSML) (2 km).

- 3.5 In light of the scope of the project, the abovementioned search areas are considered sufficient to cover the potential zone of influence of the project in relation to designated sites, habitats and species. Geological designated sites have not been included as these are not relevant to the ecological assessment. Biological records that are no more than 10 years old have been included.

Phase 1 Habitat Survey

- 3.6 A Phase 1 habitat survey was conducted of the survey area on 6th May 2021 by a suitably experienced ecologist from TLP. Conditions during the survey were overcast with sunny spells, a temperature of 8.5°C, and light air (Beaufort 1).
- 3.7 The Phase 1 habitat survey followed standard methodology published by the Joint Nature Conservation Committee (2010). Each identifiable and definable land parcel was assigned a habitat type (as defined by the JNCC). Dominant plant species present were recorded in accordance with plant species nomenclature in New Flora of the British Isles 3rd Edition (Stace, 2010). This level of survey does not aim to compile a complete floral and faunal inventory for the site.

Protected Species Assessment

- 3.8 As part of the appraisal the site was assessed for its potential to contain protected or notable species. The assessment was based on the habitats present on site and their suitability for protected species. Further information on the legal protection of these species is presented in **Appendix B**. Protected species assessed for, but not limited to, were:
- Badger (*Meles meles*);
 - Bats;
 - Dormouse (*Muscardinus avellanarius*);
 - Otter (*Lutra lutra*);
 - Water vole (*Arvicola amphibius*);
 - Nesting birds and wintering birds;
 - Great crested newt (*Triturus cristatus*);
 - Reptiles; and
 - White clawed crayfish (*Austropotamobius pallipes*).
- 3.9 In addition, a search was made for evidence of invasive non-native species.

Categorisation of Habitat Suitability for Bats

- 3.10 Following the Phase 1 habitat survey the habitats on site were categorised according to its likely value for bats (on a scale of negligible, low, moderate or high potential for commuting and foraging bats). The categories are based on the observations and information set out in **Table 1**, which is based on current best practice guidelines (Collins, 2016).

Table 1: Bat Foraging Criteria

Suitability	Rationale
Negligible	Negligible habitat features on site likely to be used by commuting or foraging bats.
Low	Habitat that could be used by small numbers of commuting bats (such as a gappy hedgerow or un-vegetated stream), but isolated, i.e., not very well connected to the surrounding landscape by another habitat. Suitable, but isolated habitat that could be used by small numbers of foraging bats such as a lone tree (not in a parkland situation) or a patch of scrub.
Moderate	Continuous habitat connected to the wider landscape that could be used by bats for commuting such as lines of trees and scrub or linked back gardens. Habitat that is connected to the wider landscape that could be used by bats for foraging such as trees, scrub, grassland, or water.
High	Continuous, high-quality habitat that is well connected to the wider landscape that is likely to be used regularly by commuting bats such as river, valleys, streams, hedgerows, lines of trees and woodland edge. High-quality habitat that is well connected to the wider landscape that is likely to be used regularly by foraging bats such as broadleaved woodland, tree lined watercourses and grazed parkland. Site is close to and connected to known roosts.

Ground Level Tree Inspection

- 3.11 The trees found on or adjacent to the application site were subject to ground level roost assessments, to determine their suitability for supporting roosting bats. This was undertaken by an experienced ecologist.
- 3.12 The trees were then placed in one of the following bat roost potential categories (**Table 2** refers), based on current best practice guidelines (Collins, 2016).

Table 2: Categorisation of Bat Roosting Potential of Trees

Level of Bat Roosting Potential	Rationale
Confirmed Roost	Presence of bats or evidence of use by bats.
High	A tree with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions and surrounding habitat.
Moderate	A tree with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions and surrounding habitat, but unlikely to support a roost of high conservation status.
Low	A tree of sufficient size and age to contain potential roost features but with none seen from the ground or features seen with only very limited roosting potential.
Negligible	Negligible habitat features likely to be used by roosting bats.

Notes and Limitations

Desk Study

- 3.13 The lack of records for a species within the search area does not necessarily indicate the absence of the species but could merely be the lack of recording within that area.

Phase 1 Habitat Survey

- 3.14 Phase 1 habitat surveys can be undertaken at any time of the year; however, the optimum time of year for these surveys to be undertaken is between April and September (inclusive). This survey was undertaken within the optimal period. However, given the seasonality of plant growth and regular maintenance procedures within areas of the application site, it was not possible to identify all grass/herbaceous species. However, the dominant species of the respective habitat types were visible and identifiable, so this does not affect the validity of this PEA.
- 3.15 The survey area was visited over the period of one day. As such seasonal variations could not be observed and it is likely that only a selection of all species that occur within the site will have been recorded. However, it is considered that the combination of historic records from the desk study and the site visit provides an accurate representation of the various habitat types present at the site and their potential to support protected species. It is therefore considered that this was not a limitation to the study.

Longevity of Baseline Data

- 3.16 The evidence set out in this report describes the characteristics of the application site at the time at which the survey was undertaken. Many species of wildlife are highly mobile by nature and will routinely take advantage of new opportunities, which arise within their home ranges (CIEEM, 2019). Over time this will alter the baseline conditions present at the application site. Should there be delays in the delivery of this project, it is possible that the baseline ecology will change. In the event of a significant delay (12-18 months) between the baseline survey and commencement of works at the application site, advice on the implications of potential changes at the application site should be sought from a suitably experienced ecologist.

Nomenclature

- 3.17 Plant species nomenclature follows New Flora of the British Isles 3rd Edition (Stace, 2010) and bird species nomenclature follows the British Ornithologists' Union (BOU) English vernacular names in The British List: A Checklist of Birds of Britain (9th edition, 2017). Mammal nomenclature follows Mammals of the British Isles: Handbook 4th Edition (Harris and Yalden, 2008).

4.0 RESULTS

- 4.1 This section details the baseline ecological conditions within the application site's potential zone of influence and assesses the value of important ecological features, which are relevant to the assessment in the context of the proposed development.
- 4.2 Further details are provided within relevant **Appendices** and **Figures** to the rear of this report.

Designated Sites

Statutory Designated Sites

- 4.3 Statutory designations often represent the most significant ecological receptors, being of recognised importance at an international and/or national level. International designations include Special Protection Areas (SPAs), Special Areas of Conservation (SACs) and Ramsar sites. Whilst national designations include Sites of Special Scientific Interest (SSSI), National Nature Reserves (NNRs) and Local Nature Reserves (LNR).
- 4.4 The application site is not covered by any such designation. There are, however, sites covered by such designations within the application site's potential zone of influence, described in **Table 3** below and shown in **Figure 2**.

Table 3: Statutory Designated Sites within the site's potential Zone of Influence.

Name of Site and Designation	Approximate Distance/Direction from Site	Feature(s) of interest.
Highwood LNR	2.7km E	Contains mixed lowland woodland and a heathland habitats. The site contains exotic tree species, once a part of an arboretum, including giant redwood (<i>Sequoiadendron giganteum</i>) and monkey puzzle (<i>Araucaria araucana</i>).
Maiden Eriegh Park LNR	2.9km SE	Consists of areas of ancient and secondary woodland, grassland, a large lake, a brook, an old woodland pond and surrounding wetland habitat. Habitats on-site support a range of wildlife including over 100 species of butterfly and moth, 50 species of bird, 50 species of fungi and 20 tree species.
Pearman's Copse LNR	3.5km S	Comprises ancient woodland, including coppiced areas with many classic archaeological features such as boundary banks and ditches. The reserve is surrounded by community woodland and shares connectivity with Dinton Pastures Country Park.
Lousehill Copse LNR	3.5km W	The majority of the site comprises natural mature woodland and features a pond. The site also contains a grassy meadow area.
Clayfield Copse LNR	4.3km N	Contains wildflower meadow, ancient woodland and fields. Sections of the woodland are actively being managed as a hazel coppice and traditional dead hedging defines some of the ancient woodland areas.
Mcilroy Park LNR	4.3km W	Located on a steep hill and supports a species rich grassland field and a large block of mature oak and hazel woodland. Contiguous with Round Copse LNR.
Round Copse LNR	4.4km W	Small woodland area contiguous with Mcilroy Park LNR.
Ali's Pond LNR	4.5km NE	Site contains large ponds established by local ecologist (Alastair Driver) in 1997, and later found to support great crested newts. The site is also known to support a range of bird, invertebrate species – including 18 species of dragonfly, 250 species of moth – and over 40 species of aquatic and wetland plants.
Blundells Copse LNR	4.6km W	Comprises close growing ancient alder carr woodland with a stream, supporting a range of species.

- 4.5 The site lies within the SSSI risk impact zone for Bramshill SSSI.

Non-Statutory Designated Sites

- 4.6 Non-statutory designations are 'local sites' which are commonly of at least County level importance, and which receive protection under local planning policy only. In Reading these sites are referred to as Berkshire Local Wildlife Sites (BLWS). Additional designated sites which should be considered at this level are Other Sites of Wildlife Interest (OSWI) and Unconfirmed Wildlife Sites (UWS) where these are not covered by other designations.
- 4.7 The site is not covered by any such designation. The desk study identified five non-statutory designated sites within 1 km of the site, and these are summarised in **Table 4** below.

Table 4: Non-Statutory Designated Sites within the site's potential Zone of Influence.

Name of Site and Designation	Approx. Distance/ Direction from the Site	Feature(s) of Interest
River Kennet/Kennet Avon Canal – BLWS	0.6km W	Contains sections of high-quality chalk river fed by the River Kennet supporting sections of diverse marginal vegetation, and bankside trees and shrubs. The river represents an important wildlife corridor running into Reading and supports a population of water vole and rich invertebrate assemblage.
Whitely Park Farm/St Patrick's Hall – BLWS	0.8km S	Holds mixed broadleaved semi-natural woodland and associated habitats including two ponds. Important for the bird fauna it supports, including a number of red and amber listed species of conservation concern.
Holy Brook – BLWS	0.8km W	Holy Brook is a stream from, and empties back into the River Kennet, a chalk river. The stream is lined with alder and willow and a variety of wetland plant species. Notable invertebrates have been recorded on-site and water vole (<i>Arvicola amphibius</i>) have been recorded.
Fobney and Kennet Valley Meadows – BLWS	1km SW	Pasture with wet grassland and patches of swamp vegetation. Site also contains an area of woodland and ditches with tall wetland and aquatic plant species. The site supports a diversity of invertebrate species and provides habitat for overwintering birds.
Kennet Valley East – Biodiversity Opportunity Area	1km SW	Flat Riverside land containing chalk river, reedbeds, fen, wet woodland, lowland meadow, wet grassland, standing water. Highlighted as having potential for nature conservation after use in future mineral extraction.

Habitats of Principal Importance and Ancient Woodland

- 4.8 The desk study identified no habitats of Principal Importance or Ancient Woodland present within the site. Several areas of these habitats are present within the 1 km search radius. **Table 5** provides a summary of Habitats of Principal Importance within the 1 km search area.

Table 5: Habitats of Principal Importance

Habitat	Summary of Features	Distance from site of nearest feature
Coastal and Floodplain Grazing Marsh	Periodically inundated pasture or meadow with ditches maintaining water level	0.9km SW
Deciduous Woodland	Broadleaved	0.5km SW

Habitats

4.9 The principal habitats within and around the site, together with their dominant/characteristic plant species, were identified during the Phase 1 habitat survey. The distribution of different habitat types within the site are mapped in **Figure 3**, illustrative photographs and target notes are also provided in **Appendix D**.

4.10 The survey area predominantly comprises a multi-purpose AstroTurf pitch and associated access path and short-mown amenity grassland with some limited areas of tall ruderal vegetation. A number of scattered broadleaved trees are present distributed to the west and north of the AstroTurf pitch, all within the amenity grassland. The site's boundaries are defined by fencing on the north and south, a wall on the west boundary, and a species poor intact hedgerow on the east boundary. At the time of survey, the hedgerow was neatly maintained with signs of regular management. **The proposals relate only to the removal of sections of the eastern hedgerow.**

4.11 Habitats recorded within the site were:

- Scattered broad-leaved trees (A3.1);
- Tall ruderal vegetation (C3.1);
- Amenity grassland (J1.2);
- Intact species-poor hedge (J2.1.2);
- Fence (J2.4);
- Wall (J2.5);
- Buildings and hardstanding (J3.6); and
- Other Habitat – AstroTurf pitch (J.5).

Scattered broad-leaved trees (A3.1)

4.12 A number of broad-leaved trees are present on-site. These are distributed adjacent to the north and west boundaries and comprise lime (*Till sp.*), field maple (*Acer campestre*), holly (*Ilex aquifolium*), hawthorn (*Crataegus monogyna*) and sycamore (*Acer pseudoplatanus*). The trees are generally small specimens of sapling or sub-mature age, with the exception of the two larger sycamore trees along the western boundary. Also of note, though not within the survey area, is the avenue of mature London Plane trees (*Patanus x hispanica*) adjacent to the eastern site boundary and lining both sides of Kendrick Road.

Tall Ruderal Vegetation (C3.1)

- 4.13 Stands of tall ruderal vegetation are present in the north-west, north-east and south-west corners, as well as some limited patches adjacent to walls, fences and trees. The tall ruderal vegetation is generally dominated by green alkanet (*Pentaglottis sempervirens*), but also contains the following species: white dead nettle (*Lamium album*), cleavers (*Galium aparine*), wood avens (*Geum urbanum*) and common comfrey (*Symphytum officinale*),

Amenity Grassland (J1.2)

- 4.14 Amenity grassland is the dominant semi-natural habitat on site. It surrounds the Astro-pitch and extends to the site boundary on all sides. At the time of the site visit, the grassland was well maintained, with a sward height of around 5cm. Areas of grassland immediately adjacent to the Astro-pitch are banked steeply towards the pitch. On these sloped sections, the grassland is a little rougher and sparsely tussocky.
- 4.15 The grassland is dominated by perennial ryegrass (*Lolium perenne*). Other grass species include; Cock's-foot (*Dactylis glomerata*), red fescue (*Festuca rubra*), and annual meadow grass (*Poa annua*), false oat grass (*Arrhenatherum elatius*), false brome (*Brachypodium sylvaticum*). Forb species present include dandelion (*Taraxacum sp.*), daisy (*Bellis perennis*), ribwort plantain (*Plantago lanceolata*), greater plantain (*Plantago major*), common mouse-ear (*Cerastium fontanum*), white clover (*Trifolium repens*), groundsel (*Senecio vulgaris*), and broad-leaved dock (*Rumex obtusifolius*).

Intact Species-poor Hedge (J2.1.2)

- 4.16 A species-poor intact hedgerow comprising predominantly elm (*Ulmus procera*), hawthorn, sycamore and field maple defines the eastern boundary of the site. The hedgerow was well trimmed and maintained at the time of the site visit and intact, except for a gap permitting access into the Astro pavilion. The hedgerow has brash, wood chip and leaf-litter piles along much of its length, with ivy (*Hedera helix*), Geranium sp, spear thistle (*Cirsium vulgare*) green alkanet all present within the herb-layer.

Fence (J2.4)

- 4.17 Fencing defines the north and south site boundaries. The northern fence is dominated by ivy in many sections. Additionally, growing through the northern fence and/overhanging it from adjacent gardens are bramble (*Rubus fruticosus* agg.), hops (*Humulus lupulus*), lilac (*Syringa vulgaris*).
- 4.18 The southern fence has overhanging cherry (*Prunus avium*) and apple trees (*Malus sp.*), with some primrose (*Primula vulgaris*), forget-me-nots (*Myosotis sp.*), red deadnettle (*Lamium purpureum*), green alkanet, and lesser celandine (*Ficaria verna*) growing at its base.

Wall (J2.5)

- 4.19 The western boundary is defined by a wall. Small stands of green alkanet and common comfrey exist sparsely along its base. Also present at the base of the wall is ivy-leaved speedwell (*Veronica hederifolia*).

Buildings and Hardstanding (J3.6)

- 4.20 A small area of hardstanding comprising the site entrance and Astro pitch access path exists in the east of the site. Two metal storage containers are also present within this area. Additionally, a long jump track and sand pit are present adjacent to the north-west corner of the Astro pitch.

Summary

- 4.21 On the whole the site can be considered of *low ecological value*, being dominated by the existing AstroTurf pitch with associated hardstanding and short-trimmed amenity grassland. Trees on site are generally young/semi-mature, offering limited value to protected species. Two mature trees (offering greater value to wildlife) are present, however, close to the western boundary.
- 4.22 Additionally, the site contains some limited stands of tall ruderal vegetation, small marginal areas of rougher grassland, and a hedgerow with notable areas of brash, leaf litter and piled grass clippings at its base: these are all of higher ecological value, offering shelter, nesting and foraging opportunities for a range of species.
- 4.23 Hedgerows are listed as a Habitat of Principal Importance (HPI) and are a UK Biodiversity Action Plan priority habitat as they provide key semi-natural habitat and habitat connectivity for a broad range of species and will need to be considered further.
- 4.24 Under current proposals, only the eastern hedgerow will be affected. Other habitats on-site are not scheduled to be removed or altered.**

Species

- 4.25 Although suitable habitats for protected species are present within the site, the proposals only concern the eastern hedgerow. The assessment of impacts on protected or notable species below has been made based on the impacts on those habitats alone.

Badger

- 4.26 The data search returned several records of badger within 1 km of the site. The records include field and sett records from 2015 and 2017. These are centred around Cintra Park and St Patricks Hall (between 0.6km and 1km to the south-west of the site), and Craven Road (approximately 0.5km to the east of the site).
- 4.27 During the walkover survey, two badger latrines were recorded at the southern end of the long-jump runway and on a pile of woodchip in the north-east corner of the site.
- 4.28 No setts are present on-site. Highly sub-optimal sett-building habitat is present in the southwest of site in the form banked grassland with stands of tall ruderal vegetation) - but this area will not be impacted under current proposals.
- 4.29 Suitable foraging habitat for badgers exists in the form of tall ruderal vegetation, hedgerow and areas of leaf litter, brash, and grass clippings around the periphery of the site. Overhanging fruit trees on the southern boundary and bramble on the north boundary may also provide additional foraging opportunities for badger. Sub-optimal foraging habitat also exists on-site in the form of amenity grassland.

Summary

- 4.30 Badgers are confirmed to be present on-site. Potential badger foraging habitat will be removed under current proposals and thus badger will require further consideration as outlined in **Section 5** below.

Bats

- 4.31 The data search returned records of nine bat species within 2 km of the site in the past 10 years. Records were for the following species:

- Common pipistrelle (*Pipistrellus pipistrellus*);
- Soprano pipistrelle (*Pipistrellus pygmaeus*);
- Nathusius's pipistrelle (*Pipistrellus nathusii*);
- Daubenton's Bat (*Myotis daubentonii*);
- Serotine (*Eptesicus serotinus*);
- Noctule (*Nyctalus noctula*);
- Leisler's bat (*Nyctalus leisleri*);
- Barbastelle (*Barbastella barbastellus*); and
- Brown long-eared (*Plecotus auritus*).

- 4.32 Many of these records are field records (i.e., records of bats in flight). There are also records of roosts, the majority of which relate to small and occasionally used roosts including recent records (2017/18) of roosting common pipistrelle bats along Kendrick Road, and from the University of Reading London Road Campus (2014).

- 4.33 Records of two larger roosts were also returned:

- A Daubenton's bat roost of 50 individuals, approximately 1.5km north of the site within a Thames Water tunnel recorded in 2015; and
- A Noctule roost of 11 breeding individuals, approximately 1.6km south-east of the site within the grounds of Leighton Park School

- 4.34 In addition, there are seven records of European Protected Species Licensing (EPSL) within 2 km of the site (**Table 7** refers).

Table 7: Granted EPSL Records Present Within 2 km Search Radius.

Date of Granted Application	Species	Licensable Activity	Approximate Distance from Site
2016	C-PIP	Destruction of a resting place; Destruction of a resting place	0.4km N
2014	C-PIP, S-PIP	Damage of a resting place; destruction of a resting place	0.7km E
2013	C-PIP	Destruction of a resting place	1.2km N
2017	C-PIP	Damage of a resting place; destruction of a resting place	1.2km W
2010	C-PIP	Destruction of a resting place	1.4km E
2017	DAUB	Licence impacts on a breeding site/unknown	1.4km N
2010	C-PIP, BLE	Licence impacts on a breeding site; destruction of a breeding site; destruction of a resting place	1.7km SE

Assessment of site for roosting bats

- 4.35 Structures on-site were limited to two storage containers situated alongside the access path leading from the site entrance on the eastern boundary. These were assessed as unsuitable to support roosting bats due to their lack of potential roosting features (PRFs).
- 4.36 Trees on-site were generally immature and were considered unsuitable for roosting bats through absence of potential roost features. The two mature trees close to the western boundary were assessed as having low potential to support roosting bats due to their age and size and the presence of knot holes, a potential bat roosting feature. However, these will not be impacted under current proposals.

Assessment of Foraging Quality

- 4.37 Scattered trees, hedgerow and tall ruderal vegetation habitats all provide good foraging habitat for bats; amenity grassland provides sub-optimal foraging habitat.
- 4.38 The hedgerow on the eastern boundary represents a linear feature, commonly used by commuting bats. This feature, however, can be considered part of the broader linear feature of the tree avenue running along Kendrick Road (immediately adjacent to site). Removal of the hedgerow is not likely to impact commuting bats as the tree avenue will remain in place.

Summary

- 4.39 No structures or trees with bat roosting potential are scheduled to be altered under current proposals. However, removal of the hedgerow will result in a reduction in available foraging habitat for bats. Bats will require further consideration as outlined in **Section 5** below.

Dormouse

- 4.40 No records of dormouse were returned by the data search.
- 4.41 No signs of dormouse were observed during the site visit. The eastern hedgerow provides suitable habitat for dormouse. This however shares no connectivity to suitable dormouse habitat in the wider landscape.

Summary

- 4.42 Dormouse are considered likely absent from the site and as such no further consideration in this assessment is required.

Other Mammals

- 4.43 One record of hedgehog (*Erinaceus europaeus*) was returned as part of the data search. The record was from Castle Street (2018), approximately 0.9km north-west of the site.
- 4.44 Suitable hedgehog habitat is present on site for hedgehog the form of the hedgerow, amenity grassland, tall ruderal vegetation, brash piles, leaf litter and heaped grass clippings. Brash piles and heaped refuse vegetation also offer potential places of refuge for hedgehog.
- 4.45 During the walkover survey, hedgehog scat was recorded in several locations, distributed throughout the amenity grassland area.

- 4.46 Hedgehog are confirmed to be present on-site. Suitable hedgehog habitat is scheduled to be removed/altered under current proposals. Hedgehog, therefore, will require further consideration in this assessment as outlined in **Section 5** below.

Nesting Birds

- 4.47 The data search returned records of seventeen bird species listed on Section 41 of the NERC Act (2006) or Schedule 1 of the Wildlife and Countryside Act. Species recorded include black redstart (*Phoenicurus ochruros*), cuckoo (*Cuculus canorus*), dunnoek (*Prunella modularis*), fieldfare (*Turdus pilaris*), firecrest (*Regulus ignicapilla*), herring gull (*Larus argentatus*), kingfisher (*Alcedo atthis*), lesser redpoll (*Acanthis cabaret*), linnet (*Linaria cannabina*), marsh tit (*Poecile palustris*), peregrine (*Falco peregrinus*), red kite (*Milvus, milvus*), redwing (*Turdus iliacus*), skylark (*Alauda arvensis*), song thrush (*Turdus philomelos*), spotted flycatcher (*Muscicapa striata*), and starling (*Sturnus vulgaris*).
- 4.48 No protected bird species were noted during the survey.
- 4.49 Suitable habitat exists within the site for nesting birds in the form of scattered broad-leaved trees, storage containers and the hedgerow, though no nests or signs of nesting were observed at the time of survey.

Summary

- 4.50 Removals of sections of the eastern hedgerow are planned. The hedgerow represents suitable nesting habitat for a variety of species and therefore further consideration for birds is required, as outlined in **Section 5**.

Great Crested Newt

- 4.51 No records of great crested newt (GCN) were returned by the data search. No granted GCN EPSL records, licence returns, or pond surveys undertaken for District Level Licencing were recorded within 2 km of the site.
- 4.52 Suitable terrestrial habitat is present in the form of hedgerow, tall ruderal vegetation, brash/leaf litter/piled grass clippings. However, no suitable waterbodies (breeding sites for GCN) were present on-site, nor apparent on maps or aerial photographs within 500m of the site.

Summary

- 4.53 The proposed scheme will impact upon suitable terrestrial habitat for GCN, however the lack of data search returns, together with the lack of connectivity to suitable terrestrial and/or aquatic habitat in the wider landscape indicate that GCN are likely absent and thus will not be considered further.

Other Amphibians

- 4.54 Suitable terrestrial habitat for common toad (*Bufo bufo*) and common frog (*Rana temporaria*) in the form of scrub and short perennial vegetation. Small rubble and brash piles may provide refuge areas.

Summary

- 4.55 The hedgerow, along with the leaf litter and brash along sections of its base represent suitable reptile habitat and are scheduled to be removed and/or altered under current proposals. Therefore, amphibians will require further consideration in **Section 5** below.

Reptiles

- 4.56 No records of reptiles were returned as part of the data search.
- 4.57 No field evidence of reptiles was noted during the Phase 1 habitat survey. Some suitable reptile habitat is present, however, in the form of hedgerow, tall ruderal vegetation and brash/leaf litter/piled grass clippings (which may also serve as potential hibernacula).

Summary

- 4.58 The hedgerow, along with the leaf litter and brash along sections of its base represent suitable reptile habitat and are scheduled to be removed and/or altered under current proposals. Therefore, reptiles will require further consideration in **Section 5** below.

Invertebrates

- 4.59 The site is generally composed of common and widespread habitat types, frequently found in the local environs of the site, and lacking in rare or notable botanical species. However, records of one Section 41 invertebrate species were returned by the data search. These were for stag beetle (*Lucanus cervus*). 53 records were returned, dating from between 2012 and 2018 from a large number of sites within the search radius.
- 4.60 Suitable stag beetle habitat includes hedgerow and decaying wood. As areas of potentially suitable stag beetle habitat are scheduled to be removed/altered, further consideration will be required in **Section 5** below.

Protected Plants

- 4.61 No records of Section 41 plant species were returned by the data search
- 4.62 No protected plants were recorded during the Phase 1 habitat survey and therefore **considered absent**.

Schedule 9 Species

- 4.63 The data search returned records for two invasive non-native species on Schedule 9 of the Wildlife and Countryside Act 1981: Japanese knotweed (*Fallopia japonica*) and Indian Balsam (*Impatiens glandulifera*).
- 4.64 No invasive species were recorded during the Phase 1 habitat survey, and therefore **considered absent**.

Protected Species Assessment

- 4.65 The site contains no suitable habitat for the following species:
- Otter;
 - Water vole; and
 - White clawed crayfish.
- 4.66 These species are therefore **not considered further** in this assessment.

5.0 DISCUSSION AND RECOMMENDATIONS

- 5.1 This Preliminary Ecological Appraisal Report assesses the potential impacts on:
- Designated sites;
 - Habitats and species of 'Principal Importance' (NERC Act 2006);
 - Habitats and species listed on regional or local Biodiversity Action Plans; and
 - Habitats and species afforded legal protection.
- 5.2 Where impacts cannot be avoided by inherent mitigation alone, additional mitigation or enhancement measures are included which would as a minimum enable the proposed development to meet legislative and/or planning policy requirements.

Designated Sites

- 5.3 As identified in **Section 4** there are nine statutory designated sites within the potential zone of influence of the site. The closest of these is Highwood LNR, approximately 2.7km east of the site, designated for its mixed lowland woodland and heathland habitats. Due to the scale and nature of the proposals – involving only the removal of sections of the eastern hedgerow, no significant impacts on this designated site are anticipated to occur.
- 5.4 As identified in **Section 4** there are five non-statutory sites within the potential zone of influence of the site, with River Kennet/Kennet Avon Canal BLWS being the closest. The proposed development is not of a nature that could cause any impacts upon this or any other locally designated site, due to the scale and nature of the proposals. No impacts are anticipated to occur.
- 5.5 The site lies within the SSSI risk impact zone for Bramshill SSSI. Developments of a certain size and nature that fall within SSSI Impact Risk Zones, require the LPA to consult with Natural England to determine whether the proposed development is likely to impact upon the SSSI. In this instance, none of the trigger developments apply to the proposed scheme at the application site.

Habitats

- 5.6 Much of the site is intrinsically of low ecological value, being dominated by the existing AstroTurf pitch, associated areas of hardstanding and short-trimmed amenity grassland. Trees on site are generally young/sub-mature, offering limited value to protected species. Two mature trees (offering greater value to wildlife) are present close to the western boundary. These are not, however, scheduled to be impacted under current proposals.
- 5.7 Additionally, the site contains some limited stands of tall ruderal vegetation, small marginal areas of rougher grassland, a hedgerow with notable areas of brash, leaf litter

and piled grass clippings at its base: these are all of higher ecological value, offering shelter, nesting and foraging opportunities for a range of species.

- 5.8 Hedgerows are listed as a Habitat of Principal Importance (HPI) and are a UK Biodiversity Action Plan priority habitat as they provide key semi-natural habitat and habitat connectivity for a broad range of species. It will therefore be necessary to mitigate for losses incurred through current proposals (removal of parts of the hedgerow). This may be achieved by compensatory planting elsewhere on-site. Mitigation required for the loss of hedgerow needs to be the same length of hedgerow to be removed should be planted elsewhere in the site.
- 5.9 The new hedgerow should comprise a variety of native species of local provenance – some of which should be fruit or nut bearing trees/shrubs – and managed for wildlife.
- 5.10 The western site boundary has potential as a planting location for a new hedgerow. Consultation with the LPA is recommended to seek agreement on the proposed mitigation measures. In time, the new hedgerow will compensate for any depreciation in the site's ecological value with respect to the following:
- Badger;
 - Bats (Foraging);
 - Hedgehog;
 - Invertebrates;
 - Nesting birds; and
 - Reptiles.

Protected and/or Notable Species

- 5.11 Certain species receive legal protection in the United Kingdom and are commonly known as 'protected species'. In reality, the level of protection for different species varies considerably, from protection solely against 'killing and injury' to full protection of the species and their places of refuge. Where pertinent, details of legal protection afforded to species/species-groups are provided below, further details on the legislation can be found in **Appendix B**.

Badger

- 5.12 No further survey work regarding badger is necessary. It is unlikely that work on the hedgerow will impact (injure, kill) individual badgers. Furthermore, there are no setts or likely sett habitat within the work area's zone of influence.

Bats

- 5.13 The eastern hedgerow represents suitable foraging habitat for bats. However, it is limited in extent and habitat of similar or better quality is present in the broader landscape. Whilst the hedgerow also represents a linear feature commonly used by commuting bats, it can be considered part of the broader linear feature of the tree avenue along Kendrick Road; its removal is not likely to decrease habitat connectivity across the local landscape with respect to bats.
- 5.14 Potential roosting opportunities for bats on-site are limited to the two mature trees close to the western boundary. These will not be impacted under current proposals.

No further survey work regarding bats is required.

Hedgehog

- 5.15 Hedgehog are confirmed to be on-site and may be utilising the hedgerow and adjacent brash/refuse vegetation piles for foraging and shelter. It is therefore recommended that vegetation removals are carried out in a sensitive manner. This should include a pre-commencement check carried out by a suitably qualified ecologist.

Invertebrates

- 5.16 The data search indicated the presence of stag beetle in vicinity of the site. The hedgerow and associated piles of refuse vegetation represent potential stag beetle habitat. Whilst the potential presence of stag beetles is not an obstacle to proposals with respect to legislation, stag beetle is a UK BAP species, and a sympathetic approach is advised. Further to this, it is recommended that a suitably qualified ecologist be present to see that any larvae or adults uncovered during works are collected and translocated to a suitable nearby receptor site.

Nesting Birds

- 5.17 The hedgerow represents suitable nesting habitat for a range of bird species. To prevent harm and/or disturbance to nesting birds, it is recommended that removals ideally take place outside of the nesting bird season (March – August). If this is not possible, a nesting bird check will need to be performed by a suitably qualified ecologist prior to commencement of works.
- 5.18 Other potential nesting habitat on-site is not scheduled to be impacted under current proposals.

Reptiles

- 5.19 As proposals are limited to the removal of parts of the eastern hedgerow, it may be possible to scope out further reptile survey work if sensitive vegetation clearance methods can be applied. These will likely involve a graded approach where the removals take place in stages and are directional, moving towards areas of retained vegetation. Works should also be restricted to spring/summer months when reptiles are most active, giving them a chance to disperse.

Summary of Recommended Mitigation/Compensation Measures and Further Surveys

- New hedgerow planting the same length to be removed, which is species rich and containing a high percentage of native species.
- Precautionary measures employed to safeguard hedgehog, reptiles, stag beetle during works;
- Works to take place outside the nesting bird season (March to August inclusive) or immediately following a check by a suitably qualified ecologist if this is not possible.

6.0 ENHANCEMENT MEASURES

- 6.1 Policy for the conservation and enhancement of the natural environment at all levels aims to “*minimise impacts on and provide net gains for biodiversity*” (National Planning Policy Framework, para.170).
- 6.2 There is potential to improve the diversity of habitats within the site through a number of means:

-
- Cultivation of rougher grassland and/or wildflower areas to benefit pollinators, enhance the site for invertebrates and increase foraging opportunities for badger, hedgehog, bats, and reptiles.
 - Installation of 'insect hotels' within areas of appropriate habitat.
 - Installation of bat and/or bird boxes on existing mature trees to provide additional roosting opportunities.
 - 'Hedgehog domes' instituted near areas of suitable habitat to provide additional refuge areas for hedgehog.
 - Brash/refuse vegetation piles to be retained where possible. New piles and/or reptile hibernacula (perhaps using materials arising from eastern hedgerow removals) to be instituted to benefit reptiles, invertebrates etc.

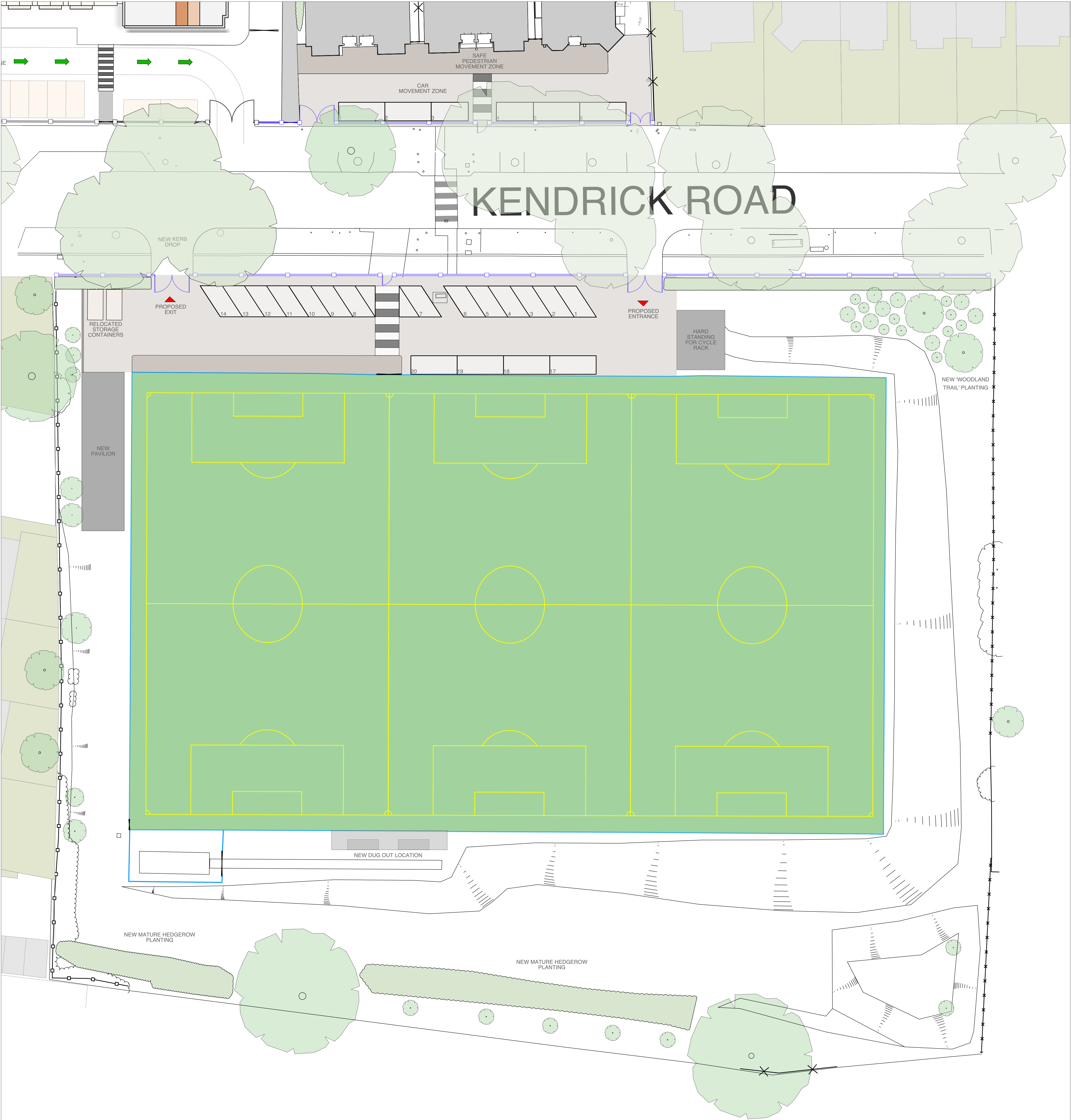
7.0 CONCLUSION

- 7.1 This PEA Report details the Preliminary Ecological Appraisal that was carried out of the application site. No further surveys are deemed necessary to support this planning application. Appropriate measures to avoid and/or mitigate impacts on protected species, and to provide enhancements where feasible have been included in this assessment in accordance with national and local development plan policy.

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APPENDIX A: PROPOSED SITE PLAN



Design Overview

- New boundary wall / fence to mirror Main School
- Existing boundary hedgerow reduced significantly
- Main entrance created opposite Turret House
- Separate Exit formed opposite Main School
- Pedestrian entrance to centre with zebra crossing
- 20 No. New parking spaces formed

- Hard standing for up to 20 No. bike racks by main entry
- Astro pavilion located to Northern edge of pitch
- 2 No. Existing storage containers relocated beside exit
- 2 No. Dug outs relocated to Western edge of pitch
- New mature hedgerow planting to Wstern boundary
- New 'woodland trail' planting to South East boundary

ASTRO SITE PLAN - OPTION C



Scale 1:250 @ A1



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Project
Astro Pavillion & Kendrick Road
Feasibility Study
Client
The Abbey School

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P2 09/03/21 DG EQ Issued for Pre-Application
P1 06/01/21 DG EQ Issued for Comments
Rev Date By Ap Note

Drawing Title
Astro Site Plan - Option C

Project Number Drawing Number Revision
200972-0513-P02

Date Drawn Checked Status
09/03/21 DG EQ PLANNING

Check all dimensions and levels on site

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APPENDIX B: LEGAL CONTEXT

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Protected Sites (European)	
Special Areas of Conservation (SACs)	SACs are designated under The Conservation of Habitats and Species Regulations 2017* ('2017 Regulations') (as amended) which implements The European Community Directive on the Conservation of Natural Habitats and of Wild Fauna and Flora 92/43/EEC (the 'Habitats Directive', EEC, 1992). Lists of candidate SACs (cSACs) have been submitted to the European Commission for approval. Both possible SACs (pSACs) and cSACs are treated by the planning system as if fully designated.
SPA	SPAs are classified in accordance with the European Community Directive on the Conservation of Wild Birds (79/409/EEC) (the 'Birds Directive', EEC, 1979). Under this Directive, the UK Government must also take special measures to conserve the habitat of species listed in Annex I of the Directive and all migratory species. The provisions of the Birds Directive are implemented in England through the Wildlife and Countryside Act 1981 (as amended) and the Habitats Regulations (2017).
Ramsar Sites	The Ramsar Convention (UNESCO, 1987) requires signatory states to protect wetlands that are of international importance, particularly as waterfowl habitats.
Protected Sites (National)	
Local Nature Reserves	Local Nature Reserves are designated under Section 21 of The National Parks and Access to the Countryside Act 1949 (HMSO, 1949) by principal local authorities. The declaring local authority must have a legal interest in the land concerned. Local Nature reserves are designated for people and wildlife. They are places with wildlife or geological features of special interest locally and that give people special opportunities to study and learn about them or simply enjoy them and have contact with nature.
National Nature Reserves	National Nature Reserves are designated under Section 21 of the National Parks and Access to the Countryside Act 1949 (HMSO, 1949) by the statutory authority. They are usually owned and managed by the statutory authority. National Nature Reserves are designated for the habitats that they support.
Sites of Special Scientific Interest (SSSIs)	The Wildlife and Countryside Act 1981 (as amended 1991 and varied 1998) (HMSO, 1981, 1991, 1998) requires Natural England, the Government body with authority for nature conservation in England, to designate areas which make a significant contribution to a national network of sites of nature conservation value as SSSIs. The Countryside and Rights of Way Act 2000 (HMSO, 2000) came into force in full on 30 January 2001. The Act is in five parts. Part III relates to Nature Conservation and amends existing legislation (i.e., the Wildlife and Countryside Act 1981) through improved protection and management of SSSIs, improved legal protection for threatened species and the provision of a statutory basis for biodiversity conservation.
Non-Statutory Sites	
Local Wildlife Sites; County Wildlife Sites;	The majority of Local Authorities have a system of 'second tier' sites which do not wholly fulfil SSSI designation criteria, but which are, nonetheless, of local or regional value. The policies, encouraged by

Sites of Nature Conservation Interest	Government advice, recognise that protection should be extended beyond the statutory sites to include the best examples of wildlife habitats, populations of rare species and geological features remaining in the area and are particularly valuable in supplementing and supporting the national framework for SSSIs.
Protected Species (European)	
Bats	All species of British bat are listed as a European Protected Species (EPS) on Schedule 2 of the Conservation Regulations (Annex IV (a) to the Habitats Directive). This affords bats and their roosts strict protection under the Conservation of Habitats and Species Regulations 2017. Additional protection for bats is also afforded under the Wildlife and Countryside Act 1981 (as amended) and a subset of the British bat assemblage are listed as priority species under the Natural Environment and Rural Communities (NERC) Act 2006.
Birds	In Britain all wild birds are granted legal protection under the EC Birds Directive. This legislation protects the birds, their eggs and nests whilst being built or in use. Under the Bern Convention 1979, Contracting Parties are required to take appropriate and necessary legislative and administrative measures to ensure the special protection of the wild fauna species specified in Appendix II. In the UK this is implemented through various national wildlife protection policies.
Great Crested Newt	The great crested newt is fully protected under Schedule 5 of the Wildlife & Countryside Act 1981 (as amended) and the Conservation of Habitats and Species Regulations 2017. The legislation protects the newts and their places of shelter or protection, which may extend 500m from the breeding pond.
Protected Species (National)	
Badger	Badgers are protected under the Protection of Badgers Act 1992. This Act makes it illegal to wilfully kill, injure or take any badger, or attempt to do so and it is an offence to intentionally or recklessly damage, destroy or obstruct access to any part of a badger sett or disturb a badger when it is occupying a sett.
Wild Mammals	Under the Wild Mammals (Protection) Act 1996 it is an offence to mutilate, kick, beat, nail or otherwise impale, stab, burn, stone, crush, drown, drag or asphyxiate any wild mammal with intent to inflict unnecessary suffering.
Reptiles	The slow-worm (<i>Anguis fragilis</i>), grass snake (<i>Natrix natrix</i>), adder (<i>Vipera berus</i>) and common lizard (<i>Lacerta vivipara</i>) are protected under Schedule 5 of the Wildlife & Countryside Act 1981 (as amended) in respect of section 9(1) and 9(5) only. Under section 9(1) it is an offence to knowingly kill or injure a reptile. Section 9(5) refers to sale and trade.
Birds	In Britain all wild birds are granted legal protection under the Wildlife & Countryside Act 1981 (as amended). This legislation protects the birds, their eggs and nests whilst being built or in use. Legal protection makes it an offence to intentionally kill, injure, take or have in possession any wild bird or egg. It is also an offence to intentionally damage or destroy the nest of any wild bird whilst it is being built or in use. Birds listed on Schedule 1 of the Wildlife and Countryside Act 1981 (as amended) are subject to special penalties and are also protected from disturbance while nesting including the disturbance of dependent young.

Biodiversity Conservation	
Natural Environment and Rural Communities Act	Section 41 (S41) of the Natural Environment and Rural Communities (NERC) Act 2006 requires the Secretary of State to publish a list (in consultation with Natural England) of habitats and species which are of principal importance for the conservation of biodiversity in England. The Government has a duty to take reasonably practicable steps to further the conservation of the species and habitats that are included in lists published under Section 41. Biodiversity 2020: A strategy for England's wildlife and ecosystem services sets out the means by which the Government will comply with its duty under Section 41 of the NERC Act to take or promote the taking by others of steps to further the conservation of listed habitats and species, including through the continued implementation of Action Plans.

APPENDIX C: PLANNING CONTEXT

APPENDIX C: PLANNING CONTEXT

National Planning Policy Framework (NPPF)

The NPPF (MHCLG, 2019) emphasises that planning decisions should contribute to and enhance the natural and local environment by protecting and enhancing sites of biodiversity value (in a manner commensurate with their statutory status or identified quality in the development plan) and "*minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures*" (paragraph 170 refers).

The NPPF advises that when determining planning applications, local planning authorities should aim to protect and enhance biodiversity by applying the following principles (paragraph 175 refers):

"a) if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;

b) development on land within or outside a Site of Special Scientific Interest, and which is likely to have an adverse effect on it (either individually or in combination with other developments), should not normally be permitted. The only exception is where the benefits of the development in the location proposed clearly outweigh both its likely impact on the features of the site that make it of special scientific interest, and any broader impacts on the national network of Sites of Special Scientific Interest;

c) development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons⁵⁸ and a suitable compensation strategy exists; and

d) development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to incorporate biodiversity improvements in and around developments should be encouraged, especially where this can secure measurable net gains for biodiversity."

National Planning Policy Guidance (NPPG)

NPPG (DCLG, 2014) will be updated in due course, where necessary, to reflect the NPPF. Current NPPG advises that information on biodiversity impacts, and opportunities should inform all stages of development, from site selection and design, to include any pre-application consultation as well as the application itself. The guidance notes that:

"An ecological survey will be necessary in advance of a planning application if the type and location of development are such that the impact on biodiversity may be significant and existing information is lacking or inadequate. Pre-application discussion can help scope whether this is the case and, if so, the survey work required" (Paragraph 016).

The Guidance also notes that:

"Local planning authorities should only require ecological surveys where clearly justified, for example if they consider there is a reasonable likelihood of a protected species being present and affected by development. Assessments should be proportionate to the nature and scale of development proposed and the likely impact on biodiversity" (Paragraph 016).

Local Planning Policy

Reading Borough Local Plan – Adopted November 2019

Policies in the Local Plan that are of relevance to this assessment are:

- Policy CC1 – Presumption in favour of sustainable development
- Policy EN12 – Biodiversity and the Green Network
- Policy EN14 – Trees, Hedges and woodland

Policy CC1 – Presumption in favour of sustainable development

A positive approach to considering development proposals will be taken that reflects the presumption in favour of sustainable development contained in the National Planning Policy Framework (NPPF). Where appropriate, the Council will work proactively with applicants jointly to find solutions which mean that proposals can be approved wherever possible.

Planning law requires that applications for planning permission must be determined in accordance with the development plan unless material considerations indicate otherwise. Planning applications that accord with the policies in the development plan (including, where relevant, with policies in neighbourhood plans) will be approved without delay, unless material considerations indicate otherwise.

Proposed development that conflicts with the development plan will be refused unless other material considerations indicate otherwise. Where there are no policies relevant to the application or the policies which are most important to determining the application are out of date at the time of making the decision then permission will be granted unless material considerations indicate otherwise – taking into account whether:

- The application of policies in the NPPF that protect areas or assets of particular importance provides a clear reason for refusing the development proposed; or
- Any adverse impacts of doing so would significantly and demonstrably outweigh the benefits, when assessed against the policies in the NPPF taken as a whole.

Policy EN12 - Biodiversity and the green network

a) The identified Green Network, the key elements of which are shown on the Proposals Map, shall be maintained, protected, consolidated, extended and enhanced. Permission will not be granted for development that negatively affects the sites with identified interest or fragments the overall network. The Green Network comprises:

- Sites with identified biodiversity interest - Local Wildlife Sites, Local Nature Reserves, Biodiversity Opportunity Areas, protected and priority species and their habitats, Priority and Biodiversity Action Plan habitats, and the River Thames and all its tributaries (including the River Kennet and the Kennet & Avon Canal); and
- Areas with potential for biodiversity value and which stitch the Green Network together – designated Local Green Space and open green spaces, and existing and potential Green Links. New development shall demonstrate how the location and type of green space, landscaping and water features provided within a scheme have been arranged such that they maintain or link into the existing Green Network and contribute to its consolidation. Such features should be designed to maximise the opportunities for enhancing this network. All new development should maximise opportunities to create new assets and links into areas where opportunities are as yet unidentified on the Proposals Map.

b) On all sites, development should not result in a net loss of biodiversity and geodiversity and should provide a net gain for biodiversity wherever possible. Development should:

- Protect and wherever possible enhance features of biodiversity interest on and adjacent to the application site, incorporating and integrating them into development proposals wherever practicable; and
- Provide new tree planting, wildlife friendly landscaping and ecological enhancements (such as wildlife ponds, bird and bat boxes) wherever practicable.

In exceptional circumstances where the need for development clearly outweighs the need to protect the value of the site, and it is demonstrated that the impacts cannot be: 1) avoided; 2) mitigated or; 3) compensated for on-site; then new development will provide off-site compensation to ensure that there is “no net loss” of biodiversity. Provision of off-site compensation shall be calculated in accordance with nationally or locally recognised guidance and metrics. It should not replace existing alternative habitats and should be provided prior to development.

Policy EN14 – Trees, hedges and woodlands

Individual trees, groups of trees, hedges and woodlands will be protected from damage or removal where they are of importance, and Reading’s vegetation cover will be extended. The quality of waterside vegetation will be maintained or enhanced.

New development shall make provision for tree retention and planting within the application site, particularly on the street frontage, or off-site in appropriate situations, to improve the level of tree coverage within the Borough, to maintain and enhance the character and appearance of the area in which a site is located, to provide for biodiversity and to contribute to measures to reduce carbon and adapt to climate change. Measures must be in place to ensure that these trees are adequately maintained.

APPENDIX D: PHOTOGRAPHS AND TARGET NOTES

APPENDIX D: PHOTOGRAPHS AND TARGET NOTES

No.	Photograph	Description
1		Amenity Grassland and scattered broad leaved trees close to western site boundary. View to south)
2		Stand of green alkanet near southern boundary fence.
3		Hedgerow along eastern site boundary.

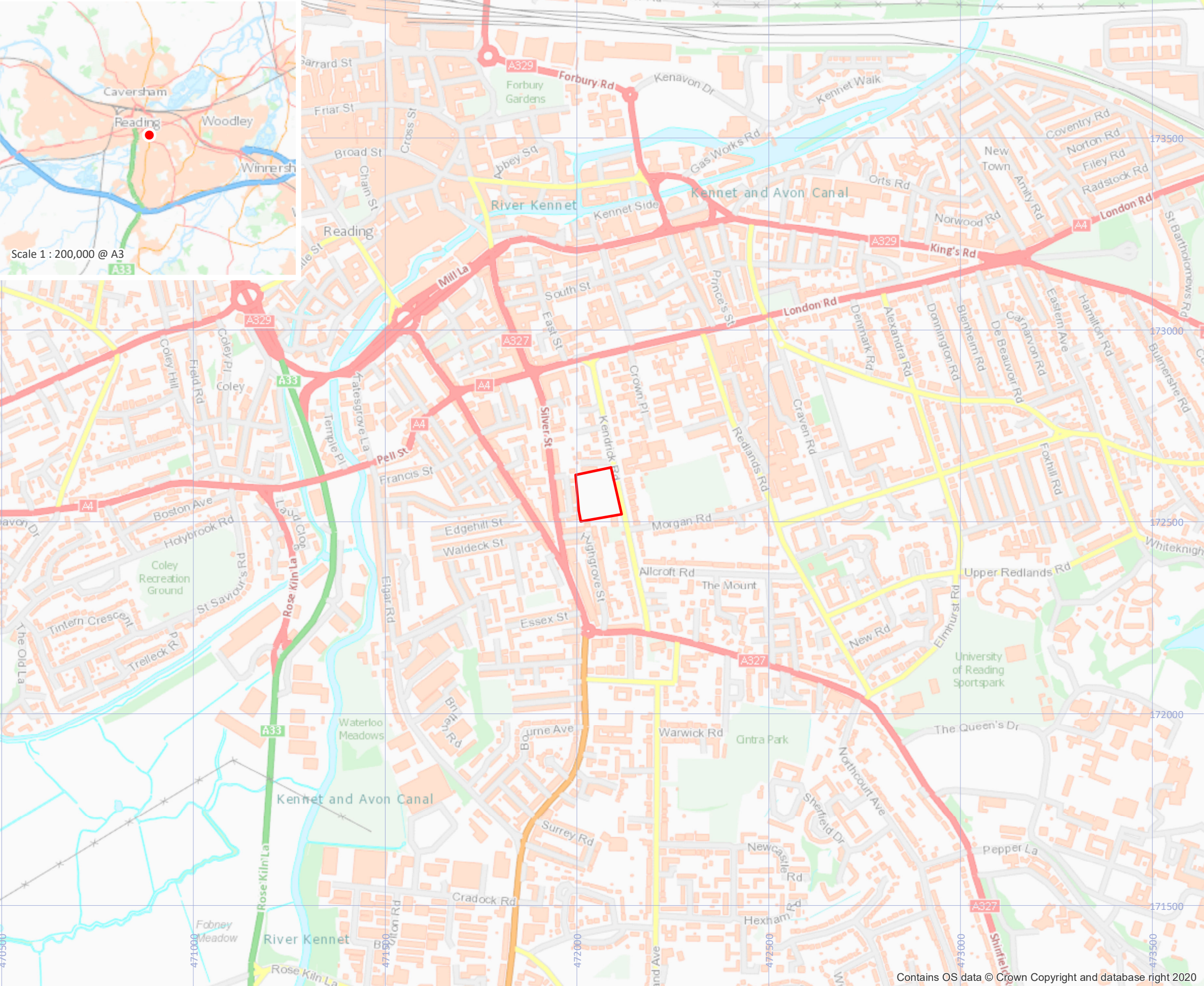
4		Eastern hedgerow, hard-standing and storage container.
5		TN1 – Piles of brash, wood-chip, leaf litter in NE corner of the site.
6		TN4 – Leaf litter and brash in south-east corner

7		TN6 – Knot holes present in mature sycamore trees near western boundary.
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Target Note	Description
TN1	Pile of brash and wood-chip in NE corner. Badger scat on wood chip pile; badger scat at end of long jump runway.
TN2	Brash and leaf litter along many sections of the hedgerow
TN3	Hedgehog scat x 8
TN4	Leaf litter and brash pile
TN5	Mammal excavations under fence; overhanging fruit trees
TN6	Low bat potential – knot holes present – uncertain how shallow/deep. Small stand of green alkanet behind tree.
TN7	Low bat potential – knot holes present – uncertain how shallow/deep
TN8	Stand of cleavers; hops, bramble, ivy overgrowing fence. Rougher grassland at base of fence.

FIGURES

S:\PROJECTS\3400 - 3449\3409 - Abbey School Reading\3 GRAPHICS\INDESIGN\3409_Abbey_School_Eco_Figs
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Legend:

- Site location
- Site location

0 125 250 m
Scale 1 : 10,000 @ A3

ABBEY SCHOOL
READING

FIGURE 1
Site location plan

THE Landmark
PRACTICE

Hope Chapel House Hope Chapel Hill Hotwells Bristol BS8 4ND
T: +44 (0)117 923 0455 E: enquiries@thelandmarkpractice.com
www.thelandmarkpractice.com

Drawn: GS Checked: IM Date: 24 May 21



Environmental Planning • EIA • Landscape Architecture • Ecology • Architectural Graphics

	Site location
	2km, 5km and 10km radial extents
	Local Nature Reserve (LNR)
	National Nature Reserve (NNR)
	Special Area of Conservation (SAC)
	Special Protection Area (SPA)
	Site of Special Scientific Interest (SSSI)



FIGURE 2
Statutory designated sites

THE Landmark PRACTICE

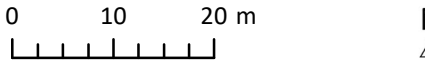
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Legend:

- Site location
- Amenity grassland
- Broadleaved tree
- Fence
- Hardstanding
- Intact species-poor hedgerow
- Tall ruderal
- Wall
- Target note (TN)



ABBEY SCHOOL
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FIGURE 3
Phase 1 Habitat Survey

THE Landmark
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