HITHER GREEN LANE GOLF COURSE, REDDITCH, WORCESTERSHIRE

UPDATED PRELIMINARY ECOLOGICAL APPRAISAL

A Report to: Barratt Homes

Report No: RT-MME-152753-03-Rev B

Date: October 2021

Triumph House, Birmingham Road, Allesley, Coventry CV5 9AZ
Tel: 01676 525880 Fax: 01676 521400
E-mail: admin@middlemarch-environmental.com Web: www.middlemarch-environmental.com

REPORT VERIFICATION AND DECLARATION OF COMPLIANCE

This study has been undertaken in accordance with British Standard 42020:2013 “Biodiversity, Code of practice for planning and development”.

Report Version	Date	Completed by:	Checked by:	Approved by:
Final	21/07/2020	David Withington BSc (Hons) (Ecological Consultant) and Becky Holmes BSc (Hons) QCIEEM (Ecological Project Officer)	Tim Hextell MCIEEM (Principal Technical Ecological Consultant)	Tom Docker CEcol MCIEEM (Managing Director)
Rev A	25/05/2021	Richard Wheat ACIEEM (Principal Consultant)	Tom Docker CEcol MCIEEM (Managing Director)	Tom Docker CEcol MCIEEM (Managing Director)
Rev B	06/10/2021	Richard Wheat ACIEEM (Principal Consultant)	Tom Docker CEcol MCIEEM (Managing Director)	Tom Docker CEcol MCIEEM (Managing Director)

The information which we have prepared 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.

DISCLAIMER

The contents of this report are the responsibility of Middlemarch Environmental Ltd. It should be noted that, whilst every effort is made to meet the client’s brief, no site investigation can ensure complete assessment or prediction of the natural environment.

Middlemarch Environmental Ltd accepts no responsibility or liability for any use that is made of this document other than by the client for the purposes for which it was originally commissioned and prepared.

VALIDITY OF DATA

The findings of this study are valid for a period of 24 months from the date of survey. If works have not commenced by this date, an updated site visit should be carried out by a suitably qualified ecologist to assess any changes in the habitats present on site, and to inform a review of the conclusions and recommendations made.

NON-TECHNICAL SUMMARY

Middlemarch Environmental Ltd was commissioned by Barratt Homes to undertake an updated Preliminary Ecological Appraisal associated with a new residential development at Hither Green Golf Course, located in Redditch, Worcestershire. Middlemarch previously carried out a Preliminary Ecological Appraisal at this site in June 2016 (RT-MME-122727). Since this assessment was completed, the proposals have changed, and it is now understood that the proposed development will cover an additional area. Given the time that has elapsed it was necessary to complete an updated Preliminary Ecological Appraisal and encompass areas not previously surveyed. To fulfil the brief, an ecological desk study and a walkover survey (in accordance with Phase 1 Habitat Survey methodology) were undertaken.

The desk study exercise identified no European statutory sites within 5 km of the survey area, three UK statutory sites within 2 km and three non-statutory sites within 1 km. The site is not located within 10 km of a statutory site designated for bats. The desk study also provided records of protected/notable species including bats, badger, hedgehog, otter, amphibians and birds.

The walkover survey was carried out on 25th June by David Withington (Ecological Consultant) and Becky Holmes (Ecological Project Officer). The eastern half of the surveyed site comprised part of a golf course with areas of plantation woodland and the western section of the site was mainly comprised of open grassland with hedges, scattered trees and scrub. A large pond was situated towards the northern site boundary and there were four smaller ponds which formed part of the golf course.

The key ecological features on site in relation to the proposed development are woodland and scattered trees, hedgerows and standing water. These habitats have the potential to support a range of protected species.

In order to ensure compliance with wildlife legislation and relevant planning policy, the following recommendations are made (for full recommendations please refer to Chapter 7):

- **Dagnell End SSSI and Windmill Naps Wood SSSI:** The proposed works could potentially impact upon Dagnell End which is designated as a Site of Special Scientific Interest. As such, Natural England should be consulted prior to any works commencing to determine how works may proceed without adversely impacting this site.
- **River Arrow, Abbey and Forge Mill Ponds and Dagnell Brook (LWS):** The proposed works could potentially indirectly impact upon River Avon, Abbey and Forge Mill Ponds and Dagnell Brook which are designated as Local Wildlife Sites. Therefore, a Construction Ecological Management Plan (CEcMP) should be compiled for the site.
- **Habitat Retention and Protection:** The development proposals should be designed to avoid areas of existing priority habitat (semi-natural woodland, hedgerows, mature trees) and allow for the retention of other notable habitats (including plantation woodland, hedgerows, semi-mature trees and standing water). Where unavoidable losses of these habitat occur, compensatoory habitat creation will be required in order to ensure no net loss of biodiversity overall. For all retained habitats, appropriate protection measures should be implemented to ensure that they are not adversley affected during each phase of the development.
- **Biodiversity Enhancement:** In accordance with the provision of Chapter 11 of the National Planning Policy Framework (Conserving and Enhancing the Natural Environment) and Local Planning Policy, biodiversity enhancement measures should be incorporated into the landscaping scheme of any proposed works to maximise the ecological value of the site. These enhancements should seek to contribute towards local biodiversity priorities in line with Biodiversity Net Gain principles.
- **Lighting:** In accordance with best practice guidance relating to lighting and biodiversity (Miles et al, 2018; Gunnell et al, 2012), any new lighting should be carefully designed to minimise potential disturbance and fragmentation impacts on sensitive receptors, such as bats, owls and otter.
- **Roosting Bats:** A preliminary roost assessment should be undertaken of the mature trees and buildings which may be impacted by the proposed development works.
- **Badger:** Given the suitable habitat present within the survey area and connectivity to adjacent habitat that is suitable for badgers, it is recommended that a badger survey is undertaken to determine whether any setts are located within 30 m of the proposed development area.

- **Terrestrial Mammals including Badger, Otter and Hedgehog:** Any excavations that need to be left overnight should be covered or fitted with mammal ramps to ensure that any animals that enter can safely escape.
- **Great Crested Newt:** A great crested newt Habitat Suitability Index (HSI) assessment should be undertaken for all ponds identified within 500 m of the edge of the proposed development.
- **Reptiles:** A reptile survey should be undertaken of suitable habitats within the proposed development site.
- **Breeding and Wintering Birds:** Due to the importance of the area for birds, as highlighted by desk study material and initial field observations, it is recommended that a breeding bird survey and a winter bird survey be conducted to determine the use of the site by breeding and wintering birds.
- **Nesting Birds:** Vegetation and building clearance should be undertaken outside the nesting bird season. The nesting bird season is weather dependent but generally extends between March and September inclusive (peak period March-August).
- **Invasive Plants:** To ensure that the works do not cause New Zealand Pigmyweed to spread, a Method Statement, as part of the Construction Ecological Management Plan, should be developed in consultation with the Environment Agency.

CONTENTS

1. INTRODUCTION

1.1 PROJECT BACKGROUND

In June 2020 Barratt Homes commissioned Middlemarch Environmental Ltd to undertake an updated Preliminary Ecological Appraisal associated with a new residential development at Hither Green Golf Course, located in Redditch, Worcestershire. Middlemarch previously carried out a Preliminary Ecological Appraisal at this site in June 2016 (RT-MME-122727). Since this assessment was completed, the proposals have changed, and it is now understood that the proposed development will cover an additional area. Given the time that has elapsed it was necessary to complete an updated Preliminary Ecological Appraisal and encompass areas not previously surveyed.

Middlemarch Environmental Ltd has also been commissioned by Barratt Homes to undertake a Preliminary Arboricultural Assessment (Report RT-MME-152753-01) and Arboricultural Impact Assessment (Report RT-MME-152753-02) at this site.

This report details the results of the updated walkover survey undertaken on 25th June 2020.

To assess the existing ecological interest of the site an ecological desk study was carried out, and an updated walkover survey was undertaken on 25th June 2020. A Habitat Condition Assessment was also undertaken following a field visit on 13th May 2021.

1.2 SITE DESCRIPTION AND CONTEXT

The site under consideration is an irregularly shaped parcel of land, measuring just over 10 ha at Hither Green Land Golf Course in Redditch, Worcestershire. The site is centred at National Grid Reference SP 044 694.

At the time of the survey, the eastern half of the site comprised part of a golf course with areas of plantation woodland. The western section of the site was mainly comprised of open grassland with hedges, scattered trees and scrub. A large pond was situated towards the northern site boundary and there were two smaller ponds which formed part of the golf course.

The site is bordered to the north by Dagnell End Road and to the west by Hither Green Lane. Residential houses and a continuation of the golf course border the site to the south, east and west. The wider landscape to the north, east and west is dominated by agricultural fields and small residential areas. Redditch Town Centre dominates the landscape to the south.

1.3 DOCUMENTATION PROVIDED

The conclusions and recommendations made in this report are based on information provided by the client regarding the scope of the project. Documentation made available by the client is listed in Table 1.1.

Document Name / Drawing Number	Author
Feasibility Sketch / ME-24-14 A	Urban Design

Table 1.1: Documentation Provided by Client

The feasibility sketch is provided in Chapter 8.

2. METHODOLOGIES

2.1 DESK STUDY

An ecological desk study was undertaken to determine the presence of any designated nature conservation sites and protected species in proximity to the site. This involved contacting appropriate statutory and non-statutory organisations which hold ecological data relating to the survey area. Middlemarch Environmental Ltd then assimilated and reviewed the desk study data provided by these organisations.

The consultees for the desk study were:

- Natural England - *MAGIC* website for statutory conservation sites; and,
- Worcestershire Biological Records Centre.

The desk study included a search for European statutory nature conservation sites within a 5 km radius of the site (extended to 10 km for any statutory site designated for bats), UK statutory sites within a 2 km radius and non-statutory sites and protected/notable species records within a 1 km radius.

The data collected from the consultees is discussed in Chapter 4. Selected raw data are provided in Appendix 1. In compliance with the terms and conditions relating to its commercial use, the full desk study data is not provided within this report.

The desk study also included a review of relevant local planning policy with regard to biodiversity and nature conservation (see Chapter 3).

2.2 PHASE 1 HABITAT SURVEY

The walkover survey was conducted following the Phase 1 Habitat Survey methodology of the Joint Nature Conservation Committee (JNCC, 2010) and the Institute of Environmental Assessment (IEA, 1995). Phase 1 Habitat Survey is a standard technique for classifying and mapping British habitats. The aim is to provide a record of habitats that are present on site. For each habitat, a condition assessment was undertaken using the published condition criteria detailed in Panks *et al.* (2021). During the survey, the presence, or potential presence, of protected species was also noted.

Whilst every effort is made to notify the client of any plant species listed on Schedule 9 of the Wildlife and Countryside Act (1981, as amended) present on site, it should be noted that this is not a specific survey for these species.

Data recorded during the field survey are discussed in Chapter 5.

3. LEGISLATION AND POLICY

This chapter provides an overview of the framework of legislation and policy which underpins nature conservation and is a material consideration in the planning process in England. The reader should refer to the original legislation for the definitive interpretation.

3.1 GENERAL BIODIVERSITY LEGISLATION AND POLICY

Conservation of Habitats and Species Regulations 2017 (The Habitats Regulations 2017)
The Habitats Regulations 2017 consolidate and update the Habitats Regulations 2010 (as amended). The Habitat Regulations 2017 are the principal means by which the EEC Council Directive 92/43 (The Habitats Directive) as amended is transposed into English and Welsh law.

The Habitats Regulations 2017 place duty upon the relevant authority of government to identify sites which are of importance to the habitats and species listed in Annexes I and II of the Habitats Directive. Those sites which meet the criteria are, in conjunction with the European Commission, designated as Sites of Community Importance, which are subsequently identified as Special Areas of Conservation (SAC) by the European Union member states. The regulations also place a duty upon the government to maintain a register of European protected sites designated as a result of EC Directive 79/409/EEC on the Conservation of Wild Birds (The Birds Directive). These sites are termed Special Protection Areas (SPA) and, in conjunction with SACs, form a network of sites known as Natura 2000. The Habitats Directive introduces for the first time for protected areas, the precautionary principle; that is that projects can only be permitted having ascertained no adverse effect on the integrity of the site. Projects may still be permitted if there are no alternatives, and there are imperative reasons of overriding public interest.

The Habitats Regulations 2017 also provide for the protection of individual species of fauna and flora of European conservation concern listed in Schedules 2 and 5 respectively. Schedule 2 includes species such as otter and great crested newt for which the UK population represents a significant proportion of the total European population. It is an offence to deliberately kill, injure, disturb or trade these species. Schedule 5 plant species are protected from unlawful destruction, uprooting or trade under the regulations.

The Wildlife and Countryside Act (WCA) 1981 (as amended)
The WCA, as amended, consolidates and amends pre-existing national wildlife legislation in order to implement the Bern Convention and the Birds Directive. It complements the Habitat Regulations 2017, offering protection to a wider range of species. The Act also provides for the designation and protection of national conservation sites of value for their floral, faunal or geological features, termed Sites of Special Scientific Interest (SSSIs).

Schedules of the act provide lists of protected species, both flora and fauna, and detail the possible offences that apply to these species.

The Countryside and Rights of Way (CRoW) Act 2000
The CROW Act, introduced in England and Wales in 2000, amends and strengthens existing wildlife legislation detailed in the WCA. It places a duty on government departments and the National Assembly for Wales to have regard for biodiversity, and provides increased powers for the protection and maintenance of SSSIs. The Act also contains lists of habitats and species (Section 74) for which conservation measures should be promoted, in accordance with the recommendations of the Convention on Biological Diversity (Rio Earth Summit) 1992.

The Natural Environment and Rural Communities (NERC) Act 2006
Section 40 of the NERC Act places a duty upon all local authorities and public bodies in England and Wales to promote and enhance biodiversity in all of their functions. Sections 41 (England) and 42 (Wales) list habitats and species of principal importance to the conservation of biodiversity. These lists superseded Section 74 of the CRoW Act 2000.

The Hedgerow Regulations 1997
The Hedgerow Regulations make provision for the identification of important hedgerows which may not be removed without permission from the Local Planning Authority.

UK Post-2010 Biodiversity Framework

The UK Biodiversity Action Plan (BAP), published in 1994, was the UK Government's response to signing the Convention on Biological Diversity (CBD) at the 1992 Rio Earth Summit. The new UK Post-2010 Biodiversity Framework replaces the previous UK level BAP. The UK Post-2010 Biodiversity Framework covers the period 2011-2020 and forms the UK Government's response to the new strategic plan of the United Nations Convention on Biological Diversity (CBD), published in 2010 at the CBD meeting in Nagoya, Japan. This includes five internationally agreed strategic goals and supporting targets to be achieved by 2020. The five strategic goals agreed were:

- Address the underlying causes of biodiversity loss by mainstreaming biodiversity across government and society;
- Reduce the direct pressures on biodiversity and promote sustainable use;
- To improve the status of biodiversity by safeguarding ecosystems, species and genetic diversity;
- Enhance the benefits to all from biodiversity and ecosystem services; and,
- Enhance implementation through participatory planning, knowledge management and capacity building.

The Framework recognises that most work which was previously carried out under the UK BAP is now focused on the four individual countries of the United Kingdom and Northern Ireland, and delivered through the countries' own strategies. Following the publication of the new Framework the UK BAP partnership no longer operates but many of the tools and resources originally developed under the UK BAP still remain of use and form the basis of much biodiversity work at country level. In England the focus is on delivering the outcomes set out in the Government's 'Biodiversity 2020: a Strategy for England's Wildlife and Ecosystem Services' (DEFRA, 2011). This sets out how the quality of our environment on land and at sea will be improved over the next ten years and follows on from policies contained in the Natural Environment White Paper.

Species and Habitats of Material Consideration for Planning in England

Previous planning policy (and some supporting guidance which is still current, e.g. ODPM Circular 06/2005, now under revision), refers to UK BAP habitats and species as being a material consideration in the planning process. Equally many local plans refer to BAP priority habitats and species. Both remain as material considerations in the planning process but such habitats and species are now described as Species and Habitats of Principal Importance for Conservation in England, or simply priority habitats and priority species under the UK Post-2010 Biodiversity Framework. The list of habitats and species remains unchanged and is still derived from Section 41 list of the Natural Environmental and Rural Communities (NERC) Act 2006. As was previously the case when it was a BAP priority species hen harrier continues to be regarded as a priority species although it does not appear on the Section 41 list.

3.2 NATIONAL PLANNING POLICY FRAMEWORK AND PRACTICE GUIDANCE

In February 2019, the National Planning Policy Framework (NPPF) was updated, replacing the previous framework published in 2012 and revised in 2018. The government circular 06/05: Biodiversity and Geological Conservation - Statutory Obligations and Their Impact within the Planning System, which accompanied PPS9, still remains valid. A presumption towards sustainable development is at the heart of the NPPF. This presumption does not apply however where developments require appropriate assessment under the Birds or Habitats Directives.

Chapter 15, on conserving and enhancing the natural environment, sets out how the planning system should contribute to and enhance the natural and local environment by:

- protecting and enhancing existing sites of biodiversity value;
- minimising impacts on and providing net gains for biodiversity; and,
- establishing coherent ecological networks.

If a proposed development would result in significant harm to the natural environment which cannot be avoided (through the use of an alternative site with less harmful impacts), mitigated or compensated for (as a last resort) then planning permission should be refused. With respect to development on land within or outside of a Site of Special Scientific Interest (SSSI) which is likely to have an adverse effect (either alone or in-combination with other developments) would only be permitted where the benefits of the proposed development clearly outweigh the impacts on the SSSI itself, and the wider network of SSSIs. Development

resulting in the loss of deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused unless there are wholly exceptional reasons for the development, and a suitable compensation strategy is provided.

Chapter 15 identifies that development whose primary objective is to conserve or enhance biodiversity should be supported and opportunities to incorporate biodiversity improvements in and around development should be encouraged, especially where this can secure measurable net gains for biodiversity.

Chapter 11, making effective use of the land, sets out how the planning system should promote use of land in meeting the need for homes and other uses, while safeguarding and improving the environment and ensuring safe and healthy living conditions. Substantial weight should be given to the value of using suitable brownfield land within settlements for homes and other identified needs. Opportunities for achieving net environmental gains, including new habitat creation, are encouraged.

In March 2014 the Department for Communities and Local Government released guidance to support the National Planning Policy Framework (NPPF), known as the National Planning Practice Guidance (NPPG).This has been produced to provide guidance for planners and communities which will help deliver high quality development and sustainable growth in England.

The guidance includes a section entitled 'Natural Environment: Biodiversity, geodiversity and ecosystems and green infrastructure', which was updated in July 2019. This document sets out information with respect to the following:

- the statutory basis for seeking to conserve and enhance biodiversity;
- the local planning authority's requirements for planning for biodiversity;
- what local ecological networks are and how to identify and map them;
- how plan-making bodies identify and safeguard Local Wildlife Sites, including Standard Criteria for Local Wildlife Sites;
- the sources of ecological evidence;
- the legal obligations on local planning authorities and developers regarding statutory designated sites and protected species;
- definition of green infrastructure;
- where biodiversity should be taken into account in preparing a planning application;
- how policy should be applied to avoid, mitigate or compensate for significant harm to biodiversity and how mitigation and compensation measures can be ensured;
- definitions of biodiversity net gain including information on how it can be achieved and assessed; and,
- the consideration of ancient woodlands and veteran trees in planning decisions and how potential impacts can be assessed.

The NPPG July 2019 issue also includes a section entitled 'Appropriate assessment: Guidance on the use of Habitats Regulations Assessment' which provides information in relation to Habitats Regulations Assessment processes, contents and approaches in light of case law. This guidance will be relevant to those projects and plans which have the potential to impact on European Sites and European Offshore Marine Sites identified under the Conservation of Habitats and Species Regulations 2017 (as amended).

3.3 LOCAL PLANNING POLICY- REDDITCH DISTRICT, WORCESTERSHIRE

http://www.redditchbc.gov.uk/council/policy-and-strategy/planning-policies/borough-of-redditch-local-plan/borough-of-redditch-local-plan-no-4/adopted-borlp4.aspx

Redditch Local Plan No.4 (BORLP4)

The Borough of Redditch Local Plan No. 4 (2011-2030) was adopted on 30th January 2017 by Redditch Borough Council. This document provides a framework approach for the growth of the Borough and forms part of the statutory development plan, providing the basis for decisions on planning applications. The BORLP4 replaces the 'saved' policies of the Borough of Redditch Local Plan 3 (Adopted 2006). Those policies of relevance to ecology are detailed below:

Policy 11 Green Infrastructure

- The Green Infrastructure (GI) Network makes an important and valued contribution to the Borough of Redditch and its distinctiveness. The GI Network is a multifunctional resource that includes, but is not limited to, green spaces and corridors, waterways, natural heritage and wildlife habitats.
- The existing GI Network will be safeguarded and new development will be required to contribute positively to the GI Network, in line with the findings of the Redditch Borough GI Strategy and to support the Worcestershire Sub-Regional GI Framework. Opportunities will be sought to improve and maintain the Network for the benefit of people, wildlife and the character and appearance of the Borough.
- The Borough Council will produce Green Infrastructure Concept Statements to guide masterplanning and development of Strategic Sites.

Policy 16: Natural Environment

A. Natural Environment and Landscape

A high quality natural environment and landscape is integral to delivering the vision of BORLP4. In order to achieve this all relevant proposals will be expected to:

i. demonstrate how the use of natural resources will be minimised;
ii. protect and, where appropriate, enhance the quality of natural resources including water, air, land, wildlife corridors, species (including protected species), habitats biodiversity and geodiversity;
iii. demonstrate the Borough's distinctive landscape is protected, enhanced or restored, as appropriate and proposals are informed by, and sympathetic to, the surrounding landscape character;
iv. avoid any significant adverse impact on skylines and hill features, including established views of these features;
v. where possible retain existing trees (including ancient trees), woodlands (including ancient woodlands) and hedgerows (including important hedgerows) and semi-natural habitats with appropriate management. Particular emphasis should be placed on the expanding and linking of ancient woodlands, and the creation of targeted new native woodland for wider benefits; and,
vi. contribute to the achievement of relevant Worcestershire Biodiversity Action Plan targets where appropriate.

B. Sites of Wildlife Importance

i. The location of sites of national (Sites of Special Scientific Interest), regional (Local Wildlife Sites) and local (Local Nature Reserves) wildlife importance are shown on the Policies Map. Applications for development should aim to conserve and enhance biodiversity by applying the principles of the NPPF. In determining applications affecting sites of wildlife importance, the Borough Council will apply the hierarchy of designated sites and appropriate weight will be given to their importance and contribution to wider ecological networks.
ii. Due to the national importance of Sites of Specific Scientific Interest (SSSI) proposals likely to have an adverse impact within or outside of a SSSI, either individually or in combination with other developments, will not normally be permitted. An exception will only be made when it can be demonstrated that the benefits of the development clearly outweigh the impact on the site or network of sites.
iii. New development or land use changes likely to have an adverse effect on Sites of Special Scientific Interest, Local Wildlife Sites and Local Nature Reserves, directly or indirectly, will not be allowed unless there are no reasonable alternative means of meeting that development need and the reasons for development clearly outweigh the intrinsic nature conservation and/or geological value of the site or network of sites.
iv. In all cases where new development or land use change is permitted, any damage to the nature conservation and/or geological value of the site will need to be kept to a minimum. Adequate and appropriate protection and enhancement of the site's nature conservation and/or geological interest will need to be secured, and where necessary, appropriate and adequate compensatory measures will need to be provided, using conditions and/or planning obligations where necessary.

4. DESK STUDY RESULTS

4.1 INTRODUCTION

The data search was carried out in July by Worcestershire Biological Records Centre. All relevant ecological data provided by the consultees was reviewed and the results from these investigations are summarised in Sections 4.2 to 4.4. Selected data are provided in Appendix 1.

4.2 NATURE CONSERVATION SITES

Statutory and non-statutory nature conservation sites located in proximity to the survey area are summarised in Table 4.1.

Site Name	Designation	Proximity to Survey Area	Description
UK Statutory Sites			
Dagnell End Meadow	SSSI	450 m east	Dagnell End Meadow is an area of ancient permanent pasture lying in the valley of the River Arrow. It represents one of the last surviving areas of such pasture in this part of Worcestershire.
Proctor's Barn Meadow	LNR	1,800 m south-east	The Meadow is being managed to maintain a number of wildflower meadows, some important scrubland, rejuvenate old hedgerows and de-silt old ponds.
Redditch Woods: Pitcheroak Wood	LNR	1,990 m south-west	An area of oak woodlands with a diverse ground flora augmented by rich grassland in the glades. The site is an importance site for bats, nesting birds and a range of butterflies.
Non-Statutory Sites			
River Arrow	LWS	Adjacent to the southern boundary	Rising from an overflow at Lower Bittell Reservoir, the River Arrow flows south through Redditch to join the River Avon at Salford Priors in Warwickshire. For much of its length it is lined with trees and shrubs and creates an important wildlife corridor through the landscape. It is a particularly valuable feature where it flows through the centre of Redditch where both the river and its attendant valley form a significant green wedge through the town. Overshadowing by bankside trees means that the aquatic flora is limited in most stretches although in places there are beds of both in-stream and marginal vegetation. In combination with a full range of natural features, including fast flowing riffle sequences, these help to support a reasonable aquatic fauna. Otters *Lutra lutra* are known to be present and kingfishers *Alcedo atthis* breed in several places.
Abbey and Forge Mill Ponds	LWS	500 m south-east	A group of four ancient mill and fish ponds ranged around the site of Bordesley Abbey and falling within the wider Scheduled Ancient Monument. The pools feed into the River Arrow, which flows to the north of the pool complex, via a narrow outflow stream and are for the most part fringed with a mixture of woodland and grassland. Between them they support a reasonable aquatic flora and marginal swamp vegetation, whilst some of the surrounding woodland trends towards a wet woodland community with alder in the canopy. The pools are likely to be important for a range of invertebrates including dragonflies and provide value for breeding birds and foraging habitat for bats. The wider Bordesley Meadows complex is managed by Redditch Borough Council and the various grassland and hedgerow habitats help to augment the Local Wildlife Site and provide a landscape buffer for the pools.

Table 4.1: Summary of Nature Conservation Sites (cont)

Site Name	Designation	Proximity to Survey Area	Description
Dagnell Brook	LWS	710 m east	The Dagnell Brook is a small tributary of the River Arrow, rising from springs around Weatheroak Hill north-east of Alvechurch and entering the Arrow on the northern edge of Redditch. Though the brook itself is rather narrow it is tree lined for much of its length and forms an important wildlife corridor through this part of the county, especially where it flows through otherwise improved farmland. Aquatic vegetation tends to be rather limited as a result of the significant shade cast by bankside trees, but these, together with occasional areas of marginal vegetation and associated scrub add value to the corridor as a whole. Faunal records for the brook are incomplete but otters are known to be present and there are past records for white-clawed crayfish *Austropotamobius pallipes*. Their current status here is unknown but the brook contains plenty of suitable habitat for the species and it is possible that a relict population still persists.
Ancient Woodland Sites			
Butler's Hill Wood	ARW	1,290 m north-west	The site measures 37.01 ha.
Brockhill Wood	ARW	1,510 m south-west	The site measures 28.26 ha.
Peck Wood	ASNW	1,740 m north-west	The site measures 3.17 ha.
Key: SSSI: Site of Special Scientific Interest LNR: Local Nature Reserve ASNW: Ancient Semi Natural Woodland ARW: Ancient Replanted Woodland			

Table 4.1 (cont'd): Summary of Nature Conservation Sites

The survey area falls within the SSSI Impact Risk Zone for Dagnell End Meadow and Windmill Naps Wood which are located 460 m south-east and 4,770 m north-east from the survey area respectively.

4.3 PROTECTED / NOTABLE SPECIES

Table 4.2 and the following text provide a summary of protected and notable species records within a 1 km radius of the study area. It should be noted that the absence of records should not be taken as confirmation that a species is absent from the search area.

Species	No. of Records	Most Recent Record	Proximity of Nearest Record to Study Area	Species of Principal Importance?	Legislation / Conservation Status
Mammals- Bats					
Common pipistrelle *Pipistrellus pipistrellus*	8	2014	10 m north	-	ECH 4, WCA 5, WCA 6
Soprano pipistrelle *Pipistrellus pygmaeus*	6	2017	210 m west	✓	ECH 4, WCA 5, WCA 6
Noctule *Nyctalus noctula*	2	2014	490 m south	✓	ECH 4, WCA 5, WCA 6
Brown long-eared bat *Plecotus auritus*	1	2014	570 m south-east	✓	ECH 4, WCA 5, WCA 6
Unidentified myotis *Myotis* sp.	2	2014	570 m south-east	-	ECH 4, WCA 5, WCA 6

Table 4.2: Summary of Protected/Notable Species Records Within 1 km of Survey Area (cont)

Species	No. of Records	Most Recent Record	Proximity of Nearest Record to Study Area	Species of Principal Importance?	Legislation / Conservation Status
Mammals- Other					
Badger *Meles meles*	1	2003	†	-	WCA 6, PBA
Otter *Lutra lutra*	1	2001	Potentially on site+	✓	ECH 2, ECH 4, WCA 5, WCA 6
Hedgehog *Erinaceus europaeus*	2	2002	330 m south-west	✓	WCA 6
Amphibians					
Common toad *Bufo bufo*	5	2001	240 m north	✓	WCA 5 S9(5)
Common frog *Rana temporaria*	1	1997	690 m south-east	-	WCA 5 S9(5)
Birds					
Kingfisher *Alcedo atthis*	1	2015	350 m south-east	-	WCA1i
Reed bunting *Emberiza schoeniclus*	3	2015	350 m south-east	✓	-
House sparrow *Passer domesticus*	2	2015	350 m south-east	✓	-
Plants					
Tubular water dropwort	2	1999	430 m east	✓	-

Key:
#: Dependent on species.
†: Badger records are confidential and therefore proximity is not provided within the report.
+: Grid reference provided was six figures and as such, the record may be located within 100 m of the study site.

ECH 2: Annex II of the European Communities Council Directive on the Conservation of Natural Habitats and Wild Fauna and Flora. Animal and plant species of community interest whose conservation requires the designation of Special Areas of Conservation.
ECH 4: Annex IV of the European Communities Council Directive on the Conservation of Natural Habitats and Wild Fauna and Flora. Animal and plant species of community interest in need of strict protection. .
PBA: Protection of Badgers Act 1992.

WCA 1i: Schedule 1 Part 1 of Wildlife and Countryside Act 1981 (as amended). Birds protected by special penalties at all times.
WCA 5: Schedule 5 of Wildlife and Countryside Act 1981 (as amended). Protected animals (other than birds).
WCA 5 S9(5): Schedule 5 Section 9(5) of Wildlife and Countryside Act 1981 (as amended). Protected animals (other than birds). Protection limited to selling, offering for sale, processing or transporting for purpose of sale, or advertising for sale, any live or dead animal, or any part of, or anything derived from, such animal.
WCA 6: Schedule 6 of Wildlife and Countryside Act 1981 (as amended). Animals which may not be killed or taken by certain methods.

Species of Principal Importance: Species of Principal Importance for Nature Conservation in England.

Note. These tables do not include reference to the Berne Convention (Convention on the Conservation of European Wildlife and Natural Habitats), the Bonn Convention on the Conservation of Migratory Species of Wild Animals or the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES).

Table 4.2 (cont'd): Summary of Protected/Notable Species Records Within 1 km of Survey Area

In addition to Table 4.2 the desk study provided records of the following notable species:

Terrestrial invertebrates
A single record of banded general *Stratiomys potamida* soldier fly was provided by the desk study and is listed as Nationally Notable.

Aquatic invertebrates
The citation for Dagnell Brook (LWS) situated 760 m east revealed past records of white-clawed crayfish *Austropotamobius pallipes* which is a European protected species.

Plants
Records of reflexed saltmarsh-grass *Puccinellia distans*, greater spearwort *Ranunculus lingua* and lesser sea-spurrey *Spergularia marina* were provided by the desk study and are listed as locally notable.

4.4 INVASIVE SPECIES

No records of invasive species were provided by the desk study. It should be noted that the absence of records should not be taken as confirmation that a species is absent from the search area.

5. PHASE 1 HABITAT SURVEY

5.1 INTRODUCTION

The results of the Phase 1 Habitat Survey are presented in the following sections. An annotated Phase 1 Habitat Survey Drawing (Drawing C152753-03-01) is provided in Chapter 8. This drawing illustrates the location and extent of all habitat types recorded on site. Any notable features or features too small to map are detailed using target notes. Photographs taken during the field survey are presented in Chapter 9.

Condition assessment tables detailing the assessment criteria used to determine habitat condition in this section are included in Appendix 3.

The survey was carried out on 25th June by David Withington (Ecological Consultant) and Becky Holmes (Ecological Project Officer). A second visit was carried out by Richard Wheat (Principal Consultant) on 13th May 2021 to carry out a condition assessment of the habitats recorded in 2020.

Table 5.1 details the weather conditions at the time of the survey.

Parameter	25/06/2020	13/05/2021
Temperature (ºC)	31	14
Cloud (%)	0	100
Wind (Beaufort)	F3	F2
Precipitation	Nil	Light drizzle

Table 5.1: Weather Conditions During Field Survey Visits

5.2 SURVEY CONSTRAINTS AND LIMITATIONS

The initial field survey was carried out in June, which is within the recommended timeframes for Phase 1 Habitat survey (Mid-March – Mid-October). As such there was no significant impediment to assigning habitat types in accordance with the Phase 1 Habitat Survey methodology. Some habitats, such as the larger areas of dense scrub had impeded access in places and such so some assumptions about the continuity of these habitats was supplemented by aerial images and vantage point visuals.

The assessment of habitat condition was carried out in early May and so may have been constrained by seasonal factors for some grassland species. In this instance, the condition criteria relating to species richness and composition was assessed using both habitat descriptions from the June 2020 survey as well as observed conditions and species recorded during the May 2021 survey.

5.3 HABITATS

The following habitat types were recorded on site during the field survey:

- Amenity grassland;
- Building;
- Dense scrub;
- Ditches;
- Hardstanding;
- Hedgerow;
- Plantation woodland;
- Scattered trees;
- Semi-natural woodland;
- Semi-improved grassland;
- Standing water; and,
- Tall ruderal.

These habitats are described below. They are ordered alphabetically, not in order of ecological importance.

Amenity grassland
The eastern section of the site, which formed part of the golf course, was dominated by amenity grassland (Plate 9.7). The majority was well managed with a short sward, but there were areas along the eastern

boundary which were relatively unmanaged and growing 30-40 cm in height. Species present included perennial ryegrass *Lolium perenne,* red fescue *Festuca rubra,* white clover *Trifolium repens* and creeping buttercup *Ranunculus repens*.

All areas of amenity grassland were assessed as against the grassland (low value) condition criteria. These areas were assessed as being in 'poor' ecological condition due to the intensive management and usage of the habitat as a playing pitch surface (See Appendix 3).

Building
A building was present along the northern boundary of the site. This was a single storey building of red brick construction with a pitched ceramic tiled roof, wooden soffits and single glazed windows set in wooden frames. A dense covering of ivy *Hedera helix* was present on the southern elevation and a large conifer was growing under the foundations of the building on the western elevation (Plates 9.14 and 9.15).

Buildings are typically of very low biodiversity value and therefore this habitat is not assigned a habitat condition score.

Dense scrub
Areas of dense scrub were present along the northern boundary of the site. Species present included bramble *Rubus fruticosus*, nettle *Urtica dioica*, mugwort *Artemisia vulgaris*, prickly sow thistle *Sonchus asper* and hemlock *Conium maculatum*. Dumped materials including wall tiles, plastic sheering, wooden tables and children's toys were noted within this area (Target note 11 and Plate 9.12).

Further patches of bramble scrub were also present within the areas of semi-improved grassland (Target notes 1 and 10) and blackthorn and bramble scrub was present along the central hedgerow.

All areas of dense scrub were assessed against the condition criteria for scrub habitat and were assessed as being of 'poor' ecological condition due to their limited species composition and structure.

Ditch
Several ditches were present with the site. The first is located on the eastern boundary on the boundary of the area of unmanaged amenity grassland (Target note 9 and Plate 9.9). The ditch is shallow to 0.5 m deep by 0.5 wide and was dry at the time of survey in June but was holding a shallow body of water during the May visit. The ditch was heavily modified, straightened and was of variable quality along its length with some areas amenity mown and others scrubbed over in the area of plantation woodland. Aquatic and marginal vegetation was largely absent expect for occasional scattered stands of pendulous sedge *Carex pendulous* on the banks and in the channel.

This ditch was assessed against the condition criteria for ditches and was deemed to be in 'poor' ecological condition.

A second ditch was associated with the hedgerow interspersing the areas of amenity and poor semi-improved grassland (see description in hedgerows).

Hardstanding
Areas of hardstanding were present in the north-eastern section of the survey area. These comprised a concrete slab approximately 10 m in diameter with water drainage pipes, a tarmacked car park and a compacted aggregate and gravel access track, approximately 4 metres wide. Woodchips, soil and gravel mounds were present along the access track adjacent to the carpark (Target note 12 and Plate 9.13).

Hedgerow
A hedgerow measuring approximately 700 m in length formed the southwestern (H1), western (H2) and northern (H3) boundaries of the site. Further sections of hedgerow delineated the boundary between the golf course (H4) and adjacent fields (Plate 9.6) and enclosed a smaller field to the east of the site (H5). All hedgerows were predominantly unmanaged hedgerows, up to maximum 5 m in height in places, approximately 3 m wide and dominated by hawthorn *Crataegus monogyna* and blackthorn *Prunus spinosa* with the occasional hazel *Corylus avellana*, honeysuckle *Lonicera periclymenum* and dog rose *Rosa canina*. Hedgerow H2 was defunct for a proportion of its length being gappy or replaced by bramble scrub but all others were mostly intact and/or interspersed by only small gaps and occasional semi-mature to mature trees including English oak *Quercus robur* and grey willow *Salix cinerea.*

Hedgerow H4 was accompanied by a ditch c.1m deep and 1 m wide that ran along the length of the two fields. The ditch was heavily shaded and contained some standing water, although water depth was difficult to determine along its length. No aquatic vegetation was noted although due to the density of the canopy in places it is possible that some species may have been overlooked.

The hedgerows were all assessed against the condition criteria for hedgerows. All hedgerows were assessed as being of 'good' ecological condition except for Hedgerow H2 which was assessed as being of 'moderate' ecological condition due to its gappy canopy and areas of disturbance from neighbouring land uses.

Plantation woodland
Linear strips of plantation woodland were present towards the eastern boundary of the site, forming part of the golf course (Plates 9.8). The canopy comprised a mixture of mature and semi-mature trees including English oak, ash *Fraxinus excelsior*, Norway maple *Acer platanoides,* silver birch *Betula pendula*, grey willow *Salix cinerea*, goat willow *Salix caprea*, Norway spruce *Picea abies*, field maple*,* large-leaved lime *Tilia platyphyllos*, rowan *Sorbus aucuparia*, common whitebeam *Sorbus aria*, Swedish whitebeam *Sorbus intermedia*, weeping willow *Salix babylonica*, cherry *Prunus avium*, small-leaved lime *Tilia cordata*, alder *Alnus glutinosus*, sycamore *Acer pseudoplatanus* and cypress. Within the northern section of the site were a number of mature white poplars *Populus alba*. The understorey included ivy *Hedera helix,* wood avens *Geum urbanum,* red campion *Silene dioica*, false oat grass *Arrhenatherum elatius,* broad-leaved dock *Rumex obtusifolius*, nipplewort *Lapsana communis*, nettle, bramble, lords and ladies *Arum maculatum,* purple toadflax *Linaria purpurea* and cleavers *Galium aparine.*

Within the golf course were a series of smaller patches of plantation woodland (Plate 9.7) of a similar canopy composition but with no discernible shrub or semi-natural field layer. These areas appeared to be mown creating an open field layer of amenity grassland.

Both areas of plantation woodland were assessed against the condition criteria for woodlands. Both were assessed as being in poor condition due to the current limited structure, low regeneration potential and low native species threshold.

Scattered trees
A number of semi-mature and mature trees were located across the site. These included English oak, ash, hawthorn, fir *Abies* sp. and hazel. The majority were in good condition, however some of the mature oak trees contained rot holes, woodpecker holes and split branches. An owl box was present on a mature oak located along the western boundary and appeared to have been recently used (Target note 2). In the north-eastern corner of the site was a row of immature field maples *Acer campestre* with the occasional dog rose and semi-mature Scots pine *Pinus sylvestris*.

The scattered mature trees were considered to provide ecological value due to the age, habitat opportunities and canopy spread. These were assessed against the Urban Trees condition criteria and were deemed to be of 'Moderate' condition.

Semi-natural woodland
An area of semi-natural woodland was present along the southern boundary of the site, adjacent to the River Arrow (Plate 9.1). The canopy was open in places with the remaining areas dominated by mature crack willow *Salix fragilis* and semi-mature alder and elder *Sambucus nigra*. The willow trees were in poor condition with hollow trunks and split branches. The understorey was dominated by nettle with occasional hemlock, bramble, ivy*,* broadleaf willowherb *Epilobium montanum* and dock. Semi-improved grassland was encroaching into the woodland at the edges. The woodland was assessed against the condition criteria for woodland habitats and was considered to be in 'poor' ecological condition due to the limited understorey, gapping canopy and regeneration potential.

A small patch of secondary woodland was also present in the centre of the site between the golf course and adjacent fields. The canopy was composed of even-aged, semi-mature trees including goat willow, silver birch beneath two mature oaks over a sparse understorey and ground flora. Occasional knot holes and woodpecker holes were noted within the mature oak trees. This area of woodland was also assessed against the woodland condition criteria and was deemed to be of 'poor' ecological condition.

Semi-improved grassland
A triangular field of semi-improved grassland was present in the west of the site, with a sward of up to 0.5 m in height (Plate 9.2). This was dominated by grass species including timothy *Phleum pratense*, crested dogstail *Cynosurus cristatus*, Yorkshire fog *Holcus lanatus*, false oat grass, meadow foxtail *Alopecurus pratensis*, perennial ryegrass, common bent *Agrostis capillaris* and cocksfoot *Dactylis glomerata*. Forb species present included meadow buttercup *Ranunculus acris*, white clover, red clover *Trifolium pratense* and lesser stitchwort *Stellaria graminea* Young blackthorn was encroaching into the grassland at the edges and patches of dense bramble scrub were present throughout. Towards the north of the field, the grassland becomes scrubbier with additional species including, self-heal *Prunella vulgaris*, spear thistle *Cirsium vulgare*, nettle, bramble and broadleaf willowherb. Occasional brash piles and small pockets of wet ground were present in the northern half of the field (Target note 4 and Plate 9.3).

Semi-improved grassland was also present surrounding the pond in the north-eastern section of the site. This had a similar species composition to the grassland in the south-west of the site but less extensive coverage of taller herbs. An area of dense bramble scrub was present in the grassland north of the existing golf course (Target Note 10).

All areas of poor semi-improved grassland were assessed against the condition criteria for grassland (medium, high and very high value). Due to the extent of scrub and tall ruderal encroachment, together with the limited sward composition, these areas were assessed as being of 'poor' ecological condition.

Standing water
A large pond (Pond P1) measuring approximately 0.15 ha was located in the northern section of the site (Plate 9.11). This pond contained large areas of water lily *Nymphaea* sp. with marginal vegetation dominated by iris *Iris* sp and New Zealand Pigmyweed *Crassula helmsii*. The bankside vegetation included immature grey willow, hawthorn, rose and bramble. The pond contained large fish and supported various dragonfly species. The pond was surrounded by areas of semi-improved grassland.

Two smaller ponds (Ponds P2 and P3) which formed part of the golf course were present in the south eastern section of the site (Plate 9.10). These were butyl lined with a 50-60% covering of algae, water lily was present within both ponds and they were surrounded by amenity grassland.

Two further ponds were present to the west and south section of the golf course (Ponds P4 and P5 respectively). At the time of the survey in 2020, these ponds were found to be dry but both held water during the field visit in 2021. The northern pond appears to support frequent submerged water milfoil *Myriophyllum sp*. and spike rush *Eleocharis sp*. and an emergent ring of soft rush. The southern pond was predominantly choked with soft rush, immature alder and iris but had some limited areas of standing open water.

All ponds were assessed against the pond condition assessment criteria. Ponds P1 and P3 were assessed as being in poor condition, whilst the remaining three were all deemed to be of moderate condition.

Tall ruderal
An area of tall ruderal vegetation was present in the north western section of the site. Species present included dock, creeping thistle, hemlock, bittersweet *Solanum dulcamara*, bramble, greater plantain *Plantago major*, creeping buttercup *Ranunculus repens*, mugwort, great willowherb *Epilobium hirsutum*, broadleaved willowherb, teasel *Dipsacus fullonum* with clumps of tufted hair grass *Deschampsia cespitosa,* soft rush *Juncus effusus* and iris *Iris* sp. also present.

The biodiversity metric classifies tall ruderal habitat as a component of other habitat types In this instance, the tall ruderal vegetation was categorised as a component of the adjacent grassland to which it formed an ecotone and was subsequently assessed using the grassland condition criteria.

5.4 FAUNA

During the survey field signs of faunal species were recorded. The time of year at which the survey is undertaken will affect species or field signs directly recorded during the survey.

Mammals
Well-worn mammal pathways were present within the patches of dense scrub located amongst the semi-improved grassland in the western section of the site (Target note 5 and Plate 9.4).

Mole hills were recorded in the area of unmanaged amenity grassland and evidence of rabbit was recorded throughout the site.

Birds
The following bird species were recorded on site during the field survey: grey heron *Ardea cinerea*, chiffchaff *Phylloscopus collybita*, magpie *Pica pica,* wren *Troglodytes aedon*, wood pigeon *Columba palumbus*, starling *Sturnus vulgaris*, jackdaw *Corvus monedula*, buzzard *Buteo buteo,* great spotted woodpecker *Dendrocopos major* and moorhen *Gallinula chloropus*.

An owl box was present on a mature oak located along the western boundary and appeared to have been recently used (Target note 2 and Plate 9.5). A bird nest was recorded on a mature oak tree located in the centre of the golf course (Target note 8).

Invertebrates
The following butterfly species were recorded during the field survey: small heath, marbled white, large white, meadow brown, small tortoiseshell and small skipper. Cinnabar moth was also recorded.

A number of dragonfly and damselfly species were also recorded. These included broad-bodied chaser *Libellula depressa*, four-spotted chaser *Libellula quadrimaculata*, common blue damselfly *Ennallagma cyathigerum*, hawker *Aeshna* sp and common darter *Sympetrum striolatum.*

5.5 INVASIVE PLANT SPECIES

New Zealand pigmyweed *Crassula helmsii,* listed on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended), was noted within the large pond (P1) in the north of the site.

6. DISCUSSIONS AND CONCLUSIONS

6.1 SUMMARY OF PROPOSALS

The proposals for the site involve the construction of up to 201 residential dwellings and associated hard and soft landscaping (please refer to 'Feasibility Sketch' within Chapter 8).

6.2 NATURE CONSERVATION SITES

The desk study exercise identified no European statutory sites within 5 km of the survey area, three UK statutory sites within 2 km and three non-statutory sites within 1 km. The site is not located within 10 km of a statutory site designated for bats. The significance of these sites to the proposed development is discussed below.

UK Statutory Sites
The closest UK Statutory site is Dagnell End SSSI located 450 m east of the survey area. The survey area also falls within the Impact Risk Zone for this site and Windmill Naps Wood SSSI located 4,770 m north-east. Residential development of 100 units or more are considered to pose a risk to these SSSIs (please refer to Appendix 1). The initial feasibility sketch indicates that the proposed development will comprise in excess of 100 units and therefore there is potential for adverse impacts upon this SSSI. Direct impacts are considered unlikely given the intervening distance between the sites, however indirect impacts are possible. The increased residential occupation of the local area has the potential result in increased recreational pressure and disturbance to these SSSIs. Therefore, a recommendation has been made within Section 7.1.

Proctor's Barn Meadow (LNR) and Redditch Woods: Pitcheroak Wood (LNR) are located 1,800 m south-east and 1,990 m south-west of the survey area respectively. Taking into consideration the large spatial separation and built-up nature of intervening habitat, no significant damage or disturbance to these nature conservation sites is anticipated as a result of the proposals.

Non-Statutory Sites
The closest non statutory site is the River Arrow (LWS) located adjacent to the southern boundary. Abbey and Forge Mill Ponds (LWS) and Dagnell Brook are located 500 m south-east and 710 m east respectively and have direct links to the River Arrow (LWS). It is understood that no works are to undertaken within 30 m of this watercourse and therefore no direct impacts are anticipated. However, given the proximity of the River Arrow to the development site there is potential for indirect impacts such as pollution run-off, which could subsequently impact the other local wildlife sites connected to the river. As such it is recommended that the proposed works are controlled by a Construction Ecological Management Plan. Please refer to Section 7.1.

6.3 HABITATS

The ecological importance of the habitats present on site is determined by their presence on the list of Habitats of Principal Importance in England and on the Local BAP. It also takes into account the intrinsic value of the habitat. Those habitats which are considered to be of intrinsic importance and have the potential to be impacted by the site proposals are highlighted as notable considerations.

A discussion of the implications of the site proposals with regard to the habitats present on site is provided in the text below. A separate discussion of the value of the habitats on site to protected or notable species is provided in Section 6.4.

Hedgerow
A hedgerow is defined as any boundary line of trees or shrubs measuring over 20m in length and less than 5 m wide, and where any gaps between the trees or shrub species are less than 20m wide (Bickmore, 2002). All hedgerows consisting predominantly (i.e 80% or more cover) of at least one woody UK native species are listed as a Habitat of Principal Importance in England. The hedgerows within the survey area meet this criterion. It is understood that the hedgerow running through the centre of the site is to be removed. The hedgerows along the northern and western boundaries are to be retained, however they may be subject to indirect impacts such as root compaction. Therefore, hedgerows are a notable consideration in relation to the proposed development and a recommendation regarding retention and protection is provided in Section 7.2.

Plantation woodland
The areas of plantation woodland on site do not meet with Habitat of Principal Importance criteria. Nevertheless, the semi-mature and mature trees contained within, are of intrinsic value as they cannot be easily replaced in the short to medium term. The woodland also has the potential to support a range of protected species (as discussed in Section 6.4). Although loss of habitat is not expected from the proposals, due to the proximity of this habitat to the development there is the potential for impacts such as root compaction. Protection of the trees associated with this habitat type should be installed on site, where necessary and appropriate, prior to works commencing. If any trees are to be removed to facilitate the proposed development, appropriate mitigation and compensation measures will need to be implemented. Recommendations are provided in Section 7.2.

Scattered trees
The semi-mature and mature scattered trees within the survey area are of intrinsic value as they cannot be easily replaced in the short to medium term. Mature and semi-mature trees are therefore a notable consideration in relation to the proposed works and should be retained and protected where possible. If loss of this habitat cannot be avoided, then appropriate mitigation and compensation measures will need to be implemented. Recommendations are provided in Section 7.2.

Semi-natural woodland
The broadleaved woodland on site is considered likely to fulfil criteria to be classified as a Habitat of Principal Importance in England and a Local BAP priority habitat. This habitat has intrinsic value and cannot be readily replaced if lost and is likely to support a range of wildlife. This woodland is, therefore, a notable consideration in relation to the proposed development and should be retained where possible. If loss of the woodland cannot be avoided, then appropriate mitigation and compensation measures should be implemented. It is understood at this stage that the areas of woodland are to be retained. However, protection of the trees within the woodland should be installed on site prior to works commencing. Recommendations are provided in Section 7.2.

Standing water
Ponds are a Habitat of Principal Importance for Nature Conservation in England if they meet one or more of the relevant criteria (e.g. contain species of high conservation importance, such as great crested newt). An initial site visit did not allow the pond to be assessed for these criteria and as such, there is potential for the ponds within the survey area to qualify as Habitats of Principal Importance for Nature Conservation in England. It is understood that the pond in the centre of the site is to be retained; however, runoff, pollution and dust may indirectly impact this waterbody. The small ponds within the golf course will need to be removed. Therefore, standing water is a notable consideration and a recommendation has been made in Section 7.2.

Building, dense scrub, ditch, hardstanding, amenity grassland, semi-improved grassland and tall ruderal
The remaining habitats are well represented locally, have low species diversity or can be easily recreated post development. Any loss of these habitats would be considered to have minimal impact on the ecology of the local area. These habitats are therefore not considered to be notable consideration.

Habitats considered to be of relevance to the proposed development are summarised in Table 6.1.

Habitat Type	Habitat of Principal Importance?	Local BAP Habitat?	Summary of Potential Impacts
Semi-natural woodland	✓	✓	Direct loss or damage, root compaction
Hedgerow	✓	✓	Direct loss or damage, root compaction
Plantation woodland	-	-	Direct loss or damage, root compaction
Scattered trees (SM/M)	-	-	Direct loss, damage or disturbance, fragmentation, root compaction
Standing water	*	✓	Direct loss, pollution from run-off
*Initial site visit does not allow full assessment to take place against published criteria.			

Table 6.1: Summary of Potential Impacts on Notable Habitats

6.4 PROTECTED/NOTABLE SPECIES

The following paragraphs consider the likely impact of the site proposals on protected or notable species. This is based on those species highlighted in the desk study exercise (Chapter 4) and other species for which potentially suitable habitat occurs within or adjacent to the survey area.

Mammals

Bats

The desk study provided records of five species of bat within a 1 km radius of the survey area. The nearest was of common pipistrelle located 10 m north.

A number of trees on site were considered to possess features that could offer potential roosting locations. The building in the northern part of the survey area was also considered to have high potential to support roosting bats and it is understood that the building is to be demolished. It is not known if the mature trees will be directly impacted by the proposed development. Roosting bats are therefore a notable consideration in relation to the proposed development and a recommendation is provided in Section 7.3.

The mosaic of habitats within the survey area provides suitable foraging and commuting opportunities for bats with corridor features such as hedgerows and watercourses offering high quality commuting features. Any additional lighting on site has the potential to disrupt commuting and foraging routes, therefore a recommendation regarding sensitive lighting is made in Section 7.3.

Badger

The desk study provided one record of badger within a 1 km radius of the survey area, which was dated from 2003. No definitive evidence of badger such as setts or latrines, were recorded on site, however a number of mammal trails were noted in the western section of the site. The woodland and dense scrub provide opportunities for badger sett building and foraging activity. As badgers are highly mobile, it is possible that badger may colonise the site prior to works commencing, which could result in direct harm/injury. Badger may also fall into any excavations required as part of the proposed development and become trapped Therefore, badgers are a notable consideration in relation to the proposed works and recommendations are provide in Section 7.3.

Hedgehog

The desk study provided two records of hedgehog within a 1 km radius of the survey area, the nearest was located 330 m south-west. The grassland, hedgerows and woodland on site offer suitable foraging and refuge opportunities for hedgehog, and link to further suitable habitat in the surrounding landscape. To prevent any harm coming to these species during the construction phase, a recommendation has been made in Section 7.3.

Otter

The desk study provided a single record of otter potentially located within the survey area. There are also records of otter within the River Arrow, located adjacent to the southern boundary of the site. It is understood that the proposed works are not to be undertaken within 30 m of the river and therefore no adverse impacts to otter are anticipated. However, it is possible that otter may pass through the site to access areas of suitable habitat in the wider landscape. To prevent any harm/injury to otter during the construction phase, a recommendation has been made in Section 7.3.

Amphibians

The desk study provided five records of common toad and one record of common frog within a 1 km radius of the survey area. The nearest was of common toad located 240 m north. No records of great crested newt were provided.

The ponds on site may provide suitable breeding habitat for great crested newts and reference to Ordnance Survey data and aerial imagery indicates that there several additional ponds within a 500 m radius of the survey area which may also provide suitable breeding habitat for amphibians. The mosaic of habitats within the survey area, such as the woodland, grassland and scrub, provide suitable terrestrial habitat for amphibians and in particular great crested newts. The clearance of the suitable terrestrial habitat may therefore cause direct harm/injury to great crested newts as well as a loss of suitable habitat. Therefore, a recommendation regarding the further assessment of this habitat has been made in Section 7.3. Any indirect

impacts to the ponds, such as run-off or pollution, may also decrease the suitability of these habitats for amphibians and a recommendation regarding the protection of these habitats has been made in Section 7.2.

Reptiles
The desk study provided no records of reptiles within a 1 km radius of the survey area. However, the mosaic of habitats within the survey area provide highly suitable foraging and refuge habitat for reptiles and are linked to suitable habitat in the surrounding landscape. The clearance of these habitats may therefore result in the direct harm/injury to reptiles if they are found to be present. Therefore, reptiles are a notable consideration and a recommendation has been made in Section 7.3.

Birds
The desk study provided records of three notable bird species within 1 km of the survey area. A range of bird species were also recorded on site during the survey, including starling which is a Species of Principal Importance. The mix of habitats within the survey area, including standing water, grassland, woodland, ruderal vegetation, scrub and hedgerows provide suitable nesting and foraging habitat for protected and notable species, as well as more common bird species.

The development of the site has the potential to result in a net loss of suitable habitat for birds and in order to fully determine the use of the site by birds Breeding and Wintering Bird Surveys will be required (please refer to Section 7.3). In addition, the construction phase of the proposed development could cause direct disturbance or harm to breeding birds if timed to occur within the nesting season. A recommendation regarding the appropriate timing of site clearance activities is made in Section 7.3.

An owl box was also recorded on a mature oak tree within the western section of the site. Any additional lighting on site has the potential to disrupt commuting and foraging routes. Therefore, a recommendation regarding sensitive lighting is provided in Section 7.2.

Invertebrates
Aquatic invertebrates
No individual records of notable aquatic invertebrates were provided by the desk study. However, the citation for Dagnell Brook (LWS) situated 710 m east revealed past records of white-clawed crayfish. There is no suitable habitat on site or in the immediate vicinity for white-clawed crayfish. Therefore, no impacts to white-clawed crayfish are anticipated as a result of the proposed development

Terrestrial invertebrates
A desk study identified a single record of banded general soldier fly within a 1 km radius of the survey area. The foodplants of these species comprise bramble and umbellifers, which are present on site. The clearance of this habitat may result in a loss of suitable habitat; however, it is considered unlikely that this invertebrate will be adversely impacted in the long-term, due the prevalence of this habitat in the surrounding landscape.

A number of butterfly and moth species were recorded on site during the field survey, including the small heath butterfly and cinnabar moth which are listed as a Species of Principal Importance. The floral diversity and plant species present within the survey area were not noted to hold particular ecological value so these species are unlikely to be significantly impacted by clearance of any habitats within the survey area. Given the presence of suitable habitat in the surrounding landscape, no long-term impacts on populations of these species are anticipated. Nevertheless, a recommendation regarding biodiversity enhancement measures to incorporate into the soft landscaping scheme of the proposed development, which will increase the value of the site for these species is provided in Section 7.2.

Other Species
The following protected species are not considered to be material considerations due to the lack of desk study records and absence of suitable habitats within the development site and its surroundings: dormouse and water vole.

Summary
Species considered to be of relevance to the proposed development are summarised in Table 6.2.

Species / Species Group	Species of Principal Importance?	Summary of Potential Impacts
Bats	#	Loss of suitable habitat, direct harm or injury, disturbance through increase in lighting.
Badger	-	Loss of suitable habitat, direct harm or injury.
Hedgehog	✓	Loss of suitable habitat, direct harm or injury.
Otter	✓	Direct harm or injury.
Great crested newts	✓	Loss of suitable habitat, direct harm or injury, habitat fragmentation.
Common amphibians	#	Loss of suitable habitat, direct harm or injury, habitat fragmentation.
Reptiles	✓	Loss of suitable habitat, direct harm or injury, habitat fragmentation.
Birds	#	Loss of suitable habitat, direct harm or injury.
Key: #: Dependent on species		

Table 6.2: Summary of Potential Impacts on Notable Species

6.5 INVASIVE PLANT SPECIES

The desk study provided no records of invasive plant species within a 1 km radius of the survey area. The invasive plant species New Zealand pigmyweed was identified within the lake on site. This species is listed on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended), and it is therefore an offence to allow it to spread in the wild. Works near to the pond may cause this species to spread. Therefore, invasive plant species are a notable consideration for the proposed development and a recommendation has been made in Section 7.4.

7. RECOMMENDATIONS

All recommendations provided in this section are based on Middlemarch Environmental Ltd's current understanding of the site proposals, correct at the time the report was compiled. Should the proposals alter, the conclusions and recommendations made in the report should be reviewed to ensure that they remain appropriate.

The ecological mitigation hierarchy should be applied when considering development which may have a significant effect on biodiversity. The ecological mitigation hierarchy, as set out in the National Planning Policy Framework (NPPF), and the National Planning Practice Guidance (NPPG) should follow these principles:

- **Avoidance** – development should be designed to avoid significant harm to valuable wildlife habitats and species.
- **Mitigation** – where significant harm cannot be wholly or partially avoided, it should be minimised by design or through the use of effective mitigation measures.
- **Compensation** – where, despite whatever mitigation would be effective, there would still be significant residual harm, as a last resort, compensation should be used to provide an equivalent value of biodiversity.

7.1 NATURE CONSERVATION SITES

The following recommendations are made regarding nature conservation sites:

R1 **Dagnell End SSSI and Windmill Naps Wood SSSI:** The proposed works could potentially impact upon Dagnell End which is designated as a Site of Special Scientific Interest. As such, Natural England should be consulted to determine if/how the development proposals could affect the features for which the site was designated as a SSSI and the extent of any mitigation that may be required (if any) to avoid any indirect effects.

R2 **River Arrow, Abbey and Forge Mill Ponds and Dagnell Brook (LWS):** The proposed works could potentially indirectly impact upon River Avon, Abbey and Forge Mill Ponds and Dagnell Brook which are designated as Local Wildlife Sites. Therefore, a Construction Ecological Management Plan (CEcMP) should be compiled for the site. The aim of the CEcMP is to minimise the potential impact of the construction phase of the development on the existing ecology of the site and off site receptors, and ensure works proceed in accordance with current wildlife legislation. This document should be agreed with the Local Planning Authority ecologist prior to any works commencing

7.2 HABITATS

The following recommendations are made regarding the habitats present on site:

R3 **Priority Habitats:** In accordance with Chapter 15 of the National Planning Policy Framework (Conserving and Enhancing the Natural Environment) and Local Planning Policy (Policy 16 – Natural Environment the development proposals at the site should be designed to allow for the retention and enhancement of existing priority habitats, including the hedgerow, mature trees and broad-leaved woodland. Where unavoidable losses of these habitats occur, compensatiory habitat creation on a like-for-like basis will be required to avoid an overall net loss of biodiversity.

R4 **Other Notable Habitats:** The development proposals at the site should seek to retain and/or minimise losses of other notable habitats within the site, particularly those that are likely to make an important constribution towards securing net gains for biodiversity (e.g. standing water, plantation woodland, scattered trees). Where losses of these habitats do occur, opportunities for enhancement of retained areas or the replacement of simliar or other priority habitats should be considered to minimise biodiversity losses and support the delivery of a biodiversity net gain overall.

R5 **Habitat Safeguards**; Appropriate protection protection measures should be provided to minimise adverse effects on retained habitats during the construction and operational phases of the development. These could comprise, for example:

- Trees/Hedgerows: Any trees/hedgerows on or overhanging the site, which are retained as a part of any proposed works should be protected in accordance with British Standard 5837: 2012 "Trees in relation to design, demolition and construction - recommendations". Protection should be installed on site prior to the commencement of any works on site.
- Waterbodies: Environment Agency Pollution Prevention Guidelines should be adhered to throughout the works. Although formerly withdrawn in December 2015, the guidelines provide a framework for the design of working practices to avoid pollution and siltation. PPG5 (Environment Agency et al, 2007), relating to works and maintenance in or near water, is considered to be of relevance to the proposed project.

R5 **Biodiversity Enhancement:** In accordance with the provision of Chapter 15 of the National Planning Policy Framework (Conserving and Enhancing the Natural Environment) and Local Planning Policy (Policy 16 – Natural Environment), biodiversity enhancement measures should be incorporated into any future green infrastrucuture propsoals for the development to support the delivery of net gains for biodiversity above and beyond that required for habitat compensation. In accordance with Biodiversity Net Gain principles, these opportunties should be considered in the context of local ecological networks and take account local biodiversity action plan priorities. This could include, for example:

- Enhancing the existing area of woodland habitat along the River Arrow to gap up existing areas of the woodland canopy and strenthen habitats along the River Avon LWS,
- Enhance and expand existing areas of plantation woodland through the introduction of appropriate management or new woodland/scrub planting,
- Creating areas of species-rich grassland as part of the areas of open space within the site,
- Gapping up and restoring areas of degraded hedgerow on the western boundary and restoring historic hedgerow boundaries following existing mature trees; and,
- Identifying opportunities for the creation of an area of orchard habitat, a priority habitat within the Worcestershire Biodiversity Action Plan.

In accordance with biodiversity net gain principles, all biodiversity enhancement proposals will need to be subject to a biodiversity management plan to demsontrate how these features will be maintained and fulfil their target aims in the long-term (typically 30 years from development commencement).

R6 **Lighting:** In accordance with best practice guidance relating to lighting and biodiversity (Miles et al, 2018; Gunnell et al, 2012), any new lighting should be carefully designed to minimise potential disturbance and fragmentation impacts on sensitive receptors, such as bat and owl species and otter. Examples of good practice include:

- Avoiding the installation of new lighting in proximity to key ecological features, such as hedgerows, woodland edges and the river corridor to the south.
- Using modern LED fittings rather than metal halide or sodium fittings, as modern LEDs emit negligible UV radiation.
- The use of directional lighting to reduce light spill, e.g. by installing bespoke fittings or using hoods or shields. For example, downlighting can be used to illuminate features such as footpaths whilst reducing the horizontal and vertical spill of light.
- Where the use of bollard lighting is proposed, columns should be designed to reduce horizontal light spill.
- Implementing controls to ensure lighting is only active when needed, e.g. the use of timers or motion sensors.
- Use of floor surface materials with low reflective quality. This will ensure that bats using the site and surrounding area are not affected by reflected illumination.
- For internal lights, recessed light fittings cause significantly less glare than pendant type fittings. The use of low-glare glass may also be appropriate where internal lighting has the potential to influence sensitive ecological receptors.

7.3 PROTECTED / NOTABLE SPECIES

To ensure compliance with wildlife legislation and local planning policy, the following recommendations are made:

R7 **Roosting Bats:** A preliminary roost assessment should be undertaken of the mature trees and buildings which may be impacted by the proposed development works. Preliminary roost assessments can be completed at any time of year. Dependent upon the results of the preliminary assessment, nocturnal emergence and dawn re-entry surveys could be required. Surveys should be undertaken in line with best practice survey guidelines (Collins, 2016), during the bat activity season. The bat activity season is considered to extend from May to October (inclusive), with the optimum survey period between mid-May and August (inclusive).

R8 **Badger:** Given the suitable habitat present within the survey area and connectivity to adjacent habitat that is suitable for badgers, it is recommended that a badger survey is undertaken to determine whether any setts are located within 30 m of the proposed development area. Should badger setts be identified, a badger activity survey may be required. Badger surveys can be completed at any time of the year. Should a badger sett be identified that will be required to be disturbed or closed, works to the badger sett will require a licence from Natural England. Badger setts can be closed between July and November inclusive.

R9 **Terrestrial Mammals including Badger, Otter and Hedgehog:** Any excavations that need to be left overnight should be covered or fitted with mammal ramps to ensure that any animals that enter can safely escape. Any open pipework with an outside diameter of greater than 120 mm must be covered at the end of each work day to prevent animals entering/becoming trapped.

R10 **Great Crested Newt:** A great crested newt Habitat Suitability Index (HSI) assessment should be undertaken for all ponds within the site and within 500 m of the edge of the proposed development. Great crested newt Habitat Suitability Index assessments can be carried out at any time of year, although if possible it is preferable to carry out the assessments between March and October. If suitable great crested newt breeding ponds are identified with connecting habitat to the proposed development site it is likely that a full great crested newt survey will be required.

R11 **Reptiles:** A reptile survey should be undertaken of suitable habitats within the proposed development site. Reptile surveys can be completed in suitable weather conditions between April and September (inclusive).

R12 **Breeding and Wintering Birds:** Due to the importance of the area for birds, as highlighted by desk study material and initial field observations, it is recommended that a breeding bird survey and a winter bird survey be conducted to determine the use of the site by breeding and wintering birds. Wintering Bird Surveys can be completed within four site visits, in the period between November and February (inclusive). Breeding Bird Surveys can be completed within five site visits, in the period between March and July (inclusive). Site visits are generally one month apart.

R13 **Nesting Birds:** Vegetation and building clearance should be undertaken outside the nesting bird season. The nesting bird season is weather dependent but generally extends between March and September inclusive (peak period March-August). If this is not possible then any vegetation and buildings to be removed or disturbed should be checked by an experienced ecologist for nesting birds immediately prior to works commencing. If birds are found to be nesting any works which may affect them would have to be delayed until the young have fledged and the nest has been abandoned naturally, for example via the implementation of an appropriate buffer zone (species dependent) around the nest in which no disturbance is permitted until the nest is no longer in use.

7.4 INVASIVE PLANT SPECIES

The following recommendation is made regarding invasive plant species:

R14 **New Zealand Pigmyweed:** To ensure that the works do not cause New Zealand Pigmyweed to spread, a Method Statement, as part of the Construction Ecological Management Plan, should be developed in consultation with the Environment Agency.

8. DRAWINGS

Drawing C152753-03-01-Rev B - Phase 1 Habitat Map

Drawing HG-42 – Landscape Masterplan by SLR

C152753-03-01-RevB

Legend

- Application boundary
- Scattered tree
- Defunct species-poor hedgerow
- Dry ditch
- Intact species-poor hedgerow
- A — Amenity grassland
- Dense scrub
- Hardstanding/Building
- Plantation woodland
- SI — Poor semi-improved grassland
- Semi-natural woodland
- Standing water
- Target note

1 Dense bramble with mammal trails
2 Mature oak with owl box
3 Mature oak
4 Brash piles
5 Mammal trails
6 Mature ash and oak
7 Bird nest in tree
8 Ditch
9 Area of dense scrub
10 Dumped materials
11 Wood chips/soil/gravel mounds

N

0 50 100 m

Project	Hither Green Golf Course, Redditch, Worcestershire
Drawing	Phase 1 Habitat Map
Client	Barratt Homes
Drawing Number: C152753-03-01-RevB	Revision: Rev B
Scale @ A3: 1:2,000	Date: September 2021
Approved By: RW	Drawn By: RP

MIDDLEMARCH ENVIRONMENTAL
Triumph House, Birmingham Road, Allesley, Coventry CV5 9AZ
T:01676 525880 F:01676 521400
E:admin@middlemarch-environmental.com

LEGEND

- EXISTING VEGETATION
- PROPOSED LAP
- PROPOSED EQUIPPED NATURAL PLAY AREA
- PROPOSED STREET TREES
- PROPOSED AMENITY GRASSLAND
- PROPOSED ORNAMENTAL HEDGEROW PLANTING ON PROPERTY FRONTAGES
- PROPOSED NATIVE HEDGEROW
- PROPOSED SCRUB GRASSLAND MOSAIC
- PROPOSED SPECIES RICH GRASSLAND
- PROPOSED DAMP GRASSLAND
- PROPOSED REED BEDS
- PROPOSED NATIVE ORCHARD PLANTING WITH LOCAL SPECIES OF APPLE AND PEAR TREES
- PROPOSED HOGGIN PATHS

BARRATT HOMES

SLR global environmental solutions

2ND AND 3RD FLOORS,
15 MIDDLE PAVEMENT,
NOTTINGHAM. NG1 7DX
T: 01159 647280

www.slrconsulting.com

HITHER GREEN

LVA

LANDSCAPE MASTERPLAN

HG-42

Scale	Date
1:1000 @A1	SEPTEMBER 2021

210514.403.04993.00075_HG-20_MASTERPLAN_EW.dwg

9. PHOTOGRAPHS

Plate 9.1: Semi-natural Woodland Adjacent to the River Arrow

Plate 9.2: Semi-improved Grassland in the Western Section of the Site

Plate 9.3: Scrubby Areas of Semi-improved Grassland with Brash Piles

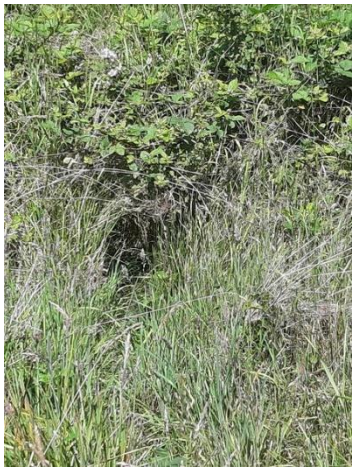

Plate 9.4: Mammal Trail in a Patch of Dense Bramble Scrub

Plate 9.5: Owl Box in a Mature Oak Tree along the Western Boundary

Plate 9.6: Woodland, Dense Scrub and Hedgerow between the Golf Course and adjacent Fields

Plate 9.7: Amenity Grassland forming part of the Golf Course with Plantation Woodland in the Centre

Plate 9.8: Plantation Woodland along the Edge of the Golf Course

Plate 9.9: Dry Ditch along the Eastern Boundary of the Site

Plate 9.10: Small Pond forming part of the Golf Course

Plate 9.11: Large Pond in the Northern Area of the Site

Plate 9.12: Dense Scrub along the Northern Boundary with Dumped Rubbish

Plate 9.13: Access Track with Aggregate Piles in the Northern Section of the Site

Plate 9.14: Southern Elevation of the Building with Dense Ivy Coverage

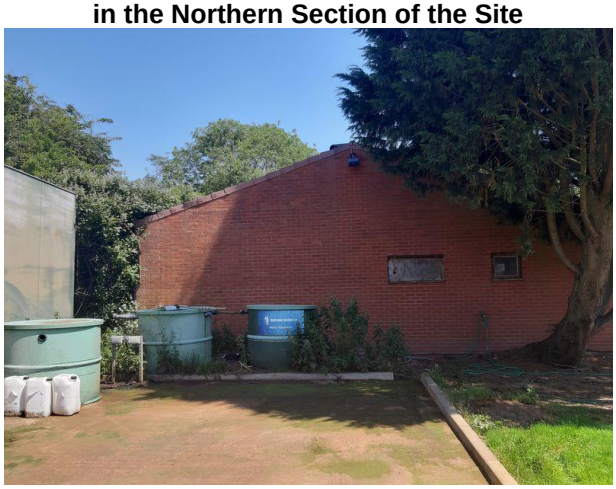

Plate 9.15: Western Elevation of the Building with Large Conifer

REFERENCES AND BIBLIOGRAPHY

Bickmore, C.J. (2002) *Hedgerow survey handbook: a standard procedure for local surveys in the UK*. London, DEFRA.

British Standards Institution (2013). *British Standard 42020: 2013. Biodiversity – Code of practice for planning and development.* British Standards Institution, London.

British Standards Institution. (2012). *British Standard 5837:2012, Trees in relation to design, demolition and construction – recommendations.* British Standards Institution, London.

Panks, S., White, N., Newsome, A., Potter, J., Heyton, M., Mayhew, E., Alvarez, M., Russell, T., Scott, S.J., Heaver, M., Scott, S.H., Treweek, J., Butcher, B. and Stone, D. (2021) T*he Biodiversity Metric 3.0 – Auditing and accounting for biodiversity: Technical Supplement*. Natural England

Institute of Environmental Assessment. (1995). *Guidelines for Baseline Ecological Assessment, Institute of Environmental Assessment*. E&FN Spon, An Imprint of Chapman and Hall. London.

Joint Nature Conservation Committee (2010). *Handbook for Phase 1 Habitat Survey: A technique for environmental audit (reprint).* Joint Nature Conservation Committee, Peterborough.

Joint Nature Conservation Committee (2012). *UK Post-2010 Biodiversity Framework*. Available: http://jncc.defra.gov.uk/pdf/UK_Post2010_Bio-Fwork.pdf

Ministry of Housing, Communities and Local Government (2019). *National Planning Policy Framework*. Available: https://www.gov.uk/government/publications/national-planning-policy-framework--2

APPENDICES

APPENDIX 1: Summary of Statutory Nature Conservation Sites

APPENDIX 2: Overview of Relevant Species Legislation

APPENDIX 3: Habitat Condition Map and Tables

APPENDIX 1

Summary of Statutory Nature Conservation Sites

UK Statutory Sites
Site Check Report Report generated on Fri Jun 26 2020
You selected the location: Centroid Grid Ref: SP04446933
The following features have been found in your search area:

Ancient Woodland (England)

Wood Name
Theme Name
Ancient & Semi-Natural Woodland
Theme ID
1414613
Area (Ha)
3.172362
Wood Name
BROCKHILL WOOD
Theme Name
Ancient Replanted Woodland
Theme ID
1107324
Area (Ha)
28.258285
Wood Name
BUTLERS HILL WOOD
Theme Name
Ancient Replanted Woodland
Theme ID
1107325
Area (Ha)
37.018593

Local Nature Reserves (England)

Reference
1442747
Name
PROCTOR'S BARN MEADOWS
Hectares
3.77
Hyperlink
https://designatedsites.naturalengland.org.uk/SiteLNRDetail.aspx?SiteCode=L1442747
Reference
1442965
Name
REDDITCH WOODS: PITCHEROAK WOOD
Hectares
45.28
Hyperlink
https://designatedsites.naturalengland.org.uk/SiteLNRDetail.aspx?SiteCode=L1442965

Sites of Special Scientific Interest (England)

Name
Dagnell End Meadow SSSI
Reference
1002468
Natural England Contact
ROB HAVARD
Natural England Phone Number
0845 600 3078
Hectares
2.07
Citation
1003656
Hyperlink
http://designatedsites.naturalengland.org.uk/SiteDetail.aspx?SiteCode=s1003656

National Nature Reserves (England)

No Features found

SSSI Impact Risk Zones - to assess planning applications for likely impacts on SSSIs/SACs/SPAs & Ramsar sites (England)

1. DOES PLANNING PROPOSAL FALL INTO ONE OR MORE OF THE CATEGORIES BELOW?

2. IF YES, CHECK THE CORRESPONDING DESCRIPTION(S) BELOW. LPA SHOULD CONSULT NATURAL ENGLAND ON LIKELY RISKS FROM THE FOLLOWING:

All Planning Applications

Infrastructure

Pipelines, pylons and overhead cables. Any transport proposal including road, rail and by water (excluding routine maintenance). Airports, helipads and other aviation proposals.

Wind & Solar Energy

Minerals, Oil & Gas

Planning applications for quarries, including: new proposals, Review of Minerals Permissions (ROMP), extensions, variations to conditions etc. Oil & gas exploration/extraction.

Rural Non Residential

Large non residential developments outside existing settlements/urban areas where net additional gross internal floorspace is > 1,000m² or footprint exceeds 0.2ha.

Residential

Residential development of 100 units or more.

Rural Residential

Any residential development of 50 or more houses outside existing settlements/urban areas.

Air Pollution

Any industrial/agricultural development that could cause AIR POLLUTION (incl: industrial processes, livestock & poultry units with floorspace > 500m², slurry lagoons > 200m² & manure stores > 250t).

Combustion

General combustion processes >20MW energy input. Incl: energy from waste incineration, other incineration, landfill gas generation plant, pyrolysis/gasification, anaerobic digestion, sewage treatment works, other incineration/ combustion.

Waste

Landfill. Incl: inert landfill, non-hazardous landfill, hazardous landfill.

Composting

Any composting proposal with more than 500 tonnes maximum annual operational throughput. Incl: open windrow composting, in-vessel composting, anaerobic digestion, other waste management.

Discharges

Any discharge of water or liquid waste of more than 2m³/day to ground (ie to seep away) or to surface water, such as a beck or stream (NB This does not include discharges to mains sewer which are unlikely to pose a risk at this location).

Water Supply

Large infrastructure such as warehousing / industry where net additional gross internal floorspace is > 1,000m² or any development needing its own water supply .

Notes 1

Notes 2

GUIDANCE - How to use the Impact Risk Zones

/Metadata_for_magic/SSSI IRZ User Guidance MAGIC.pdf

1. DOES PLANNING PROPOSAL FALL INTO ONE OR MORE OF THE CATEGORIES BELOW?

2. IF YES, CHECK THE CORRESPONDING DESCRIPTION(S) BELOW. LPA SHOULD CONSULT NATURAL ENGLAND ON LIKELY RISKS FROM THE FOLLOWING:

All Planning Applications

Infrastructure

Pipelines, pylons and overhead cables. Any transport proposal including road, rail and by water (excluding routine maintenance). Airports, helipads and other aviation proposals.

Wind & Solar Energy

Minerals, Oil & Gas

Planning applications for quarries, including: new proposals, Review of Minerals Permissions (ROMP), extensions, variations to conditions etc. Oil & gas exploration/extraction.

Rural Non Residential

Large non residential developments outside existing settlements/urban areas where net additional gross internal floorspace is > 1,000m² or footprint exceeds 0.2ha.

Residential

Residential development of 100 units or more.

Rural Residential

Any residential development of 50 or more houses outside existing settlements/urban areas.

Air Pollution

Any development that could cause AIR POLLUTION (incl: industrial/commercial processes, livestock & poultry units, slurry lagoons/manure stores).

Combustion

All general combustion processes. Incl: energy from waste incineration, other incineration, landfill gas generation plant, pyrolysis/gasification, anaerobic digestion, sewage treatment works, other incineration/ combustion.

Waste

Mechanical and biological waste treatment, inert landfill, non-hazardous landfill, hazardous landfill, household civic amenity recycling facilities construction, demolition and excavation waste, other waste management.
Composting
Any composting proposal. Incl: open windrow composting, in-vessel composting, anaerobic digestion, other waste management.
Discharges
Any discharge of water or liquid waste that is discharged to ground (ie to seep away) or to surface water, such as a beck or stream (NB this does not include discharges to mains sewer which are unlikely to pose a risk at this location).
Water Supply
Large infrastructure such as warehousing / industry where net additional gross internal floorspace is > 1,000m² or any development needing its own water supply .
Notes 1
Notes 2
GUIDANCE - How to use the Impact Risk Zones
/Metadata_for_magic/SSSI IRZ User Guidance MAGIC.pdf
1. DOES PLANNING PROPOSAL FALL INTO ONE OR MORE OF THE CATEGORIES BELOW?
2. IF YES, CHECK THE CORRESPONDING DESCRIPTION(S) BELOW. LPA SHOULD CONSULT NATURAL ENGLAND ON LIKELY RISKS FROM THE FOLLOWING:
All Planning Applications
Infrastructure
Pipelines, pylons and overhead cables. Any transport proposal including road, rail and by water (excluding routine maintenance). Airports, helipads and other aviation proposals.
Wind & Solar Energy
Minerals, Oil & Gas
Planning applications for quarries, including: new proposals, Review of Minerals Permissions (ROMP), extensions, variations to conditions etc. Oil & gas exploration/extraction.
Rural Non Residential
Residential
Residential development of 100 units or more.
Rural Residential
Any residential development of 50 or more houses outside existing settlements/urban areas.
Air Pollution
Any industrial/agricultural development that could cause AIR POLLUTION (incl: industrial processes, livestock & poultry units with floorspace > 500m², slurry lagoons > 200m² & manure stores > 250t).
Combustion
General combustion processes >20MW energy input. Incl: energy from waste incineration, other incineration, landfill gas generation plant, pyrolysis/gasification, anaerobic digestion, sewage treatment works, other incineration/ combustion.
Waste
Landfill. Incl: inert landfill, non-hazardous landfill, hazardous landfill.
Composting
Any composting proposal with more than 500 tonnes maximum annual operational throughput. Incl: open windrow composting, in-vessel composting, anaerobic digestion, other waste management.
Discharges
Water Supply
Large infrastructure such as warehousing / industry where net additional gross internal floorspace is > 1,000m² or any development needing its own water supply .
Notes 1
Notes 2
GUIDANCE - How to use the Impact Risk Zones
/Metadata_for_magic/SSSI IRZ User Guidance MAGIC.pdf

MAGIC

UK Statutory Sites within 2 km

EU Statutory Sites
Site Check Report Report generated on Fri Jun 26 2020
You selected the location: Centroid Grid Ref: SP04446932
The following features have been found in your search area:

Ramsar Sites (England)
No Features found

Proposed Ramsar Sites (England)
No Features found

Special Areas of Conservation (England)
No Features found

Possible Special Areas of Conservation (England)
No Features found

Special Protection Areas (England)
No Features found

Potential Special Protection Areas (England)
No Features found

APPENDIX 2

Overview of Relevant Species Legislation

Bats

Bats and the places they use for shelter or protection (i.e. roosts) receive European protection under The Conservation of Habitats and Species Regulations 2017 (Habitats Regulations 2017). They receive further legal protection under the Wildlife and Countryside Act (WCA) 1981, as amended. This protection means that bats, and the places they use for shelter or protection, are capable of being a material consideration in the planning process.

Regulation 41 of the Habitats Regulations 2017, states that a person commits an offence if they:

- deliberately capture, injure or kill a bat;
- deliberately disturb bats; or
- damage or destroy a bat roost (breeding site or resting place).

Disturbance of animals includes in particular any disturbance which is likely to impair their ability to survive, to breed or reproduce, or to rear or nurture their young, or in the case of animals of a hibernating or migratory species, to hibernate or migrate; or to affect significantly the local distribution or abundance of the species to which they belong.

It is an offence under the Habitats Regulations 2017 for any person to have in his possession or control, to transport, to sell or exchange or to offer for sale, any live or dead bats, part of a bat or anything derived from bats, which has been unlawfully taken from the wild.

Whilst broadly similar to the above legislation, the WCA 1981 (as amended) differs in the following ways:

- Section 9(1) of the WCA makes it an offence to *intentionally* kill, injure or take any protected species.
- Section 9(4)(a) of the WCA makes it an offence to *intentionally or recklessly** damage or destroy, *or obstruct access to*, any structure or place which a protected species uses for shelter or protection.
- Section 9(4)(b) of the WCA makes it an offence to *intentionally or recklessly** disturb any protected species *while it is occupying a structure or place which it uses for shelter or protection*.

*Reckless offences were added by the Countryside and Rights of Way (CRoW) Act 2000.

As bats re-use the same roosts (breeding site or resting place) after periods of vacancy, legal opinion is that roosts are protected whether or not bats are present.

The following bat species are Species of Principal Importance for Nature Conservation in England: Barbastelle Bat *Barbastella barbastellus*, Bechstein's Bat *Myotis bechsteinii*, Noctule Bat *Nyctalus noctula*, Soprano Pipistrelle *Pipistrellus pygmaeus*, Brown Long-eared Bat *Plecotus auritus*, Greater Horseshoe Bat *Rhinolophus ferrumequinum* and Lesser Horseshoe Bat *Rhinolophus hipposideros*.

Badger

Badgers and their setts are protected under the Protection of Badgers Act 1992. The Protection of Badgers Act 1992 is based primarily on the need to protect badgers from baiting and deliberate harm or injury, badgers are not protected for conservation reasons. The following are criminal offences:

- To intentionally or recklessly interfere with a sett. Sett interference includes disturbing badgers whilst they are occupying a sett, as well as damaging or destroying a sett or obstructing access to it.

- To wilfully kill, injure, take, possess or cruelly ill-treat a badger, or to attempt to do so.

A badger sett is defined in the legislation as:

- *'Any structure or place that displays signs indicating current use by a badger'*.

'Current use' is not synonymous with current occupation and a sett is defined as such (and thus protected) as long as signs of current usage are present. Therefore, a sett is protected until such a time as the field signs deteriorate to such an extent that they no longer indicate 'current usage'.

Badger sett interference can result from a multitude of operations including excavation and coring, even if there is no direct damage to the sett, such as through the disturbance of badgers whilst occupying the sett. Any intentional or reckless work that results in the interference of badger setts is illegal without a licence from Natural England[30]. In England a licence must be obtained from Natural England before any interference with a badger sett occurs.

Hedgehog

Hedgehogs receive some protection under Schedule 6 of the Wildlife and Countryside Act 1981 (as amended); this section of the Act lists animals which may not be killed or taken by certain methods, namely traps and nets, poisons, automatic weapons, electrical devices, smokes/gases and various others. Humane trapping for research purposes requires a licence.

Hedgehogs are Species of Principal Importance for Nature Conservation in England and are thus capable of being material considerations in the planning process.

Otter

The otter benefits from world-wide protection under Appendix I of the Convention on International Trade in Endangered Species of Wild Flora and Fauna. It also receives European protection under Appendix II of the Bern Convention and Annexes II and IV of the EU Habitats Directive 94/43/EEC, which is transposed into UK Law by means of The Conservation of Habitats and Species Regulations 2017 (Habitats Regulations 2017).

Regulation 41 of the Habitats Regulations 2017, states that a person commits an offence if they:

- deliberately capture, injure or kill an otter;
- deliberately disturb otters; or
- damage or destroy a breeding site or resting place.

Disturbance of animals includes in particular any disturbance which is likely to impair their ability to survive, to breed or reproduce, or to rear or nurture their young, or in the case of animals of a hibernating or migratory species, to hibernate or migrate; or to affect significantly the local distribution or abundance of the species to which they belong.

It is an offence under the Habitats Regulations 2017 for any person to have in his possession or control, to transport, to sell or exchange or to offer for sale, any live or dead otter, part of an otter or anything derived from an otter which has been unlawfully taken from the wild.

Whilst broadly similar to the above legislation, the WCA 1981 (as amended) differs in the following ways:

- Section 9(1) of the WCA makes it an offence to *intentionally* kill, injure or take any protected species.
- Section 9(4)(a) of the WCA makes it an offence to *intentionally or recklessly** damage or destroy, *or obstruct access to*, any structure or place which a protected species uses for shelter or protection.
- Section 9(4)(b) of the WCA makes it an offence to *intentionally or recklessly** disturb any protected species *while it is occupying a structure or place which it uses for shelter or protection*.

*Reckless offences were added by the Countryside and Rights of Way (CRoW) Act 2000.

Otters are listed as Species of Principal Importance for Nature Conservation in England.

Great crested newt

Great crested newts (GCN) and the places they use for shelter or protection receive European protection under The Conservation of Habitats and Species Regulations 2017, (Habitats Regulations 2017). They receive further legal protection under the Wildlife and Countryside Act (WCA) 1981, as amended. This protection means that GCN, and the places they use for shelter or protection, are capable of being a material consideration in the planning process.

Regulation 41 of the Habitats Regulations 2017, states that a person commits an offence if they:

- deliberately capture, injure or kill a GCN;
- deliberately disturb GCN;

- deliberately take or destroy eggs of a GCN; or
- damage or destroy a GCN breeding site or resting place.

Disturbance of animals includes in particular any disturbance which is likely to impair their ability to survive, to breed or reproduce, or to rear or nurture their young, or in the case of animals of a hibernating or migratory species, to hibernate or migrate; or to affect significantly the local distribution or abundance of the species to which they belong.

It is an offence under the Habitats Regulations 2017 for any person to have in his possession or control, to transport, to sell or exchange or to offer for sale, any live or dead GCN, part of a GCN or anything derived from GCN, which has been unlawfully taken from the wild. This legislation applies to all life stages of GCN.

Whilst broadly similar to the above legislation, the WCA 1981 (as amended) differs in the following ways:

- Section 9(1) of the WCA makes it an offence to *intentionally* kill, injure or take any protected species.
- Section 9(4)(a) of the WCA makes it an offence to *intentionally or recklessly** damage or destroy, *or obstruct access to*, any structure or place which a protected species uses for shelter or protection.
- Section 9(4)(b) of the WCA makes it an offence to *intentionally or recklessly** disturb any protected species *while it is occupying a structure or place which it uses for shelter or protection*.

*Reckless offences were added by the Countryside and Rights of Way (CRoW) Act 2000.

Common amphibians

Common frog and smooth newt

Common frogs and smooth newts are protected in Britain under Schedule 5 of the Wildlife and Countryside Act (1981, as amended) with respect to sale only. They are also listed under Annex III of the Bern Convention 1979. Any exploitation of wild fauna specified in Appendix III shall be regulated in order to keep the populations out of danger. The convention seeks to prohibit the use of all indiscriminate means of capture and killing and the use of all means capable of causing local disappearance of, or serious disturbance to, populations of a species.

Common toad

Common toads are protected in Britain under Schedule 5 of the WCA (1981, as amended) with respect to sale only. They are also listed under Annex III of the Bern Convention 1979. Any exploitation of wild fauna specified in Appendix III shall be regulated in order to keep the populations out of danger. The convention seeks to prohibit the use of all indiscriminate means of capture and killing and the use of all means capable of causing local disappearance of, or serious disturbance to, populations of a species. Common toad is a Species of Principal Importance for Nature Conservation in England.

Reptiles

All of the UK's native reptiles are protected by law. The two rarest species – sand lizard (*Lacerta agilis*) and smooth snake (*Coronella austriaca*) – benefit from the greatest protection.

Common lizard (*Zootoca vivipar*a), slow-worm (*Anguis fragilis*), adder (*Vipera berus*) and grass snake (*Natrix natrix*) are protected under the Wildlife and Countryside Act 1981 as amended from intentional killing or injuring.

Sand lizard and smooth snake are protected under the Wildlife and Countryside Act 1981 (as amended) and The Conservation of Habitats and Species Regulations 2017 which together make it illegal to kill, injure, capture, handle or disturb these animals. Places they use for breeding, resting, shelter and protection are protected from being damaged or destroyed. It is also illegal to obstruct these animals from using such areas.

In England and Wales, this Act has been amended by the Countryside and Rights of Way Act 2000 (CRoW), which adds an extra offence, makes species offences arrestable, increases the time limits for some

prosecutions and increases penalties. All native reptiles are Species of Principal Importance for Nature Conservation in England.

Birds

The Conservation of Habitats and Species Regulations 2017 places a duty on public bodies to take measures to preserve, maintain and re-establish habitat for wild birds.

Nesting and nest building birds are protected under the Wildlife and Countryside Act WCA 1981 (as amended).

Subject to the provisions of the act, if any person intentionally:

- kills, injures or takes any wild bird;
- takes, damages or destroys the nest of any wild bird while that nest is in use or being built; or
- takes or destroys an egg of any wild bird, he shall be guilty of an offence.

Some species (listed in Schedule 1 of the WCA) are protected by special penalties. Subject to the provisions of the act, if any person intentionally or recklessly**:**

- disturbs any wild bird included in Schedule 1 while it is building a nest or is in, on or near a nest containing eggs or young; or
- disturbs dependent young of such a bird, he shall be guilty of an offence.

Several bird species are Species of Principal Importance for Nature Conservation in England, making them capable of being material considerations in the planning process.

Invasive plants

The Wildlife and Countryside Act 1981 provides the primary controls on the release of non-native species into the wild in Great Britain. It is an offence under section 14(2) of the Act to 'plant or otherwise cause to grow in the wild' any plant listed in Schedule 9, Part II. This list contains 36 plant species and their hybrids. The Infrastructure Act 2015 makes it possible, under certain circumstances, to compel land owners or occupiers to carry out control or eradication operations, or to allow them to be carried out by the issuing authority.

APPENDIX 3

Habitat Condition Map and Tables

C152753-03-02

Legend

- Application boundary
- Defunct species-poor hedgerow
- Dry ditch
- Intact species-poor hedgerow
- Moderate
- Poor
- N/A

N

Project: Hither Green Golf Course, Redditch, Worcestershire	
Drawing: Habitat Condition Assessment	
Client: Barratt Homes	
Drawing Number: C152753-03-02	Revision: 00
Scale @ A3: 1:2,000	Date: September 2021
Approved By: RW	Drawn By: RP

MIDDLEMARCH ENVIRONMENTAL
Triumph House, Birmingham Road, Allesley, Coventry CV5 9AZ
T:01676 525880 F:01676 521400
E:admin@middlemarch-environmental.com

Tables A1, A2 and A3summarise the results of the habitat condition assessment for woodlands, other area-based habitat and hedgerows respectively. For the detailed condition criteria for each habitat, see Panks *et al.* (2021)[1] The ID reference refers to Drawing RT-MME-152753-03-02 above.

ID	Phase 1 Habitat	UK Hab Equivalent	Condition Sheet	Condition Criteria Score													Total Score	Condition Assessment	Notes
				1	2	3	4	5	6	7	8	9	10	11	12	13			
1	Broad-leaved plantation woodland	Other broad-leaved woodland	24. Woodland	1	3	3	3	2	3	1	3	1	2	1	1	1	25	Poor	Comprises area of plantation without mown understorey
2	Broad-leaved plantation woodland	Other broad-leaved woodland	24. Woodland	1	3	3	3	2	3	1	3	1	1	1	1	1	24	Poor	Comprises area of plantation woodland with mown field layer
3	Broad-leaved semi-natural woodland	Lowland mixed deciduous woodland	24. Woodland	2	3	3	2	3	1	2	3	1	2	1	1	1	25	Poor	Woodland is located adjacent to a Local Wildlife Site and is deemed to be in a strategic ecological location
4	Broad-leaved semi-natural woodland	Other broad-leaved woodland	24. Woodland	2	3	3	2	3	3	1	3	1	1	1	1	1	25	Poor	Comprises secondary woodland in the centre of the site.

Key:
Each criteria are based on a series of options where the attributes assessed is in good (3), moderate (2) or poor (1) condition. The final condition of the habitat is assigned based on the total overall score. Woodlands that score <26 are in poor condition, 26 – 32 are in moderate condition and >32 in good condition.

Table A1 – Summary of condition assessment for woodland habitats

[1] Panks, S., White, N., Newsome, A., Potter, J., Heyton, M., Mayhew, E., Alvarez, M., Russell, T., Scott, S.J., Heaver, M., Scott, S.H., Treweek, J., Butcher, B. and Stone, D. (2021) T*he Biodiversity Metric 3.0 – Auditing and accounting for biodiversity: Technical Supplement*. Natural England

ID	Phase 1 Habitat	UK Hab Equivalent	Condition Sheet	Condition Criteria Score									Total Score	Condition Assessment	Notes
				1	2	3	4	5	6	7	8	9			
5	Amenity grassland	Modified Grassland	5. Grassland (Low Distinctiveness)	F*	F	P	F	F	P	P	-	-	3/7	Poor	Grassland fails criteria relating to damaging operations, sward height and species-richness due to its intensive use as a golf turf.
6	Poor semi-improved grassland	Other Neutral Grassland	6. Grassland (Medium, High & Very High Distinctiveness)	F	P	P	F	F	-	-	-	-	2/5	Poor	Habitat is assessed as other neutral grassland in accordance with the UK Hab key.
7	Dense scrub	Mixed scrub	19. Scrub	F	F	P	P	F	-	-	-	-	2/5	Poor	Comprises several stands composed of either dominant blackthorn, hawthorn or bramble.
8	Eutrophic standing water	Eutrophic standing water	17. Ponds	F	P	P	P	P	F	F	F	P	5/9	Poor	Pond P1. Cover of invasive species relates to New Zealand pigmyweed
9	Eutrophic standing water	Eutrophic standing water	17. Ponds	F	F	P	P	P	P	P	F	P	6/9	Moderate	Pond P2. Fish assumed to be absent as precautionary assessment due to size of pond
10	Eutrophic standing water	Eutrophic standing water	17. Ponds	F	F	F	F	P	P	P	F	P	4/9	Poor	Pond P3. Fish assumed to be absent as precautionary assessment due to size of pond
11	Eutrophic standing water	Eutrophic standing water	17. Ponds	F	F	F	P	P	P	P	P	P	6/9	Moderate	Pond P4. Fish assumed to be absent as precautionary assessment due to size of pond
12	Eutrophic standing water	Eutrophic standing water	17. Ponds	F	F	P	P	P	P	P	F	P	6/9	Moderate	Pond P5. Fish assumed to be absent as precautionary assessment due to size of pond

Table A2 – Summary of condition assessment for other area-based habitats

ID	Phase 1 Habitat	UK Hab Equivalent	Condition Sheet	Condition Criteria Score									Total Score	Condition Assessment	Notes
				1	2	3	4	5	6	7	8	9			
13	Broad-leaved Scattered Trees	Urban Tree	22. Urban trees	P	F	P	P	P	P	-	-	-	5/6	Good	Scattered mature trees are deemed to have value and can be assessed under the urban tree category where they are not individually valued as part of the underlying habitat. In this instance the trees assessed overlie amenity grassland
14	Buildings/ Other Habitat	Developed land	Not assessed	-	-	-	-	-	-	-	-	-	-	N/A- Other	Developed land is automatically assigned a 'Null' condition score in accordance with the Biodiversity Metric 3.0 user guide.
15	Ditch	Eutrophic standing water	4. Ditch	P	F	P	F	P	F	F	P	-	4/8	Poor	Ditch is amenity mown in parts and heavily shaded in others with little to no associated aquatic vegetation.

Key:
*Non-negotiable pass to achieve good condition
P – Criteria passed
F – Criteria failed
- No criteria applicable

Table A2 [Cont.] – Summary of condition assessment for other area-based habitats

ID	Phase 1 Habitat	UK Hab Equivalent	Criteria Score										Condition Assessment	Notes
			A1	A2	B1	B2	C1	C2	D1	D2	E1*	E2*		
H1	Species-poor intact hedgerow	Native hedgerow	P	P	F	P	P	P	P	P	-	-	Good	Hedgerow passes 7/8 with only 1 failure from 1 functional group.
H2	Species-poor defunct hedgerow	Native hedgerow	P	P	F	F	P	P	P	F	-	-	Moderate	Hedgerow fails 3 criteria with 2 failures from functional group B
H3	Species-poor intact hedgerow	Native hedgerow	P	P	F	P	P	F	P	P	-	-	Good	Hedgerow passes 6/8 with only 1 failure from 1 functional group

Table A3 – Summary of condition assessment for hedgerows

ID	Phase 1 Habitat	UK Hab Equivalent	Criteria Score										Condition Assessment	Notes
			A1	A2	B1	B2	C1	C2	D1	D2	E1*	E2*		
H4	Species-poor intact hedgerow	Native hedgerow with associated ditch	P	P	P	P	P	P	P	P	-	-	Good	Hedgerow passes all criteria for good condition
H5	Species-poor intact hedgerow	Native hedgerow	P	P	F	P	P	P	P	P	-	-	Good	Hedgerow passes 7/8 with only 1 failure from 1 functional group

Key:
*Applicable to hedgerows with trees only
P – Criteria passed
F – Criteria failed
– Criteria not applicable

Table A3 [Cont.] – Summary of condition assessment for hedgerows