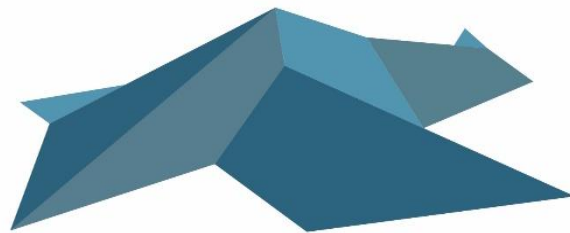


Ecological Assessment

BE-1220-02D

Pentlands, New Mill Road, Holmfirth, West
Yorkshire, HD9 7LN



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Site address	Pentlands, New Mill Road, Holmfirth, West Yorkshire, HD9 7LN
Grid reference	SE 14809 09173
Report composed by	David Watts MICFor MArborA MCIEEM
Client	Priestroyd Construction Ltd
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Executive Summary

David Watts Associates Ltd have been instructed by Priestroyd Construction Ltd to produce an Ecological Assessment relating to a proposed development at Pentlands, New Mill Road, Holmfirth, West Yorkshire HD9 7LN.

The habitats on the site consist of improved grassland, scattered scrub and amenity grassland. All habitats on the site are considered to be of low ecological value and will require removal. It is recommended that further planting is incorporated into the development proposals to compensate for the loss of habitat. Further on site and offsite planting are recommended within separate reports.

A previous scoping survey of the building on the site found bat droppings within the annexed garage. Subsequent activity surveys however confirmed bats to be likely absent. No signs of bats were identified during the most recent survey. Taking account of the structural features of the building, the building is considered to have low potential for roosting bats. The further dusk emergence survey did not identify bats emerging from or re-entering the building, and as such it is not anticipated that roosting bats are present.

In the absence of further mitigation, the development proposals may impact upon terrestrial connectivity of hedgehogs. It is recommended that gardens are either delineated by hedges, or if fences are used, holes should be cut into fence panels to enable access.

The site has low suitability for reptile species. As a precautionary measure it is recommended that a walkover inspection is carried out by an ecologist within 48 hours prior to the commencement of works. If reptiles are identified, these should be translocated to a suitable area.

The site has potential for nesting birds, and it is recommended that vegetation removal either avoids the bird nesting season, or commences only if a survey has established nesting birds to be absent within 48 hours prior to the commencement of works.

1. Introduction

1.1. Background

David Watts Associates Ltd (DWA) have been instructed by Priestroyd Construction Ltd to produce an Ecological Assessment at Pentlands, New Mill Road Holmfirth, West Yorkshire HD9 7LN, hereafter referred to as 'the site'.

The purpose of the report is to identify the habitat types on the site, along with the presence or absence of any protected or notable species. The ecological impact of the proposed development is assessed, and mitigation, management and aftercare proposals are suggested when appropriate.

A Preliminary Ecological Assessment and Bat Survey was undertaken by Access Ecology in 2014 (Wiggs, 2014). This included a Phase 1 Habitat Survey, bat scoping survey, and two bat activity surveys.

A previous report was produced by DWA in March 2020. This report reiterates the findings of the previous report, and contains additional results of a bat activity survey and additional compensation. This report supersedes the previous report.

1.2. Site Details

The site consists of a residential property with its associated garden, parking areas and a field. The site is located at grid reference SE 14809 09173 and is accessed off the west of New Mill Road (A635) in Holmfirth. The site is bordered by a residential property and its access drive to the north, by New Mill Road to the east, residential properties to the south and a garden to the west, approximately 30 m beyond which is a woodland. Figure 1, below, shows aerial imagery of the site and the surrounding area.



Figure 1: Aerial Imagery of Site and Surrounding Area (Google Earth Pro, 2020)

1.3. Development Proposals

The development proposals are to construct 21 residential properties, in addition to their associated gardens and parking areas. A new access drive is to be constructed leading off New Mill Road.

2. Methods

2.1. Ecological Data Search

The Department for Environment, Food and Rural Affairs' (DEFRA) Magic Maps website was consulted as to any land-based designations and priority habitats within a 2 km radius of the site.

Aerial imagery was assessed using OS maps and Google Earth Pro to give an appraisal of the surrounding land use.

The local biological record centre, West Yorkshire Joint Services (WYJS) were consulted as to any protected and notable species and land-based designations within 2 km of the site.

2.2. Habitat Survey

The site survey was carried out in suitable weather conditions on 11th February 2020. The survey was carried out by David Watts BSc (Hons) PGCert MCIEEM, a consultant ecologist, experienced in carrying out Phase 1 Habitat surveys, and who holds Natural England class licences to survey bats, great crested newts *Triturus cristatus* and barn owls *Tyto alba*.

The study area was surveyed in accordance with JNCC (2010) guidelines. Habitats were classified into hierarchical codes, and a Phase 1 Habitat map was produced. Habitats and species present on or adjacent to the site were assessed using CIEEM's (2018) guidelines. Ecological features were classed as being of either international, national, regional, district, local or low/site importance (see Table 1).

Table 1: Importance of ecological features

Value of feature	Key examples
International	Internationally designated sites (SPA, SAC, Ramsar site, Biogenetic Reserve), or an area which meets designation for such sites; Internationally significant and viable areas of a habitat listed in Annexe 1 of the Habitats Directive; Any regularly occurring, globally threatened species; A regularly occurring population of an internationally important species, which is threatened or rare in the UK.
National	A nationally designated site (SSSI, NNR, LNR), or an area which meets designation for such sites; A regularly occurring significant number/population of a nationally important species; A feature identified as being of critical importance.
Regional/County	Viable areas of key habitat identified in the regional or county BAP; A regularly occurring significant population/number of any species important at regional/county level; Sites of conservation importance which exceed the district selection, but which fall short of SSSI selection guidelines.
District	Areas of habitat identified in District/City/Borough BAP; sites that the designating authority has determined meet the published ecological selection criteria for designation. sites/features which are scarce within the District/City/Borough; a regularly occurring significant population/number of any species important at District/City/Borough level.
Local	Areas identified in a Local BAP; sites/features which are scarce in the locality or which are considered to appreciably enrich the habitat resource within the local context (e.g. species-rich hedgerows); any populations, species or habitats of local importance.
Low/Site	Habitats of moderate to low diversity which support a range of locally and nationally common species, the loss of which can be easily mitigated.

2.3. Bat Survey

A bat scoping survey of the site was undertaken by Miranda Cowan PGDip MCIEEM, a suitably qualified ecologist, on 19th March 2020. The bat survey was carried out in accordance with guidelines prescribed by the Bat Conservation Trust (Collins, 2016). Buildings and trees on the site were assessed for signs of bats, and were classified in accordance with criteria shown in Table 2, below.

Table 2 Bat roost suitability classes

Bat Roost Suitability Class	Description
High	Buildings that have many areas suitable for roosting with a large number of potential access points.
Medium	Buildings with a smaller number of areas suitable for roosting, but still supporting features that could be attractive to bats and potentially support maternity roosts.
Low	Buildings with limited roosting opportunities but which could be used on a sporadic or occasional basis which are unsuitable for maternity roosts.
Negligible	Buildings which appear unsuitable for roosting bats due to a clear lack of roosting spaces such as voids etc. and/or absence of suitable access points.

The dusk emergence survey was carried out on 28th August 2020. The building was monitored for emerging and re-entering bats. Any additional bat activity, including foraging and commuting bats, was recorded. Table 3, below, shows a summary of the survey details.

Table 3 Survey times and conditions

Date	Sunset/sunrise time	Start time	Finish time	Surveyors	Equipment	Weather
28/08/2020	20:05	19:50	21:35	David Watts John Bryers	Echo Meter Touch 2	Dry. Start temp. 17.7°C. Finish temp. 13.3°C. Wind Beaufort 0 Cloud 5%

2.4. Other Protected and Notable Species

A survey of the site was undertaken for signs of and suitable habitat for any protected and notable species.

A walkover inspection was made for any other notable mammal species, including badgers (*Meles meles*), otters (*Lutra lutra*) and water voles (*Arvicola amphibius*).

The site was assessed for its suitability for reptiles and amphibians. An assessment of ponds within the surrounding area was made using aerial imagery.

The site was assessed for its suitability for nesting birds. Any bird species identified during the survey were recorded.

The habitats on the site were assessed for their suitability for invertebrates, although a detailed invertebrate survey was not undertaken.

2.5. Invasive Species

Any invasive species listed under Schedule 9 of the Wildlife and Countryside Act 1981 (as amended) on or immediately adjacent to the site were recorded.

2.6. Constraints

The site survey was conducted outside the optimum period for Phase 1 Habitat Surveys. Some species are only visible at certain times of the year and may not have been present during the survey.

3. Results

3.1. Designated Sites

WYJS and Magic Maps (DEFRA, 2020) do not hold records of statutory designated sites within 2 km of the site.

WYJS hold records of four non-statutory sites within 2 km of the site, including:

- Hagg Wood, a Local Wildlife Site (LWS) approximately 1.3 km north of the site.
- Holmroyd Wood, an LWS approximately 1.8 km northwest of the site.
- Round Wood, an LWS approximately 1.8 km northeast of the site.
- Brockholes and Round Wood, a Local Geological Site (LGS) approximately 1.8 km north of the site.

3.2. Habitats within the Surrounding Area

The immediate surrounding land use is predominantly residential. Berry Bank Wood is located approximately 30 m west of the site, which contributes significantly to habitat connectivity throughout the surrounding area. Approximately 400 m both southeast and northwest the land use is agricultural. Tree cover in the surrounding area is high, and there is good connectivity between the site and semi-natural habitat.

3.3. Habitats within the Site

A2.2 Scattered scrub

Scattered scrub at the field boundaries, consisting predominantly of bramble *Rubus fruticosus* and great willowherb *Epilobium hirsutum*.

A3.3 Mixed scattered trees

Scattered trees throughout the site. Species included *Acer pseudoplatanus*, silver birch *Betula pendula*, deodar cedar *Cedrus deodora*, Lawson cypress *Chamaecyparis lawsoniana*, Leyland cypress *Cupressus x leylandii*, beech *Fagus sylvatica*, ash *Fraxinus excelsior*, holly *Ilex aquifolium*, Norway spruce *Picea abies*, wild cherry *Prunus avium*, Japanese cherry *Prunus 'Kanzan'*, goat willow *Salix caprea*, crack willow *Salix fragilis*, elder *Sambucus nigra* and yew *Taxus baccata*.

B4 Improved grassland

The fields on the site consisted of improved grassland (B4), with an unmown, tussocky sward which is relatively low in forb diversity. Graminoid species included cock's foot *Dactylis glomerata*, yellow oat grass *Arrhenatherum elatius* and perennial ryegrass *Lolium perenne*. Forb species were typical of modified grassland, and included ribwort plantain *Plantago lanceolata*, great willowherb, broadleaved dock *Rumex obtusifolius*, hogweed *Heracleum sphondylium*, cow parsley *Anthriscus sylvestris*, herb Robert *Geranium robertianum*, dandelion *Taraxacum officinale* agg., spear thistle *Cirsium vulgare* and daisy *Bellis perennis*.

J1.2 Amenity grassland

Mown, managed grassland to the front and rear of the existing residential property.

3.4. Invasive Species

Rhododendron *Rhododendron ponticum* was recorded growing amongst scattered trees adjacent to the site entrance.

3.5. Bats

The previous Preliminary Ecological Appraisal (Wiggs, 2014) identified several old bat droppings within the garage annexed to Building 1. The droppings were consistent in shape, size and texture to pipistrelle *Pipistrellus* spp. Two activity surveys did not identify any bats emerging from or re-entering the building, and it was concluded that bats were likely absent from the building.

WYJS hold records of a possible common pipistrelle *Pipistrellus pipistrellus* and soprano pipistrelle *Pipistrellus pygmaeus* roost within the building, dated July 2014. It is apparent that this record was submitted from the findings of the previous report.

Additional records of bat species within 2 km of the site held by WYJS include common and soprano pipistrelles, Leisler's bat *Nyctalus leisleri*, noctule *Nyctalus noctula*, Daubenton's bat *Myotis daubentonii* and numerous records of unidentified bats.

A search on Magic Maps (DEFRA, 2020) identified granted European Protected Species (EPS) licences for bats within 2 km of the site:

- EPSM2010-2268 allowed destruction of a resting place of common pipistrelle. The start date was 15th December 2010 and the end date was 31st August 2011.
- 2016-24318-EPS-MIT allowed destruction of a resting place of common pipistrelle. The start date was 29th June 2016 and the end date is 28th June 2021.
- EPSM2009-863 allowed destruction of a resting place of Leisler's bat. The start date was 24th April 2009 and the end date was 30th June 2009.
- EPSM2012-4393 allowed destruction of a resting place of common pipistrelle. The start date was 11th October 2012 and the end date was 1st October 2014.

The existing residential building on the site, 'Building 1', consisted of a two-storey stone building of 1970's construction. The building had two adjoining roofs: one with a hipped end to the south and one with a pitched gable to the east and a hipped end to the north and west. The roof was in good condition, with no visible gaps, and lead flashing at the roof valleys was well-sealed. There was a single storey garage annex to the south, with a hipped roof, also in good condition. There were wooden soffit boxes on the exterior of the building, and gaps were observed between the soffits and the brickwork, enabling potential access points for bats. An inspection of the interior of the roof void did not identify any signs of roosting bats.

The subsequent dusk emergence survey did not identify any bats emerging from or re-entering the building. Common bat species, including common pipistrelle and noctule (*Nyctalus noctula*) were

identified foraging and commuting over the site. The first bat was identified at 20:27, 22 minutes after sunset, and bats were observed foraging over the site until the survey end.

None of the trees on the site had features suitable for roosting bats, and all are considered to have negligible potential for roosting bats.

The site provides suitable habitat for commuting and foraging bats, particularly generalist species such as common pipistrelle, soprano pipistrelle and noctule.

3.6. Other Mammals

WYJS hold records of badger *Meles meles* 1110 m from the site, and brown hare *Lepus europaeus* 1838 m from the site.

The site provides suitable habitat for hedgehog *Erinaceus europaeus*.

No evidence of any other protected or notable mammal species was observed on the site.

3.7. Amphibians

WYJS hold records of common toad *Bufo bufo* 1356 m from the site.

DEFRA (2020) holds no records of granted EPS licences for great crested newts *Triturus cristatus* within 2 km of the site.

A search on aerial imagery (Google Earth Pro, 2020) did not identify any ponds within 250 m of the site. Therefore, while the grassland and scrub on the site provides suitable habitat for amphibians, it is not anticipated that there is a breeding population on the site.

3.8. Reptiles

WYJS hold records of grass snake *Natrix natrix* 1402 m from the site.

The grassland on the site provides suitable habitat for reptiles. It is possible that reptiles from the surrounding area use the site, although due to the residential land use within the immediate surrounding area, and the presence of more suitable habitat within 2 km of the site, it is not considered likely that reptiles are present in any significant number.

3.9. Bird Species

WYJS hold records of bird species within 2 km of the site, including redwing *Turdus iliacus* and fieldfare *Turdus pilaris*, in addition to numerous common species.

Common bird species were observed on or flying over the site during the survey, including blue tit *Cyanistes caeruleus*, great tit *Parus major*, goldfinch *Carduelis carduelis* and magpie *Pica pica*.

The trees and scrub on the site provide suitable habitat for nesting birds.

3.10. Invertebrates

The site provides suboptimal pollination opportunities for invertebrates.

4. Impact Assessment

4.1. Designated Sites

There are no foreseeable impacts of the development proposals upon any designated sites.

4.2. Habitats

The development proposals will necessitate the removal of all the habitats on the site, with the exception of some of the scattered trees (tree removals are detailed in a separate Arboricultural Impact Assessment). These habitats are all considered to be of low ecological value, and their removal can be easily mitigated.

Using the DEFRA Biodiversity Metric 2.0. Calculation Tool, the habitats on the site have a baseline of 1.16 Habitat Units.

4.3. Bats

Bat droppings were identified within Building 1 in 2014, however a subsequent activity survey did not identify bats emerging from the building. No bat droppings were identified during the most recent survey. Taking account of the structural features of the building, Building 1 is considered to have low potential for roosting bats. The dusk emergence survey did not identify any bats emerging from or re-entering the building, and as such it is not anticipated that roosting bats are present.

The trees on the site have negligible potential for roosting bats. Therefore, there are no further considerations regarding tree removals upon roosting bats.

4.4. Other Mammals

In the absence of further mitigation, the development proposals may impact upon terrestrial connectivity for hedgehogs.

There are no foreseeable impacts of the development proposals upon any other protected or notable mammal species.

4.5. Amphibians

There are no foreseeable impacts resulting from the development proposals upon amphibians.

4.6. Reptiles

Individual reptiles may be present on the site, and in the absence of further mitigation there is a low chance of reptiles being harmed by development works.

4.7. Birds

The removal of trees and scrub has the potential to impact upon nesting birds, if undertaken during bird nesting season (1st March – 31st August inclusive).

4.8. Invertebrates

There are no foreseeable impacts of the development proposals upon any notable invertebrate species. The development proposals will not impact upon pollination resources used by invertebrates in the surrounding area.

5. Recommendations

5.1. Avoidance of Ecological Impacts

To avoid impacts upon terrestrial connectivity for hedgehogs, gardens of properties should either be delineated by hedges, or if fences are to be used, holes 15x15 cm in size should be cut into panels to enable access.

It is recommended that a precautionary inspection for reptiles is carried out by a suitably qualified ecologist within 48 hours prior to the commencement of works. If reptiles are identified on the site, these should be translocated to a suitable area away from works.

To avoid impacts to nesting birds, it is recommended that any tree and scrub removal avoids the bird nesting season (1st March – 31st August inclusive). If this is not possible, a nesting bird survey should be carried out within 48 hours prior to the commencement of works, and works should only commence if it has been established that nesting birds are not present.

There are no foreseeable impacts of the development proposals upon any other protected or notable species. In the unlikely event that any protected or notable species (e.g. bats, badgers, great crested newts) are identified during works, all works should cease, and a suitably qualified ecologist should be consulted.

5.2. Invasive Species

It is recommended that rhododendron is removed and burned on the site. Precautions must be taken to ensure that burning does not impact upon any trees and habitats to be retained throughout the development proposals.

5.3. Compensation and Ecological Enhancement

The removal of habitat due to the development proposals will need to be mitigated by the incorporation of further planting into the development proposals. An Ecological Design Strategy has been produced by DWA, which contains the specification of further shrub and tree planting. This will result in 0.87 Habitat Units on the site, a loss of 0.29 Habitat Units. Offset mitigation has been specified on a separate site in Kirklees in a Woodland Planting Scheme produced by JCA Ltd (Kent, 2020). This will result in a total net unit change of 0.16n Habitat Units, resulting in a net gain of 14.15%.

6. References

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Appendix 1: Photographs



Plate 1. Amenity grassland



Plate 2. Improved grassland



Plate 3. Scattered trees



Plate 4. Scattered scrub



Plate 5: Building 1, viewed from southwest



Plate 6: Building 1, viewed from west



Plate 7: Building 1, viewed from north



Plate 8: Building 1, viewed from east



Plate 9: Interior of garage



Plate 10: Rear of garage

Appendix 2: Legislation and Policy

Legislation

The Conservation of Habitats and Species Regulation 2017 makes it an offence to deliberately capture, kill or disturb any animal protected under Schedule 2 of the regulations. It is also an offence to damage or destroy a breeding site or resting place of an animal, even if the animal is not present at the time.

The Wildlife and Countryside Act 1981 (As Amended), makes it an offence to:

- Deliberately or recklessly injure, kill or capture any animal protected under Schedule 5 of the act.
- Deliberately or recklessly kill, injure or take any wild bird; to take, damage or destroy the nest of any wild bird while occupied or being built, or to take or destroy the egg of a wild bird. Additional protection is afforded to bird species listed under Schedule 1 of the Act.
- Intentionally pick, uproot or destroy any wild plant included in Schedule 8 of the Act.

Badgers *Meles meles* benefit from specific protection under the provisions of the Protection of Badgers Act 1992. Under the Act, it is an offence to wilfully kill, injure or take a badger (or attempt to do so), to cruelly ill-treat a badger, to interfere with a sett, cause a dog to enter a sett, and to disturb a badger while it is occupying a sett.

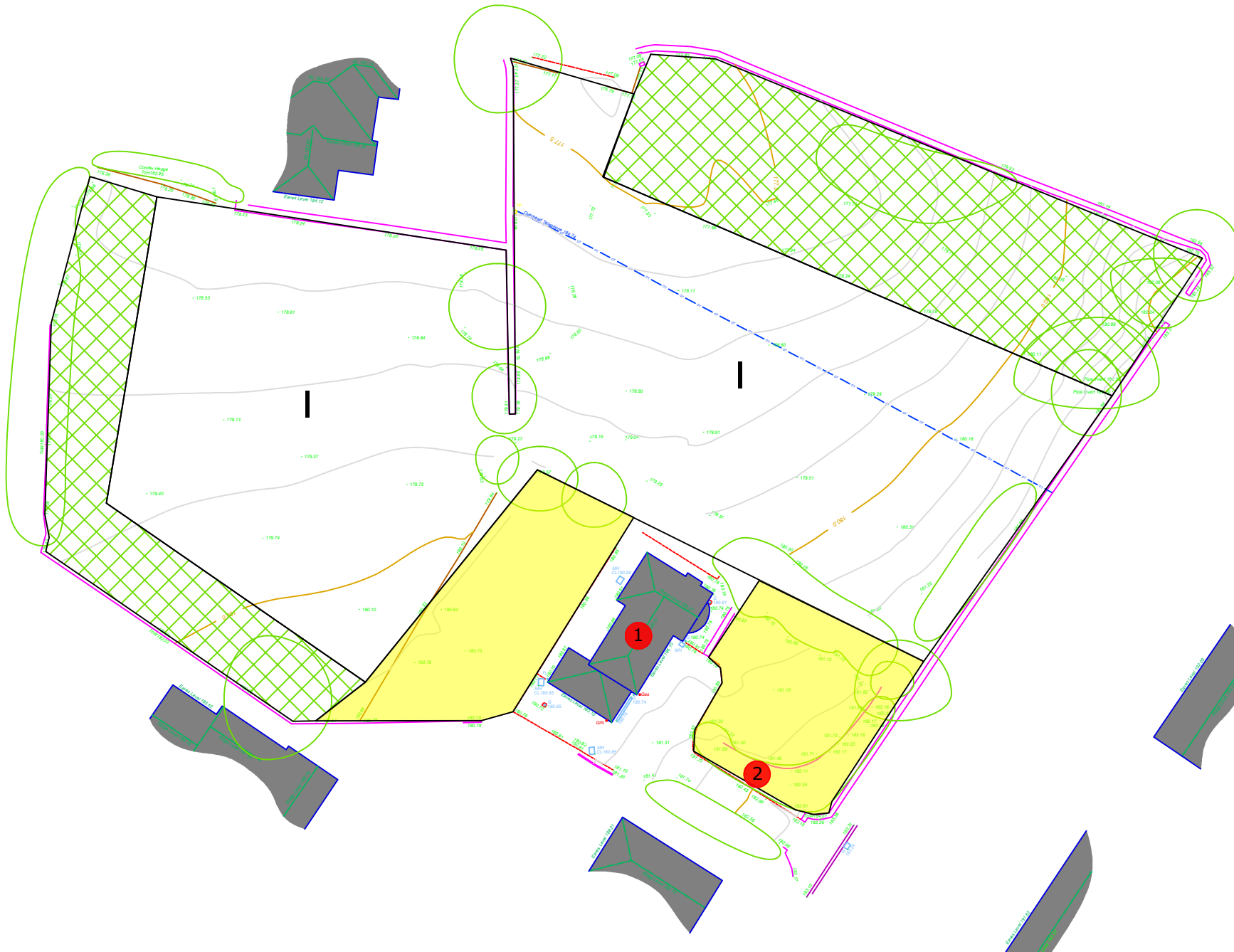
Policy

The UK Biodiversity Action Plan (UKBAP) includes a list of 943 national priority species and 56 habitats of principal importance, with all species and habitats having specific action plans defining the measures required to ensure their conservation. Although the UKBAP has since been superseded by the UK-Post 2010 Biodiversity Framework and a focus on County Biodiversity Plans, it remains a useful point of reference.

Section 41 of the Natural Environment and Rural Communities Act (NERC) 2006 required that any public bodies take into consideration any species and habitats listed in the UKBAP when implementing their duty and exercising any normal functions.

The National Planning Policy Framework (NPPF) states that planning decisions should aim to protect or enhance biodiversity and conservation interests, and where possible any development should aim to increase net gains in biodiversity.

Appendix 3: Phase 1 Habitat Plan



Habitats:

	A2.2 Scattered scrub
	A3.3 Scattered trees
	B4 Improved grassland
	J1.2 Amenity grassland
	J3.6 Buildings

Note that some colour codes vary to JNCC guidelines

Target notes:

- Building 1
- Rhododendron

Drawing title:	Phase 1 Habitat Plan
Project:	Pentlands
Drawing number:	P1H-1220-01
Drawn by:	David Watts
Date:	17/02/2020
Scale:	1:500 @ A4

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