



PRELIMINARY ECOLOGICAL APPRAISAL (PEA) AND BIODIVERSITY NET GAIN (BNG) REPORT

34 Church Road

Roby, Liverpool

Client: Mr Lee Owen

April 2026

Quality Assurance

The information which the author has prepared and provided is true, and has been prepared and provided in accordance with the CIEEM's Code of Professional Conduct. We confirm that the opinions expressed are our true and professional bona fide opinions.

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Summary

A Preliminary Ecological Appraisal (PEA) was commissioned by Mr Lee Owen in March 2026 of a site at 34 Church Road, Roby. The survey was commissioned to support a planning application for the re-development of the site for a single three-storey dwelling.

The purpose of the survey and the report is to provide an ecological baseline and an initial assessment of the potential impacts of any potential development proposals upon the nature conservation of the site.

Further to the above, a baseline Biodiversity Net-Gain (BNG) assessment (using the Statutory Defra Metric Calculation Tool) was commissioned to determine a baseline calculation for the site and inform any future development proposals to determine if a minimum 10% net-gain in biodiversity can be achieved on-site as part of the development.

Due to the scale of the proposed development and distance/disconnect from any statutory or non-statutory designated sites, no impacts upon such sites are anticipated because of the proposed development.

In view of the results of the desk and field-based assessment of the site, the site is considered to be of negligible to low ecological value currently. Habitat losses as a result of the proposed development as calculated using the Defra Statutory Metric should be compensated for via the purchasing of off-site habitat units from a habitat bank provider.

Appropriate mitigation and enhancement (achieving a minimum of 10% biodiversity net-gain) as per the BNG metric section of this report has been considered at the design stage. Retention has been implemented where possible, but onsite habitat creation and enhancement is not possible due to the residential nature of the site. Measures are being taken to avoid an overall adverse impact via purchasing of off-site habitat units.

Additional biodiversity enhancements including habitat for bats and birds and consideration to artificial lighting have also been proposed.

For the development to proceed in line with UK legislation and Planning Policy relating to biodiversity, the recommendations contained within this report will be adopted as necessary. Where appropriate measures as recommended in the report are adopted, the development will be able to proceed having considered and addressed the necessary legislation and both local and national policy relating to biodiversity conservation.

1. INTRODUCTION

A Preliminary Ecological Appraisal (PEA) was commissioned by Mr Lee Owen in March 2026 of a site at 34 Church Road, Roby. The survey was commissioned to support a planning application for the re-development of the site for a single three-storey dwelling.

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1.1. Site Description

The site is located at 34 Church Road, Roby Liverpool (Grid Reference: SJ 43301 90938) and currently consists of an area of private garden and hardstanding associated with 34 Church Road. The site is situated in an urban area comprised of residential properties and associated infrastructure. St Bartholomew's Church is located to the west of the site, across Church Road, and Roby Field to the southwest.



Figure 1. Site location and surrounding landscape character.

1.2. Proposed Development

The proposed development is for the construction of a single three-storey dwelling with associated car parking and garden (as per the Proposed Plans & Elevations drawing indicated at Appendix 6 and detailed within 2064-RA-XX-XX-DR-A-0110).

2. METHODOLOGY

2.1. Personnel & Quality Assurance

Rob Nicholson BSc (Hons) MCIEEM is a Class 2 Bat licence holder and Great Crested Newt Licence holder (Natural England), has over 17 years' relevant experience as an ecologist and is a full member of the Chartered Institute of Ecology and Environmental Management (CIEEM). Rob has also been 'named ecologist' on numerous European Protected Species Licences (EPSL) for bats for a range of species and roost types in both England and Wales.

All field work and assessment was undertaken in accordance with current best practice guidelines (CIEEM, 2016). The field survey was undertaken on the 20th March 2026 and the desk-based assessment was conducted on the 12th April (following receipt of data requested from Local Records Centres).

The report has been prepared in accordance with guidance produced by the Chartered Institute of Ecology and Environmental Management (CIEEM 2017) and the British Standard 42020:2013.

2.2. Scope of the Assessment

The following ecological features / resources were considered during the assessment:

- Statutory and Non-Statutory Designated sites;
- Habitats of principal importance for conservation of biodiversity;
- Protected species;
- Species of principal importance for conservation of biodiversity;
- Other notable species.
- Defra Statutory Biodiversity Metric (Baseline Calculations)

No consultations have taken place in relation to determining the scope of the assessment.

2.3. Desk Study

To inform the survey a desk study was conducted using available ecological information relating to ecology for the area surrounding the site. Online resources, including Multi-Agency Geographic Information Centre (MAGIC), were consulted in relation to the presence of sites and habitats of importance in the wider context.

A data request to the Merseyside Biobank, the Local Records Centre (LRC) for the area, was made for full species records and list of non-statutory designated sites (e.g., local wildlife sites) within 1km of the site (full details available upon request).

Other organisations in the county that may hold relevant ecological data were not consulted (the full extent of data can be provided upon request).

It is important to note that most species are greatly under-recorded and therefore a lack of records for a location should not be taken as an absence of the species concerned. Furthermore, a historical record for a habitat or species does not necessarily confirm its current presence.

2.4. Field Survey

UKHabs Survey

A habitat survey was conducted based on the techniques and methodologies described in the UKHabs version 2.0 Handbook (2023) and using standard nomenclature (Stace 2019). The habitats present were recorded on to a field map (Appendix 2) along with digital photographs (Appendix 3), providing supplementary information on, for example, species composition structure and management where relevant. This was extended to include notes on fauna and habitats which could potentially support protected species.

2.5. Biodiversity Net Gain Baseline Calculations

Due to the nature of the proposed development, it is understood that a biodiversity net gain assessment of the proposed works is required, as per local and national policy. Biodiversity net gain occurs in development when the project leaves the natural environment in a better state than it was prior to the project. To achieve biodiversity net gain, the developer is required to ensure that wildlife habitats are created or enhanced. It requires the development to result in a demonstrable increase in habitat value to the baseline (how the site was prior to development) or otherwise address any deficit via purchase of relevant off-site biodiversity credits. Biodiversity net gain should be demonstrated quantitatively.

To demonstrate biodiversity net gain, the value of the habitats are assessed using a recognised metric tool to calculate biodiversity units. The biodiversity losses or gains resulting from the development are then calculated by subtracting the baseline (pre-development) units from the post development units. The Statutory Biodiversity Metric (Defra, 2024a) has been used to demonstrate biodiversity net gain in a quantitative manner.

The Biodiversity Net Gain Good Practice Principles for Development (CIEEM, CIRIA, IEMA, 2016) are a set of ten principles which have been produced to provide a framework that helps improve the UK's biodiversity by contributing towards strategic priorities to conserve and enhance nature while progressing with sustainable development. To demonstrate that biodiversity net gain has been achieved in a qualitative manner for a development it would need to be shown that the development meets these ten principles which have been listed below:

- Apply the mitigation hierarchy
- Avoid losing biodiversity that cannot be offset by gains elsewhere
- Be inclusive and equitable
- Address risks
- Make a measurable net gain contribution
- Achieve the best outcomes for biodiversity
- Be additional
- Create a net gain legacy
- Optimise sustainability
- Be transparent

The biodiversity net gain assessment has been produced in accordance with the British Standard (BS) for Biodiversity – Code of practice for planning and development, BS42020:2013.

The objectives of this report are as follows:

1. *To identify the planning policy context relevant to BNG matters on the site.*
2. *To describe the baseline biodiversity value of the site based on the UK Habitat condition assessment.*
3. *To evaluate the proposed biodiversity of the site based on the agreed final landscape proposals.*

4. *To calculate the predicted change in the biodiversity unit value of the site post development and demonstrate the potential biodiversity net gain of the proposed development in a quantitative manner.*
5. *To assess if the proposed development meets the requirements of the trading rules and demonstrate how the proposed development does meet those requirements.*
6. *To demonstrate how the proposed development meets the ten principles set out in the 'Biodiversity Net Gain Good Practice Principles for Development' and has led with the mitigation hierarchy.*

The Mitigation Hierarchy

The aim of the BNG assessment is to identify, predict and evaluate potential key effects arising from the proposed development and assess them against the mitigation hierarchy. The mitigation hierarchy requires that developers first take steps to avoid and then to minimise impacts on biodiversity. Only after these steps are taken should developers look to compensate for losses that cannot be avoided. Finally, if compensation within the development footprint is not possible or does not generate the most benefits for nature conservation, the losses should be offset elsewhere. The proposals have been developed in accordance with the British Standard for 'Process for designing and implementing Biodiversity Net Gain – Specification', BS8683:2021 to reduce risk to harm of biodiversity and maximise the potential gains on the site.

Biodiversity Metric Rules

The rules set out in the table must be followed, otherwise a biodiversity net gain cannot be claimed for the project.

1. The trading rules of the biodiversity metric must be followed.
2. Biodiversity unit outputs, for each type of unit, must not be summed, traded, or converted between types. The requirement to deliver at least a 10% net gain applies to each type of unit.
3. To accurately apply the biodiversity metric formula, you must use the Statutory Biodiversity Metric calculation tool or small sites biodiversity metric tool (SSM) for small sites. The tools remove the need for a user to manually calculate the change in biodiversity value. The tool will summarise the results of the calculation and inform a user whether the biodiversity net gain objective has been met.

4. In exceptional ecological circumstances, deviation from this biodiversity metric methodology may be permitted by the relevant planning authority

Biodiversity Metric Calculation

Biodiversity metrics (units) were calculated for the site using the “Statutory Biodiversity Metric- Calculation Tool” and guidance available on the government website (Defra, 2024a, 2024b). The biodiversity metric spreadsheet is provided as an Excel file with this report.

The metric uses area and linear habitat features as a proxy measure for capturing the value and importance of biodiversity. It uses a calculation in MS Excel to allow for the importance of these features for nature: their size, ecological condition, distinctiveness and location. The metric enables assessments to be made of the baseline (pre-intervention) biodiversity value of a site in terms of ‘biodiversity units’ and calculates the projected post-development (post-intervention) biodiversity value. The metric can also be used to measure off-site biodiversity changes for a project or development and can be applied from the level of an individual field to, for example, an entire river catchment.

The calculator uses the following variable elements to determine biodiversity units, based on the information collected in the field:

Habitat type: The field survey was based on the UK Habitat (UKHabs) classification system (UK Habs, 2023).

Area (Hectares): The area has been measured based aerial imagery using Geographical Information System (GIS) based software. Measurements have been rounded up or down to achieve a minimum mapping unit (MMU). Mapping habitats at different times of year may lead to variation between where one habitat starts, and another begins as there is potential overlap between habitats (the ecotone). The actual field mapping is based on both field survey and aerial imagery in order to achieve the best representation of the areas covered by each habitat identified on-site. The areas for the post development site were taken from a pdf version of the development and planting plan (see Appendix 6 and drawing number 2064-RA-XX-XX-DR-A-0110).

Condition: The condition is a means to measure the quality of a habitat based on a series of physical characteristics and typical species of a particular habitat type. In order to aid the process, the statutory metric provides ‘condition assessment sheets (Defra, 2024c).’ Condition sheets provide a list of positive indicators for each habitat and dependent on

how many positive indicators a particular habitat meets will equate to the relevant condition for that specific habitat. In order that this process can be followed, in relation to this calculation, the number of positive indicators that are met for each habitat type are presented in the accompanying excel document for each habitat found on-site.

Strategic significance: This element is to assess the habitats on site in relation to the geographical location in which they are located. Information to determine the significance of a habitat within a specific landscape can be found in Local Nature Recovery Strategies (LNRS) as well as a variety of sources that include local plans, local biodiversity and National Character Areas. The strategic significance is based on three categories which equate to a different score, which are as follows: High – 1.15; Medium – 1.1 and Low - 1.

2.6. Assessment and Evaluation

The importance of the habitat features on site were assessed and defined in a geographical context. The frame of reference for the habitat features in terms of their geographical importance is in line with guidance set out in CIEEM, 2018.

Species are assessed, where appropriate, against best practice guidelines. As part of the evaluation, further surveys may be recommended based on the suitability of habitats to support protected species, the habitats themselves and potential impacts posed by the proposed development, and the legal protection afforded to both habitats and species.

2.7. Zone of Influence

The assessment conducted for this report has considered the area in which ecological features could be subject to significant effects from the proposed development. The area of the potential effects is often wider than the actual perimeter of the development site and is known as the Zone of Influence.

The Zone of Influence varies for different ecological features and each designated site, habitat and species has been considered in relation to their sensitivity to the proposed development.

- Special Areas of Conservation (SAC), Special Protection Areas (SPA), Sites of Special Scientific Interest (SSSI), National Nature Reserves (NNR) – 2km
- Local Nature Reserves (LNR), Local Wildlife Sites (LWS) – 1km
- Great Crested Newt (GCN) ponds - 500m

- Badger – 50m
- Other notable species/habitats – site level only

3. CONSTRAINTS

The protected species assessment provides a preliminary view of the likelihood of protected species occurring on the site. It should not be taken as providing a full and definitive survey of any protected species group.

Even where data for a particular species groups are provided in the desk study, a lack of records of a defined geographical area does not necessarily mean that there is a lack of ecological interest; the area may simply be under recorded.

The UKHab Survey does not constitute a full botanical survey or provide accurate mapping of invasive plant species, and the survey was undertaken just outside of the optimal period for botanical survey, however it is considered unlikely that this will have any significant effect upon the assessment given the habitats present.

Despite any of the above limitations, it is considered that this report reflects accurately the habitats present, their biodiversity importance, and the potential for the site to support protected and notable species.

4. Baseline ecological conditions

4.1. Designated Sites

Statutory Designated Sites

According to the Natural England online mapping resource MAGIC there are no Statutory Designated sites located within 2km of the site.

Non-statutory sites

According to data supplied by Merseyside Biobank, the following non-statutory sites overlap with the 1km search area surrounding the site:

- River Alt and M57 Corridor Nature Improvement Area (0.5km northeast of the site)
- Bowring Park Gold Course, s of M62 – Knowsley Local Wildlife Site (0.9km southwest of the site)

4.2. Habitats

The habitats identified during the UKHabs Survey are listed and described below. All habitats are marked on the UKHabs map in Appendix 2 and each habitat type is illustrated with a photograph in Appendix 3.

Desk Study

According to the Natural England online mapping resource MAGIC, there are the following mapped habitats within 1km of the site:

- Woodland (Broadleaved/Mixed Deciduous/Plantation)
- Scattered Trees/Parkland
- Semi-improved Grassland
- Amenity Grassland
- Ponds
- Scrub
- Tall Herb and Fern (Ruderal)

Field Survey

The habitats identified on site during the field survey are listed and described below. All habitats are marked on the habitat map in Appendix 2.

Developed Land, Sealed Surface – u1b

The site includes the driveway which provides access to the 34 Church Road and an area of laid concrete to the rear of 34 Church Road.

Vegetated garden – u1 (828)

Areas of short-cut, well-managed lawn are present to the front and rear of 34 Church Road. The lawn is homogenous and species poor, comprising of species typical of such habitats including Annual Meadow Grass (*Poa annua*), Perennial Rye-Grass (*Lolium perenne*), Dandelion (*Taraxacum* agg) and Daisy (*Bellis perennis*).

Individual Trees – u1 (32)

There are 10 individual trees onsite. T2, T3, T4 and T5 are a group of newly planted trees in the rear garden of 34 Church Road, consisting of Cherry (*Prunus* spp.), Rowan (*Sorbus aucuparia*) and Norway Maple (*Acer platanoides*). T7, T8, T9, T10 and T11 are small trees in the front garden, consisting of Lawson Cypress (*Chamaecyparis lawsoniana*), Holly (*Ilex aquifolia*), Horse Chestnut (*Aesculus hippocastanum*), Rowan and Sycamore (*Acer pseudoplatanus*). T12 is a medium-sized, mature European Lime (*Tilia x europaea*) located at the entrance of the driveway. A group of 3 Leyland Cypress (*Cupressus x leylandii*), G1, are present to the eastern boundary.

4.3. Species

Species likely to occur in close proximity to the site according to information provided by the local records centre (records within last 10 years) or with relevance to habitats present within or adjacent to the site (as identified during the field survey) are covered below:

Amphibians

According to Merseyside Biobank, there are no records of amphibian species within 1km of the site in the last 10 years.

According to MAGIC website, there are no records of granted European Protected Species Licences for Great Crested Newt within 500m of the site. In addition, there are

no Great Crested Newt Class Survey Licence Returns or Great Crested Newt Pond Surveys 2017 – 2019 (for District Level Licencing) records within 500m of the site.

There are two mapped waterbodies within 500m of the site. Both ponds are >470m from the site and connectivity is interrupted by the intermediary network of roads and closed boundaries associated with the residential nature of the wider area. There are no waterbodies onsite and terrestrial habitat is suboptimal for this species group.

In view of the above, the site is considered highly unlikely to support or be of any importance for this species group.

Badger

According to Merseyside Biobank, there is a single record of Badgers (*Meles meles*) within 1km of the site within the last 10 years. The record is not related to the site.

The site consists of a driveway and managed lawn associated with 34 Church Road. The site is isolated within an urban environment, likely subject to regular disturbance due to the residential nature of the site. There is no habitat within or in close proximity to the site suited for sett building.

In view of the above, the site is of no value or interest for this species.

Bats

According to Merseyside Biobank, there are nine records of two bat species within 1km of the site within the last 10 years (plus records of unconfirmed species). Species recorded include:

- Common Pipistrelle (*Pipistrellus pipistrellus*)
- Noctule (*Nyctalus noctula*)

None of the above records are related to the site.

According to MAGIC website, there are no records of granted European Protected Species Licences for bats within 1km of the site

The site has been assessed as being of 'negligible suitability' as a foraging resource and commuting route for bats, due to the paucity of suitable habitats onsite and urban location

with adjacent roads/buildings likely deterring light sensitive species. Ground Level Tree Assessments found those trees onsite to be of 'none' suitability for roosting bats, with no Potential Roosting Features (PRFs) identified.

Birds

According to Merseyside Biobank, there are no records of birds within 1km of the site in the last 10 years.

The habitats within the site are largely limited in ecological value but the small number of scattered trees within the site boundary may offer some nesting habitat for common garden bird species.

Invertebrates

There are numerous records of invertebrate species within 1km of the site according to Merseyside Biobank. None of the records are directly related to the site. There is an absence of habitat with potential to support any notable invertebrate species within or adjacent to the site.

Reptiles

According to Merseyside Biobank, there are no records of reptiles within 1km of the site within the last 10 years.

Habitat within the site is of negligible potential for reptiles and there is no uninterrupted terrestrial connectivity to other habitat with potential for reptiles in the wider area. Given the urban location of the site and absence of records for reptiles in the locality, the site is considered to have negligible potential to support common reptile species.

Other Notable Species

There are records provided by Merseyside Biobank of other notable species within 1km of the site in the past 10 years, including:

- Hedgehog (*Erinaceus europaeus*)

None of the above records are related to the site.

The site provides limited foraging habitat for Hedgehog, however, there is no habitat that provides shelter or nesting habitat within or adjacent to the site.

Non-native Invasive Species

According to Merseyside Biobank there are records of non-native invasive species within 1km of the site in the past 10 years as follows:

- Japanese Knotweed (*Reynoutria japonica*)
- Japanese Rose (*Rosa rugosa*)
- *Rhododendron ponticum*
- Three-cornered Garlic (*Allium triquetrum*)
- Grey Squirrel (*Scirurus carolinensis*)

None of the above species were recorded on site during the survey or are likely to occur on or adjacent to the site.

Notable Flora

According to data provided by Merseyside Biobank, there has been several species of notable flora recorded over the past 10 years within 1km of the site. None of the records are related to the site and none of the listed species were recorded within the site at the time of survey, or are likely to occur in a managed lawn associated with a residential garden. No other notable species of flora were recorded within the site at the time of survey or is anticipated to be present within the site.

Note: Full Local Records Centre Data is available upon request

5. PLANNING POLICY AND LEGISLATION

5.1. National Planning Policy

The National Planning Policy Framework (NPPF) December 2024, is a revised update to previous versions and is a policy framework document which provide a range of important principles. Paragraph 187 of the NPPF states that planning policies and decisions should contribute to and enhance the natural and local environment by:

“protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan)”;

“recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland”;

“minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures and incorporating features which support priority or threatened species such as swifts, bats and hedgehogs”;

Paragraph 192 goes on to state:

“To protect and enhance biodiversity and geodiversity, plans should”:

“Identify, map and safeguard components of local wildlife-rich habitats and wider ecological networks, including the hierarchy of international, national and locally designated sites of importance for biodiversity; wildlife corridors and stepping stones that connect them; and areas identified by national and local partnerships for habitat management, enhancement, restoration or creation;” and

“promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity”.

Further to this, paragraph 193 states that:

“When determining planning applications, local planning authorities should apply the following principles”:

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

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

“development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons⁷⁰ and a suitable compensation strategy exists;” and

“development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to improve biodiversity in and around developments should be integrated as part of their design, especially where this can secure measurable net gains for biodiversity or enhance public access to nature where this is appropriate”.

Finally, Paragraph 195 states that *“the presumption in favour of sustainable development does not apply where the plan or project is likely to have a significant effect on a habitats site (either alone or in combination with other plans or projects), unless an appropriate assessment has concluded that the plan or project will not adversely affect the integrity of the habitats site”.*

5.2. Local Planning Policy

Table 1 details the policies within Knowsley Local Plan Core Strategy (Adopted January 2016) which are relevant to the ecological features associated with the proposed development.

Table 1: Summary of relevant local planning policy

Policy	Description
Policy CS8	Maintenance and Enhancement of Knowsley's Existing Green Infrastructure:
Green Infrastructure	1) Knowsley's existing Green Infrastructure and its beneficial functions will be protected, managed and/or enhanced, primarily to: a) Ensure more attractive and cleaner residential neighbourhoods; b) Sustain and promote biodiversity (including designated sites, priority

	habitats and protected and endangered species) in accordance with importance and contribution to ecological networks; c) Preserve the character and function of historic environments and valued landscapes; d) Mitigate the effects of climate change and flood risk; e) Mitigate air, water and noise pollution; f) Provide local opportunities for sport, recreation and allotments; and g) Provide sustainable transport linkages between residential neighbourhoods and easy access to employment and services. 2) To achieve the above, planning powers and other interventions will be used to: a) Protect and enhance strategically important areas of greenspace; b) Ensure an appropriate quantity and improved quality of locally important open spaces, including outdoor sports provision (and ancillary facilities of appropriate scale); c) Promote effective movement of wildlife through a network of strategic green links, by protecting, maintaining and improving existing and new open spaces, water courses (including water quality) and biodiversity assets; d) Protect, enhance and/or introduce biodiversity into existing areas of Green Infrastructure, through integration into the design of new development and public realm projects; e) Improve accessibility for communities to greenspace offering leisure and recreation opportunities; f) Protect and where possible improve green paths and cycleways linking residential areas, existing strategic areas of greenspace, employment locations, local community services and leisure facilities; g) Work in partnership with other districts and relevant bodies at a landscape scale to minimise the impact of development upon Knowsley's existing biodiversity and geological assets, and sustain the protection afforded to internationally important sites, including supporting habitat, for biodiversity outside of the borough; and h) Deliver new integrated and functional Green Infrastructure that helps to mitigate and adapt to climate change, such as sustainable drainage systems, carbon capture and storage, soft landscaping and green roofs. Strategic Green Links 4) Knowsley's strategically important green links are: a) Alt Corridor (Huyton) – stretching from Huyton Village through South Alt Park, Alt Park, Alt Meadows and into Stockbridge Village; b) Valley Corridor (Kirkby) – stretching through Valley Meadow, St. Chad's Park, Millbrook Park, Millennium Green and Mill Dam; c) Whiston to Cronton Corridor – stretching through Cronton, Stadt Moers Park and Whiston Greenway; d) Halewood Triangle – Halewood Park linkage with the Trans-Pennine Trail and to the national cycle network; e) M57 Green Belt Corridor; and f) Knowsley Hall Estate – including Knowsley Safari Park and Local Wildlife Sites. Approach to Green Infrastructure and New Development 6) New development must
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	be served by Green Infrastructure to meet the needs of residents and the local environment, in a manner which will: a) Contribute to the creation of a high-quality residential environment; b) Provide access to high quality open space for leisure and recreational purposes; c) Seek to protect, maintain and where possible enhance biodiversity within and around new developments according to their designation and significance to provide space for nature; and d) Provide adequate mitigation and/or, as a last resort, compensation for Green Infrastructure or biodiversity loss, in circumstances where harm resulting from the development is otherwise unavoidable.
Policy CS2 Development Principles	Principle 4: Recognise environmental limits, protect and enhance environmental assets, enhance local character and promote quality of place by: (h) Maintaining or enhancing the quantity and quality of biodiversity and habitats, including potential impacts on nationally and internationally important sites for biodiversity;

Local Nature Recovery Strategy (LNRS) – Liverpool City Region / Merseyside

The Liverpool City Region Local Nature Recovery Strategy (LNRS) sets out biodiversity priorities and a Local Habitat Map identifying core local nature sites and opportunity areas for habitat creation/restoration. The site was screened against the Local Habitat Map, and the outcome has informed the Statutory Biodiversity Metric ‘strategic significance’ score used in the BNG calculation (see Section 6.2).

5.3. Relevant Legislation

National Legislation

The Wildlife and Countryside Act 1981

The Wildlife and Countryside Act 1981 (as amended) consolidates and amends existing national legislation to implement the Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention) and Council Directive 79/409/EEC on the conservation of wild birds (Birds Directive) in Great Britain.

Natural Environment & Rural Communities Act 2006

Section 40 of the NERC Act 2006 places a duty upon all local authorities in England to promote and enhance biodiversity in all of their functions. Section 41 lists habitats and species of principal importance to the conservation of biodiversity. Fifty-six habitats and 943 species of Principal Importance for Conservation are included on the Section 41 list and draws upon the UK BAP List of Priority Species and Habitats.

The Conservation of Habitats and Species (Amendment) Regulations 2017

The Conservation of Habitats and Species Regulations 2017 transpose Council Directive 92/43/EEC, on the conservation of natural habitats and of wild fauna and flora (EC Habitats Directive), into national law and transpose elements of the EU Wild Birds Directive in England and Wales. The Regulations provide for the designation and protection of 'European sites' (Special Areas of Conservation (SACs) and Special Protection Areas (SPAs)), the protection of 'European protected species', and the adaptation of planning and other controls for the protection of European sites.

The Environment Act 2021

Paragraph 2 (3) of Schedule 14 of The Environment Act 2021 makes it mandatory (as of January 2024) for all new developments (with some limited exceptions) to achieve a biodiversity net gain (BNG) of at least 10% by the time the development is completed compared to the pre-development biodiversity value of the onsite habitat. This percentage may be amended in the future by the Secretary of State. Please note that some Local Policies stipulate a higher target than this.

The Act allows three methods for securing biodiversity net gains:

1. enhancement of the biodiversity of land to which the planning permission relates;
2. the allocation of registered offsite biodiversity gain to any development for which the planning permission is granted; and
3. the purchase of biodiversity credits for any such development.

A biodiversity gain statement must set out whether, and if so how, the biodiversity gain objective applies in relation to development where the onsite habitat is irreplaceable, how the development will minimise any adverse effects to the onsite habitat, and what evidence must be produced to show how the biodiversity net gain has been met upon completion of the development.

Biodiversity gains will need to be maintained for at least 30 years after the development is completed.

6. ECOLOGICAL EVALUATION, AND RECOMMENDATIONS FOR MITIGATION, AND FURTHER SURVEY

6.1. Designated Sites

Due to the scale of the proposed development and distance/disconnect from any statutory or non-statutory designated sites, no impacts upon such sites are anticipated because of the proposed development.

6.2. Habitats

Habitats present on or adjacent to the site include the following:

- Developed Land, Sealed Surface – u1b
- Vegetated garden – u1 (828)
- Individual Trees – u1 (32)

The site is not situated within a core local nature site or an opportunity area as identified on the Liverpool City Region Local Nature Recovery Strategy (LNRS) Local Habitat Map. Accordingly, for the purposes of the Statutory Biodiversity Metric, the habitats within the site have been assigned 'low' strategic significance.

Developed Land, Sealed Surface – u1b

The existing driveway will be retained and expanded to provide access and parking, and a dwelling and terrace will occupy the existing laid concrete area.

Vegetated garden – u1 (828)

The majority of the site is comprised of vegetated garden, made up of a short-cut, well-managed lawn. The lawn area will be partially retained to provide private garden to the front and rear of the proposed dwelling. A small area will be developed due to the footprint of the proposed dwelling.

Individual Trees – u1 (32)

T7 and T8, a small Hybrid-Holly and a small Lawson Cypress tree, are to be removed to facilitate the proposed dwelling. All remaining trees are to be retained (T2-T5, T9-T11 and G1).

6.3. Biodiversity Metric Baseline Calculation

Baseline

Using the Defra Statutory Biodiversity Metric, it was possible to calculate the existing biodiversity value in terms of “Biodiversity Units” of the site.

The Metric provides a score of **0.41 baseline habitat units** associated with habitat present within the site currently.

Recommendations have been made at an early stage to retain small areas of existing habitat within the design of the proposed development. However, onsite habitat creation and enhancement is not possible due to the residential nature of the site and so purchasing of off-site habitat units from a habitat bank provider will be required to deliver appropriate mitigation and enhancement (achieving a minimum of 10% biodiversity net-gain).

Based on the score of **0.41 baseline habitat units** and development proposals for the site, breakdown of habitat retention that could be feasibly achieved is as follows:

Existing Habitat Retention:

- **Retention of small, poor condition trees T2-T5, T9-T11 and G1, and the medium-sized, moderate condition T12 within the site boundary (equating to 0.0326ha and 0.0163 ha).** These trees can be retained within the front and rear vegetated garden of the proposed dwelling.
- **Retention of 0.223ha of vegetated garden.** Areas of lawn within the existing garden can be incorporated into the front and rear vegetated garden of the proposed dwelling.

Note: Vegetated garden associated with private residential gardens is included in BNG calculations as per current local mandatory guidance (MEAS, 2023) which states that “Only habitats outside of privately owned plots are to be included within the post-development sheets of the metric. Any planting, including individual trees and hedgerows, within private gardens must be inputted as the habitat type ‘Urban – Vegetated garden.’

Post-development Calculation (On-site Habitats)

The new on-site area habitats are based on the development plan and proposed planting plan drawing 2064-RA-XX-XX-DR-A-0110 and indicative plan at Appendix 6, and are detailed within the accompanying metric document. A summary of the results is provided below in Figure 2:

34 Church Road, Roby

Return to results menu

Headline Results

Scroll down for final results ▲

On-site baseline	Habitat units	0.41	
	Hedgerow units	0.00	
	Watercourse units	0.00	
On-site post-intervention (Including habitat retention, creation & enhancement)	Habitat units	0.34	
	Hedgerow units	0.00	
	Watercourse units	0.00	
On-site net change (units & percentage)	Habitat units	-0.07	-16.98%
	Hedgerow units	0.00	0.00%
	Watercourse units	0.00	0.00%
Off-site baseline	Habitat units	0.00	
	Hedgerow units	0.00	
	Watercourse units	0.00	
Off-site post-intervention (Including habitat retention, creation & enhancement)	Habitat units	0.00	
	Hedgerow units	0.00	
	Watercourse units	0.00	
Off-site net change (units & percentage)	Habitat units	0.00	0.00%
	Hedgerow units	0.00	0.00%
	Watercourse units	0.00	0.00%
Combined net unit change (Including all on-site & off-site habitat retention, creation & enhancement)	Habitat units	-0.07	
	Hedgerow units	0.00	
	Watercourse units	0.00	
Spatial risk multiplier (SRM) deductions	Habitat units	0.00	
	Hedgerow units	0.00	
	Watercourse units	0.00	

FINAL RESULTS

Total net unit change (Including all on-site & off-site habitat retention, creation & enhancement)	Habitat units	-0.07	
	Hedgerow units	0.00	
	Watercourse units	0.00	
Total net % change (Including all on-site & off-site habitat retention, creation & enhancement)	Habitat units	-16.98%	Total net gain achieved is less than target set ▲
	Hedgerow units	0.00%	
	Watercourse units	0.00%	
Trading rules satisfied?	No - Check Trading Summaries ▲		

Unit Type	Target	Baseline Units	Units Required	Unit Deficit
Habitat units	10.00%	0.41	0.46	0.11
Hedgerow units	10.00%	0.00	0.00	0.00
Watercourse units	10.00%	0.00	0.00	0.00

No additional hedgerow units required to meet target ✓
No additional watercourse units required to meet target ✓

Input errors/rule breaks present in metric ▲

Figure 3. Statutory Biodiversity Metric 'post-development' values based on achievable landscape proposals.

In view of the above, the post-development metric calculation results in a net loss of 16.98% habitat units. There are no linear or watercourse habitat units to consider.

As +10% net-gain is not viable on-site, **off-site provision** will be required in order to satisfy the Biodiversity Net-gain requirement for the development. Off-site habitat units should be purchased from a habitat bank provider.

6.4. Species and Species Groups

Results of the desk study and field survey are used to determine protected species that may be of relevance to the site and the proposed development. Those that are not considered relevant to the site following the above assessment are not discussed specifically any further.

Bats

The site has been assessed as being of 'negligible - low suitability' as a foraging and roosting resource, and as a commuting route for bats due to the urban location and adjacent roads/buildings likely deterring light sensitive species.

In order to enhance the site for bats in the long-term, it is recommended consideration is given to the installation of bat boxes, into the proposed building. Boxes such as the Habibat 001 should be considered. Bat Boxes would need to be installed at a height of >4m with a southerly aspect. This is to enhance the site by providing potential roost features for bats in the long term.

Any proposed external lighting scheme associated with the future development of the site should be designed to ensure that it is sensitive to the presence of wildlife, including bats foraging and commuting through the site. Any lighting proposals should include low-level lighting or other site appropriate solutions to prevent artificial light levels from deterring bats from the site (please see *Bats and Artificial Lighting at Night' ILP Guidance Note (2023)* for further information).

Birds

The site currently contains only limited foraging and nesting habitat for birds.

It is recommended that any clearance of trees within the site is undertaken outside of the nesting bird season (taken to be March – August inclusive). Where this is not possible a nesting bird check should be undertaken by a suitably qualified ecologist prior to vegetation clearance commencing, though it should be noted that where an active nest is identified this would result in delays to works in the vicinity of the nest and there is a high likelihood of multiple nests being present across the site during the breeding season.

It is recommended that to enhance the biodiversity value of the site integrated bird boxes should be incorporated into the site. In particular, integrated nest boxes / bricks designed

to accommodate House Sparrow (*Passer domesticus*) and Swift (*Apus apus*) would be particularly beneficial. These should be integrated into the proposed new building.

Tree and fruit bearing shrub planting within vegetated garden areas could also enhance both foraging and nesting opportunities for birds in the long-term.

Other Species

Though the site is not considered to be of value for any other protected species, the site contains habitat suitable for supporting Hedgehog.

Tree and scrub planting within the site boundaries of the vegetated garden areas could benefit Hedgehogs. Where solid fencing or walls are to be installed at site boundaries, installation of 'Hedgehog highways' and nest boxes should be considered within the site to encourage and protect this species.

7. Conclusions

In view of the results of the desk and field-based assessment of the site, the site is considered to be of negligible - low ecological value currently. Habitat losses as a result of the proposed development as calculated using the Defra Statutory Metric should be compensated for via the purchasing of off-site habitat units from a habitat bank provider.

Appropriate mitigation and enhancement (achieving a minimum of 10% biodiversity net-gain) as per the BNG metric section of this report has been considered at the design stage. Retention has been implemented where possible, but onsite habitat creation and enhancement is not possible due to the residential nature of the site. Measures are being taken to avoid an overall adverse impact via purchasing of off-site habitat units.

Additional biodiversity enhancements including habitat for bats and birds and consideration to artificial lighting have also been proposed.

For the development to proceed in line with UK legislation and Planning Policy relating to biodiversity, the recommendations contained within this report will be adopted as necessary.

Where appropriate measures as recommended in the report are adopted, the development will be able to proceed having considered and addressed the necessary legislation and both local and national policy relating to biodiversity conservation.

7. REFERENCES

British Standards Institution (2013) *BS 42020:2013 Biodiversity – Code of Practice for Planning and Development*. BSI Standards Limited.

Chartered Institute of Ecology and Environmental Management (2017) *Guidelines for Preliminary Ecological Appraisal*. CIEEM.

Chartered Institute of Ecology and Environmental Management (2015) *Guidelines for Ecological Report Writing*. CIEEM.

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Defra (2024c) *Statutory Biodiversity Metric: Condition Assessment Sheets*. Department for Environment, Food & Rural Affairs.

Institution of Lighting Professionals & Bat Conservation Trust (2023) *Guidance Note 08/23: Bats and Artificial Lighting at Night*. ILP.

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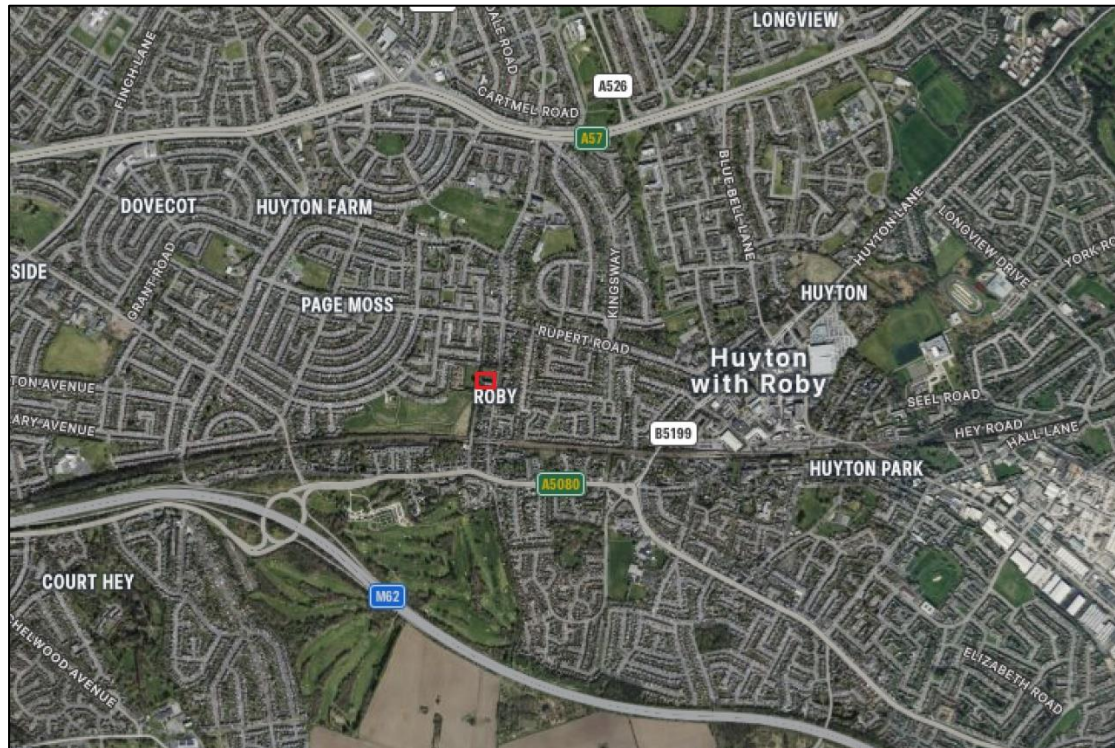
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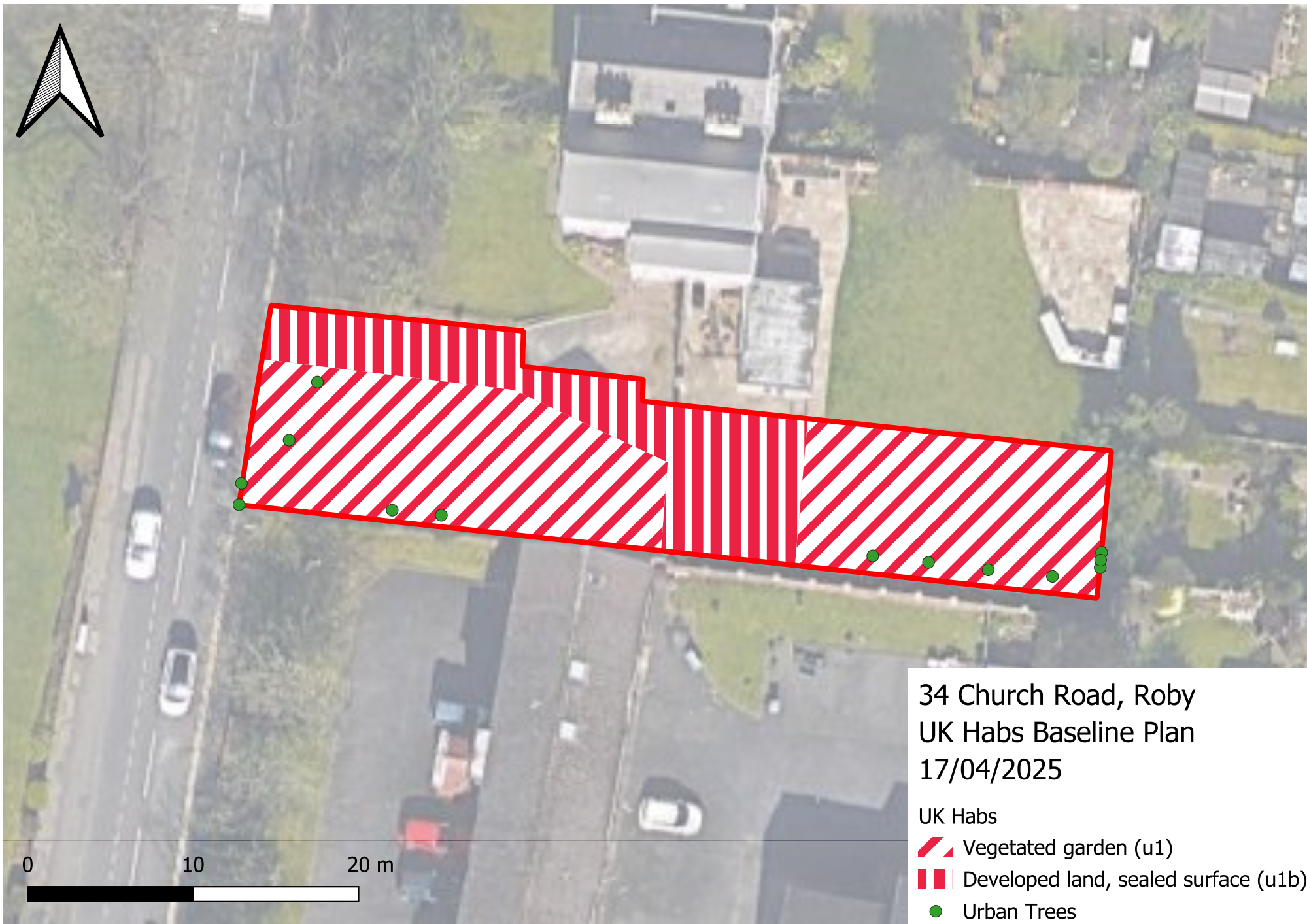
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APPENDIX 1 SITE LOCATION PLAN



APPENDIX 2: UKHABS PLANS

SEE NEXT PAGE



34 Church Road, Roby
UK Habs Baseline Plan
17/04/2025

UK Habs

-  Vegetated garden (u1)
-  Developed land, sealed surface (u1b)
-  Urban Trees

APPENDIX 3: SITE PHOTOS



Photo 1. Existing access to 34 Church Road flanked by managed lawn forming the front area of vegetated garden



Photo 2. Urban trees to be removed present in the front vegetated garden



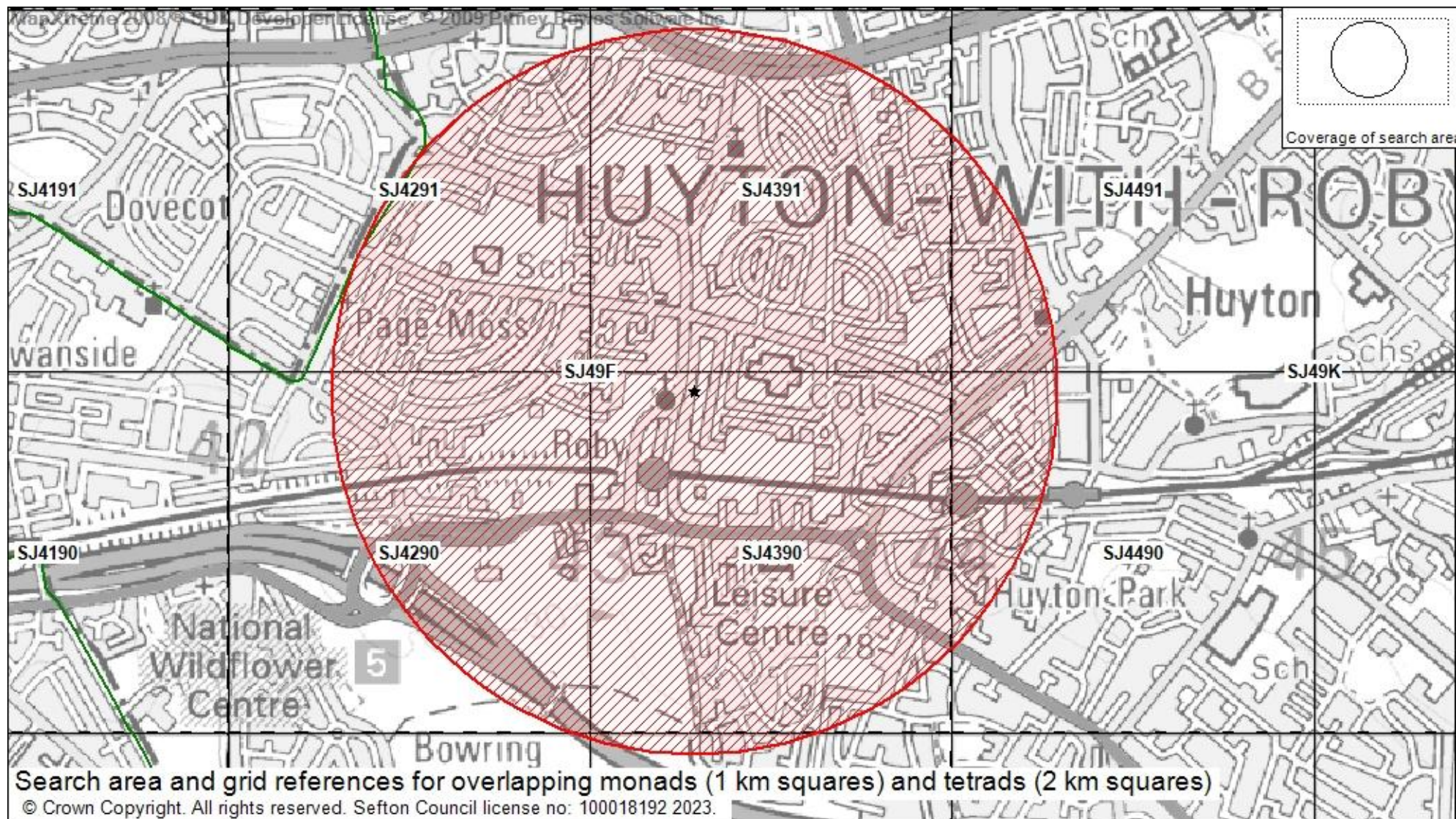
Photo 3. Laid concrete to the rear of 34 Church Road

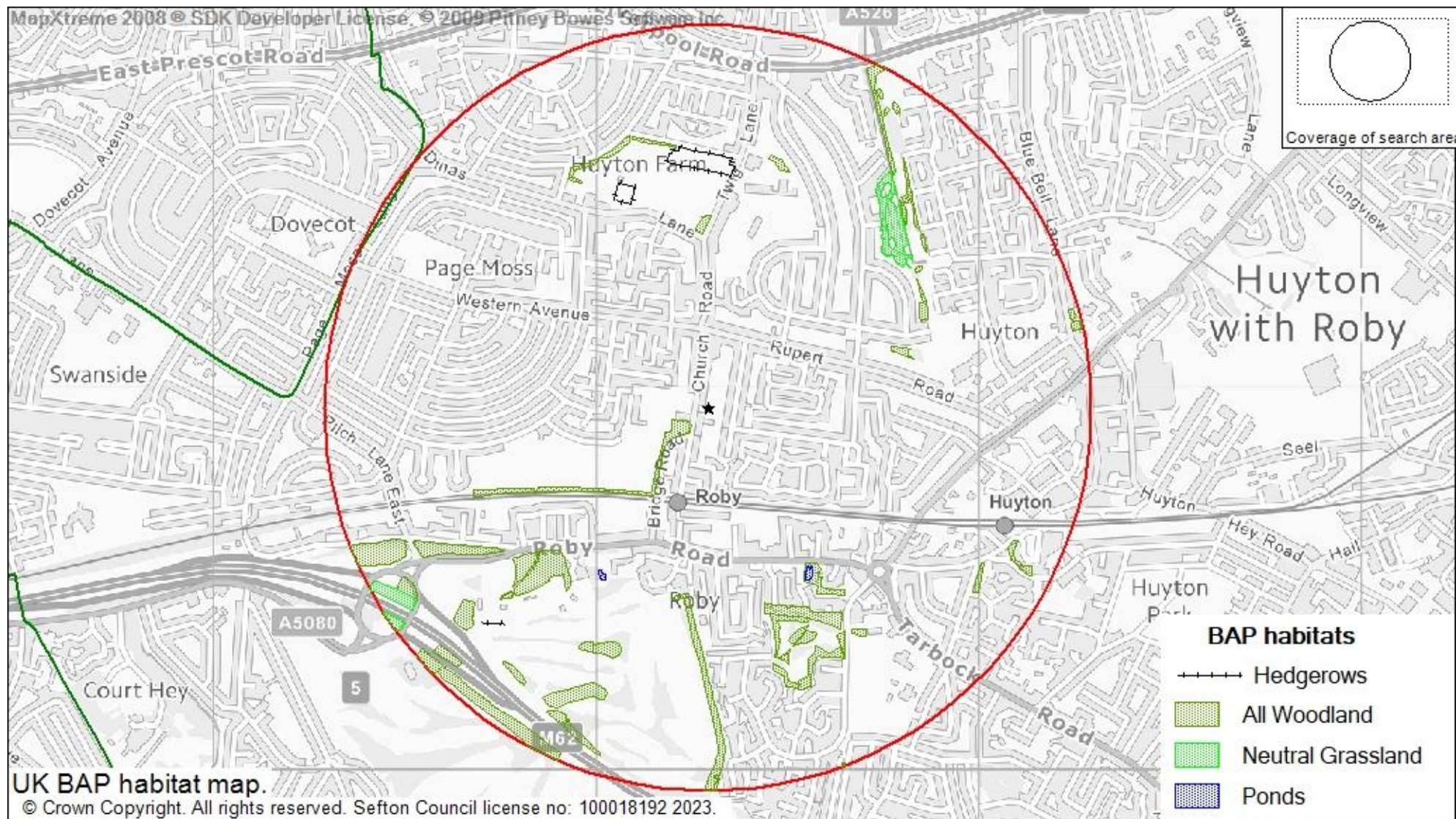


Photo 4. Managed lawn forming the vegetated garden to the rear of 34 Church Road

APPENDIX 4: LOCAL RECORD CENTRE DATA.

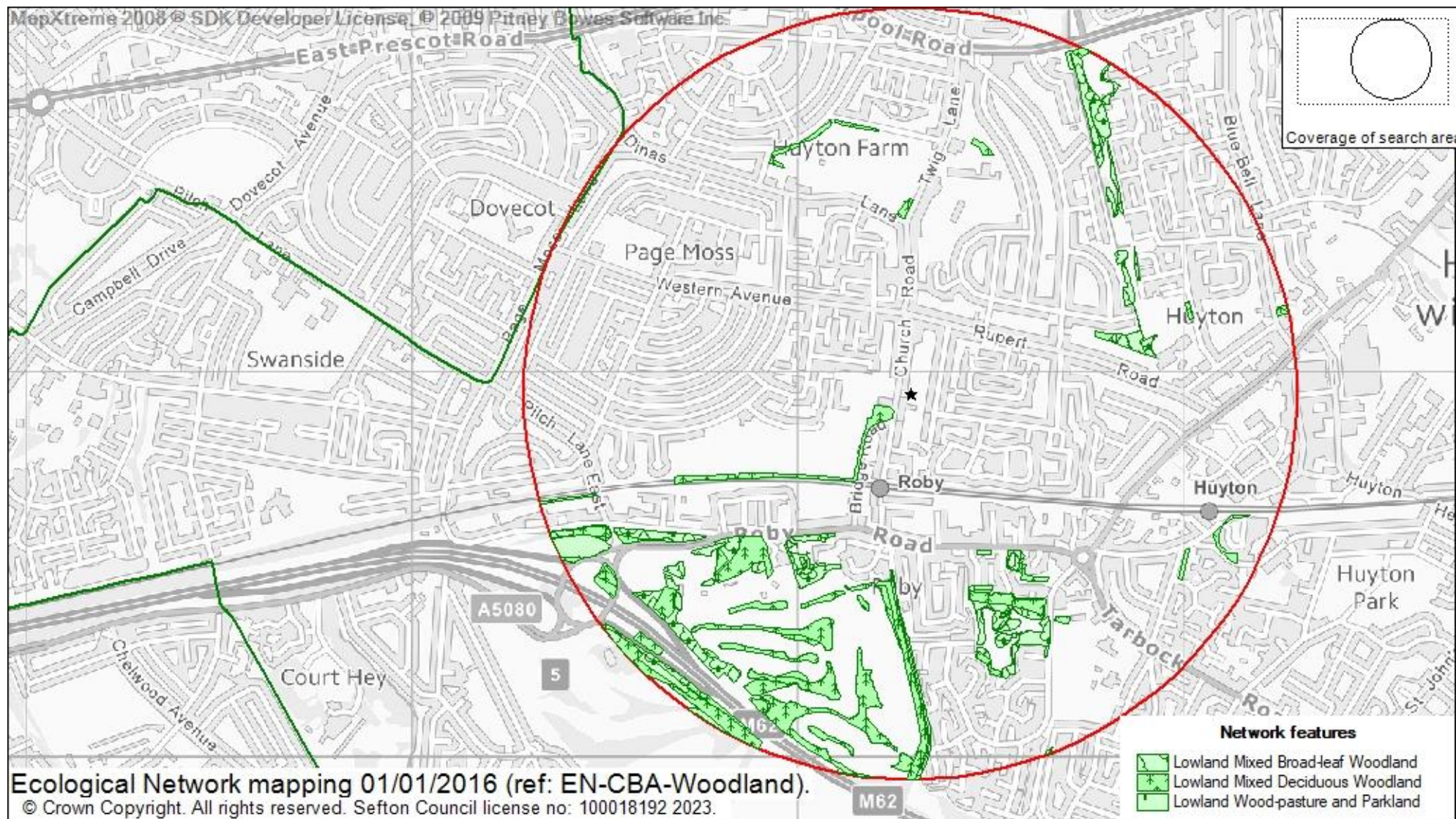
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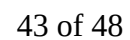






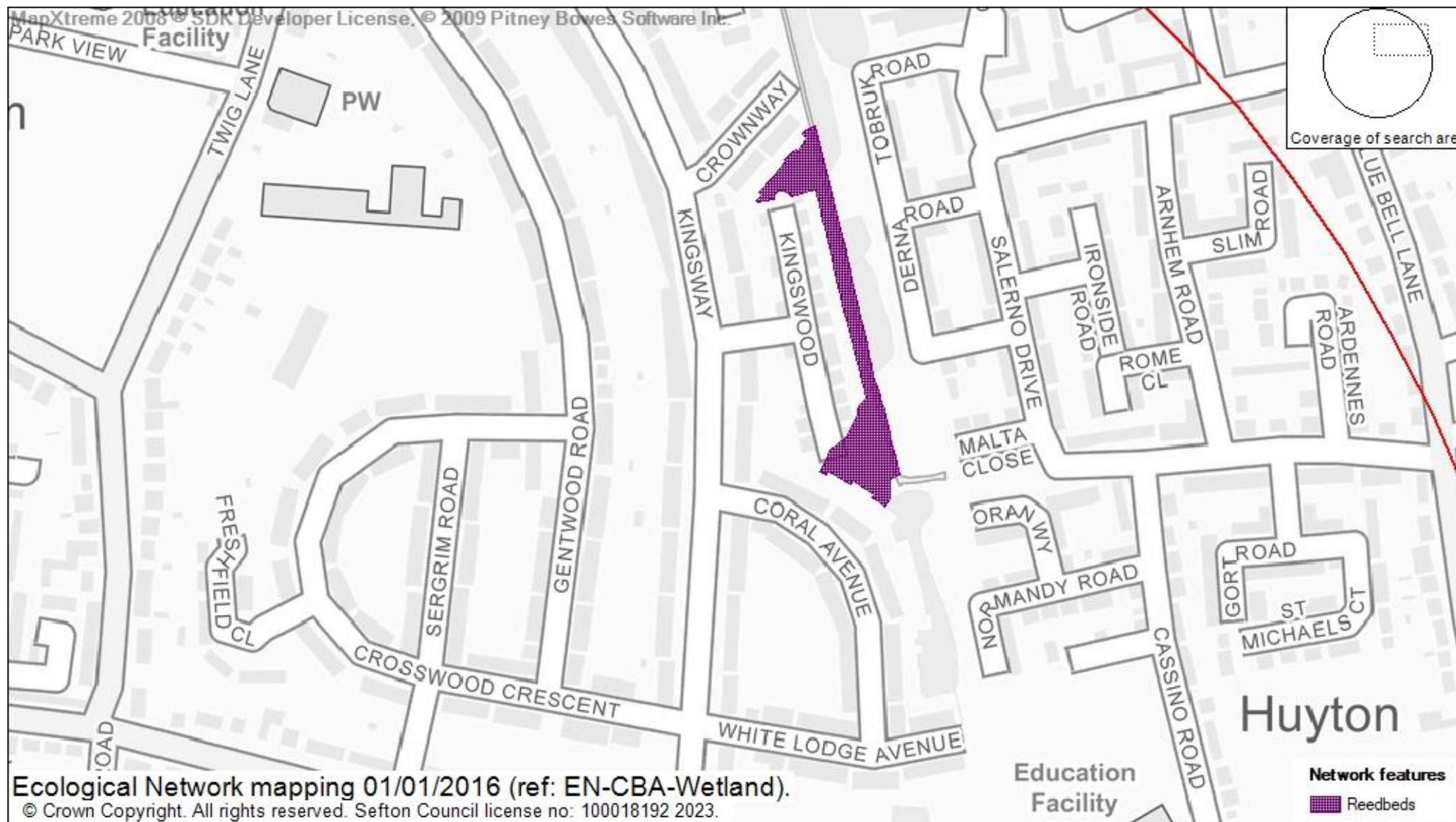


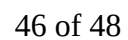


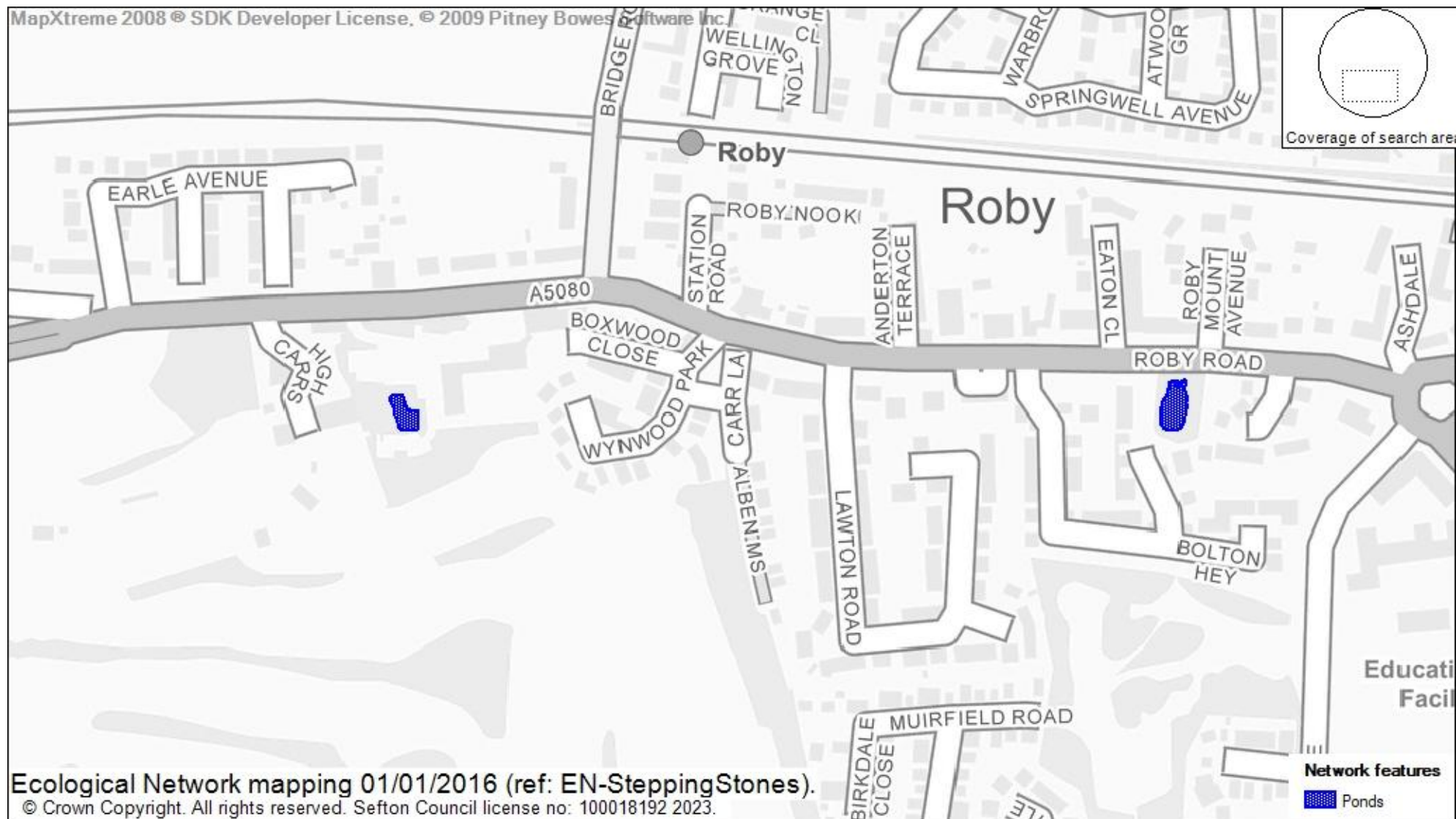


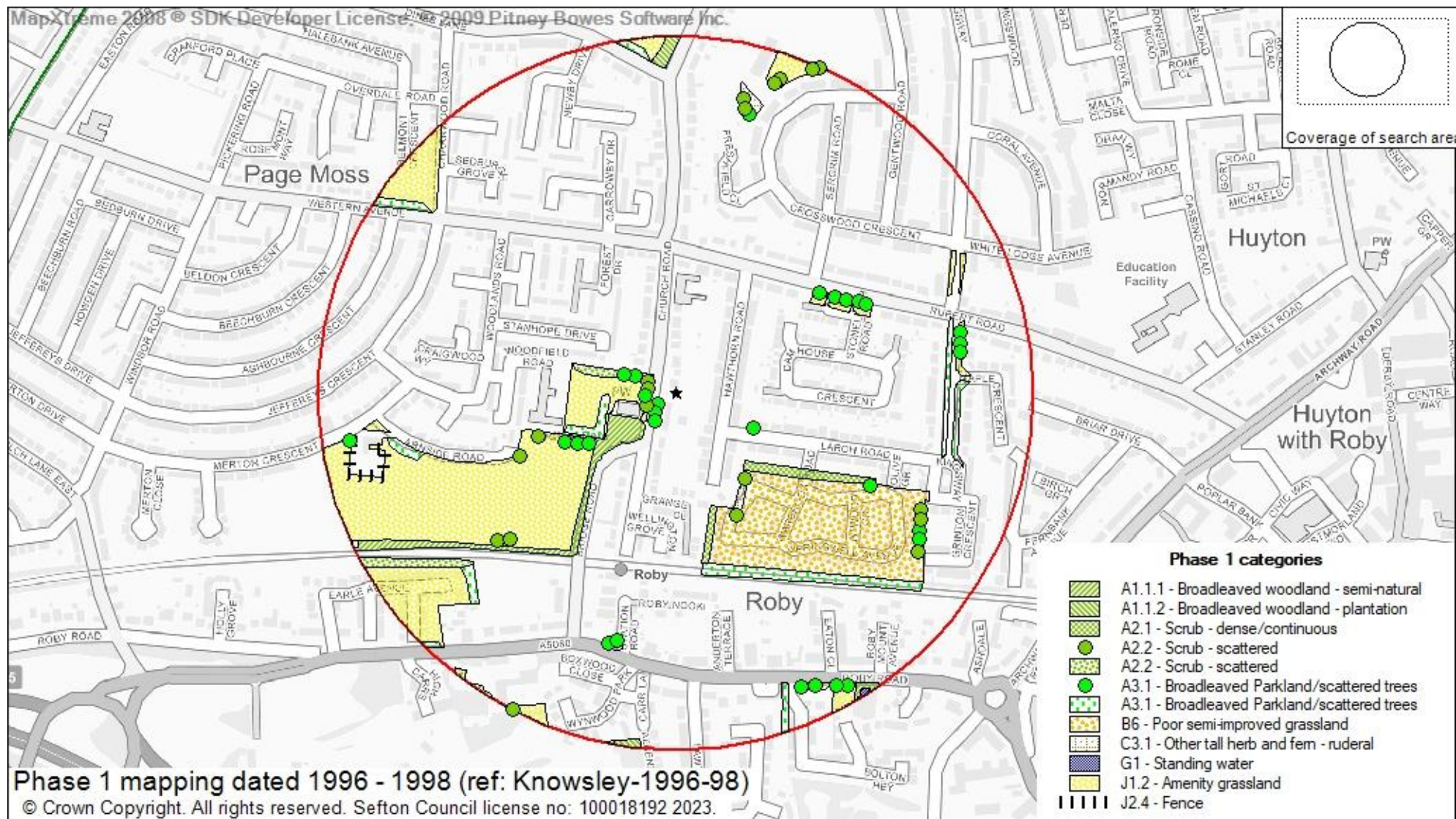
**The Local Environmental Records Centre
for North Merseyside**

Merseyside BioBank,
Estate Barn, Court Hey Park
Roby Road, Liverpool
L16 3NA
Tel: 0151 737 4150
Info@MerseysideBiobank.org.uk









APPENDIX 5: CONDITION ASSESSMENT SHEETS

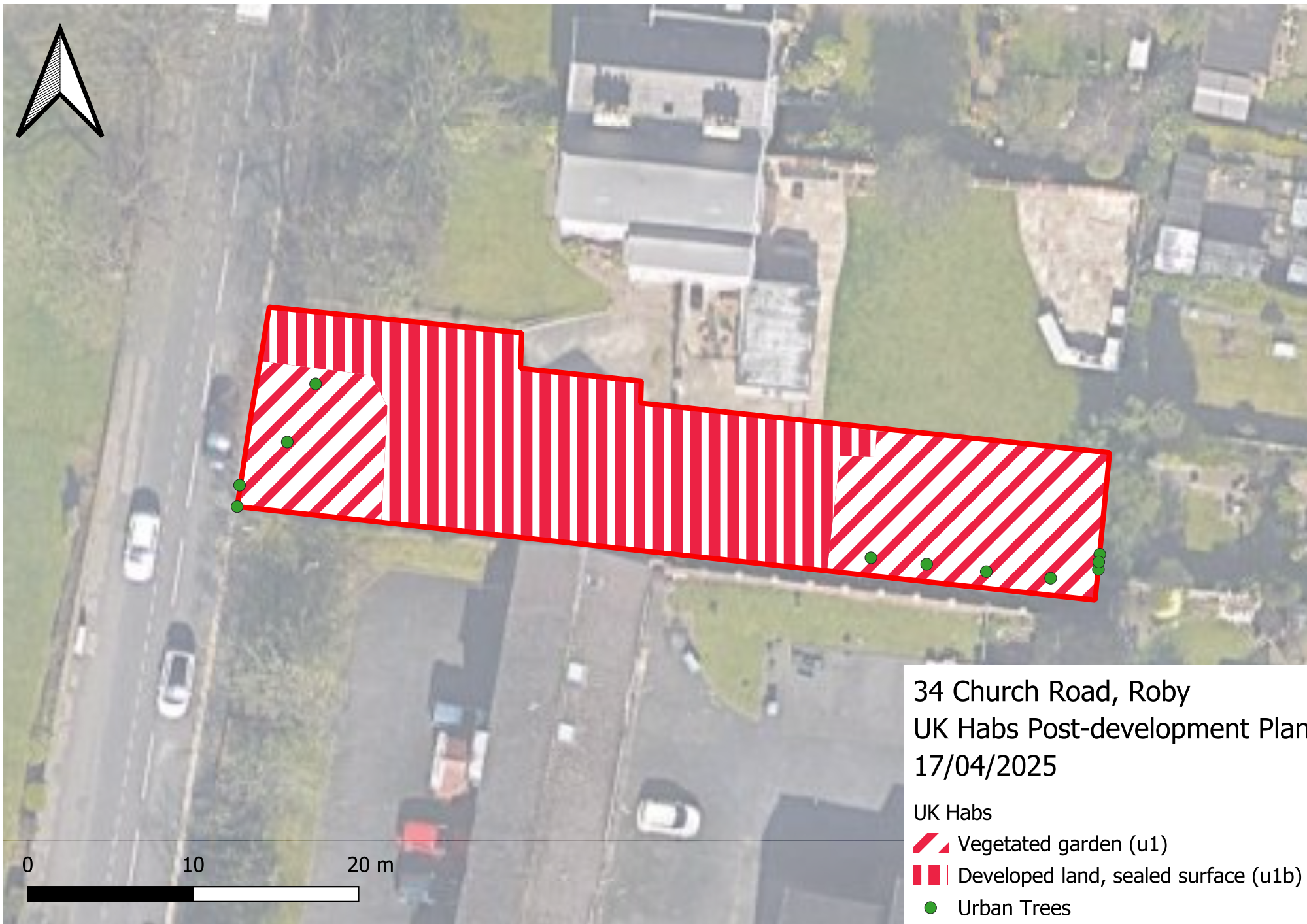
PRE-DEVELOPMENT

1. Urban Trees

On-site or off-site, site name and location		On site, 34 Church Road, Roby		Survey date and Surveyor name		20th March 2026, R.Nicholson									
				Survey reference (if relating to a wider survey)		PEA									
Limitations (if applicable)		N/A		Habitat parcel reference											
				G1	T2	T3	T4	T5	T7 & 8	T9-T11	T12				
				Grid reference											
Condition Assessment Criteria														Notes (such as justification)	
				Criterion passed (Yes or No)											
A	The tree is a native species (or at least 70% within the block are native species).	N	Y	Y	Y	Y	N	Y	Y					Mix of native and non-native/cultivar	
B	The tree canopy is predominantly continuous, with gaps in canopy cover making up <10% of total area and no individual gap being >5 m wide (individual trees automatically pass this criterion).	N	N	N	N	N	N	Y	Y					Not predominantly a continuous canopy except for T9-12	
C	The tree is mature (or more than 50% within the block are mature) ¹ .	Y	N	N	N	N	N	N	Y					Mix of mature, semi-mature and immature saplings.	
D	There is little or no evidence of an adverse impact on tree health by human activities (such as vandalism, herbicide or detrimental agricultural activity). And there is no current regular pruning regime, so the trees retain >75% of expected canopy for their age range and height.	N	N	N	N	N	N	N	N					Garden setting with regular pruning.	
E	Natural ecological niches for vertebrates and invertebrates are present, such as presence of deadwood, cavities, ivy or loose bark.	N	N	N	N	N	N	N	N					Trees are either immature or managed and lack features	
F	More than 20% of the tree canopy area is oversailing vegetation beneath.	N	Y	Y	Y	Y	Y	N	Y					No veg beneath certain individuals	
Number of criteria passed		2	2	2	2	2	2	2	4						
Condition Assessment Result (out of 6 criteria)	Condition Assessment Score	Score Achieved x/√													
Passes 5 or 6 criteria	Good (3)														
Passes 3 or 4 criteria	Moderate (2)								y						
Passes 2 or fewer criteria	Poor (1)	y	y	y	y	y	y	y							
Note that 'Fairly Good and Fairly Poor' condition categories are not available for this broad habitat type.															
Suggested enhancement interventions to improve condition score²															
N/A															

APPENDIX 6: PROPOSED SITE LAYOUT

SEE NEXT PAGE



34 Church Road, Roby
UK Habs Post-development Plan
17/04/2025

UK Habs

-  Vegetated garden (u1)
-  Developed land, sealed surface (u1b)
-  Urban Trees