



**Ecological Appraisal
Land off Manor Grove,
Royston, Barnsley**

Report reference: R-1489-01
February 2013

Report Title:	Ecological Appraisal Land off Manor Grove, Royston, Barnsley
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Summary Statement

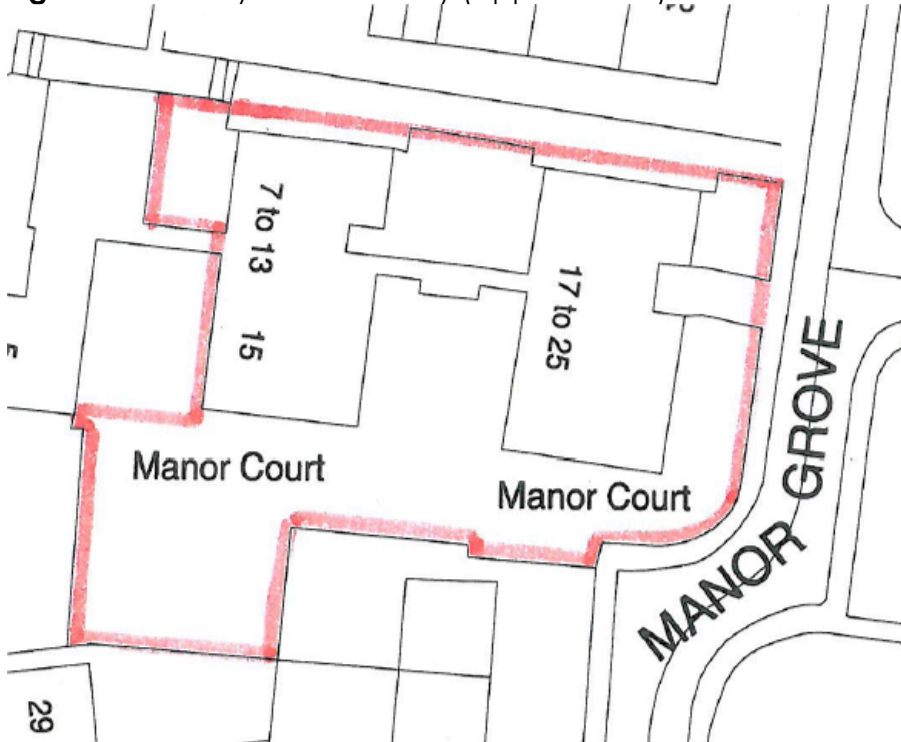
The site's development need not impact on protected or otherwise important species, habitats or designated sites.

Precautions are recommended in relation to the potential use of scrub vegetation by nesting birds.

Introduction

1. Brooks Ecological Ltd was commissioned by FDA Landscape to carry out an ecological assessment of land off Manor Grove, Royston, Barnsley, South Yorkshire, S71 4LL (SE 355 113).

Figure 1 Survey site boundary (approximate)



Site Proposals

2. The proposals are for a residential development to occupy the application site.

Potential impacts

3. The following potential impacts are highlighted and the report which follows sets out the significance of these impacts relative to the ecological value of the site and the potential presence of protected or notable species:
 - Clearance of vegetation;
 - Loss of areas currently occupied by habitat to built development; and
 - Effects on adjacent /nearby habitats.

Desk Study

4. A desk study was carried out to identify species or habitats that are considered important in a local context and to identify any species recorded locally that may be associated with the application site. This information can be used to help target groups that need to be considered in more detail in order to identify the ecological baseline for the application site.

Designated Sites

5. A search of the MAGIC website was undertaken. The MAGIC site is a Geographical Information System that contains all statutory (e.g. Sites of Scientific Interest [SSSI's]) as well as many non-statutorily listed habitats (e.g. Ancient woodlands and grassland inventory sites). It is a valuable tool when considering the relationship of a potential development site with nearby important habitats.
6. There is one locally designated statutory site within 2 km of the application site. This is Notton Wood Local Nature Reserve (LNR), situated approximately 920m northwest of the proposed site boundary. This LNR is isolated from the application site by housing and so is highly unlikely to be affected by the proposed works.

Natural England Natural Area

7. The site falls within *Natural Area 24 Coal Measures*
8. Based on shale and sandstone deposits natural area 24 is characterized by dense population centres such as Sheffield, Leeds and Wakefield. The area's ecology reflects the changing geology which underlies it and is typified by mixed agriculture, acidic / ancient woodlands, valley wetlands and acidic / neutral grasslands.
9. There are no nationally important conservation priorities. Local Conservation priorities for the area are;
 - Acid Grassland
 - Fen, Marsh and Swamp
 - Lowland Heathland
 - Neutral Grassland
 - Rivers and Streams
 - Standing and open water
 - Wet Woodland
10. The application site does not present any good examples of these habitat types.

Local Biodiversity Action Plan

11. Consideration is given to the Local Biodiversity Action Plan (LBAP), which for this site is the 'Barnsley Biodiversity Action Plan'.
12. Table 1 lists the local Species Actions Plans and, with reference to the field study presented later in this report, assesses a) whether the species potentially have any degree of dependence on the site, and b) if so whether development would be likely to have a significant bearing on the objectives of the UK/LBAP.

Table 1: Species Action Plans

Species/group	Potentially on site	Could development impact significantly on BAP objectives?
Hedgehog	No	-
Barn owl	No	-
Skylark	No	-
Tree sparrow	Yes	No
Twite	No	-
Great crested newt	No	-
Salmon	No	-
Bullhead	No	-
White-clawed crayfish	No	-
Glow worm	No	-
Dingy skipper	No	-
Bats	No	-
Bluebell	No	-
Water vole	No	-
Otter	No	-
Grey partridge	No	-
Bittern	No	-
Kestrel	No	-
Little ringed plover	No	-
Lapwing	No	-

13. Table 2 lists local Habitat Action Plans and assesses a) whether habitats on site could represent valuable examples of the habitat type within the spirit of the BAP and b) whether loss of the habitat would have a significant bearing on the objectives of the BAP.

Table 2: Habitat Action Plans

Habitat	Valuable examples present on site?	Could development impact significantly on BAP objectives?
Upland oakwood	No	-
Lowland heathland	No	-
Upland heathland	No	-
Blanket bog	No	-
Purple moor grass and rush pasture	No	-
Reedbeds	No	-
Ponds	No	-
Rivers	No	-
Open mosaic habitats	No	-
Lowland mixed deciduous woodland	No	-
Wet woodland	No	-
Wood pasture and parkland	No	-
Hedgerows	No	-
Arable field margins	No	-
Floodplain grazing marsh	No	-
Lowland meadows	No	-
Lowland dry acidic grassland	No	-

Aerial Photography and Detailed Map Study

14. Aerial photographs published on commonly used websites were studied to place the site in its wider context and to look for ecological features that would not be evident on the ground during the walkover survey. This approach can be very useful in determining if a site is potentially a key part of a wider wildlife corridor or an important node of habitat in an otherwise ecologically poor landscape. It can also identify potentially important faunal habitat (in particular ponds) which could have a bearing on the ecology of the application site. Ponds may sometimes not be apparent on aerial photographs so we also refer to close detailed maps that identify all ponds issues and drains. We use Promap Street + scale maps for this purpose.
15. The site is located in the centre of a residential estate in the large village of Royston, north of Barnsley. The village extends north and east of the site whilst beyond the residential area south and west of the site are areas of farmland. Large mature tree lines border many of the fields, whilst others have only narrow grassland field margins, reducing the value of the connectivity beyond the tree lines.
16. The only woodland close to the site is Notton Park LNR, c.920m to the north-west. Housing, roads and large open fields separate the two areas; hence there is relatively poor connectivity between the woodland and the application site.

17. There are no significant water features within a 1km radius of the site. A single issue is located c.320m south but again this is poorly connected to the site and unlikely to support important wildlife populations.

Records

18. Barnsley Biological Records Centre (BBRC) has been asked to provide information on protected or notable species and locally designated sites within 1km of the application site. The records include the following which are of relevance to this assessment:
 - A small number of bat records, relating to noctule, common pipistrelle, pipistrelle sp. and vesper bat. The nature of these records is not specified. The closest record is c.280m south-east of the application site.
 - A single bird record relating to house sparrow.
 - A small number of common liverwort and moss records.

Phase 1 Habitat Survey

Survey Method

19. The survey was carried out on the 28th January 2013 by an experienced field ecologist who is a member of the Institute of Ecology and Environmental Management (IEEM).
20. The survey followed a Phase 1 habitat survey methodology (JNCC, 1993) and was extended to assess faunal potential. This involves walking the site, mapping and describing different habitats (for example: woodland, grassland, scrub). Evidence of fauna and faunal habitat is also recorded (for example droppings, tracks or specialist habitat such as ponds for breeding amphibians). This modified approach to the Phase 1 survey is in accordance with the approach recommended by the Guidelines for Baseline Ecological Assessment (IEA, 1995).

Results

21. The application site comprises a small plot of brown field land, set within the centre of a residential estate. The site supports the following habitat types:
 - Hard standing;
 - Rough improved grassland, and;
 - Scrub

Hard-standing

22. The majority of the site comprises of un-vegetated compacted earth and gravel, currently being used as a site compound (figure 2). This area of the site is enclosed by metal security fencing and contains a mix of building equipment, construction materials and temporary metal office units.



Figure 2

Un-vegetated hard-standing within the centre of the site.

Rough improved grassland

23. The site appears to have experienced a large amount of ground disturbance and vegetation clearance in the recent past, in preparation for development. Sections of the site then look to have been left undisturbed, allowing small areas of rank grassland to establish to the south and north-west of the site (figure 3).
24. The grassland is species poor, consisting primarily of a small number of common grass species, including false oat grass (*Arrhenatherum elatius*), cock's foot (*Dactylis glomerata*) and Yorkshire fog (*Holcus lanatus*). A range of common forbs are scattered throughout the habitat, including curled dock (*Rumex crispus*), common nettle (*Urtica dioica*), mugwort (*Rumex crispus*), common knapweed (*Centaurea nigra*), creeping thistle (*Cirsium arvense*), ragwort (*Senecio jacobaea*) and ribwort plantain (*Plantago lanceolata*).



Figure 3

Strip of rough improved grassland to the south.

Scrub

25. A very small amount of scrub vegetation is present within the site, including bramble (*Rubus fruticosus*) and elder (*Sambucus nigra*).
26. A line of mature hawthorn (*Crataegus monogyna*) and elder is present on adjacent land to the south-west, most likely planted as a hedgerow but then left un-managed.

Fauna

Amphibians

27. There is no amphibian breeding habitat within the application site, and the only pond within 500m is poorly connected to the site. This means that the site will be of limited value to amphibians and that (especially in the case of great crested newt) they are very unlikely to be present at the site.

Birds

28. Set within an urban landscape, the scrub on site has the potential to support only low numbers of common urban species.

Protected mammals

29. The site is unsuitable for any protected mammal species, such as bat, otter, badger or water vole.

Reptiles

30. The site does not present good reptile habitat. This coupled with the absence of records in the area suggests that it is highly unlikely to be of value to this group.

Invasive species

31. No invasive plant species were encountered within the site boundary during the site walkover.

Evaluation and Recommendations

32. The site supports a small range of common species poor habitats reflecting the effect man has had here in the past.
33. The proposed development presents minimal risk of significant impacts on important, protected or designated sites.
34. The proposed development presents minimal risk of significant impacts on legally protected or otherwise valued species.
35. The following precautions are however considered necessary in relation to the site's development:

Nesting birds

36. To prevent the proposed works impacting on nesting birds, clearance of the scrub vegetation on site will need to be undertaken outside of the breeding bird season which is 1st March – 31st August inclusive. Any clearance that is required during the breeding bird season should be preceded by a nesting bird survey to ensure that the Wildlife and Countryside Act (1981) is not contravened through the destruction of nests and that any active nests are identified and adequately protected during the construction phase of the development.

Enhancement

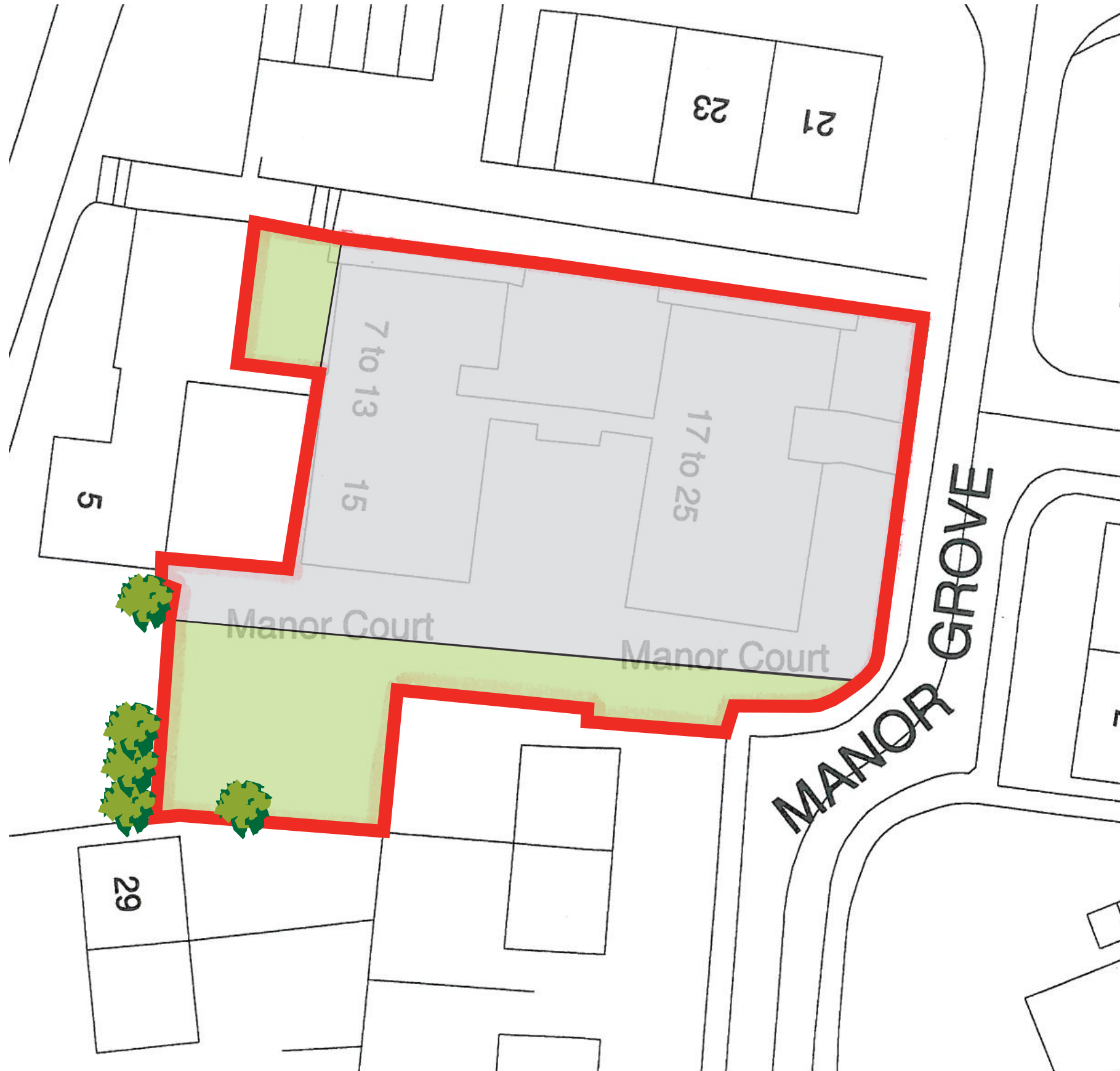
37. In line with planning guidance now outlined in the National Planning Policy Framework (NPPF) development should take account of the value of ecosystem services and enhance ecological networks.
38. A landscaping scheme could be created which incorporates only native trees and shrubs, or those non-natives with a known benefit to wildlife, i.e. nectar rich flowers or berry bearing.

39. The site could be enhanced in terms of providing roosting opportunities for bats and nesting birds, though the erection of artificial boxes in suitable locations around the site.

References

IEA. (1995). *Guidelines for Baseline Ecological Assessment*. Chapman and Hall

Nature Conservation Committee (1990). *Handbook for Phase 1 Habitat Survey: A technique for environmental audit*. NCC



Hard-standing



Rough improved grassland



Scrub



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T: 0113 250 6101

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Site: Manor Grove, Barnsley

Title: Ecological Features Plan

Drawing Number: D-1489-01

Scale: Do not scale

Date: 01.02.13

Revision:
