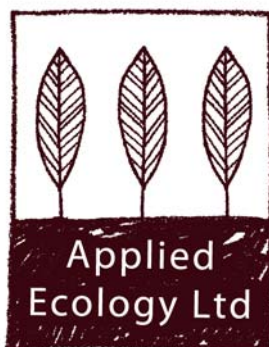


Annex 35.7

Old Little Humber Farm
Phase 1 Habitat Survey

(Applied Ecology Ltd)



**OLD LITTLE HUMBER FARM
PHASE 1 HABITAT SURVEY**

Report for

Able UK Ltd

October 2011

Client: Able UK Ltd

Title: Old Little Humber Farm Phase 1 Habitat Survey

Project No: AEL 454

Date of Issue: 4 October 2011

Status: Final

Signed on behalf of Applied Ecology Ltd:



Dr Duncan Painter
Director

CONTACT DETAILS:

APPLIED ECOLOGY LTD
St. John's Innovation Centre
Cowley Road
Cambridge
CB4 0WS

Tel: 01223 422 116

Fax: 01223 420 844

Mobile: 07725 811 777

Email: info@appliedecology.co.uk



Contents

1	Introduction	1
1.1	Background.....	1
2	Survey Approach.....	2
2.1	Phase 1 Habitat survey.....	2
2.2	Protected Species Survey	2
3	Survey Findings	3
3.1	Habitats	3
3.2	Protected Species.....	5
4	Evaluation and Recommendations	9
4.1	Habitats	9
4.2	Protected Species.....	9
4.3	Recommendations.....	10



1 INTRODUCTION

1.1 BACKGROUND

- 1.1.1 Applied Ecology Ltd (AEL) was appointed by Richard Cram of Able UK to carry out an ecological appraisal of land at Old Little Humber Farm (Central Ordnance Survey Grid Reference: TA203242), 1.5km south of Thorngumbald in the East Riding of Yorkshire. A location map, supplied by the client, is given in **Appendix 1**. R Goater (MIEEM), an experienced AEL ecologist, completed the appraisal of the site on 16 September 2011.
- 1.1.2 The purpose of the survey was to produce a Phase 1 habitat map of the site and to highlight any ecology issues within it, such as the potential presence of habitats and animal species of high individual nature conservation value by virtue of being protected by wildlife law and/or that are the subject of Biodiversity Action Plan (BAP) initiatives in line with planning policy guidance.



2 SURVEY APPROACH

2.1 PHASE 1 HABITAT SURVEY

2.1.1 All habitats present were classified according to standard Phase 1 habitat survey categories¹ during a walkover survey completed on 16 September 2011. The main plant species present, and an estimate of their individual relative abundance following the DAFOR scale² was recorded for each habitat type/feature.

2.2 PROTECTED SPECIES SURVEY

2.2.1 A walkover survey of the site was completed in conjunction with the habitat survey to search for field evidence of protected animal species or species groups, for instance great crested newt, badger, reptiles, bats, and birds. In the absence of such field evidence, an assessment of habitat suitability for these species was undertaken using a professional judgement assessment of habitat value.

2.2.2 A search was also made of the National Biodiversity Network (NBN)³ database for protected animal species records within the survey area's 10km grid square; TA22. It should be understood that the absence of species records on the NBN, relevant to the survey site, does not indicate their absence in fact.

¹ JNCC (1993) *Handbook for Phase 1 Habitat Survey – A technique for Environmental Audit*. JNCC. Peterborough.

² DAFOR scale, where D=Dominant; A=Abundant; F=Frequent; O=Occasional; and R=Rare.

³ data.nbn.co.uk



3 SURVEY FINDINGS

3.1 HABITATS

3.1.1 The survey area was relatively simple in habitat terms, being comprised almost entirely of arable fields with most boundaries formed by species-poor hedgerows and dry or wet ditches. A small plantation woodland was present in the south-west corner. The Phase 1 Habitat Map is shown in **Figure 1**.

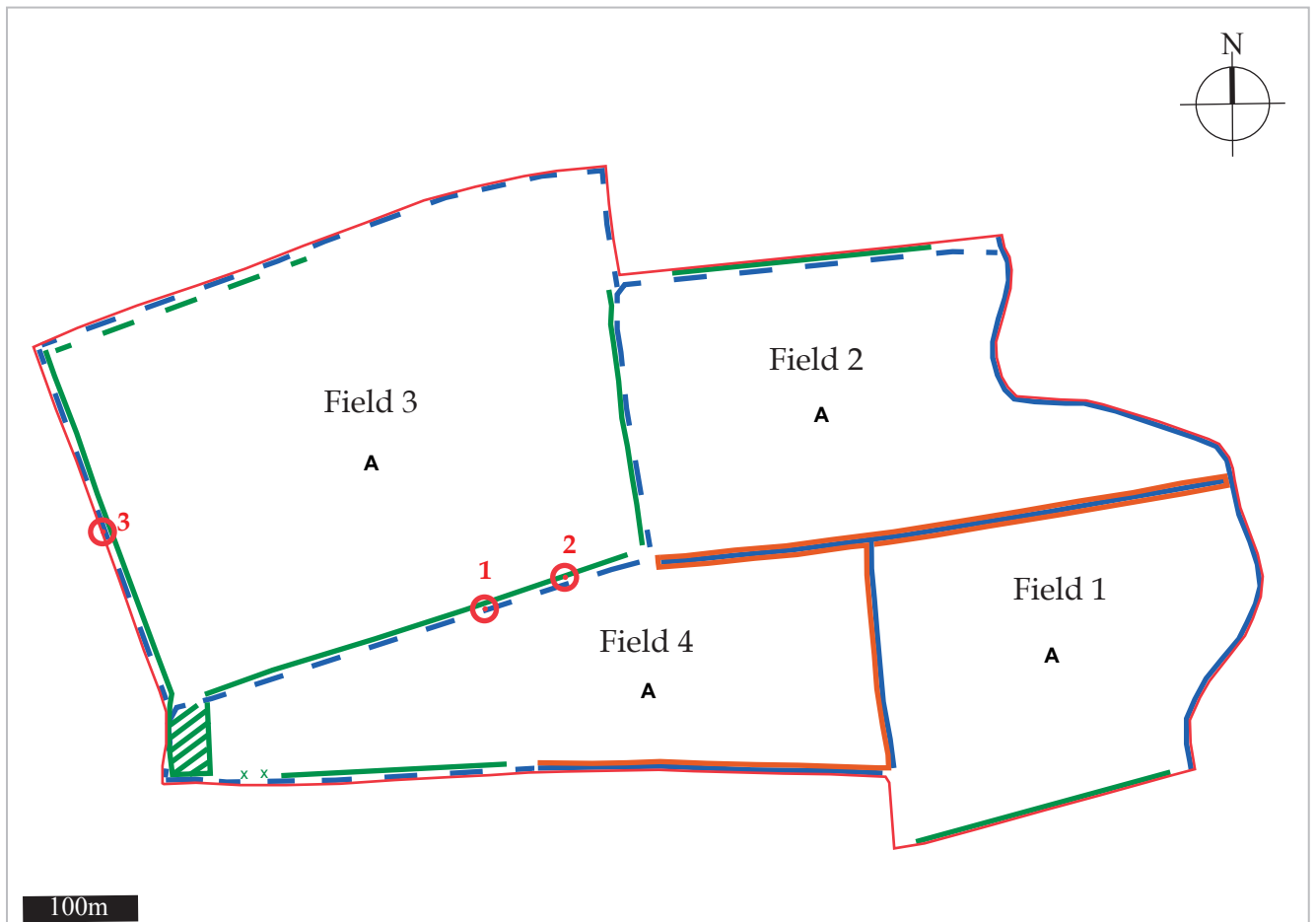
Arable Fields

3.1.2 Four arable fields (e.g. **Photo 1**) comprised the majority of the site and are labelled 1 - 4 in **Figure 1** to aid descriptions of survey findings. All fields had been recently cropped (oilseed rape and wheat) and were either in stubble (Fields 1 and 3), had been freshly ploughed (Field 4), or were partially ploughed (Field 2). Where stubbles remained, arable weeds were sparse, with shepherd's-purse, *Capsella bursa-pastoris*, bristly oxtongue *Picris echioides*, groundsel *Senecio vulgaris* and charlock *Sinapis arvensis* all occasional but widespread. Annual meadow-grass *Poa annua*, and greater plantain *Plantago major* were also occasional in less recently cultivated areas along field edges.




3.1.3 Most fields were edged by 2 - 3 metre wide improved grassland margins (**Photo 2**) (not shown in **Figure 1**) dominated by false oat-grass *Arrhenatherum elatius* and with frequent cock's-foot *Dactylis glomerata*. Perennial rye-grass *Lolium perenne* and the tall ruderal species', common nettle *Urtica dioica* and cow parsley *Anthriscus sylvestris* were occasional. White clover *Trifolium repens*, ribwort plantain *Plantago lanceolata*, and lady's bedstraw *Galium verum*, were rare in these margins, being recorded mainly along the southern boundary of Field 4.

Hedgerows

3.1.4 All boundary hedgerows, apart from the western section of the northern boundary of Field 3, were intact and appeared to be regularly trimmed (e.g. **Photo 3**). All were species-poor and dominated by hawthorn *Crataegus monogyna*, with dog rose *Rosa canina*, and blackthorn *Prunus spinosa* occasional. Bullace *Prunus domestica ssp. interstitia* was rare in the northern boundary hedgerow of Field 2. The northern boundary hedgerow of Field 3 appeared to have been cut to ground level recently, and at the time of the survey consisted of very sparse re-growth of stumps. This is marked in **Figure 1** as a defunct species-poor hedge.



Key:

- | | |
|---|----------------------------------|
|  | Site Boundary |
|  | Intact Hedge - species-poor |
|  | Defunct Hedge - species-poor |
|  | Wet Ditch |
|  | Dry Ditch |
|  | Semi-improved Grassland |
|  | Broad-leaved Plantation Woodland |
| A | Arable |
|  | Target Note (refer to text) |
|  | Scattered Scrub |

Old Little Humber Farm
Figure 1. : Phase 1 Habitat Map





Photo 1



Photo 2



Photo 3



Photo 4



Photo 5



Photo 6



Photo 7



Photo 8



Photo 9



Photo 10



Photo 11



3.1.5 The hedgerow (**Photo 4**) forming the western boundary to Field 3, though species-poor, was different in character from the others, being double for much of its length, taller and broader as a result of less frequent management. It was comprised of the same woody species as hedgerows elsewhere on the site, with the addition of frequent elder *Sambucus nigra*. Its southern end was dominated by damson or bullace *Prunus domestica ssp interstitia*, extending into the western boundary of the plantation woodland at the western end of Field 4.

3.1.6 Where single woody shrubs, probably remnant hedge plants, were present along field boundaries, these were marked on the Phase 1 map as 'scattered scrub'. They were invariably hawthorn.

Ditches

3.1.7 Every boundary around and within the survey area was marked by a drainage ditch except for that along the southern edge of Field 1. Ditches were assessed as either wet or dry based on their plant species composition.

3.1.8 The ditch containing South Ends and Thorney Crofts Drain (**Photo 5**), forming the eastern site boundary, was 2 – 3 metres deep and 6 metres wide at its top. It held a few centimetres of non-flowing water in places and was considered most likely to hold at least some water for much of the year. Within the channel, common reed *Phragmites australis* was dominant for much of its length, with occasional ruderal plants such as bristly oxtongue, curled dock *Rumex crispus*, and spear thistle *Cirsium vulgare*. Where open water was present, a fine-leaved species of pondweed *Potamogeton sp.* and a water-starwort species *Callitriche sp.* were locally abundant.

3.1.9 Smaller ditches, marking the southern boundary of Field 2 (**Photo 6**), the western boundary of Field 1 and the eastern half of the southern boundary of Field 4, were judged to be more often wet than dry, though no water was present in them at the time of survey. Typical plant species present within their steep banks included frequent common reed, tall fescue *Festuca arundinacea*, creeping bent *Agrostis stolonifera* and false fox-sedge *Carex otrobae*, and rare sea club-rush *Bolboschoenus maritimus*; all indicating a high water table near the ditch bottoms.

Semi-improved Grassland

3.1.10 The predominantly grassy sides to the ditches described in paragraph 3.1.8 extended approximately three metres each side, giving a grassland boundary



habitat, in places up to 10 metres in width (**Photo 7**). The mix of plant species present was taken as an indication that mowing was infrequent and that fertilizer and chemical spray drift from arable farming operations had not significantly altered the flora.

- 3.1.11 All other ditches were dry and appeared to be permanently so, often with considerable leaf- and woody litter accumulated in them from adjacent hedgerows.

Broad-leaved Plantation Woodland

- 3.1.12 A rectangle of broad-leaved plantation woodland, measuring 50m x 30m and estimated at 20 - 30 years old, was present in the western-most extremity of Field 4 (**Photo 8**). It was bounded by a species-poor hedgerow dominated by hawthorn. More or less equal numbers of English oak *Quercus robur*, ash *Fraxinus excelsior*, and horse-chestnut *Aesculus hippocastanum* comprised the plantation, the shrub layer of which was purely elder, densest to the north, where it was abundant. A species-poor ground layer was present, which consisted of abundant common nettle, and hogweed *Heracleum sphondylium* with locally abundant bramble *Rubus fruticosus* agg.

3.2 PROTECTED SPECIES

Great Crested Newt

- 3.2.1 No ponds where GCN could potentially breed were present within the survey area. A pond shown on Ordnance Survey maps to be present in Field 3 did not exist, presumably having been filled in. Five ponds and a moat are shown on the OS map to be within 500m of the survey area boundary but in the absence of access permission to these areas, were not investigated.
- 3.2.2 No records of the presence of GCN in or near the site were listed on the NBN gateway website. The nearest NBN GCN record is from Thorngumbald, dated 1977, over 1.5km to the north.
- 3.2.3 Arable fields are not generally suitable for GCN during the terrestrial phases of their life-cycle, but damp ditches, infrequently mown grassland, and hedgerows - all of which are present on the site - are suitable and may provide newt-friendly habitats linking the site with potential breeding ponds.
- 3.2.4 A moat, associated with Old Little Humber Farm buildings, 300m to the south of



the survey area was said by Mr White, the tenant farmer, to be dry at the time of survey but this does not necessarily rule out its suitability as a newt breeding site; moats are often highly favoured by GCN. Therefore, the presence of this species within the survey area cannot be ruled out without further survey taking place, including of all ponds within 500m of the site boundary.

Badger

- 3.2.5 No recent evidence of use of the site by badgers was found. Regularly used badger paths would have been expected to be clearly evident along or across the arable field grass margins, if the species was present. However, two single-hole disused setts, with approximate positions shown as **Target Notes 1** and **2** on the Phase 1 Habitat Map, were present in the north side of a dry ditch along the southern boundary of Field 3. These excavations had large associated spoil heaps consistent with their formation by badger but one of these (**Target note 1**) was overgrown with vegetation (**Photo 9**) indicating a lack of recent badger activity, and both holes were cluttered with leafy and woody debris, making the entrances too small for use by badgers without re-excavation. These holes did not constitute a main sett, being classified most appropriately as disused outlier setts. Badger hairs were searched for in the burrow entrances but none were found. Other excavations within this bank were made by rabbits, though with some possible enlargement by badger, and evidence of current use by rabbits was present.
- 3.2.6 Definitive evidence of the recent presence of badger close to the site was found on the grass verge of Newlands Lane, the road running north-south outside the site's western boundary, at grid reference TA19928,24193. The evidence, marked on the Phase 1 Habitat Map as **Target Note 3** consisted of approximately 12 small excavations in the turf and a well-used latrine with recent badger dung. (**Photo 10**). No clear badger paths were present in association with this latrine, though a possible mammal path led into the adjacent dry ditch below the over-arching double hedge within the site. A careful search within the ditch, and also within the plantation woodland at its southern end (considered to be the most likely location of a sett), showed that no badger sett was present there.
- 3.2.7 Although no recent evidence of badgers within the survey area was present, the species clearly uses ground very close to it and it is therefore very likely that badgers are sometimes to be found there.



Water Vole

- 3.2.8 Sections of the South Ends and Thorney Crofts Drain were searched for evidence of the presence of water vole, such as characteristic droppings, burrows and feeding signs. None were found and it was judged likely that owing to the meagre amount of water present in the drain, the species was unlikely to be there. Nevertheless, in other respects, the drain appeared attractive to water vole and its presence could not be confidently ruled out without more exhaustive survey effort.
- 3.2.9 Numerous unspecified records of water vole within TA22 were listed in the NBN Gateway up to 2006. Although no records were clearly relevant to the survey area, the number of records and the recent dates of some of them give weight to the argument that they may be present on the site.

Reptiles

- 3.2.10 No evidence of reptiles was found on the site, and the majority of the survey area, being frequently disturbed arable land was not suitable for this species group. However, the semi-improved grass-banked ditches, and the South Ends and Thorney Crofts Drain at the eastern side of the site were considered to provide suitable habitat, particularly for grass snake, and also potentially for common lizard and slow-worm.
- 3.2.11 Grass snake and common lizard were both recorded in the NBN Gateway within TA22 but no details of records were given.

Bats

- 3.2.12 No buildings or trees were present on the site that could have represented suitable roosting places for bats. The survey area was, in general, open and unsheltered, within a flat and similarly unsheltered wider landscape without attractive commuting or foraging corridors for bats. The tall hedge running along the western boundary of the site offered some potential as a sheltered foraging or commuting route but it was not well-linked with similar hedges and was therefore considered unlikely to be used regularly or frequently by bats.

Birds

- 3.2.13 Few birds were noted during the survey, and the timing of the survey was not optimal for assessing the site's use by breeding species. However, a number of



typical arable farmland species were noted feeding or roosting on the remaining stubbles, indicating the site's value to this group of birds, all of which are Red-listed Birds of Conservation Concern⁴ owing to rapid recent population declines. These species were linnet (flock of 30), yellowhammer (three males along the southern boundary) and grey partridge (2 - 3 birds each recorded in fields 2 and 3).

⁴ Eaton M A, Brown, A F, Noble D G, Musgrove A J, Hearn R, Aebischer NJ, Gibbons D W, Evans A and Gregory RD (2009) *Birds of Conservation Concern 3: the population status of birds in the United Kingdom, Channel Islands and the Isle of Man*: British Birds 102, pp 296-341.



4 EVALUATION AND RECOMMENDATIONS

4.1 HABITATS

4.1.1 The habitats present within the survey area were not considered to be of high intrinsic biodiversity value, largely being comprised of frequently disturbed arable land, regularly managed species-poor hedges, predominantly dry ditches and a small area of immature plantation woodland. No plants of high biodiversity interest were recorded or thought likely to be present, given the existing habitats.

4.1.2 Nevertheless, these and other habitats were present that could be exploited by some protected animal species.

4.2 PROTECTED SPECIES

4.2.1 The site provided some opportunities for protected species, but little evidence was found of their presence. There was clear evidence that badger had been recently present just beyond the site's western boundary and two holes, classified as disused outlier setts, were present along the site's southern boundary ditch, indicating that the species was, at least sometimes, present within the survey area. Badgers are particularly attracted to grassland, where they forage for ground-dwelling invertebrates. Owing to the site's predominantly arable nature, it was not considered to be particularly attractive to this species. No extant setts were found during careful searches along dry ditches and in the plantation woodland.

4.2.2 Water vole evidence was not found along the site's eastern boundary drain, which, owing to the presence of some water, was thought the most likely watercourse in which to find them. In order to prove or disprove the species' presence, further survey would be required of this drain and other connected ditches on the site if these were found to hold water for much of the year. All other ditches were dry or nearly so, and were assessed as being unsuitable for water vole.

4.2.3 The wet ditches and narrow strips of semi-improved grassland within their banks and adjacent to them were considered to provide potentially suitable habitat for reptiles; particularly grass snake. Further survey would be necessary in order to prove their presence or likely absence.

4.2.4 Ditches, plantation woodland and hedgerows provided terrestrial habitat



potentially suitable for amphibians, including great crested newt. No assessment was made of ponds within newt foraging range of the site and in order to reach a conclusion about the likelihood of GCN being present within the survey area, presence/absence surveys of these ponds would be necessary.

4.2.5 No potential locations for bat roosts, either in trees or in buildings, were present and the site's value to foraging or commuting bats was judged to be low.

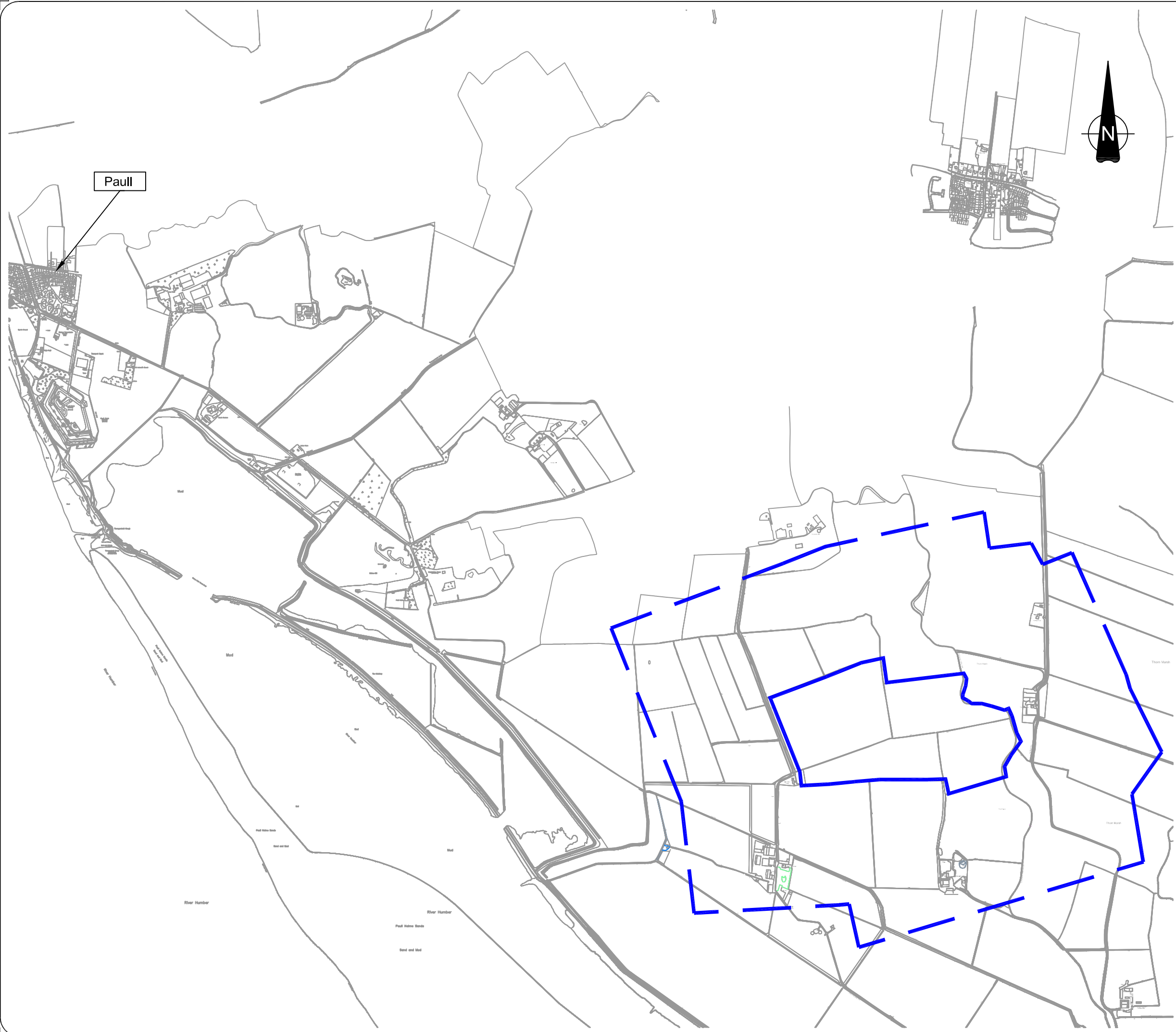
4.2.6 Hedgerows and plantation woodland are likely to be used by nesting birds during the March - August breeding season. Species such as the Red-listed linnet and yellowhammer, both recorded during the survey, are likely breeders within the site's hedgerows. The open fields may be attractive to ground-nesting species of similar conservation concern, such as sky lark and grey partridge, and also for wintering flocks of finches (such as linnet) and roosting waders, such as lapwing and golden plover (both of which were observed flying overhead during the survey).

4.3 RECOMMENDATIONS

4.3.1 Survey to prove the absence or presence of badger, water vole, reptiles and (in ponds within 500m of the site) great crested newt would be necessary at Old Little Humber Farm, only if habitats potentially suitable for them are likely to be destroyed or significantly disturbed, by any future management.



Appendix 1



KEY

- Old Little Humber Farm
- - - Phase 1 Habitat Buffer (500m)

A	13/09/11	Preliminary Issue	JH	RC	RC
Rev	Date	Comments	Drw	Chk	App

ABLE UK Ltd
 ABLE House
 Billingham,
 Teesside,
 TS23 1PX
 Tel: +44(0)1642 806080
 Fax: +44(0)1642 655655
 email: info@ableuk.com
 www.ableuk.com

Project: **ABLE Marine Energy Park**

Client: **ABLE Humber Ports Ltd**

Title: **Old Little Humber Farm Site Location Plan**

PRELIMINARY

Scale:	Drawn	Checked	Approved
1:15,000@A3	J Harris	R Cram	R Cram
Date	13/09/2011	13/09/2011	13/09/2011
Drawing No.	AME - 08055		Revision: A