The Granary, Warthill, York

Preliminary Ecological Appraisal

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November 2021

Report to:	**Philip Hodgson**
Report Title:	**The Granary, Warthill, York** **Preliminary Ecological Appraisal**
Version:	**V0.1**
Issue Date:	**November 2021**
Report Ref:	**TGPEA1**

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Version	Author	Description	Date
V0.1	NC	Initial draft.	12/11/2021
V0.2	RC	QA1	13/11/2021
V0.3	NC	Amendments to QA1	14/11/2021

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Executive Summary

Eps Ltd was commissioned by Philip Hodgson in November 2021 to undertake a Preliminary Ecological Appraisal (PEA) of land at The Granary, Warthill, York, hereafter termed 'the Site'.

The Site is comprised of 1.2 hectares (ha) split into two distinct parcels; a residential plot with associated hard and soft landscaping and a pasture field currently being grazed by sheep. The Site is located at Old Carlton Farm, off Common Lane, Warthill, approximately 8 km to the north east of York.

The application is for a single residential home within the footprint of the existing property.

All habitats inside the Site are considered to be of importance to nature conservation at the Site or Local level only.

A data search shows there are no statutory designated site within 2 km of Site. The nearest statutory site is Strensall Common SSSI, approximately 3 km to the north west, however this will not be impacted.

The PEA has highlighted the potential for commuting and foraging bats, as well as birds and hedgehogs at a local level.

If works do not commence within 12 months of this report a further survey should be undertaken to confirm the site conditions have not changed.

If there is potential for active birds' nests to be destroyed/disturbed during vegetation removal. As a precautionary measure, it is recommended that any works to remove trees or shrubs should be undertaken outside of the bird breeding season, i.e. between October and February (inclusive). If it is not possible to schedule scrub or tree removal works for these months, a nesting bird check should be undertaken by a suitably qualified ecologist no more than 48 hours prior to vegetation removal commencing.

Both bat and bird boxes should be incorporated into the design in accordance with the net biodiversity gain principle as part of the National Planning Policy Framework (2019).

1. Introduction

1.1 Background

1.1.1 Eps Limited was commissioned in November 2021 by Philip Hodgson to undertake a Preliminary Ecological Appraisal (PEA) for a 1.2 hectare (ha) area of land situated at The Granary, Warthill (central OS Grid Reference: SE 67030 56616), hereafter referred to as 'the Site'.

1.1.2 The Site consists of two distinct parcels; a residential plot with associated hard and soft landscaping and a pasture field currently being grazed by sheep.

1.1.3 The proposals are for a single residential home within the footprint of the existing property.

1.1.4 The PEA is required prior to submission of a planning application for development of the Site. The purpose of the PEA was to record and map habitats and assess the potential for the Site to support (or contain) species, which are protected under UK and/or European nature conservation legislation, namely the Wildlife & Countryside Act 1981 (as amended), the Conservation of Habitats and Species Regulations 2017 and the Natural Environment and Rural Communities (NERC) Act 2006. For full details of legislation relating to those habitats and species discussed within this report visit http://www.legislation.gov.uk.

1.1.5 This report details the findings of a data consultation and extended Phase 1 habitat survey carried out during November 2021. Methodologies employed during the surveys are described along with all survey findings, an evaluation and assessment of their ecological value and any requirement for any further survey work and/or mitigation/enhancement as required.

2. Methodology

2.1 Data Consultation

2.1.1 The Multi-Agency Geographic Information for the Countryside (MAGIC) website (http://magic.defra.gov.uk) was consulted for information on statutory designated sites of nature conservation interest, and the presence of great crested newt *Triturus cristatus* (GCN), and bat European Protected Species (EPS) mitigation licences within 2 km of the Site.

2.1.2 Information obtained from MAGIC is included within the report where appropriate.

2.2 Extended Phase 1 Habitat Survey

2.2.1 The Site was surveyed on 12th November 2021 by Eps Principal Ecologist Nick Carter, MCIEEM using the extended Phase 1 habitat survey methodology (JNCC, 2010). This survey method aims to characterise habitats and communities present and is not intended to provide a complete list of all plants occurring across the Site.

2.2.2 Habitats and vegetation types present inside the Site were recorded on to a field map and notable, rare, or scarce plant species, including other features of ecological interest, were highlighted and marked using Target Notes (TN). Evidence of protected species or species of nature conservation importance were also recorded where present at the time of survey. Survey findings and TN are detailed in Section 3 below and annotated on Figure 1.

2.2.3 Habitats present that are listed under Section 41 of the NERC Act 2006 or the Local Biodiversity Action Plan (LBAP) for York were also noted.

2.2.4 The value and sensitivity of ecological features present in the Site was determined based on the guidance given in '*Guidelines on Ecological Impact Assessment'* (CIEEM, 2016). Individual ecological receptors (habitats and species) that could be affected by the proposed Site development were assigned levels of importance for nature conservation. The highest level is International, then decreasing in order of importance through UK, national, regional, county, district, local, and lastly site level (within the zone of influence).

2.3 Protected and Key Species

2.3.1 Any evidence of protected species or groups encountered during the survey was recorded. This included observations of field signs and an assessment of the suitability of the habitats present to support protected species. For full details of legislation relating to all habitats and species discussed within this report visit http://www.legislation.gov.uk.

Amphibians

2.3.2 The presence of waterbodies within 500 m of the Site, which are not separated by a significant barrier to amphibian dispersal, was checked for using Ordnance Survey (OS) 1:10,000 mapping and aerial imaging.

Badger

2.3.3 Signs of badger *Meles meles* activity were searched for within the Site and up to 30 m from the Site boundary, where accessible, in accordance with standard methodology detailed in '*Surveying Badgers'* (Harris et al., 1989).

2.3.4 The survey included searching for badger setts, latrine/dung pits, foraging marks, feeding signs and pathways, specifically along linear features and boundaries in the

Site.

Bats

Ground-based Inspection

2.3.5 Trees and building within the Site were assessed for their suitability to support roosting bats during the extended Phase 1 habitat survey.

2.3.6 An individual tree or structure may have several features of potential interest to roosting bats associated with it and it is not always possible to confirm usage of a feature by bats, as often the animals may be present on one day and no evidence of occupation may be found on the next. Consequently, it is customary when undertaking such surveys to assign each feature to a defined category of roosting potential as follows: negligible, low, moderate, high, confirmed (Collins, 2016).

2.3.7 The Site was also assessed for its suitability to be used by foraging and commuting bats.

Birds

2.3.8 While on Site during the extended Phase 1 habitat survey the opportunity was taken to record any species of birds encountered and habitats on Site were assessed for their potential value to nesting and foraging birds.

Reptiles

2.3.9 The habitats present on Site were assessed for their suitability to support reptiles, with reference to their connectivity with other areas of suitable habitat in the surrounding area.

Riparian Mammals and White-clawed Crayfish

2.3.10 A desk-based search for watercourses on or within 30 m of the Site which are not separated from the Site by a significant barrier to dispersal was undertaken using OS 1:10,000 mapping.

Other Key and Notable Species

2.3.11 The opportunity was taken whilst on Site to assess habitats for their potential to support any other nationally, locally scarce or locally notable, e.g. LBAP, species.

2.4 Invasive Species

2.4.1 During the extended Phase 1 habitat survey any evidence of invasive species, as listed on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended), was recorded and mapped where seen.

2.5 Survey Limitations

2.5.1 An extended Phase 1 habitat survey is intended to provide a rapid assessment of habitats present within a site and is not intended to replace detailed vegetation or protected species surveys, where deemed necessary.

2.5.2 The Site survey was undertaken in November, which is sub-optimal for botanical surveys, but due to the type of habitats present a sound assessment of site habitats and a robust evaluation of their importance to nature conservation has subsequently been made.

3. Findings and Evaluation

3.1 Site Description

3.1.1 The Site is 1.2 ha of land divided into two distinct parcels; a residential plot with associated hard and soft landscaping and a pasture field currently being grazed by sheep. The new development will be situated within the existing residential plot.

3.1.2 The Site is located at Old Carlton Farm off Common Lane, (central OS Grid Reference: SE 67030 56616).

3.1.3 The Site is bounded by Residential properties to the south and farm land to all other aspects.

3.2 Designated Sites

3.2.1 There are no statutory designated site within 2 km of the Site using the MAGIC website.

3.2.2 The nearest designated site is Strensall Common SSSI

Table 1. Designated Sites within 1 km of the Site

Site Name/ Designation	Description from Citation	Approx. Distance and Direction from Site
Statutory		
Strensall Common SSSI	Strensall Common is a northern example of acidic lowland heath and is one of only two extensive areas of open heathland remaining in the Vale of York.	3 km north west.

3.2.3 Statutory sites of nature conservation interest are considered to be of importance at the national level while non-statutory designated sites are considered to be of importance at between the local and county level.

3.3 Habitats

3.3.1 Habitats recorded on the Site, their distribution and composition are discussed below. Habitat locations and TN depicting features of ecological interest are annotated on Figure 1 with TN descriptions also listed at Appendix 1.

Amenity grass and gardens

3.3.2 An area of amenity grass with introduced shrubs and trees surrounds the residential plot.

3.3.3 The amenity grass does not fall under any of the categories listed within the NERC Act 2006. This habitat is relatively species-poor and as such is considered to be of importance to nature conservation at a local level only.

Tall ruderal

3.3.4 There is a patch of land dominated by tall ruderal vegetation. The dominant species are; Bramble *Rubus friticosus,* Nettle *Urtica dioica* Rosebay willoherb *Chamaenerion augustifolium* and Bindweed *Convolvulus.*

Pasture

3.3.5 The dominant species are; Common bent *Agrostis capillaris* Perennial rye-grass *Lolium perenne,* Yorkshire-fog *Holcus lanatus,* Cock's foot *Dactylis glomerate,* False oat-grass *Arrhenatherum elatius,* Timothy grass *Phleum pratense*, White clover *Trifolium repens,* Creeping buttercup *Ranunculus repens and Rumex sp.* There are

patches of soft rush *Juncus effusus* in the damper areas.

Woodland, Broad-leaved - Plantation

3.3.6 There is an area of woodland between the house and the pasture field. The dominant species are the following; Alder *Alnus glutinosa,* Norway maple *Acer platanoides,* Horse chestnut *Aesculus hippocastanum* Silver birch *Betula pendula* and Ash *Fraxinus excelsior*.

Hedgerows

3.3.7 There is a Hawthorn dominant defunct species poor hedgerow surrounding the garden and a native species rich hedgerow at the bottom of the pasture field with Hawthorn *Crataegus mongyna,* Blackthorn *Prunus spinosa*, Sycamore *Acer pseudoplatanus*, Ash *Faxinus excelsior* and Dog rose *rosa canina.*

Pond

3.3.8 There is pond within the pasture field with one end dominated by Bog bean *Menyanthes trifoliata* and the other margin dominated by Common reed *Phragmites Australis.*

3.4 Species

Amphibians

3.4.1 No GCN EPS licences were identified within 2 km of the Site using the MAGIC website. The nearest records for GCN are 2.3 km to the south in Holtby.

Table 2. Local GCN EPS Licences

GCN licence dates	Distance/Direction from Site
2017-28930-EPS-MIT-1	2.3 km south

3.4.2 The pond in the pasture field is being retained and the hardstanding and amenity grass surround the development plot is unsuitable terrestrial habitat for Great Crested Newts.

3.4.3 As such, common amphibians and GCN are unlikely to occur within the development site and are discounted as ecological receptors and are not discussed further within the report.

Badger

3.4.4 The rural setting of the site with relatively little disturbance could offer some potential habitat for badgers.

3.4.5 There are no signs of badger using the site.

Bats

3.4.6 There are no EPS licences pertaining to bats within 2 km of the Site. The nearest licence pertained to the destruction of a common pipistrelles roost. The dates and distances of licences from Site are stated below (Table 3).

Table 3. Local Bat EPS Licences

Bat licence dates	Distance/Direction from Site
2015-8143-EPS-MIT	2.5 km south

Roosting Bats

3.4.7 There is a main residential property on the site which is well maintained and in good condition. As the building is planned to be demolished to allow for development a more detailed Preliminary Roost Assessment is recommended. The trees on site are all to be retained.

3.4.8 Overall the value of the Site for foraging and commuting bats is considered to be moderate due to its connection to surrounding green spaces in the area.

3.4.9 The Site is considered to have potential to be of importance to foraging and commuting bats at a local level.

Birds

3.4.10 In 2015, a re-assessment of Birds of Conservation Concern (BoCC) was published by Eaton et al. (2015), which defined rare and threatened bird species on two lists (Red and Amber) describing the level of threat to each species of concern.

3.4.11 "Red" is the highest conservation priority, with species needing urgent action due to either a historical decline in breeding population, severe (>50%) decline in breeding or non-breeding population, or severe decline in breeding range over 50 years or more. "Amber" is the next most critical group, with species qualifying for this status as a result of either recovery from red list criterion, being classed as rare breeders in the UK, moderate (>25%) decline in breeding or non-breeding population or moderate decline in breeding range over 25 years or more. These categories are followed by "Green", indicating that the species are relatively unthreatened.

3.4.12 With reference to the Schedule 1 species noted the house and gardens to be developed offer unsuitable habitat.

3.4.13 Bird species recorded on the day of survey include blackbird *Turdus merula*, Magpie *Pica pica* and robin *Erithacus rubecula,* all of which are BoCC Green Status.

3.4.14 Trees, hedgerows and ruderal habitats within the Site provide suitable features for common and garden bird species to breed and shelter. The site is well connected to residential gardens and the adjacent farmland. The Site is considered to be of importance to birds at site level only.

Reptiles

3.4.15 The house, hardstanding and garden habitat proposed for development is sub-optimal for reptiles and therefore reptiles are discounted as an ecological receptor and are not discussed further within this report.

Riparian Mammals and White-clawed Crayfish

3.4.16 A search of the pond and ditch revealed no signs of otter or water vole using the habitat and the features are generally unsuitable due to lack of connectivity and available food sources.

3.4.17 The pond and ephemeral ditch within the paddock are to be retained and the development will not impact upon this habitat.

Other Key and Notable Species

Hedgehog

3.4.18 The mix garden, hedgerow, woodland and ruderal vegetation on Site provides foraging habitat for hedgehog. Hedgehogs have become increasingly suburban animals and it

is possible that they occur within the local area and will use the Site as part of their wider foraging resource and for shelter.

3.4.19 The site is connected to other residential gardens and the wider area therefore, despite its value, the Site is considered to be of importance to hedgehog at site level only.

3.5 Invasive Species

3.5.1 There are no schedule 9 invasive plant species within the site.

4. Ecological Assessment, Mitigation and Enhancements

4.1 Habitats

4.1.1 Under the plans all habitats on site are to be retained and as such no further mitigation or enhancement is required.

4.2 Designated Sites

4.2.1 There are no statutory designated sites for nature conservation within 2 km of the Site. The nearest designated site is over 3 km to the north west.

4.2.2 Given the distance from the Site and the scale of the proposals, it is considered that there will be no impacts upon designated sites or the habitats/species that they support.

4.3 Species

Badger

4.3.1 Badgers and their setts are protected under the Protection of Badgers Act 1992. It is an offence under the act to kill, injure or take a badger. It is also an offence to destroy, damage or obstruct a currently active badger sett, or to disturb animals within the sett.

4.3.2 It is advised that if works do not commence within 12 months of this survey a further site visit will be needed to assess the current status of Site for badgers and check no setts have opened.

Bats

4.3.3 All species of bat occurring within the UK are included in Schedule 2 of the Conservation of Habitats and Species Regulations 2017 and are protected from deliberate capture, injury or killing, from deliberate disturbance and from deliberate damage or destruction of a breeding site or resting place (roost).

4.3.4 All UK bats are also included on Schedule 5 of the Wildlife and Countryside Act 1981 (as amended). However, their protection is limited to certain offences. Under the 1981 Act (as amended) it is an offence to intentionally or recklessly disturb bats while they are occupying a structure or place used for shelter or protection, or to obstruct access to any such place.

<u>Roosting Bats</u>

4.3.5 As the existing property is planned to be demolished a more detailed Preliminary Roost Assessment is recommended. All trees on site are to be retained.

<u>Foraging and Commuting Bats</u>

4.3.6 As the plans are to replace a property It is considered there are no negative impacts to foraging and commuting bats at the site level only.

4.3.7 Lighting within the proposed development should be minimised as far as possible and designed to avoid light-spill onto habitats within and adjacent the Site that may be used by the local bat population foraging or commuting.

4.3.8 Good lighting design would be achieved by following guidelines presented in the Bat Conservation Trust & Institute of Lighting Professionals Guidance Note 08/18 '*Bats and Lighting in the UK - Bats and Built Environment Series'* (2018).

4.3.9 In order to minimise light spill onto potential commuting/foraging routes and minimise potential disturbance caused through the lighting of corridors the lighting scheme

should include the following:

- The avoidance of direct lighting of retained trees, scrub, woodland, or proposed areas of habitat creation / landscape planting;
- Lighting levels not raised above that already evidenced in the area and any security lights should be avoided or if used should be on a sensor;
- Unnecessary light spill could be controlled through a combination of directional lighting, low lighting columns, hooded/shielded luminaires or strategic screening planting; and,
- All luminaires should lack UV elements and metal halide, fluorescent sources should not be used. LED luminaires should be used where possible with a warm white spectrum adopted (<2700Kelvin).

Birds

4.3.10 All nesting birds are protected under the Wildlife and Countryside Act 1981 (as amended) against destruction of the nest during the bird nesting season, which falls between March and August, inclusive.

4.3.11 It is recommended that any vegetation removal is undertaken outside of the breeding bird season, i.e. between September and February inclusive. If it is not possible to remove vegetation within these months, a nesting bird check(s) should be undertaken by a suitably qualified ecologist prior to vegetation removal. The nesting bird check(s) will aim to identify the presence of active birds nests and, where identified, nests would require an exclusion zone to be established until any chicks have fledged (monitored and confirmed by an ecologist). If no active bird nests are identified vegetation should be removed within the 48 hour period following the check.

4.3.12 Inclusion of bird nesting provision on any new structures or retained trees would provide replacement nesting opportunities to compensate for the lost nesting habitat and would comply with the NPPF (2019) aims for biodiversity by enhancing nature conservation.

4.3.13 Suitable bird boxes would include Schwegler 1B nest boxes and Schwegler 1SP sparrow terraces. All bird boxes should be placed at a minimum height of 3 m, preferably at eaves level, and should avoid full south aspects which receive full sun during the summer months and present a risk of overheating. Advice on the siting and specification of bird boxes can be provided by Eps.

Other Key and Notable Species

<u>Hedgehog</u>

4.3.14 Hedgehog is included as a species of principal importance under Section 41 of the NERC Act 2006. Whilst not afforded a high level of protection, hedgehogs have experienced significant declines in their UK population numbers, therefore, a best practice approach, avoiding harm to hedgehogs should be taken into consideration during works.

4.3.15 Hedgehogs are also very highly mobile and inquisitive animals that if not on Site do have the potential to move onto Site. As a precautionary measure, it is recommended that any excavations left overnight should be covered or have a suitable escape ramp, e.g. a long scaffold board, inserted to allow escape should a hedgehog fall in.

4.3.16 Should a hedgehog be discovered on Site at any time during the works, it should be moved carefully with gloved hands to a sheltered area away from the footprint of works.

4.3.17 Natural gaps should be left under or around timber board fencing where used or where this is not feasible, gaps measuring a minimum of 13 cm x 13 cm could be created to

the base of panels/gravel boards to allow the movement of hedgehogs from the Site to local gardens. Further information and examples of fencing gaps in practice can be found at: www.hedgehogstreet.org/pages/link-your-garden.html.

5. References

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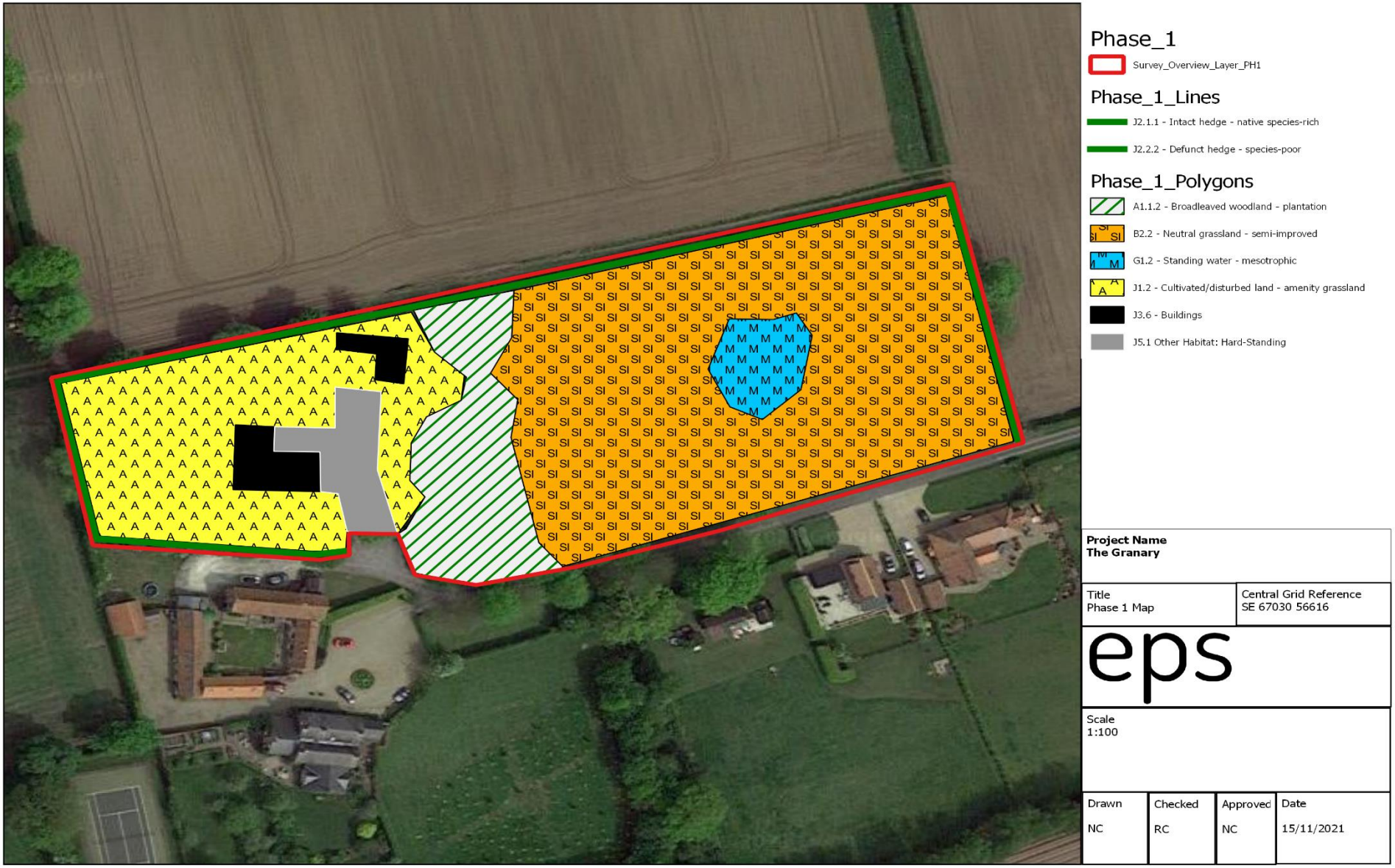

Appendix 1. Phase 1 Habitat

Appendix 2. Site Photographs

1. Existing property and garden.

2. Pasture field.

3. Pond.

4. Amenity grass.