

Biodiversity Enhancement Plan

BE-723.1

Holme House Care Home, Oxford Road, Gomersal,
Cleckheaton BD19 4LA



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Site address	Holme House Care Home, Oxford Road, Gomersal, Cleckheaton BD19 4LA
Grid reference	SE 20481 27041
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1. INTRODUCTION	3
1.1. BACKGROUND	3
1.2. SITE DETAILS	3
1.3. DEVELOPMENT PROPOSALS	4
1.4. SITE SURVEY	4
BIODIVERSITY ENHANCEMENT PLAN	5
2.1. AVOIDANCE OF ECOLOGICAL IMPACTS.....	5
2.2. HABITAT PROVISIONS FOR NOTABLE SPECIES	5
2.3. WILDLIFE FRIENDLY LIGHTING	5
2.4. FURTHER PLANTING	6
3. REFERENCES	8
 TABLES AND FIGURES	
FIGURE 1.1. AERIAL IMAGERY OF SITE AND SURROUNDING AREA (GOOGLE EARTH PRO, 2018)	3

1. Introduction

1.1. Background

- 1.1.1. Bagshaw Ecology Ltd have been requested by Damian Hartley to produce a Biodiversity Enhancement Plan in relation to the proposed development at Holme House Care Home, Oxford Road, Gomersal, Cleckheaton BD19 4LA , hereafter referred to as 'the site'. The site is located at grid reference SE 20481 27041.
- 1.1.2. An Extended Phase 1 Habitat and Bat Scoping Survey was produced by JCA in May 2018 (Butler, 2018). Notable findings and recommendations of the report include:
- Potential for roosting and foraging bats within the trees on site.
 - Suitable habitat for nesting birds within the trees on site.
 - Provisions for wildlife outlined within a Biodiversity Enhancement Plan.
- 1.1.3. The purpose of this report is to provide details on the ecological enhancement opportunities within the site. These include:
- Appropriate timings of works within the site
 - Mitigation for the loss of several trees on the site through further planting
 - Details on habitat provisions for notable species within the site
 - Details on wildlife friendly lighting throughout the site

1.2. Site Details

- 1.2.1. The site is accessed off the west of Oxford Road in Gomersal and consists of an old care home and associated gardens.



Figure 1.1. Aerial imagery of site and surrounding area (Google Earth Pro, 2018)

1.3. Development Proposals

- 1.3.1. The development proposals are to demolish the care home and construct eight residential dwellings on the site. This will necessitate the removal of several trees on the site.

1.4. Site survey

- 1.4.1. A site survey was undertaken on the 20th June 2018 by Amy Reddick BSc (Hons) Grad CIEEM, an ecologist and licenced bat surveyor (Class Licence 2017-32206-CLS-CLS), who is experienced in carrying out habitat surveys.

2. Biodiversity Enhancement Plan

2.1. Avoidance of ecological impacts

- 2.1.1. The trees on the site provide suitable habitat for nesting birds. All nesting birds are protected under the Wildlife and Countryside Act 1981 (as amended). The removal or trimming of any of the trees on site during bird nesting season could disturb nesting birds and potentially kill or injure their young.
- 2.1.2. It is recommended that no tree or hedge removals are carried out within bird nesting season (1st March – 31st August inclusive). If the removal of trees is considered necessary within this period, a further nesting bird survey should be undertaken, and works should only commence if it has been established that no nesting birds are present.

2.2. Habitat provisions for notable species

- 2.2.1. As the surrounding landscape provides suitable habitat for foraging and commuting bats, three bat boxes of type 1FD Schwegler Bat Boxes will be installed on a retained tree on the site. The bat boxes will be hung from trees at a height between 3 to 6 metres, with clear flight paths to and from the entrances and in an open and sunny position. The three bat boxes will be situated on the same tree facing different directions to provide a variety of micro-habitats.
- 2.2.2. To enhance the nesting opportunities for birds within the site, two 1B Schwegler Nest Boxes will also be hung from retained trees on the site. The nest boxes will be hung at a minimum height of 1.5 metres and angled away from the prevailing wind. Care will be taken to ensure the bird boxes are not positioned near to features predators may use to reach the nest such as tall shrubs.
- 2.2.3. See appendix 1 for the proposed locations of the bat and bird boxes on the site.

2.3. Wildlife friendly lighting

- 2.3.1. The site provides suitable habitat for roosting and foraging bats. To prevent negative impacts on bats within the site, outdoor lighting used as part of the proposed development will follow recommendations prescribed by the Bat Conservation Trust (2014):
- The spread of light should be at, or near horizontal level.
 - The times that lights are used should be limited to provide some dark periods.
 - Light sources to be used should emit minimal ultra-violet light.
 - Lights should peak higher than 660nm.
 - White and blue wavelengths of the spectrum should be avoided

2.4. Further planting

- 2.4.1. Ten individual and two small groups of trees are recommended for removal in the Arboricultural Impact Assessment (Cocking, 2018), species include Ash *Fraxinus excelsior*, horse chestnut *Aesculus hippocastanum*, common lime *Tilia × europaea* and sycamore *Acer pseudoplatanus*. To mitigate this a replanting scheme is recommended which will help offset their loss; this should seek to diversify species structure at the site, with native trees often providing the greatest ecological benefits.
- 2.4.2. Trees planted should be standard in size and should be planted in accordance with BS845: 2014 – Trees: from Nursery to Independence in the Landscape. All trees should be affixed with a wooden stake, secured to the tree by a biodegradable cable tie. An organic woodchip mulch should be applied in a 1m radius around tree stems.
- 2.4.3. A minimum of fifteen trees should be included in mitigation planting. Tree species should be agreed with by the local authority tree officer. Suggested species include:
- Hornbeam *Carpinus betulus*
 - Fastigate oak *Quercus robur* 'Fastigiata Koster'
 - Rowan *Sorbus aucuparia*
 - Beech *Fagus sylvatica*
 - Wild service tree *Sorbus torminalis*
 - Field maple *Acer campestre*
- 2.4.4. It is recommended that a beech hedge is planted along the northern boundary of the site to provide noise attenuation.
- 2.4.5. The hedge should consist of two staggered rows of bare root whips, spaced 20-30cm apart. The number of trees used should correspond to the length of the new hedge; the proposed hedgerow is 39m and therefore should consist of approximately 312 trees.
- 2.4.6. Once established, the new hedgerow should be subject to a weeding regime. A 50cm weed free boundary should be maintained by spraying a systematic herbicide such as glyphosate. Trees should be fitted with a stake, attached to the tree with a cable tie, and with a spiral root guard.
- 2.4.7. To provide additional pollination opportunities for invertebrates, areas of shrub planting will be included within the development. Ornamental species may be included provided they are known to benefit British wildlife and are not listed as invasive by Schedule 9 of the Wildlife and Countryside Act 1981. Suggested species include:
- Dog rose *Rosa canina*
 - Hawthorn *Crataegus Monogyna*
 - Senecio Sunshine *Brachyglottis sunshine*
 - Mexican orange blossom *Choisya ternata*
 - English lavender *Lavandula angustifolia*
 - Hebe vernicosa *Hebe vernicosa*
 - Chrysanthemum *Chrysanthemum spp.*

2.4.8. Larger specimens in 5 litre pots should be planted as these have a higher survival rate. Shrubs should be sourced from UK-grown stock. All planting should be carried out in accordance with BS8545: 2014 – Trees: from Nursery to Independence in the Landscape, and should include the following specifications:

- Grass and weeds should be removed from around the planting area by hand.
- Shrubs should be fitted with spiral root guards to prevent damage by browsing rabbits.
- All shrubs should be supported by a bamboo cane, affixed with a biodegradable tie.
- An organic woodchip mulch should be applied approximately 1m around the planting area.

2.4.9. Aftercare will be required for a period of at least three years after planting. This should include watering, removal of weeds and if necessary, removal of cable ties, formative pruning and reapplication of mulch. If any trees fail to establish within this period then they should be replaced.

2.4.10. Amenity grassland and lawn areas on the site will be seeded with a mixture of grasses and wildflowers to increase biodiversity and pollination opportunities within the site. The seed mix should consist of approximately 80% grass species to 20% wildflower species (Blakesley & Buckley 2016). EL1 – Flowering Lawn Mixture is suggested due to its positive response to a regular mowing regime, species include:

- Common bent *Agrostis capillaris*
- Crested dogtail *Cynosurus cristatus*
- Slender-creeping Red-fescue *Festuca rubra*
- Selfheal *Prunella vulgaris*
- Lady's bedstraw *Galium verum*

2.4.11. See Appendix 1 for approximate locations for tree, hedge and shrub planting.

3. References

Bat Conservation Trust (2014). *Bats and Lighting*. Bat Conservation Trust, London

Blakesley, D. and Buckley, G.P (2016) *Grassland Restoration and Management*. Exeter: Pelagic Publishing, UK

British Standards (2014). BS8545: 2014 – Trees: from Nursery to Independence in the Landscape. British Standards Institute, London

Butler, J. (2018) *Extended Phase 1 and Bat Scoping Survey & Report* [Technical report]. Halifax: JCA

Cocking, C. (2018) *Arboricultural Impact Assessment at Holme House* [Technical report]. Halifax: JCA


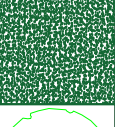

Google Earth Pro (2018). *Google Earth* [online]. Available at: >www.google.co.uk/earth< [accessed 22nd June 2018]

Wildlife and Countryside Act 1981

Appendix 1: Biodiversity Enhancement Map

Project:	Holme House Care Home
Drawn by:	Amy Reddick
Date:	22/06/2018
Scale:	1:200 @ A1

Do not scale off this drawing - to be reproduced in colour only

	Proposed Hedgeline
	Proposed Shrub Planting
	Proposed Tree Planting

