Ecological Appraisal
Temporary Haul Route at Wombwell High School, South Yorkshire

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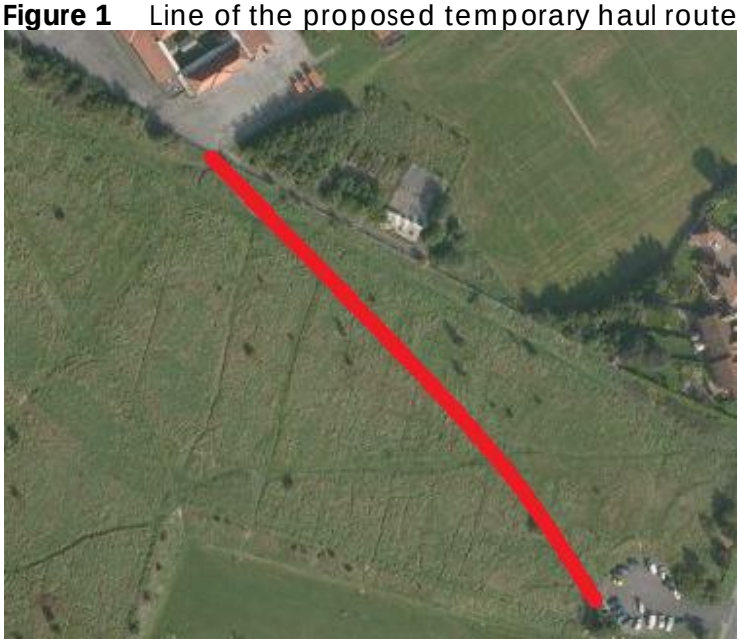
Summary Statement

Proposals to site a temporary haul route will have a negligible impact on wildlife. No impacts on protected or notable species or habitats are anticipated.

Introduction

1. Brooks Ecological Ltd was commissioned by Laing O' Rourke to carry out an ecological assessment of the line of a temporary haul route in land adjacent to Wombwell High School, Roebuck Street, Wombwell, South Yorkshire (SE 401 023).

Figure 1 Line of the proposed temporary haul route



Site Proposals

2. It is proposed to construct a temporary haulage route to allow access to a site at the former Wombwell High School. This will require:

- A 4m strip of soil is removed for temporary storage on hard standing in the school site;
- laying hard core in the stripped area;
- removal of the hardcore at the end of the roads useful life, and;
- replacement of the soils followed by seeding back to grassland.

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:

- Loss of areas currently occupied by habitat; and
- Effects on adjacent /nearby habitats or on site protected species.

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 affected area. 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 are no nationally or locally designated statutory sites within 2km of the affected area.

7. There are four areas of ancient semi-natural or replanted woodland within 2km of the application site. The closest of these is Wombwell Wood South c.1.2km west of the site. There is no conceivable way in which the works could affect the ecological functioning of these sites.

Natural England Natural Area

8. The site falls within *Natural Area 24 Coal Measures*

9. 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.

10. 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

11. The application site does not support any ecologically valuable examples of these habitat types.

Local Biodiversity Action Plan

12. Consideration is given to the Local Biodiversity Action Plan (LBAP), which for this site is the 'Barnsley Biodiversity Action Plan'.

13. 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	Yes	No
Barn owl	No	-
Skylark	No	-
Tree sparrow	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	Yes	No
Little ringed plover	No	-
Lapwing	No	-

14. 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

15. 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.

16. The site comprises a narrow strip of land, currently a footpath, that is located within an unmanaged area of rough grassland. Beyond this lies; a golf course to the west, sports pitches to the south, the site of Wombwell High School to the north and residential development to the east.

17. The nearest water body to the site is a large pond approximately 280m south, a second smaller pond is found c.430m south east. The status of these ponds with regard to great crested newt presence is not known. However, according to Natural England's rapid risk assessment calculator, at these distances, due to the small area of the application site, the chance of an offence being committed even if great

crested newt was present is 'highly unlikely' with a probability score of 0.005. Impacts on this group can be effectively ruled out on this basis.

Records

18. Due to the very confined nature of the application site it was not deemed necessary to carryout a formal records search.

19. However, due to the proximity of ponds to the site a search of the National Biodiversity Network was made for great crested newts, no records exist at this source within c.8km of the application site.

Phase 1 Habitat Survey

Survey Method

20. The survey was carried out on the 29th of November 2012 by a highly experienced field ecologist; a full member of the Institute of Ecology and Environmental Management (IEEM) and Chartered under SocEnv.

21. The survey mirrored 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

22. The affected area supports bitmac hard-standing (a footpath) with attendant rough neutral grassland verges. The wider grassland area supports a number of self sown young trees of species such as pedunculate oak (*Quercus robur*) and apple (*Malus* sp.).

23. The site is on a moderate south facing slope falling away to lower ground. This slope supports uniform rough neutral grassland and self sown trees.



Figure 1 View of the affected area (the footpath marks the centre line)

24. The rough grassland is the ubiquitous type which develops on 'waste land' dominated by species able to survive in the absence of mowing or grazing. This creates a dense species poor sward of low ecological complexity and value. It is dominated by cocksfoot (*Dactylus glomerata*), Yorkshire fog (*Holcus lanatus*) and false oat grass (*Arrhenatherum elatius*) with perennial rye grass (*Lolium perenne*), common bent (*Agrostis capillaris*), and red fescue (*Festuca rubra*).

25. The sward is accompanied by typical forbs able to tolerate the vigorous growth of these species; these include broad leaved dock (*Rumex obustifolius*), ribwort plantain (*Plantago lanceolata*), nettle (*Urtica dioica*), cleavers (*Galium aparine*), and cowparsley (*Anthriscus sylvestris*).

26. Towards the top of the route where it meets the school site, some tall herb habitat is developing with the abundantly common species rosebay willowherb (*Chamerion angustifolium)* and mugwort (*Artemisia vulgaris*) being present here, in addition to the species already mentioned.



Figure 2 The affected area adjacent to the school showing tall herb vegetation

Fauna

Bats

27. The temporary loss of a small section of low value grassland will have no impact on bats.

Amphibians

28. The temporary loss of a small section of low value grassland will have minimal impacts on amphibians given the rationale described in paragraph 17.

Birds

29. So long as the works are carried out as is anticipated in the winter months (outside of the nesting season) there will be no impact on any bird species.

Protected mammals

30. Due to lack of suitable habitat and any evidence of use, the works would not impact on any species of protected mammal.

Reptiles

31. The affected area will not support reptiles (especially in winter due to absence of suitable hibernation sites). While there is potential for the occasional grass snake to use the rough grassland surrounding the affected area for hunting this will be at low densities in the summer months. The risk of affecting reptiles is assessed as minimal.

Invasive species

32. No Schedule 9 Part 2 species were found within the affected area boundaries.

Evaluation and Recommendations

33. The proposed haul route would produce negligible ecological impacts being extremely unlikely to affect protected or notable species and affecting an extremely common and low value habitat.

34. Site stripping should be carried out in winter to avoid the outside risk of affecting ground nesting birds.

35. Reinstatement works will also have negligible impact on ecology.

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