

**Extended Phase 1 Habitat Survey
& Baseline Ecological Impact Assessment
Green's Lane, Lydiate**

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Executive Summary

1. An ecological survey, desktop survey and ecological impact assessment were carried in respect of an area of land and buildings situated off Green's Lane, Lydiate, where proposals are to develop the site to equestrian usage including the construction of an all-weather riding surface and an all-weather paddock along with the removal and replacement of several buildings to be used as stables or for other equestrian purposes
2. The wider site is likely to be used by a small number of relatively common breeding bird species and the site margins are likely to be used to a relatively small extent for foraging and commuting by bats but otherwise the site is of limited ecological value due to the predominance of species-poor modified grassland, ruderal vegetation and bare or disturbed ground
3. There are no mature trees on site or that are close enough to be affected by proposals. A wooded area to the northeast that surrounds a pond will not be affected by proposals
4. There are several wooden or prefabricated buildings on site comprising several stable blocks, animal shelters, storage units and a horse walker. The majority of buildings will be retained, modified or extended. None have significant potential for bat roosting and there were no signs of roosting having previously taken place. Some of the buildings are however suitable for use by breeding birds with several swallow nests and a jackdaw nest noted during the survey, though there were no signs of barn owl having used any of the buildings
5. There are no functional waterbodies on site or that will be directly affected by proposals. There is an extant pond within 250m of the wider site to the northeast where there is direct habitat linkage though this could not be surveyed due to the time of year and lack of access permission. However, the distance of the pond from the proposed development footprint and presence of intervening suboptimal habitat would suggest that an adverse impact is highly improbable, though a precautionary approach would be advisable
6. There were no conclusive signs of any other protected or otherwise important species such as water vole, badgers or barn owl occurring on site within 30m though badgers are known to occur sparsely in the wider area
7. There are no important habitats or vegetation communities occurring on site or close to the site boundaries *that will be adversely affected by proposals*, the part of the site proposed for development being dominated by hard-standing, existing buildings and disturbed ground. The remainder of the site will not be directly affected by proposals but is subject to a change of use application for grazing by horses instead of cattle or other livestock
8. There are no historic records of any protected or otherwise important species or habitats occurring within or closely adjacent to the site boundaries
9. Whilst there will be no adverse impact and no loss of habitat likely to be used by protected species such as water voles, badgers, great crested newts and roosting bats, the loss of a small areas of ruderal vegetation will result in a small net loss of biodiversity which can feasibly be mitigated for within the site boundaries by means of native tree and shrub planting. Details are provided within the official Biodiversity Metric spreadsheet prepared and submitted in respect of current development proposals

Contextual Statement

This report ***must be read in conjunction with the documentation and drawings prepared and submitted to the Local Planning Authority in respect of current development proposals (as shown in Figure 17 and section 7.0 of this report)***. The author of this report will accept no responsibility for any misunderstanding resulting from a failure to consult all relevant planning documentation or through any lack of information where responsibility for the provision of such is beyond the control of Cameron S Crook & Associates.

This report is not intended as a natural history text or scientific paper. Rather, its purpose is to inform the site owner, developer and local planning authority in accordance with current local and national planning guidance, in as clear and succinct a manner as possible. To that end, all survey and assessment works carried out in respect of current proposals are proportionate to the site and situation, and only the minimum level of information necessary has been provided. Detailed information on the respective life cycles of protected species such as the bat, badger or great crested newt, or detailed descriptions of sundry ecological scenarios that have no relevance to the site or development in question have therefore been omitted.

This report provides no planning or legal advice and no attempt has been made to interpret any respective planning or environmental laws that may apply to this case. Any such interpretation must be obtained from an appropriately qualified Planning Consultant, Planning Officer or Lawyer.

All survey works detailed within the methodology section below have been either carried out personally by the author or by appropriately qualified, licenced and/or experienced surveyors working under the direct supervision of the author. The author of this report takes full responsibility for the quality of data collected and any subsequent interpretation. Raw survey data and names of individual surveyors may be provided for *bone fide* reasons, upon request, but only where this is strictly necessary and does not otherwise conflict with client, landowner or surveyor confidentiality and privacy.

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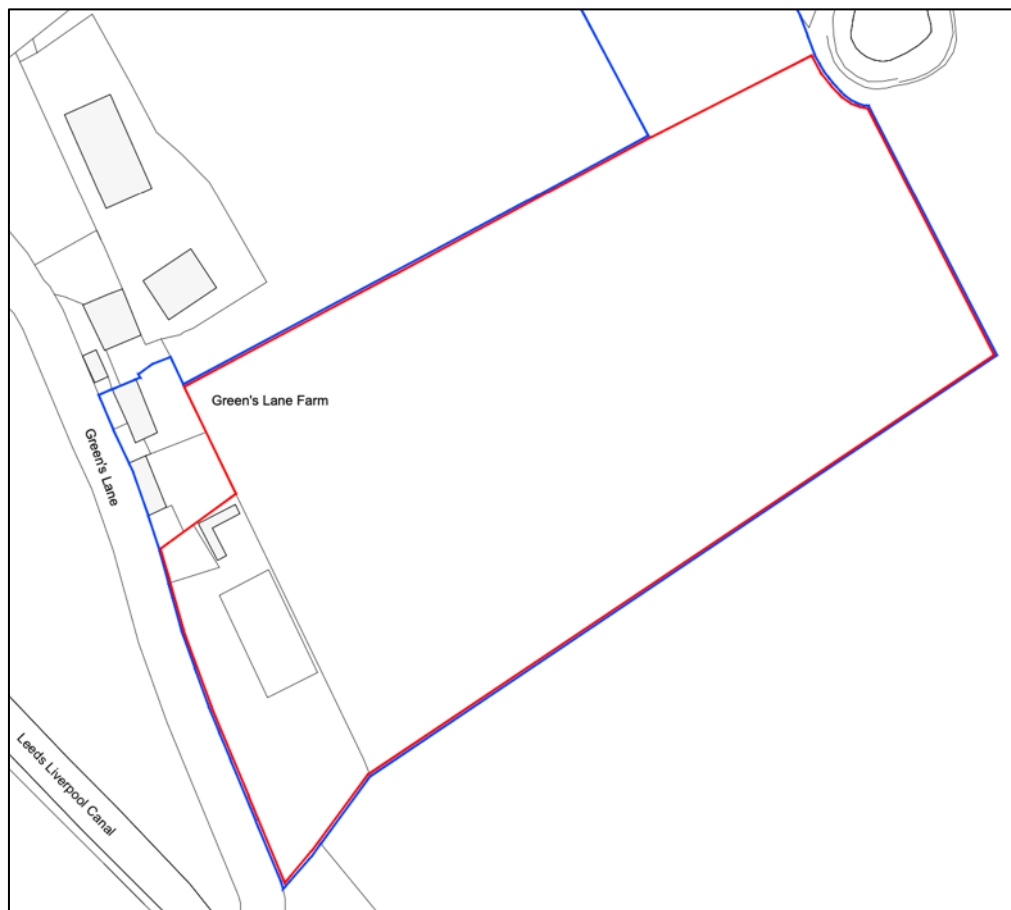
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1.0 Introduction

- 1.1 A baseline ecological survey, site appraisal and impact assessment were carried out in respect of land and buildings situated off Green's Lane, Lydiate with the following aims:
1. To establish the likely presence or absence of protected or otherwise important species and evaluate the overall nature conservation (biodiversity) status of the site
 2. To assess the likely impact of proposed works to develop the site upon any protected or otherwise important species that may occur on or adjacent to the area of land concerned, and the integrity of nature conservation interest of any other sites of ecological or nature conservation importance within the vicinity
 3. To provide outline mitigation and habitat aftercare proposals, as appropriate
- 1.2 The terms *site* or *development footprint* will be used in this report to refer to the area of land proposed for development as shown on the site location plan (see *Figure 1* below) unless otherwise indicated within the text.

Figure 1 Site Location Plan (within the Red Line Boundary)



2.0 Methodology

Desktop Survey

2.1 Prior to undertaking any site survey works, a data search was carried out to check for any protected or other important species or habitats occurring within or closely adjacent to the site boundaries. Data sources include the following:

- ◆ LERN
- ◆ Merseyside Biobank
- ◆ NBN Gateway
- ◆ MAGIC

Any *significant* results are provided within the relevant sections below.

General Ecological and Botanical Survey

2.2 This comprised an Extended Phase 1 Habitat Survey carried out initially on the 5th December 2023, with any evidence of birds, amphibians, reptiles and mammals noted during the survey. The survey methodology for the Extended Phase 1 Habitat Survey comprised a modified version of that described in NCC (1990) and IEA (1995) and where appropriate, with respect to the Phase 2 Habitat Survey, incorporating the methodology outlined in Rodwell (1991, 1992, 1995 & 2000) for determination of National Vegetation Classification plant communities. This was supplemented by a full vascular plant species survey using the 'walkabout method' as described in Kirkby (1988) and a generalized assessment of the site for suitability of habitat for animals, in particular protected species such as badger, bats, breeding birds (including barn owls) and great crested newts. The results from the initial Phase 1 Habitat survey were used to guide the requirement and level of detail of the more specific surveys outlined below.

Badgers

2.3 This part of the survey was carried out concurrently with the Phase 1 Habitat Survey visit in December 2024 using the standard badger survey methodology as described in Harris et al (1989). In practice, this comprised a generalized search of the site proposed for development, where suitable habitat was found, to 30m from the development site boundary (where accessible) to check for feeding signs, habitual runs and footprints, hairs, droppings and latrines, scratching posts and actual setts.

Bats

2.4 The preliminary bat survey was carried out on the 5th December 2023 concurrently with the general ecological assessment and comprised a daytime inspection of any suitable habitat that will be affected by development proposals such as buildings and mature trees to check for signs of roosting bats, as well as an inspection of any other mature vegetation, especially linear habitat, which was evaluated for suitability in respect of foraging and commuting. No nighttime survey was carried out or deemed necessary due to the general lack of optimal habitat for commuting and foraging or roosting.

Birds

2.5 This part of the survey followed a modified, proportionately scaled-down version of the methodology described in Bibby *et al* (1992) and was carried out concurrently with the Phase 1 Habitat Survey during the site visit in December 2023. All potential bird nesting habitat such as trees, shrubs and any other suitable vegetation within the site boundaries were checked for potential use by breeding birds. Incidental records were also made of any birds noted during the survey. The results of the survey have been tabulated within the relevant section below according to the likely breeding potential of each species recorded. Due to the lack of optimal habitat, and time of year, only a single site visit was carried out and deemed necessary.

Great Crested Newts

- 2.6 The site was searched for water bodies which were then visually assessed where possible for suitability to amphibians, in particular great crested newts. There is one extant pond within 250m of the wider site boundaries though there was no access permission to enable a close inspection. Habitat quality was therefore visually assessed using the Habitat Suitability Index method (Oldham et al 2000) on the 5th December 2023. No eDNA or other kind of survey was possible due to the suboptimal time of year.

3.0 Existing Situation

General Site Description

- 3.1 The site subject to this ecological assessment comprises an extensive area of improved grassland and a smaller area of land occupied by buildings, mostly constructed of timber including several stable blocks, storage units, a large hay barn, along with a horse walker and other buildings and structures associated with equestrian usage. The existing layout of the built area is shown in *Figure 2* below. The wider site which comprises mainly an extensive area of improved (modified) grassland currently grazed by horses and existing habitats are shown in *Figure 3*.
- 3.2 Beyond the site boundaries there is open agricultural land, used primarily for grazing, with existing dwellings to the west, Green's Lane to the south, and the Leeds Liverpool Canal to the east. There is also a pond and wooded area to the north though neither this nor the canal will be directly affected by proposals.

Figure 2 The existing site layout (built area)

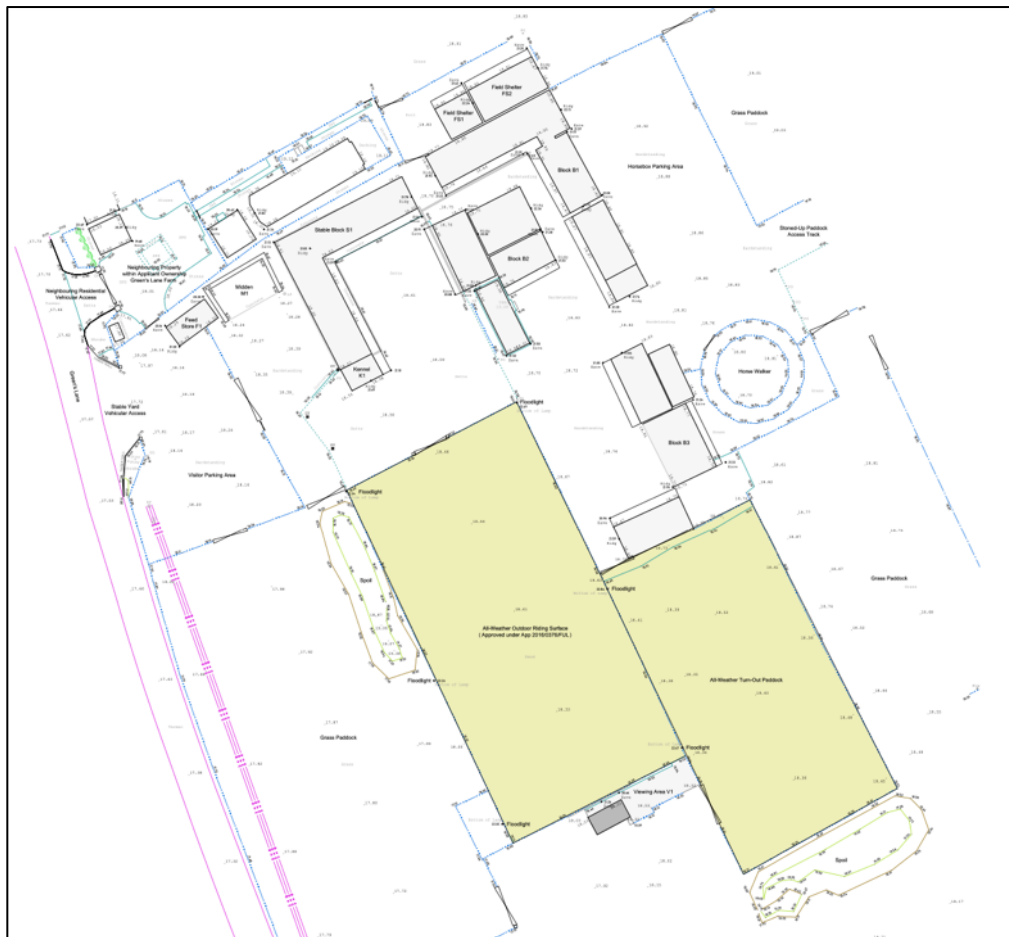


Figure 3 Existing full site layout and habitats. The target notes (TN1-TN7) are described in Table 1 below. Colour-coding of habitats comply with UKHab and BNG recommendations



Table 1 Target Notes with reference to Figure 2 above

Target Note	Details of the main site and habitat features and dominant vegetation types
TN1	The existing built area of the site proposed for development comprising several wooden buildings including stables, storage units, animal shelters, kennels (now removed) and a hay barn. There is no vegetation within this area apart from occasional patches or sparse coverings of ruderal vegetation along the site margins. All buildings have low-negligible potential for roosting bats but have been recently used by breeding birds such as swallow and jackdaw
TN2	An area of bare ground with a sparse covering of ruderal vegetation at the margins, used for storage and parking of vehicles and machinery. This area also accommodates a horse-walker. Negligible ecological value
TN3	An existing all-weather paddock which is unsealed but devoid of vegetation. Negligible ecological value
TN4	An existing all-weather paddock which has developed a sparse covering of ruderal vegetation. Very limited ecological value. However, a bund of soil which has become sparsely vegetated over has potential for use by overwintering amphibians, including great crested newts
TN5	The access track that leads to the paddocks used for horse grazing and turn-out
TN6	Part of an extensive area of species-poor modified grassland, each of the paddocks separated by post-and wire or wooden post and rail fencing. Limited ecological value but will be retained and remain unaffected by proposals
TN7	An off-site pond, the only one within 250m of the site boundaries where there is direct habitat linkage though intervening habitat is generally suboptimal for amphibians, including great crested newts

Figure 3 The site as viewed from the existing all-weather paddock, looking south-westwards towards the stable blocks at the southern end of the site (TN1)



Figure 4 The western end of the site and existing entrance as viewed from TN3 (Figure 3)



Figure 5 The horse walker



Figure 6 The unvegetated paddock to the southwest of the site (TN3)



Figure 7 The sparsely vegetated all-weather paddock which was partially flooded at the time of survey though the areas covered in water were very shallow and evidently temporary



Figure 8 The land to the north and east that is dominated by modified grassland, as viewed from the access track adjacent to TN2



Habitats and Flora

- 3.3 Apart from some very sparse areas of ruderal vegetation, there is no vegetation within the existing built area proposed for development. Beyond the existing developed area which comprises hard-standing, bare ground and buildings, the dominant habitat is species-poor modified grassland, which accounts for nearly 90% of the total site area. The grassland is regularly mown and/or grazed and is dominated by dandelion, daisy and field mouse-ear, which are species typical of modified grassland. Grasses include perennial rye-grass, meadow foxtail, red fescue and rough meadow-grass with creeping fescue dominating the more sparsely vegetated areas where there has been poaching. Overall, this habitat is of limited ecological value and has a relatively low distinctiveness in terms of Biodiversity Net Gain (BNG).
- 3.4 Otherwise, the site is of very limited value in ecological terms comprising mainly species-poor habitat composed of vegetation typical of disturbed or cultivated ground. The habitats recorded during the Phase 1 Habitat Survey either on or bordering the site are summarized within *Table 2* below.

Table 2 Habitats and vegetation communities within the site boundaries

NCC/RSNC ¹ Habitat (UKHab Habitat)	NVC ² Communities
Grassland: Improved (Modified Grassland)	MG1 <i>Arrhenatherum elatius</i> grassland MG7 <i>Lolium perenne</i> leys and related grasslands MG10 <i>Holcus lanatus</i> - <i>Juncus effusus</i> rush pasture
Tall herb and fern: tall ruderal (Tall Ruderal)	OV24 <i>Urtica dioica</i> - <i>Galium aparine</i> community OV25 <i>Urtica dioica</i> - <i>Cirsium arvense</i> community
Cultivated/disturbed land: ephemeral/short perennial (Ruderal Vegetation)	OV21 <i>Poa annua</i> - <i>Plantago major</i> community OV22 <i>Poa annua</i> - <i>Taraxacum officinale</i> community OV28 <i>Agrostis stolonifera</i> - <i>Ranunculus repens</i> community
¹ Nature Conservancy Council and Royal Society for Nature Conservation habitat classification (NCC, 1990)	
² National Vegetation Classification communities (Rodwell, 1991)	

Significance of Habitats and Flora

- 3.5 All habitats and vegetation communities recorded on site (within the development footprint) are relatively common and widespread throughout South Lancashire and Great Britain.
- 3.6 There are no historic records of any other important plant species or habitats occurring within or closely adjacent to the site boundaries and overall the part of the site that forms the development footprint is of *low ecological value* in this respect. There will however be an initial slight loss of biodiversity in terms of BNG due to the loss of ruderal vegetation, though this could reasonably be compensated for by the planting of native trees and shrubs in the wider site.

Designated and otherwise Important Sites

- 3.7 There are no designated sites within site boundaries. The nearest SSSI is Downholland Moss SSSI, some 4.5km to the northwest, the nearest European site being Ainsdale SAC and Ramsar site which is located in excess of 8km to the west, and Martin Mere Ramsar site some 9km to the northeast, neither of which will be affected by proposals. There are no second-tier sites within the site boundaries, the

nearest being St Michael's Churchyard Biological Heritage Site (BHS) located some 1.9km to the southeast so will not be affected by proposals.

Mammals (Badgers)

- 3.8 *Habitat Suitability:* The site provides a moderate level of habitat suitable for badger foraging and the wooded area around the off-site pond to the north is marginally suitable for the establishment of setts.
- 3.9 *Presence/Absence:* An inspection of all suitable habitat to a distance of at least 30m from the proposed development site boundaries (where accessible) revealed no conclusive signs of badger activity.

Mammals (Bats)

- 3.10 *Habitat Suitability:* There are several buildings on site, most of which will be retained though some will be modified or extended. All the buildings are constructed of either tongue and groove timber or sheet materials. None have enclosed voids or niches that are optimal for bat roosting and all qualify as either negligible or low in terms of the Bat Conservation Trust (BCT) evaluation criteria. The buildings and their potential for roosting are listed in *Table 3* below.

Figure 9 Buildings within the developed part of the site

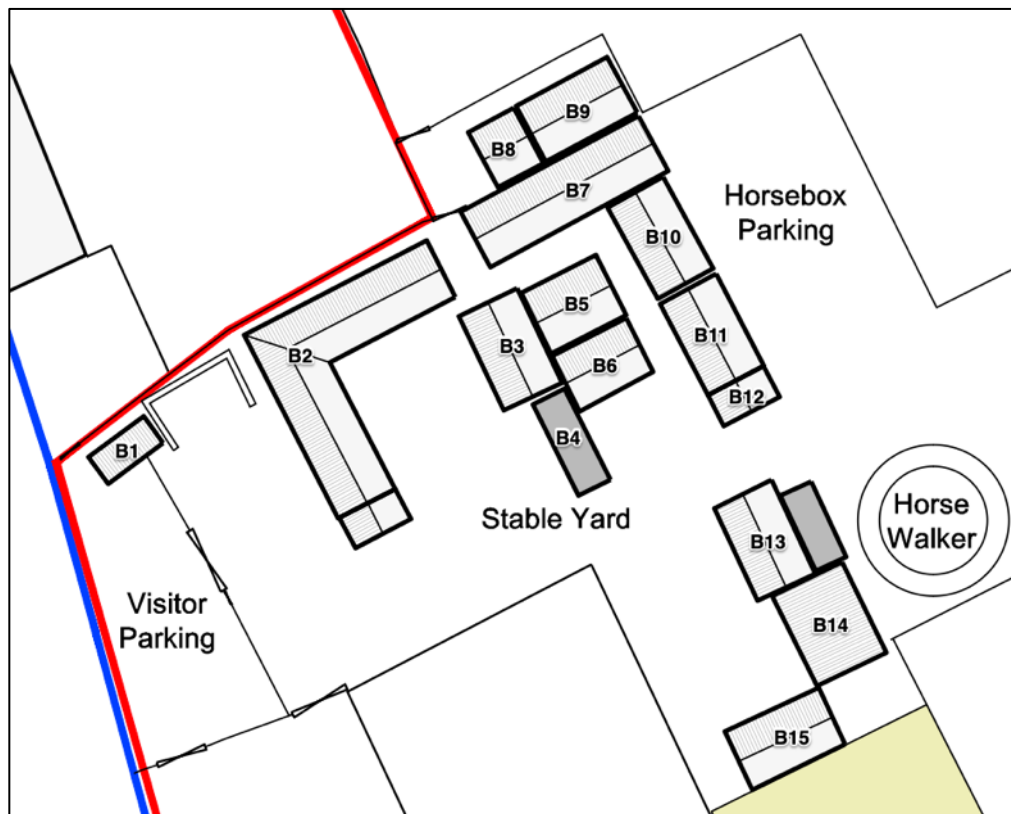


Table 3 List of buildings and roosting potential

Building No.	Description	Roosting Potential
B1	A small wooden shed with a formed sheet roof, used as a feed store. No internal voids or roosting niches	Negligible
B2	An L-shaped single-storey stable block constructed of wood with an apex, vented, sheet material roof. No internal roof voids and very few niches suitable for roosting. A kennel at the southern end shown in the site plan is no longer present	Low
B3	A single-storey stable block of the same construction as B2. No enclosed roof voids and few niches suitable for use by bats	Low
B4	A single-storey wooden building with a flat roof, used as a rest room and for on-site catering. The building has three small windows and a closely lined roof underside. There are no accessible roof voids. Soffits are tightly fitted and there are no significant access points for bats or suitable roosting niches within	Low
B5	A wooden storage shed with an apex formed sheet roof. No suitable roosting niches or enclosed voids	Negligible
B6	A wooden storage shed with an apex formed sheet roof, like B5 but larger. No suitable roosting niches or enclosed voids	Negligible
B7	A stable block with the same construction and features as B3, connected to B8. No internal roosting niches and no enclosed roof voids	Low
B8	An open fronted animal shelter constructed of wood with a formed sheet pent roof, no enclosed roof voids and no roosting niches within	Negligible
B9	An animal shelter similar in construction to B8 but larger	Negligible
B10	An extension of B7 orientated at a right-angle with the same feature and construction. No internal roof voids and few roosting niches	Low
B11	A wooden stable block with the same features as B7, no internal roof voids or roosting niches	Low
B12	An enclosed part of B11 of the same construction used for storage. Few internal roosting niches and no internal roof voids	Low
B13	A small wooden stable block of the same construction as B11 with no internal roof voids and few roosting niches	Low
B14	An open-fronted hay barn with no suitable roosting niches	Negligible
B15	A wooden stable-block with the same construction and features as others on site	Low

Figure 10 Building B1, a small wooden storage shed near the site entrance

Figure 11 Buildings B2, B3 and B4 as viewed from the east



Figure 12 Building B6 (left), B7 (rear left), B10 (rear centre), B11 (centre) and B12 (front right) as viewed from the southeast



Figure 13 A typical internal view of the stables showing unlined roof and lack of roof voids or roosting niches, all other stable blocks being of the same construction



Figure 14 Buildings B8 and B9



Figure 15 Buildings B13 and B14



- 3.11 There are no mature trees on site or close enough to be affected by proposals. There is no optimal habitat on site suitable for bat foraging, the site being generally open and exposed. There is a degree of shelter around the buildings and the presence of horses will encourage flies and other invertebrates that will attract foraging bats though the site is floodlit and there are security lights that will deter more sensitive species such as brown long-eared bats and *Myotis spp.*. However, the site will change little following development so any impact is likely to be neutral at worst.
- 3.12 *Roosting, Foraging & Commuting Activity:* A thorough inspection of the buildings both internally and externally, using close-focussing binoculars where necessary revealed no conclusive signs of bat roosting such as staining or smoothing around potential roost entrances, droppings or feeding remains so the presence of roosting bats is considered reasonably unlikely though not impossible. No nocturnal survey was carried out to confirm this, partly due to the time of year, partly due to being unnecessary since the buildings were found to have no greater than *Low* roosting potential in respect of the Bat Conservation Trust criteria (BCT 2023), many having *Negligible* potential (see *Table 3*) and most will be retained. For the reasons outlined above, the level of foraging and commuting activity is also likely to be quite limited.

Mammals (General)

- 3.13 *Habitat Suitability:* The site provides habitat for several mammal species, primarily those associated with rural and urban fringe areas such as brown hare, hedgehog and deer though the extent and quality of such habitat is limited. The grassland which is currently grazed by horses is currently too short to support significant numbers of field vole and shrews. There is no habitat suitable for red squirrel despite the site being within 2km of a designated Red Squirrel Buffer Zone. Similarly, there is no habitat for grey squirrel, the site also being located within a Grey Squirrel Control Zone.
- 3.14 *Presence/Absence:* Apart from signs of small mammals such as wood mouse, bank vole and brown rat, evidence of which was mostly recorded along the site margins in adjacent vegetation, there was little evidence of mammal activity on site other than red fox, the latter species indicated by occasional droppings, feeding remains, footprints and tracks. There was no conclusive evidence of deer though this group of species is widespread in the area and may be expected to graze on site from time to time.
- 3.15 There was no evidence of hedgehog though this species may be expected to forage and take refuge beneath rough vegetation at the site margins or possibly beneath buildings or debris. The site is generally unsuitable for brown hare due to the poor quality of habitat and level of disturbance from site usage and none were noted, though this species occurs in the wider area so its occasional presence cannot be totally ruled out. There were no signs of either red or grey squirrel and no historic records of these species within or closely adjacent to the site boundaries. The part of the site where development proposals will take place is too far from the Leeds Liverpool canal (>120m) to have any impact upon water voles or otter.

Birds

- 3.16 *Habitat Suitability:* There is very little habitat within the development footprint suitable for bird breeding, though the buildings do provide a moderate level of nesting potential for common species that are less susceptible to disturbance from site usage. The grassland is generally unsuitable for ground nesting and overwintering birds due to the poor structural quality and level of disturbance by grazing, mowing and all-year-round usage by horses. The grassland does however fall within an area designated by the RSPB for Arable Farmland Assemblage (four species) and Grassland Assemblage (two species) and is within a target area for corn bunting and lapwing. A closely adjacent site to the north is also designated as an area frequently used by whooper swan but this will not be affected by proposals.

- 3.17 *Species Recorded/Potential Breeding:* Table 3 below lists the birds recorded during the survey either within or close to the site boundaries and provides an indication of those species considered likely to breed on site. This is not intended of an exclusive list and only includes species recorded at the time of survey. All species recorded and those considered likely to breeding within or close to the development site boundaries are species that are relatively common and widespread within rural areas and the urban fringe. No Schedule 1 species such as barn owl were recorded or are reasonably expected to occur on site, due to the lack of suitable habitat and the general level of disturbance, though owls and raptors such as kestrel may be expected to hunt within the longer areas of grassland along the field margins from time to time. There are no historic records of any protected or otherwise important species occurring or breeding within the site boundaries.

Table 3 Birds recorded during the surveys, mostly in adjacent sites and likely breeding status

Species Name	Common Name	Likely Breeding Status*
<i>Columba palumbus</i>	Wood Pigeon	NoBr
<i>Corvus corone</i>	Carrion Crow	NoBr
<i>Corvus monedula</i>	Jackdaw	CoBr
<i>Erithacus rubecula</i>	Robin	PrBr
<i>Hirundo rustica</i>	Swallow	CoBr
<i>Parus caeruleus</i>	Blue Tit	PoBr
<i>Parus major</i>	Great Tit	PoBr
<i>Pica pica</i>	Magpie	NoBr
<i>Turdus merula</i>	Blackbird	PrBr
Key to Breeding Qualifiers: CoBr - Confirmed Breeding; NoBr – Not Breeding; PrNB – Probably Not Breeding; PrBr – Probably Breeding; PoBr – Possibly Breeding *None of the above were recorded within the development footprint, only within closely adjacent sites, principally trees in adjacent gardens or flying overhead		

- 3.18 Other species previously, recorded within 1km of the site boundaries and that could reasonably be expected to occur on site from time to time include yellowhammer, bullfinch, tawny owl, tree sparrow, corn bunting, meadow pipit, skylark, teal, reed bunting, snipe, willow tit, grey partridge, song thrush and fieldfare though there are no historic records of any of these species occurring within the site boundaries and very little suitable habitat.

Great Crested Newts

- 3.19 *Habitat Suitability:* No standing water-bodies occur on site and no habitat suitable for foraging occurs within the development footprint. There are no ponds on site but there is one pond within 250m of the wider site boundaries, adjacent to the northern part of the site, where there is direct habitat linkage. However, this pond is more than 250m from the part of the site that will be developed, the remaining part of the site being species-poor modified grassland which will not be affected and is only subject to a change of use in respect of horses replacing cattle and sheep. The habitat between the pond and the proposed development site footprint to the west is suboptimal and is likely to deter migration should any great crested newts occur.
- 3.20 The pond could not be accessed so was assessed visually from the adjacent site or from aerial photos. It has a well-developed margin of woody vegetation, the margins

apparently well-shaded. From aerial photographs, there was little or no obvious floating vegetation and the margins of the pond appear to grade immediately into dense scrub and tall ruderal vegetation. The shape of the pond and presence of fishing stations and a car park suggest it is used as a fishing pond so is presumed to be well stocked. In respect of the Habitat Suitability Index (Oldham 2000), taking all the above into consideration, the pond is classed as *Poor* (0.27) as shown in *Table 4* below.

Figure 16 The pond to the east, adjacent to the site boundaries, taken from Google Maps



Table 5 Habitat Suitability Index scores (Oldham et al 2000) in respect of the pond to the east

SI No	SI Description	SI Value
1	Geographic location	1
2	Pond area	0.8
3	Pond permanence	0.9
4	Water quality	0.67
5	Shade	0.5
6	Water fowl effect	0.01
7	Fish presence	0.01
8	Pond Density	1
9	Terrestrial habitat	0.33
10	Macrophyte cover	0.3
HSI Score		0.27
Pond suitability (see below)		<i>Below Average</i>
	HIS Score	Pond Suitability
	< 0.50	Poor
	0.50 - 0.59	Below average
	0.60 - 0.69	Average
	0.70 - 0.79	Good
	> 0.80	Excellent

3.21 *Presence/Absence*: The pond to the north has low potential for supporting great crested newts and there are no historic records of this species in the near vicinity. Using Natural England's Rapid Assessment Method, with a probability of 0.03 the likelihood of any impact and an offence being committed if great crested newts are present is very low as shown in *Table 6* below. No impact is therefore reasonably considered likely.

Table 6 The results of Natural England's Rapid Impact Assessment based on a site area of 0.5-1ha and a pond in excess of 250m

Component	Likely effect (select one for each component; select the most harmful option if more than one is likely; lists are in order of harm, top to bottom)	Notional offence probability
Great crested newt breeding pond(s)	No effect	0
Land within 100m of any breeding pond(s)	No effect	0
Land 100-250m from any breeding pond(s)	No effect	0
Land >250m from any breeding pond(s)	0.5 - 1 ha lost or damaged	0.03
Individual great crested newts	No effect	0
	Maximum:	0.03
Rapid risk assessment result:	GREEN. OFFENCE HIGHLY UNLIKELY	

Significance of Fauna

- 3.22 Several breeding birds, which are protected in general terms during the breeding season, occur within or close enough to the proposed development site boundaries to be affected. Several other species recorded on site are also expected to breed though this is not expected to include any WCA Schedule 1 species such as barn owl. Consequently, any site works which may affect potential breeding sites should avoid the breeding season (February to August inclusive) and any unavoidable loss of breeding habitat should be compensated for by provision of proprietary breeding boxes sited in appropriate locations on completion of site works.
- 3.23 There are no known bat roosts on or close to the site boundaries though bats probably commute and forage along or adjacent to the site margins to small extent. Measures should therefore be taken to ensure that any suitable marginally habitat is retained or enhanced wherever possible, that there is no severance of any existing wildlife corridors, and that no additional light falls on any habitat that is suitable for foraging or roosting immediately beyond the site boundaries.
- 3.24 No water-bodies suitable for great crested newts occur on site and none are known to occur within 250m of the site boundaries where development proposals will take place and where there is direct habitat linkage. It is reasonable to assume therefore that protected or otherwise important amphibian species such as great crested newt or common toad will not be adversely affected by development proposals.

4.0 Potential Impacts & Mitigation

4.1 Likely Impact

- 4.1.1 The likely impact of the proposed site works is evaluated against the criteria laid out in the table below which is based on NATA (New Approach to Appraisal) as described in Byron H. (2000). This evaluation assumes that no mitigation works will be implemented.

Table 3. Impact Assessment Matrix

Impact Magnitude	Nature Conservation Importance				
	<i>Negligible</i>	<i>Local</i>	<i>County</i>	<i>National</i>	<i>European</i>
Beneficial Effect	Non Significant	Non Significant	Non Significant	Non Significant	Non Significant
Nil Effect	Non Significant	Non Significant	Non Significant	Non Significant	Non Significant
Minor (short term or reversible effects)	Non Significant	Non Significant	Slight	Moderate	Moderate
Moderate (deterioration of feature)	Non Significant	Slight	Moderate	Severe	Severe
High (loss of feature)	Non Significant	Slight	Moderate	Severe	Severe

- 4.1.2 The evaluation criteria for nature conservation importance are as follows:

European

Habitats that are listed in Annexe 1 of the Habitats Directive and are included as candidate or proposed Special Areas of Conservation (cSAC, pSAC)

Species that are listed under Schedule 2 of the Habitats Directive and form a population which would qualify the site for consideration as a Special Protection Area (SPA) or Special Area of Conservation

National

Habitats that meet the criteria for designation of, or occur within, a Site of Special Scientific Interest (SSSI)

Species that are protected under national wildlife legislation such as the Wildlife & Countryside act, are listed in a national Red Data Book, or that are part of a population or assemblage of species that would meet the criteria for the site being designated a site of Special Scientific Interest (SSSI)

County

Habitats that are rare or uncommon in the County would meet the criteria for inclusion or are included within a second tier nature conservation site (SINC), or which form part of a local Biodiversity Action Plan (BAP) or Habitat Action Plan (HAP)

Species that are rare or uncommon within the County, form part of a population or assemblage of species which would meet the criteria for

inclusion or are included as part of a Site of Importance for Nature Conservation (SINC)

Local

Habitats that are uncommon or threatened within the Lydiate area

Species that are uncommon or threatened within the Lydiate area

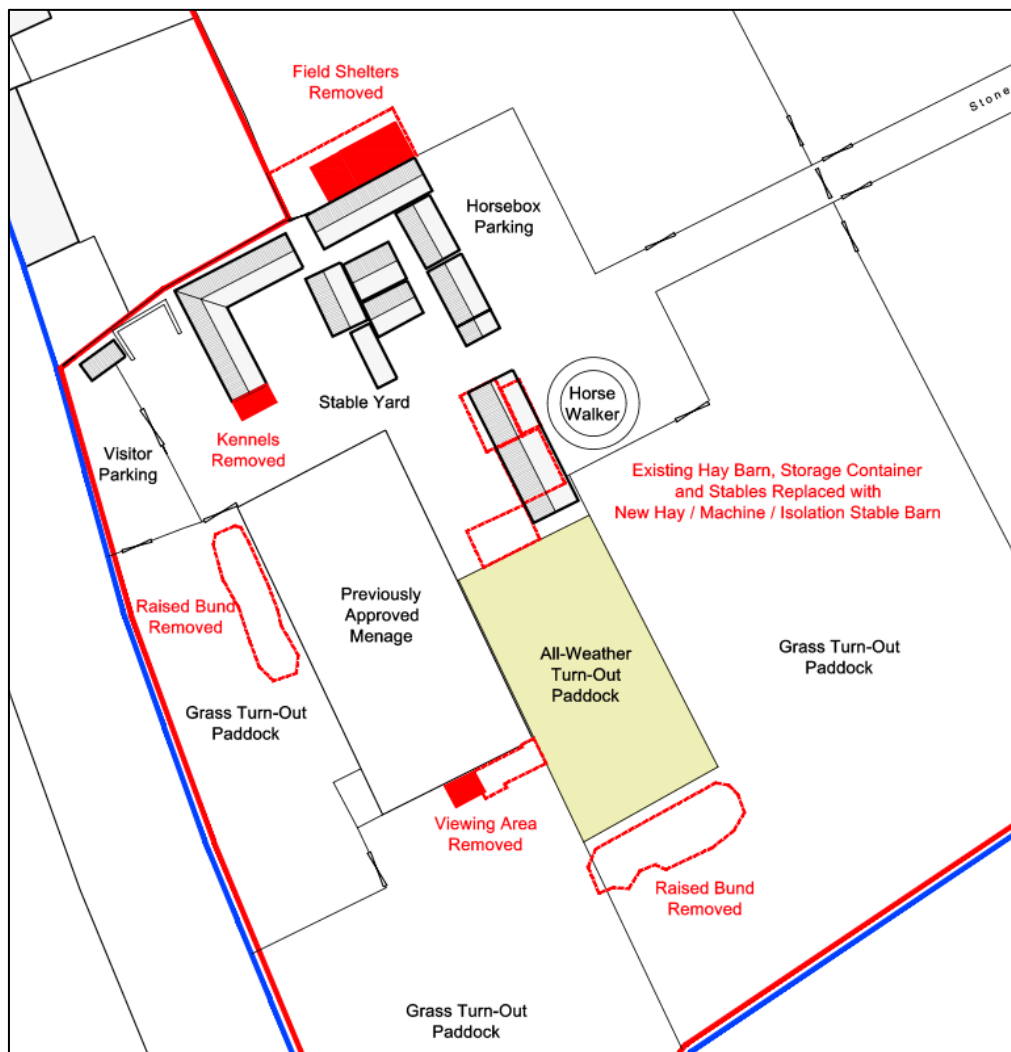
Negligible

Habitats or *Species* that fit into none of the above categories

4.2 Likely Impact of the Development and Outline Mitigation

The current ecological impacts resulting from the proposed sites development works (as indicated on the site plans below and to the rear of this report) based on the criteria outlined above and mitigation required to negate any impacts resulting from the works shown below, are summarized within the following tables.

Figure 17 Summary of development proposed works. It should be noted that some works have already been partially or wholly implemented



4.2.1 Badgers

Details	Likely Impacts	Required Mitigation and Residual Impact
No badger setts found on site but badgers known to occur in the wider area	No significant impact likely unless new setts are established in the interim	Check for signs of setts being established 4-6 weeks prior to any site works taking place. Retain mature vegetation along periphery of site as commuting routes. If new setts found, situation to be reassessed
Nature Conservation Importance: National	Impact Magnitude: Nil Effect Overall Impact: (Nil Effect: National) Non Significant	Residual Impact: Non Significant

4.2.2 Mammals (Hedgehog)

Details	Likely Impacts	Required Mitigation and Residual Impact
Hedgehog occurs in the wider area and may use the site from time to time, especially the site margins	There is potential to harm hedgehog during clearance works especially the mound and where adjacent to stands of trees and scrub	Care to be taken during any site clearance works, especially during the winter to avoid disturbing overwintering hedgehog. Suitable habitat to be checked prior to such works taking place. Any new fencing to allow adequate size gaps beneath to facilitate passage of hedgehogs
Nature Conservation Importance: National	Impact Magnitude: Minor Overall Impact: (Minor: National) Moderate	Residual Impact: Non Significant

4.2.3 Bats

Details	Likely Impacts	Required Mitigation and Residual Impact
Bats are likely to forage and commute to a small degree around the buildings and any mature vegetation situated along the site boundaries of the site beyond the development footprint, though overall the site has limited potential for use by bats	Based on current survey data, there will be no impact upon any roosting bats and whilst there may be a very minor impact upon foraging and commuting activity, development proposals will not be detrimental to the favourable conservation status to the wider bat population. There may however be a very slight loss of roosting potential	Maintain existing flight-lines (linear vegetation along the site margins) wherever possible. Loss of potential roosting sites should be compensated for by the provision of bat boxes attached to retained or proposed new buildings. Any additional lighting should be kept to a minimum and should avoid impacting any adjacent vegetation that might be used for foraging and commuting
Nature Conservation Importance: European	Impact Magnitude: Minor Overall Impact: (Minor: European) Moderate	Residual Impact: Non Significant

4.2.4 Breeding Birds

Details	Likely Impacts	Required Mitigation and Residual Impact
Low bird breeding potential within the grassland but moderate potential within the existing buildings	Removal or modification of any buildings during the breeding season (February-July) may result in disturbance to breeding birds and loss of breeding habitat	Retain as much existing mature vegetation as possible and avoid any impact to vegetation in adjacent sites. No dense vegetation to be removed or buildings dismantled or modified during the breeding season (February to July inclusive) until or unless checked for breeding birds by an ecologist. Loss of roosting and breeding sites to be compensated for by siting of proprietary nesting boxes on new buildings and planting with native trees and shrubs to provide foraging, nesting and roosting habitat
Nature Conservation Importance: National	Impact Magnitude: High Overall Impact: (High: National) Severe (where works are carried out during the breeding season)	Residual Impact: Non Significant

4.2.5 Great Crested Newts

Details	Likely Impacts	Required Mitigation and Residual Impact
There are no ponds on site, but one pond occurs to the northeast, adjacent to the wider site boundaries. This pond is however more than 250m from the proposed development footprint, the remaining grassland habitat that dominates the wider site being suboptimal, remaining unaffected and only subject to a change of use from livestock to horse grazing and turn-out	No impact likely	No specific mitigation required. However, as a precaution to ensure that there is no adverse impact upon migrating or overwintering great crested newts, the Reasonable Avoidance Measures (RAMS) below should be implemented
Nature Conservation Importance: European	Impact Magnitude: Nil Effect Overall Impact: (Nil Effect: European) Non Significant	Residual Impact: Non Significant

Reasonable Avoidance Measures in respect of Great Crested Newts (outline)
<ul style="list-style-type: none"> • The site proposed for development (modification and removal of existing buildings or construction of new buildings and reinstatement of grassland by removal of bund) should be kept clear of any dense vegetation for at least fourteen days prior to site works commencing • Prior to works taking place, all unnecessary loose or sheet materials to be removed and checked for the presence of terrestrial phase newts (all species) • Any loose or sheet materials stored on site during site works to be raised on pallets, contained within bulk bags, or enclosed by amphibian-proof fencing • Any excavations to be back-filled or covered with plywood or other suitable materials and the edges sealed with topsoil at the end of each working day • All contractors or site workers to be made aware of the potential for amphibians being present, especially during works in respect of bund to be removed • Should the presence of great crested newts be found or suspected, all works should cease and the advice of an appropriately licenced ecologist should be sought

4.2.6 Botany/Vegetation Communities/Habitats

Details	Likely Impacts	Required Mitigation and Residual Impact
<p>Whilst semi-natural habitat of moderate to high ecological value occurs along the site boundaries (i.e. mainly species-poor grassland and sparse or scattered ruderal vegetation) there is virtually no vegetation within the development footprint. Consequently, the development footprint is predominantly of very low ecological value in botanical habitat terms</p>	<p>Virtually all vegetation within the development footprint will be lost. Whilst there will be little or no impact upon any semi-natural vegetation of importance, in terms of BNG, there will be an initial net loss of habitat (biodiversity value)</p>	<p>No specific mitigation possible within the development footprint. However, beyond this area, ensure that peripheral vegetation such as rank grassland or other semi-natural vegetation is retained and links into the wider wildlife corridor maintained. Supplementary planting of native trees and shrubs along the site boundaries could feasibly reduce the initial net loss of biodiversity and allow a 10% net gain in line with current requirements</p>
<p>Nature Conservation Importance: County</p>	<p>Impact Magnitude: High</p> <p>Overall Impact: (High: Local) Slight</p>	<p>Residual Impact: Non Significant</p>

5.0 Conclusion

- 5.1 There was no evidence of any specifically protected or otherwise important species occurring within the development footprint and no important habitats were identified that will be adversely affected. Several breeding birds, which may include species that are listed on both local and UK Biodiversity Action Plans at some times of year, all of which are protected in general terms during the breeding season, do or are likely to occur on site, and there will be an initial but relatively minor loss of breeding habitat.
- 5.2 With adequate mitigation and the implementation of a few relatively minor precautions as outlined above, it is considered that the proposed development will result in negligible overall ecological impact regarding protected species.
- 5.3 There will however be an initial net loss of biodiversity in terms of BNG due to the loss of ruderal vegetation and small areas of species-poor grassland. However, the planting of native trees within the wider site will reduce any such losses of biodiversity and could feasibly enable 10% net gain to be achieved. Other measures such as the provision of bat and bird boxes will also improve biodiversity though these do not currently count towards BNG.

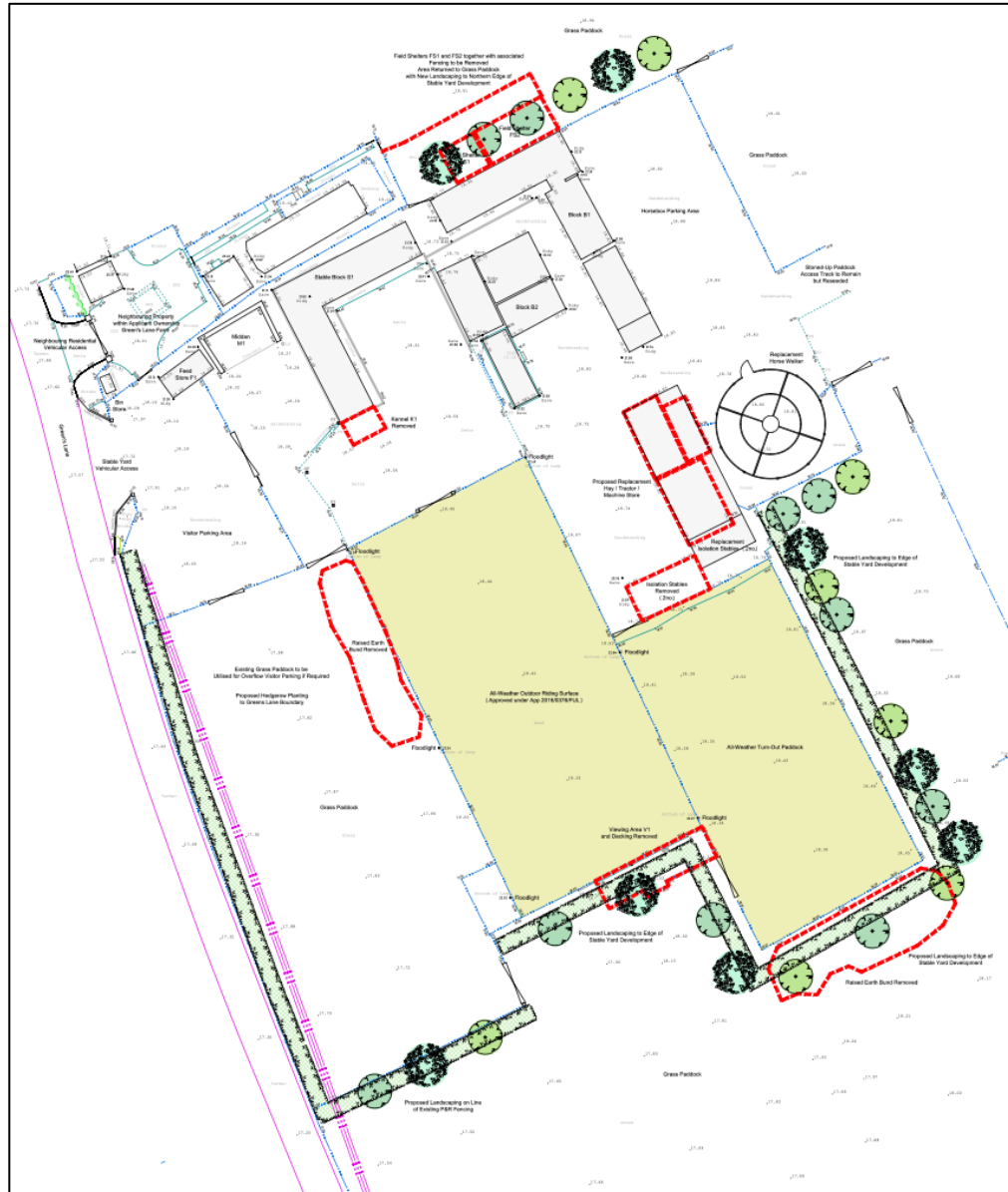
6.0 References

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7.0 Site Plan

7.1 Proposed Site Layout (screenshot)

7.1.1 Summary of proposed site works and landscaping. See full set of drawings prepared and submitted by RPS for further details. The remainder of the site will not be affected and is only subject to a change of use in respect of horse grazing and turn-out instead of livestock such as cattle and sheep.



8.0 Legislative Considerations

Bats

- 8.1 All British bat species are listed and protected under Schedule 5 of the Wildlife and Countryside Act 1981 and Schedule 2 of the Habitat Regulations 1994 where it is an offence to:
- ◆ Intentionally or deliberately kill, injure or take (capture) bats;
 - ◆ Deliberately disturb bats (whether or not in a roost);
 - ◆ Damage, destroy or obstruct access to a bat roost;
 - ◆ Possess or transport a bat or any part of a bat unless acquired legally;
 - ◆ Sell, barter or exchange bats or parts of bats.
- 8.2 Where any bat roosts are affected by a proposed development, a licence from the Natural England will be required before any development works can be implemented, *irrespective of whether or not planning consent has been given*. However, where no roosts are likely to be affected, no licence is required.

Badgers

- 8.3 Badgers and their setts are protected under the following legislation:
- The Protection of Badgers Act 1992
- The Wildlife and Countryside Act 1981
- The Protection of Animals Act 1911
- The Abandonment of Animals Act 1960
- Animals (Scientific Procedures) Act 1986.
- 8.4 The primary legislation relevant to badgers in this case is the Protection of Badgers act and the Wildlife and Countryside act. With respect to the former, it is an offence to:
- ◆ Kill, injure or take a badger, or attempt to do so
 - ◆ Ill-treat or be cruel to a badger
 - ◆ Dig for badgers or use badger tongues
 - ◆ Ring or mark badgers
 - ◆ Sell or possess a live badger or possess a dead badger,
 - ◆ Send or deliberately allow a dog to enter a badger sett
 - ◆ Disturb a badger when it is occupying a sett
 - ◆ Damage or destroy a sett or obstruct access to a sett.
- 8.5 However, it should be noted that the legislation does not directly protect habitat used for foraging or migration.
- 8.6 With respect to any proposed development, any of the offences listed above may be permitted providing a licence has been issued by Natural England.

Great Crested Newts

- 8.7 Great crested newts and their habitat are fully protected under both the Wildlife & Countryside act 1981 and Schedule 2 of the Habitat Regulations 1994. It should be noted that where great crested newts and their habitat are affected by a proposed development, a licence from Natural England will be required be the site can be developed, irrespective of whether planning consent has been given.

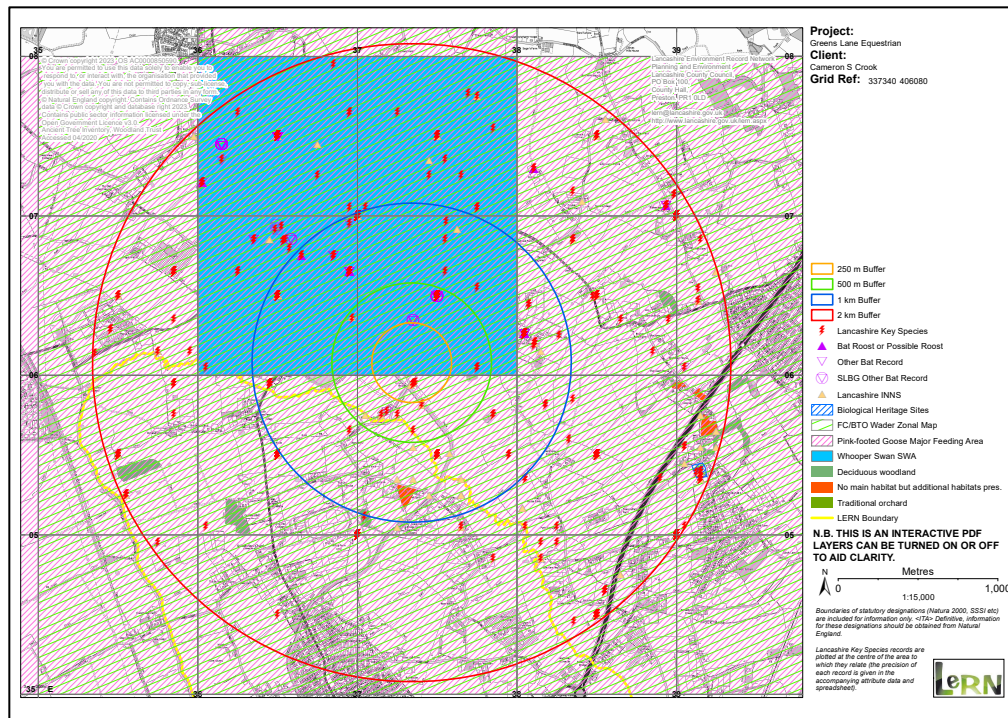
Birds

- 8.8 All nesting wild birds, except for certain pest species, are protected under Part 1 of the Wildlife and Countryside Act 1981 and barn owls are specially protected under Schedule 1 of the act where it is an offence to:
- ◆ Kill, injure or take any wild barn owl;
 - ◆ Take, damage or destroy any wild barn owl nest whilst in use or being established;
 - ◆ Take or destroy a wild barn owl egg;
 - ◆ Have in one's possession a wild barn owl or it's egg;
 - ◆ Disturb any wild barn owl whilst establishing a nest or whilst in, on or near a nest containing eggs or young;
 - ◆ Disturb any dependent young of wild barn owls.

9.0 Appendix

- 9.1 Desktop survey map
- 9.2 BNG summary data
- 9.3 Habitat Map

9.1 Desktop survey data summary map provided by LERN



9.2 BNG Summary Results (preliminary)*

Green's Lane Equestrian		Return to results menu	
Headline Results			
Scroll down for final results			
On-site baseline	Habitat units	7.87	
	Hedgerow units	0.00	
	Watercourse units	0.00	
On-site post-intervention <small>(Including habitat retention, creation & enhancement)</small>	Habitat units	8.48	
	Hedgerow units	0.14	
	Watercourse units	0.00	
On-site net change <small>(units & percentage)</small>	Habitat units	0.81	10.87%
	Hedgerow units	0.14	N/A
	Watercourse units	0.00	0.00%
Zero baseline units - % cannot be calculated			
Off-site baseline	Habitat units	0.00	
	Hedgerow units	0.00	
	Watercourse units	0.00	
Off-site post-intervention <small>(Including habitat retention, creation & enhancement)</small>	Habitat units	0.00	
	Hedgerow units	0.00	
	Watercourse units	0.00	
Off-site net change <small>(units & percentage)</small>	Habitat units	0.00	0.00%
	Hedgerow units	0.00	0.00%
	Watercourse units	0.00	0.00%
Combined net unit change <small>(Including all on-site & off-site habitat retention, creation & enhancement)</small>	Habitat units	0.81	
	Hedgerow units	0.14	
	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 <small>(Including all on-site & off-site habitat retention, creation & enhancement)</small>	Habitat units	0.81	
	Hedgerow units	0.14	
	Watercourse units	0.00	
Total net % change <small>(Including all on-site & off-site habitat retention, creation & enhancement)</small>	Habitat units	10.87%	
	Hedgerow units	N/A	
	Watercourse units	0.00%	
0 baseline units - % cannot be calculated			
Trading rules satisfied?	Yes ✓		

*See Statutory BNG Metric submitted separately for full details

9.3 Habitat Map and Target Notes

