Brooks Ecological
Grounded advice

Hedgerow Regulations Assessment

Halifax Road, Thurgoland

Arncliffe Homes

Report Reference: ER-4643-02

29/10/2020

Report Title:	Hedgerow Regulations Assessment Halifax Road, Thurgoland
Report Reference:	ER-4643-02
Written by:	David Lovett MBiolSci ACIEEM Ecologist
Technical Review:	Christopher Shaw BSc (Hons) MCIEEM Senior Ecologist
QA:	Kate Wright BSc (Hons) MSc ACIEEM Ecologist
Approved for Issue:	Christopher Shaw BSc (Hons) MCIEEM Senior Ecologist
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Unit A, 1 Station Road, Guiseley,
Leeds, LS20 8BX
01943 884451
admin@brooks-ecological.co.uk
www.brooks-ecological.co.uk
Registered in England Number 5351418

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Summary

None of the hedgerows on site meet the criteria for 'Important' status under the Hedgerow Regulations 1997.

Two hedgerows (H1 & H2) meet the criteria for Habitat of Principle Importance under the NERC Act 2006 and Priority Habitat under the local BAP.

H1 will be lost and replaced with a new section of hedgerow as part of the development, whilst sections of H2 will also be lost. The remaining sections of H2 and new areas of hedgerow planting will present opportunities for ecological enhancement, to mitigate/compensate this loss.

Introduction

1. Brooks Ecological Ltd was commissioned by Arncliffe Homes to carry out a detailed Hedgerow Assessment at their proposed development Site known as Halifax Road, Thurgoland (grid reference SE 2910 0108).

2. The survey was required to clarify whether any of the hedgerows within the Site (labelled H1 and H2 in the Figure below) are afforded protection under the Hedgerows Regulations 1997 and also to assess the value of the hedgerows and hedgerow network with regard to the species present and/or their value as functioning wildlife corridors for faunal groups.

Figure 1 Site boundary (red line), with hedgerows denoted by green lines

Methodology

3. Survey was carried out on 27th October 2020 and followed the methodology set out in the Hedgerow Regulations 1997 and the Hedgerow Survey Handbook (DEFRA, 2007). This involved walking the Site and mapping hedgerows as defined in Box 1.

4. The full length of each hedgerow was then walked and data relevant to the assessment was collected, such as the number of woody species, ground flora, dimensions, public right of way and associated features.

5. The woody species count was obtained following the guidelines set out in the Hedgerows Regulations, as summarised below:

   - hedgerows less than or equal to 30m - all of the woody species are counted;
   - hedgerows between 30m – 100m - a count is taken from the central 30m;
   - hedgerows between 100 – 200m - a count is taken from the central stretch of 30 metres within each half of the hedgerow and the counts divided by two;
   - hedgerows exceeding 200 metres – a count is taken from the central stretch of 30 metres within each third of the hedgerow and the counts divided by three.

Survey Constraints

6. The survey was carried out at a time of year when species of ground flora might not be evident. However, the presence/absence of this associated feature would not change the overall outcome for either of the hedgerows.

Box 1 *Hedgerow Definition (Hedgerow Regs)*

The Hedgerow Regulations apply to any hedgerow growing in, or adjacent to, any common land, protected land, or land used for agriculture, forestry or the breeding or keeping of horses, ponies or donkeys, that have:

- a continuous length of, or exceeding, 20 metres; or
- a continuous length of less than 20 metres and, at each end, meets another hedgerow (whether by intersection or junction).

The Regulations do not apply to any hedgerow within the curtilage of, or marking a boundary of the curtilage of, a dwelling-house.

The end of a hedgerow is defined as the point at which it meets another hedgerow, whether by intersection or junction (termed as the node point). Any gap not exceeding 20 metres is treated as part of the hedgerow.

Box 2 *Important Hedgerow (Hedgerow Regs))*

A hedgerow is defined as important under the Hedgerow Regulations if it has existed for 30 years or more and satisfies at least one of the criteria listed below:

1. The hedgerow marks the boundary of a historic parish or township existing before 1850;
2. The hedgerow contains or is within an archaeological feature which is on the Sites and Monuments Record, or a pre-1600 manor or estate;
3. The hedgerow is a part of, or associated with, a field system predating the Inclosure Acts;
4. The hedgerow is adjacent to a public right of way (not counting an adopted highway) and at least 4 woody species as defined in Schedule 3 of the regulations plus at least two Associated Features
5. The hedgerows contains any species listed under Schedule 1 Part I, Schedule 5 or Schedule 8 of the Wildlife and Countryside Act 1981; categorised as a declining breeder (category 3) in "Red Data Birds in Britain"; or categorised as "endangered", "extinct", "rare" or "vulnerable" in Britain.
6. The hedgerow meets one or more of the following criteria:
   - at least 7 woody species;
   - at least 6 woody species and at least 3 associated features;
   - at least 6 woody species, including one of the following - black-poplar tree (*Populus nigra ssp betulifolia*), large-leaved lime (*Tilia platyphyllos*), small-leaved lime (*Tilia cordata*), wild service-tree (*Sorbus torminalis*);
   - at least 5 woody species and at least 4 associated features;

Where the hedgerow in question is situated wholly or partly in the county of the City of Kingston upon Hull, Cumbria, Darlington, Durham, East Riding of Yorkshire, Hartlepool, Lancashire, Middlesbrough, North East Lincolnshire, North Lincolnshire, Northumberland, North Yorkshire, Redcar and Cleveland, Stockton-on-Tees, Tyne and Wear, West Yorkshire or York, the number of required woody species mentioned above should be reduced by one.

Box 3 *Associated Features*

1. A bank or wall which supports the hedgerow along at least one half of its length;
2. Gaps which in aggregate do not exceed 10% of the length of the hedgerow;
3. Has at least one standard trees per 50m of hedgerow. A standard tree is defined as having a diameter of at least 20cm (when single stemmed) or has at least two stems of at least 15cm (when multi-stemmed) when measured at a point 1.3 metres from natural ground level;
4. At least 3 woodland species within one metre, in any direction, of the outermost edges of the hedgerow;
5. A ditch along at least one half of the length of the hedgerow;
6. Connections scoring 4 points or more, where connection to a hedgerow counts as one point and a broad-leaved woodland or pond counts as two points;
7. A parallel hedge within 15 metres of the hedgerow;

Box 4 *Hedgerow Definition (UK BAP/ Section 41, NERC Act 2006)*

A hedgerow is defined as any boundary line of trees or shrubs over 20m long and less than 5m wide, and where any gaps between the trees or shrub species are less that 20m wide (Bickmore, 2002). Any bank, wall, ditch or tree within 2m of the centre of the hedgerow is considered to be part of the hedgerow habitat, as is the herbaceous vegetation within 2m of the centre of the hedgerow.

All hedgerows consisting predominantly (i.e. 80% or more cover) of at least one woody UK native species are covered by this priority habitat, where each UK country can define the list of woody species native to their respective country. Climbers such as honeysuckle and bramble are recognised as integral to many hedgerows, however they require other woody plants to be present to form a distinct woody boundary feature, as such they are not included in the definition of woody species. The definition is limited to boundary lines of trees or shrubs, and excludes banks or walls without woody shrubs on top of them.

Based on an analysis of Countryside Survey data, using the threshold of at least 80% cover of any UK native woody species, it is estimated that 84% of countryside hedgerows in GB would be included.

Result

Overview of Hedgerow Network

7. The Site encompasses a single field of rank improved grassland on the eastern edge of Thurgoland. The Site is bound by drystone walls to the west and north, with hedgerows present along the eastern (H1) and southern (H2) boundaries.
8. Neither hedgerow appears to have received recent management and were generally similar in size, though H2 contained several trees, increasing its overall height.
9. Hawthorn is the main component of H1, with elder, holly, oak and dog rose also present.
10. H2 was dominated by blackthorn, though components of common dogwood, hawthorn, holly, hazel, dog rose and laurel were all noted, as well as trees of field maple, sycamore, elder and ash.

Hedgerow Regulations Assessment

11. All on-site hedgerows have been mapped and labelled (see Figure 1) and a summary of the data collected for the Hedgerow Regulations assessment can be seen in Table 1 overleaf.
12. Neither of the hedgerows can be defined as 'Important' under the Hedgerow Regulations 1997, due to a lack of diversity and associated features.
13. The average woody species count for H2 was taken from two 30m sections and gave an average of 5 species.
14. The woody species count for H1 was taken from a single 30m section and gave a total of 5 species.

Section 41, NERC Act 2006 Assessment

15. Both of the hedgerows would qualify as being *'habitat of principle importance'* under Section 41 of the NERC Act 2006.

Figure 2 Hedgerows H1 (top) and H2 (bottom)

Table 1 Summary of the hedgerow survey

Hedge	Dimensions			Woody sp. Count	Associated Features							PRoW	Important under Hedgerow Regs	Section 41 NERC Act
	Length (m)	Height (m)	Width (m)		Bank/Wall (≥50%)	Gaps (≤10%)	Tree / 50m	Ground flora (≥3)	Ditch (≥50%)	Connections (≥4)	Parallel hedge			
1	61	2-4	2-3	5	-	Yes	-	-	-	-	-	-	No	Yes
2	120	3-8	4-5	5	-	Yes	Yes	-	-	-	-	-	No	Yes

Conclusion & Recommendations

16. Neither of the hedgerows present on Site meet the criteria for 'Important' status under the Hedgerow Regulations 1997. This is a result of low species diversity and lack of associated features.
17. Although not qualifying as Important, the two hedgerows will meet the criteria for Habitat of Principle Importance under the NERC Act 2006 and Priority Habitat under the local BAP.
18. Hedgerow H1 will be lost during the initial enabling works and will be replaced with planting as outlined in the Biodiversity Management Plan R-4643-01 – Brooks Ecological – February 2020.
19. Sections of H2 (shown in Figure 3) will be removed as part of the development.
20. There is opportunity to enhance the remaining sections of H2 through management discussed in the Biodiversity Management Plan.
21. Despite small sections of hedgerow being removed as part of the development, the proposals outlined in the Biodiversity Management Plan for the Site will establish better management plans for the hedgerows on Site and associated wildlife.

Figure 3 Plans for improving the value of hedgerows on Site

References

Hedgerows Regulations 1997 < http://www.legislation.gov.uk/uksi/1997/1160/regulation/1 /made> viewed on 27.10.20.

Defra (2007). Hedgerow Survey Handbook – A standard procedure for local surveyed in the UK (2nd edition).