

ECOLOGICAL ENHANCEMENT AND MITIGATION STRATEGY

Bleathwood Lodges Country Park, Ludlow, Herefordshire



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Prepared by:

RPS

Hannah Knight MSc ACIEEM

Senior Ecologist

Lakesbury House, Hiltingbury Road

Hampshire SO53 5SS

T +44 2380 810 440

E hannah.knight@rpsgroup.com

Prepared for:

**Darwin Leisure Development Properties
(Guernsey) Ltd'**

Roger Vail

Empire House, 175 Piccadilly,

London W1J 9EN

T +44 (0)7977 488 360

E roger@darwinalternatives.com

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1 INTRODUCTION

- 1.1.1 RPS were commissioned by Darwin Leisure Development Properties (Guernsey) Ltd to prepare an Ecological Enhancement and Mitigation Strategy, to support the Bleathwood Lodges Country Park planning application.
- 1.1.2 The proposed development includes the re-organisation and upgrade of the existing 'Bleathwood Lodges Country Park' to include demolition of existing site buildings, the change of use of the on-site residential property for holiday let, the construction of a replacement facilities/meet and greet building, and the provision of accommodation in the form of 60 lodges, with associated access and parking.
- 1.1.3 The application is also supported by a Preliminary Ecological Appraisal, undertaken by RPS in September 2019; which found the site to comprise largely of two improved grassland fields, with an orchard, hardstanding, buildings, a pond, a series of hedgerows and ruderal vegetation / scattered scrub.
- 1.1.4 The majority of the development site is currently considered to be of low ecological value (comprising two grazed improved grassland fields). However, there are some features of high ecological value (such as the boundary hedgerows and longer grassland features); these are to be retained and protected within the proposed redevelopment of the site.
- 1.1.5 Therefore, the requirement for on-site mitigation is limited, and the majority of the enhancement / mitigation measures are focused on the improvement of the boundary features.
- 1.1.6 This Habitat Enhancement and Management Strategy provides details of the ecological mitigation and enhancement to be included within the final scheme. It is split into sections, detailing mitigation / enhancements measures for habitats, and then the various target species for which on-site mitigation/enhancement is required (bats, birds and dormice).
- 1.1.7 The accompanying figures provide details of how the mitigation and enhancement measures will be achieved within the scheme.

1.2 The site and setting

- 1.2.1 The site is circa 8k south-east of Ludlow in Herefordshire. The site is approximately 4.8 ha in size. The National Grid coordinates for the centre of the site are SO 5768 0642.
- 1.2.2 The site comprises a number of short grazed improved grassland fields, bordered with hedgerows and scattered trees, an area of woodland, an orchard, and several buildings and areas of hardstanding associated with Bleathwood Lodges and the boxing gym. A residential house and garden were also present towards the south-east of the site.
- 1.2.3 Aerial imaging available via Google Earth Pro was also reviewed to assess the site in relation to its context in the wider landscape. The site is situated within a rural location, surrounded by expanses of open fields on all borders; the River Teme Site of Special Scientific Interest lies 0.45 km south of the application site.

1.3 Existing features of relevant conservation interest on site

- 1.3.1 The following features on site or near the site were identified during the Preliminary Ecological Appraisal (RPS, 2019) as habitats or species of conservation interest that require consideration within this strategy:
 - Broadleaved woodland copses;

- Orchard;
- A range of hedgerows of varying conservation status;
- Dormice;
- A low level of activity by various bat species foraging/commuting on site; and
- Breeding bird habitat.

1.4 Recommendations for ecological mitigation and enhancement

- 1.4.1 This Habitat Enhancement and Mitigation Strategy (HEMS) has been developed alongside the masterplan for the site; to ensure that the biodiversity and ecological value of the site is not comprised during the development. It should be read in conjunction with the other ecological reports prepared by RPS, such as the Preliminary Ecological Appraisal (PEA) (RPS, 2019).
- 1.4.2 Although no Phase 2 survey work has been undertaken, the strategy provides the requirements for mitigation for species which the site has suitable habitat (dormice, bird and bat populations), to ensure that there is an enhancement for these species, post-development.

2 MANAGEMENT OBJECTIVES

2.1.1 Table 2.1 below sets out specific management objectives for the site.

Table 2.1 – Management Objectives at Bleathwood Lodges, Ludlow, Herefordshire

Habitat Type	Management Type	Management Objectives
Grassland	Habitat Creation	<p>To provide foraging habitat and nesting material for a range of wildlife species, particularly birds but also invertebrates, through the planting of species-rich grass areas in informal open space.</p> <p>To increase the area of such habitat through the creation of buffer zones off of all hedgerow features on site.</p> <p>To provide a mosaic of habitat types, particularly in relation to invertebrates.</p>
Hedgerows	Habitat Creation and Habitat Maintenance	<p>To provide green corridors throughout the development to facilitate wildlife movement.</p> <p>To provide nesting and foraging habitat for birds and dormice, and shelter for a range of wildlife.</p> <p>Retained hedgerows to be protected.</p>
Orchard	Habitat Management and Creation	<p>To maintain the existing orchard as a Biodiversity Action Plan (BAP) habitat; which will provide a valuable resource for species of bird, bat and invertebrate.</p> <p>To create a new orchard area, which will further promote movement across the site and provide new green corridors.</p> <p>To provide nesting and foraging habitat for birds and dormice, and shelter for a range of wildlife, including bats.</p>
Woodland	Habitat Creation and Habitat Maintenance	<p>To provide nesting and foraging habitat for birds and dormice, and shelter for a range of wildlife, including bats.</p> <p>To provide long-grass rides within the woodland that increase the variety of habitat present.</p>
Sustainable Urban Drainage System (SUDS) features	Habitat Creation	<p>To provide the sustainable management of surface water within the site.</p> <p>To provide a variety of habitats to include wet-grass swales and infiltration basins/soakaway features.</p>

Habitat Type	Management Type	Management Objectives
Other features	Habitat Creation	<p>Woodpiles to provide cover for reptiles, particularly for use during hibernation, and invertebrates.</p> <p>Bird boxes to provide additional nesting habitat for birds known to occur on site.</p> <p>Bat boxes to provide additional roosting habitat for bats known to occur on site.</p>

3 GRASSLAND

- 3.1.1 The development as a whole will provide a range of different grassland types of both a formal and informal nature (i.e. – mown amenity grassland, and more informal, meadow grassland).

3.2 Informal grassland

- 3.2.1 Such habitats will provide foraging opportunities for bats, invertebrates, reptiles and birds and will be seeded with a variety of botanically-diverse seed mixtures depending upon the anticipated soil humidity.
- 3.2.2 The informal grassland will largely be present alongside every hedgerow on site (providing a minimum 3m buffer); with a larger area of open grassland present to the east of the site, surrounding the new attenuation pond.
- 3.2.3 Given the informal nature of these areas, there will be no significant lighting present, creating a large dark corridor for animal movement (particularly bats). Any lighting necessary for security reasons would be low-level and directional to where required. Suitable cowlings will be used to ensure no light spill from paths.

3.3 Management for biodiversity benefit

- 3.3.1 Where appropriate, the grassland will be managed for biodiversity benefit. This will include the following:
- areas of long grass to be subject to a range of mowing regimes to be sympathetic to wildlife and to enable grasses and associated plants to flower and set seed during the summer. This will include some areas being left long through the summer months and then cut once plants have set seed and some areas (particularly adjacent to hedgerows, for example) will be left unmown to facilitate the development of a more tussocky structure that will benefit reptiles in particular.

4 HEDGEROWS

- 4.1.1 Currently, pre development, there is a total of seven hedgerows across the site, a mixture of species-rich and species poor.
- 4.1.2 This habitat type is listed on Section 41 of the Natural Environment and Rural Communities Act (NERC) 2006 as a habitat of principal importance to the conservation of biodiversity in England. Therefore, all the hedgerows are to be protected and retained within the redevelopment of the site.
- 4.1.3 To further enhance the site, a series of new native hedgerows will be planted across the site; with the most significant of these planted alongside the Public Right of Way (PRoW) running east-west across the site.
- 4.1.4 The following key principles with respect to hedgerows will be followed, to ensure the establishment of such features represent a significant enhancement over the current situation and that they are managed for biodiversity benefit:
- All new hedgerows will comprise native species (except where required for operational reasons – low hedge boundaries, for example);
 - All new hedgerows will be species-rich, comprising at least five woody species chosen from the following:
 - A. hawthorn *Crataegus monogyna*;
 - B. blackthorn *Prunus spinosa*;
 - C. field Maple *Acer campestre*;
 - D. hazel *Corylus avellana*;
 - E. holly *Ilex aquifolium*;
 - F. spindle *Euronymus europaeus*;
 - G. guelder-rose *Viburnum opulus*;
 - H. dog-rose *Rosa canina*; and
 - I. dogwood *Cornus sanguinea*.
- 4.1.5 All hedgerows bounding the site will feature a long-grass buffer of at least 3m wide at their base in order to maintain their diverse nature. Such features will be established through the retention of existing grassland (where possible) or by leaving new grassland un-mown to become long and tussocky.
- 4.1.6 All new hedgerows will be encouraged to grow as thick as possible by topping and facing-up every other year once plants have flowered and fruited (usually late autumn).
- 4.1.7 Existing retained hedgerows will be protected during development to suitable standards (Netlon fencing, for example). Such retained hedgerows will be enhanced, where necessary, by filling gaps using plants chosen from the list above and will be subject to a similar managed regime as described above.

5 ORCHARD

- 5.1.1 An orchard is present towards the south of the site, which is to be retained, protected and enhanced. This comprised five lines of planted fruit trees, spaced circa 5 m apart. The planted trees included apple *Malus sp.*, pear *Pyrus sp.*, blackthorn *Prunus spinosa*, and cherry *Prunus avium*. The ground flora within this area was limited and comprised species poor semi-improved grassland.
- 5.1.2 Orchards are listed as a BAP habitat, and so this will be retained, protected and enhanced through the redevelopment of the site. Enhancements for the grassland on site should include the creation of a varied grassland habitat, so that a greater diversity of insects, mammals and birds can be supported. Key principles for the grassland management could include:
- Remove any grass cuttings from the orchard floor and pile them in an area to compost out of the way;
 - Avoid adding any fertilisers to the grassland;
 - Keep an area of short grass, which makes a good habitat for grassland fungi and hunting ground for owls; and
 - Leave patches of nettles and brambles here scattered throughout. Nettles are the larval food-plant for species of butterfly. Brambles provide a late source of nectar, an abundance of fruit, thorny shelter and a great predation ground for insectivores.
- 5.1.3 Other enhancements will include the ongoing management of the trees within the orchard; to ensure that the habitat remains in a good condition. The key principles with respect to enhancing the orchard habitat for biodiversity will include the following, to ensure they provide a biodiversity benefit:
- Plant young trees; there are a number of species that depend upon the habitat that mature trees provide, and so, planting young trees will give the habitat continuity over the years to come;
 - Plant a mixture of early, mid and late flowering / fruiting trees so that the orchard will be a source of nectar, fruit and pollen for a longer period throughout the year;
 - Standing decaying wood is one of the most valuable elements of an orchard habitat; with some species (stag beetle) living exclusively in decaying wood, and so, dead wood, hollow trunks, cracks in bark etc, should be retained, if possible; and
 - The windfall from the trees (as well as the food left on trees) provides a valuable enhancement for birds, badgers, hedgehogs and hares; and so, any unwanted fruit should be left to hang on the tree, or where it falls.

6 WOODLAND

- 6.1.1 The current site, pre development has a small area of woodland present towards the south-west corner of the site; which is dominated by single stem sycamore *Acer pseudoplatanus*. The understorey was rather sparse, and was dominated by nettles *Urtica dioica*, ground elder *Aegopodium podagraria*, cranesbill *Geranium* and herb-Robert *Geranium robertianum*, with lords-and-ladies *Arum maculatum* present on the rare occasions.
- 6.1.2 A number of the sycamore trees present within this woodland are failing, and so recommendations have been made to coppice / remove select trees to ensure that the woodland copse remains viable in the longer term. The area will however, be protected during the development of the site, as per *BS5837: Trees in Relation to Design, Demolition and Construction* standard, and the Arboricultural Impact Assessment (AIA).
- 6.1.3 It is envisaged that new native tree and woodland planting will be included within the scheme, to strengthen the existing site boundaries, and to provide further green corridors of movement across the site. The planting of new tree and woodland habitat will also provide new habitat on site for a range of species, such as dormice and bats.
- 6.1.4 Scattered tree planting should include the following species:
- hawthorn;
 - blackthorn;
 - field maple;
 - hazel; and
 - beech.
- 6.1.5 The new tree planting will be sourced from a local, reputable nursery, to ensure that they are of good quality. Planted blocks (such) will be interspersed with long-grass glades, to create a mosaic of habitats that will be of particular benefit to foraging bats, invertebrates and birds.
- 6.1.6 New native trees will be included within the development, such as the along the roads around the development. These will provide further commuting routes for species of bats, along with nesting and foraging opportunities for birds. Other incidental tree planting will be including around the scheme.
- 6.1.7 The woodland copse will be managed for its biodiversity benefit by ensuring that a diversity of structures is maintained, including canopy, understorey, shrub and ground flora. This will be maintained through appropriate thinning of canopy trees to ensure sufficient light is available within the understorey.
- 6.1.8 The retention of existing grass glades within the woodland will further increase the structural diversity of the woodland. Although they will, generally, be managed as detailed above for long grass (i.e. cut once per year around late summer following flowering), the edges of the rides will be left to develop a taller structure with taller herbaceous vegetation, bramble etc. encouraged.

7 SUSTAINABLE URBAN DRAINAGE SYSTEMS

- 7.1.1 The SUDS to be used across the site to manage surface water will provide significant opportunities for biodiversity enhancement, given the lack of any diversity in the water status of habitats on site currently.
- 7.1.2 The management of all SUDS features located will be managed and maintained by Darwin Alternatives. It is currently envisaged that the SUDS features of ecological interest will comprise the following:
- Wetland meadow grassland; and
 - Attenuation pond.
- 7.1.3 The wetland meadow grassland towards the east of the site will provide a good habitat feature, this will be of particular benefit to mobile wildlife such as birds, bats and invertebrates, and will provide a significant enhancement over the situation that is currently present (an improved grassland field).
- 7.1.4 This area will be seeded with an appropriate wetland grass mix (British Seed Houses WFG9, for example) to provide a botanically-diverse sward. It will be unlit, to ensure that the eastern boundary remains dark throughout the development.
- 7.1.5 An attenuation pond is also to be created towards the east of the development; this will provide foraging habitat for species of invertebrates and bats, post-development; it will be planted with aquatic and marginal vegetation, to encourage amphibians onto site.
- 7.1.6 The attenuation pond will provide focus points within the green infrastructure by providing a source of water (at certain times of the year) and associated biodiversity interest. For example, it is likely to support a substantial invertebrate population which in turn will offer enhanced bat foraging opportunities, particularly since such features are to be located towards the (more natural) perimeter of the site.

8 LOG PILES / WOODPILES / BRASH

- 8.1.1 Log piles will be created on site to provide additional invertebrate foraging habitat/shelter (see Figure 1 for their locations).
- 8.1.2 Such features will be created from any woody vegetation cleared both during site preparation/construction and during routine management of tree stock on site. The requirement to create such woodpiles from brash won during such works will be incorporated into the necessary management specifications for the open space on site.
- 8.1.3 Woodpiles will therefore generally be focused within existing woodland where a source of appropriate material is available. Such features will also be created within long-grass glades / near to SUDS features, where they will be particularly beneficial to bats (through the increased invertebrate abundance around them).
- 8.1.4 Woodpiles will be created in a variety of shapes and sizes depending upon the size of material available as even small piles created from thin branches (<5 cm in diameter) will be beneficial to wildlife. They should not exceed 2 m x 1 m x 1 m in size, however, to avoid attracting undue attention, they should generally be located away from more open public places.
- 8.1.5 Biennially, woodpiles will be inspected and topped up with fresh wood, as necessary, to maintain the broad size requirements described above.

9 DORMOUSE HABITAT ENHANCEMENT

- 9.1.1 The PEA (RPS, 2019) identified suitable habitat on site to support populations of dormice, however, no records for dormice were identified from the surrounding 2 km; and all the suitable habitat features (hedgerows) are to be retained within the development of the site. Therefore, no further survey work for dormice was recommended.
- 9.1.2 In order to ensure that the redevelopment provides an enhancement for dormice; the following will be included.
- 9.1.3 All the existing hedgerows on site will be retained with a minimum of a 3m buffer (although, in most places this will be 5m). Any gaps or thin sections of hedgerow, such as that along the western boundary of the site will be infilled, with native species in keeping with that particular hedgerow.
- 9.1.4 In addition to this, new native hedgerow planting will be included around the site; with the most significant the new hedgerow running east – west through the site, alongside the existing PRoW. This new planting will provide stronger links within the site, as well as strengthening the retained hedgerows. It will also increase the carrying capacity for the number of dormice on site (if any are indeed present).
- 9.1.5 Dormice feed on a wide variety of arboreal foods including flowers (nectar and pollen), fruits (berries and nuts) and some insects (especially aphids and caterpillars). However, hazel appears to be an important provider of insects, and its nuts form the main food used by dormice to fatten up for hibernation.
- 9.1.6 Therefore, in addition to the new planting including hazel and oak, the development should also include many other species, which provide a valuable food source of dormice. These include honeysuckle, bramble, wayfaring tree, yew, hornbeam, broom, willow, birch, sweet chestnut, blackthorn, hawthorn, dogwood, dog-rose, wild cherry and elder.
- 9.1.7 The scheme plans will avoid light spillage along green corridors i.e. hedgerows, woodland edges and areas of connectivity on and off site through restricting lighting in sensitive habitat areas, using back shields on new lighting column and low-level bollard lighting. No lighting will be directed towards the woodland / green corridors.

10 BAT HABITAT ENHANCEMENT

- 10.1.1 During the P E A of the site, the hedgerows and woodland copse on site were found to offer moderate suitability for commuting and foraging bats; however, as such habitats are to be retained within the development of the site (and not subject to any indirect impacts, such as lighting), no further survey work was deemed necessary.
- 10.1.2 No buildings on site were found to have any roosting suitability.
- 10.1.3 The new habitat creation on site, including through the SUDS network, long grass meadows, orchard, scattered tree planting and woodland enhancements will provide an extensive network of bat foraging and commuting habitat, linked through linear corridors provided on site.
- 10.1.4 All of the existing linear features used by bats for foraging/commuting on site will be retained, with lux levels >1 (bright moonlight), meaning that post-development, there will be no impacts to the foraging bat habitat on site.
- 10.1.5 Also, dark corridors will be maintained within the woodland/orchard/wetland habitats on site, enabling any light-sensitive bat species to continue to foraging/commute within the site. These corridors will be maintained as dark through being un-lit with any lighting directional and cowled.
- 10.1.6 In order to increase the bat roost potential on site, bat boxes / bricks will be included across the development. This will include the following types of box to be split evenly across the site:
- Schwegler 2FN; and
 - Schwegler 2FF.
- 10.1.7 Both boxes provide roosting habitat for a range of species. These will be sited as high up as possible on buildings facing onto informal/natural greenspace to ensure a close proximity to foraging habitat. Their exact location is illustrated in Figure 1 (Ecological Enhancements).
- 10.1.8 Once installed, bat boxes require little maintenance. However, they will be inspected annually to ensure that any damage can be made good.

11 BIRD HABITAT ENHANCEMENT

- 11.1.1 The woodland copse and perimeter hedgerows provide good habitat for breeding birds. All bird nests are protected by law. Therefore, any vegetation clearance (such as hedgerow or tree removal) should take place outside of the breeding bird season, which is generally considered to be from March to August inclusive.
- 11.1.2 If this is not possible, prior to removal, such vegetation should first be checked for the presence of nesting birds by an experienced ecologist. If any nests are found, they would have to be left undisturbed until the chicks had fledged (usually around six weeks).
- 11.1.3 The new green infrastructure to form part of the masterplan provides additional trees and hedgerows across the site, which will provide suitable habitat for foraging and nesting birds.
- 11.1.4 The development will also incorporate a range of bird boxes to enhance the nesting opportunities within the development. These will target a range of bird species which are known to occur within the wider area.
- 11.1.5 Boxes will be provided on communal structures within the development, comprising a range of different bird nesting boxes. The boxes may need to be placed in different locations, depending on the species habitat requirements. Buildings facing onto open space, especially that of an informal/natural character will be preferentially chosen to support bird boxes, ensuring they are placed over-looking foraging opportunities. Final box locations will be determined in consultation with the project ecologist.
- 11.1.6 Further to the new breeding/foraging habitat for birds to be created on site, any meadow habitats to be created within the open space areas will also provide a significant enhancement for bird species, especially with respect to any ground-nesting birds displaced from the fields present within the main development.
- 11.1.7 Bird boxes will be inspected annually, and any damage made good. Old nests will be also removed to ensure any parasites etc are removed.

12 BADGER HABITAT ENHANCEMENT

- 12.1.1 Although no badger setts were identified on site (RPS, 2019), there is suitable habitat present for badger foraging. Badgers are mobile species, and so an update survey of the site will take place immediately prior to construction, to ensure that no badger setts have been excavated in the interim.
- 12.1.2 Although no direct impacts to badger setts are envisaged, as the woodland is broadly to be retained; the following measures would be implemented to ensure that no badgers are harmed during the construction phase:
- Heras fencing to be erected around all construction works to exclude foraging badgers from the works areas;
 - Any excavated holes to have a wooden board placed in them over night so as to provide a means of escape should any badgers accidentally enter the excavation;
 - Any chemicals to be securely stored at night in a locked container; and
 - In order to avoid attracting badgers to the works area any food waste must be disposed of in appropriate bins or removed from site at the end of each day.
- 12.1.3 Several new habitats are to be introduced within the development, in order to ensure that overall, there is a net gain of badger habitat. This will include new meadow grassland planting, wetland planting and an attenuation feature. All of these habitats provide new foraging opportunities for badgers.

13 TIMETABLE

- 13.1.1 The delivery of biodiversity mitigation and enhancement measures will be concurrent with the redevelopment of the site.
- 13.1.2 Construction is anticipated to start in early 2020. If any delays are incurred during the planning process, this table of works may need to be reviewed and updated accordingly by the project ecologist.

14 LONG TERM MANAGEMENT

- 14.1.1 The table below, 14.1, outlines the long-term management strategy for the habitats and enhancements on site.

Landscaping element	Management Objective	Prescriptions	Detailed creation and management actions
1: Woodland planting, orchard planting, tree planting, and hedgerows	To provide nesting and foraging habitat for a range of invertebrates, dormice and birds.	<ul style="list-style-type: none"> Planting and maintaining the trees and hedgerows. 	<ul style="list-style-type: none"> Prepare the soil; this will include levelling the soil and ensuring that the area is watered prior to planting. Plant the trees and hedgerows using stakes, spiral guards, and ties, and water them in. Tree pruning shall be carried out as necessary to establish a well-balanced head relative to the natural form and shape of the species and purpose. Maintain a well-balanced crown, shape and character typical of the species, clear of any crossing or rubbing growth allowing a clear stem, 2 m above ground level (retain if field tree feathered to ground). Trim the hedgerows twice per year outside bird breeding season (March to August inclusive) to a neat and consistent finish to maintain a dense screen and remove arising off site. Tree support systems, ties and protective guards shall be checked regularly during establishment and adjusted where necessary. Any broken or missing items shall be replaced, and ties adjusted to allow growth and prevent rubbing of bark. Undertake Pest and Disease Control using suitable pesticides or fungicides as advised, only if severe infestation occurs. Maintain a weed free area at the base of all trees, 1m diameter mulch area for trees in grass or planting.
2: Ornamental shrubs and flowering plants	To provide foraging habitat and nesting material for a range of wildlife species, particularly invertebrates and birds. Also, to create attractive planted areas that adds to and compliments the surrounding development.	<ul style="list-style-type: none"> Preparation of soil and planting. Re-plant areas where plants have failed to become established. 	<ul style="list-style-type: none"> Prepare the soil; this will include levelling the soil and ensuring that the area is watered prior to planting. Ensure all planted areas are kept free of weeds by the use of suitable herbicides; maintain levels of mulch and hand weeding in more prominent areas as required. Fork over beds as necessary to eliminate any hollows or cambers, ensuring the depth of mulch is maintained. Check condition of stakes, ties and guys and replace broken or missing items until plant establish. Adjust if necessary to allow for growth and prevent damage to plants. Cut back any damaged, dead or diseased branches to a healthy node or any growth obstructing adjacent areas of hard standing. Remove any dead flowers/foliage at times appropriate to the species. Reform any plants that have been disturbed by adverse weather or interference. Undertake pest control with approved pesticides in accordance with

Landscaping element	Management Objective	Prescriptions	Detailed creation and management actions
			<p>manufacturer's instructions in approved locations only.</p> <ul style="list-style-type: none"> Prune annually shrubs using normal horticultural standards to form attractive natural habit. Dead-head bulb planting once the flowering period has finished trim back dead vegetative growth.
3. Wildflower meadow / Informal grassland	To provide nesting and foraging habitat for a range of invertebrates, bats and birds.	<ul style="list-style-type: none"> Enhance visual amenity Provide valuable habitat to invertebrates, birds and bats Integrate with surrounding landscape 	<ul style="list-style-type: none"> Cut all fringe areas adjacent to footpaths / hard surfaces fortnightly between April and November, mow to a height of 40 mm. Cut all other areas in late July – early August following the displacement of any annual seeds. Leave cut grass in situ for 3-5 days, before removing all arisings off site to approved tip or compost on site. Carry out further cuts until November and again in early spring to maintain sward at 3 – 4 cm. Remove all arisings off site or to approved tip or compost on site. Stop cutting grass in mid-April to allow grass to grow Cut a neat and consistent finish including edges, without rutting or scalping, ensuring adjacent areas of hard standing free are kept free of arisings. Hand pull invasive weed species. Allow leaf litter and fallen woody material to mulch / compost naturally. Exercise extreme care when working in close proximity to existing/new trees and prevent damage to stems/trunks. Do not apply organic or inorganic fertilisers Do not apply insecticides, herbicides or fungicides, as these can destroy valuable wildlife. The exception is herbicides for the control of specific problem weeds (i.e. nettle, spear thistle, creeping thistle, curled dock, broadleaved dock and ragwort) – herbicides for these species should be applied by weed wiper or spot treatment with a back-pack sprayer. Do not plough, level or re-seed the grassland areas, except with the same species-rich seed mix as used originally.
4: Bat boxes	To provide additional, secure roosting habitat for bats.	<ul style="list-style-type: none"> Placement of boxes/bat access panels. Create refuges in suitable locations to increase habitat suitability for bats. 	<ul style="list-style-type: none"> Attach the boxes and/or bat access panels to suitable buildings and trees around the site – supervised by the project ecologist. Re-site if not used after two years. Replace any damaged boxes. Sometimes, birds may use bat boxes.

Landscaping element	Management Objective	Prescriptions	Detailed creation and management actions
		<ul style="list-style-type: none"> Maintenance of bat boxes. 	
5: Bird boxes	To provide additional, secure nesting habitat for bird species.	<ul style="list-style-type: none"> Placement of boxes. Maintenance of bird boxes. 	<ul style="list-style-type: none"> Placement of boxes on suitable retained trees and new buildings around the site – final locations to be determined and supervised by the project ecologist. Cleaning out of nesting debris from bird boxes. Assessment on their usage and whether it would be appropriate to re-site or add further boxes. Replacement of any damaged boxes.
6: Good horticultural practice	To promote species diversity by avoiding using pesticides, fertilisers or compost with peat in.	<ul style="list-style-type: none"> Avoiding using pesticides. Avoiding using fertilisers. Avoiding compost with peat in. 	<ul style="list-style-type: none"> Ensure all ground maintenance work complies with the prescriptions.

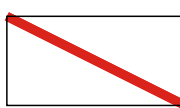
15 REFERENCES

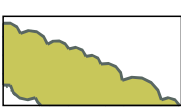
RPS (2019). *Bleathwood Lodges: Preliminary Ecological Appraisal*. RPS Southampton: Unpublished Report.

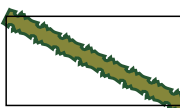
16 **FIGURE**

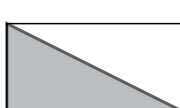


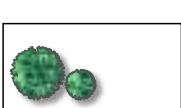
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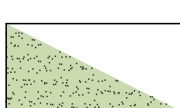
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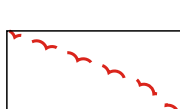
Site Boundary
- 


Existing Planting
- 

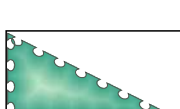
Proposed Native Hedge
- 

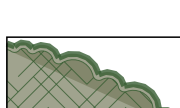
Buildings
- 


Proposed Trees
- 

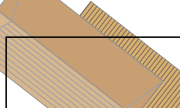
Proposed Wildflower Grass
- 

Existing Trees to be Removed
- 

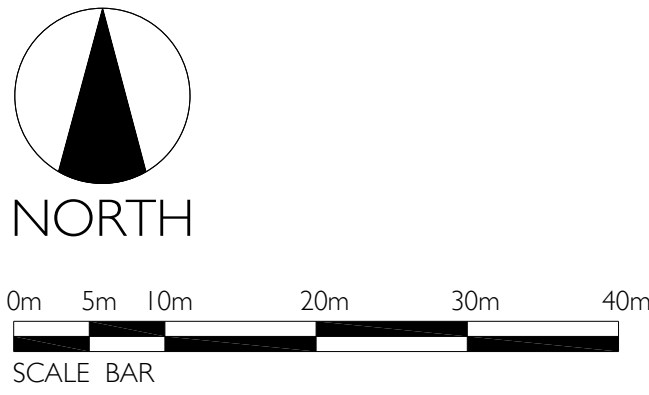
Proposed Amenity Planting
- 

Proposed Aquatic Planting
- 

Existing Trees
- 

Proposed Structure Planting
- 

Proposed Unit



Insight to conceive
Expertise to realise....

Sketch Design

BLEATHWOOD LODGES COUNTRY PARK
LANDSCAPE PROPOSALS

To be read in conjunction
with ecological management
recommendations report

A	Minor amends following comments	TH	10.12.19
Revisions		Initials	Date



PLANNING ISSUE
Landscape Architects
& Environmental Consultants

Sketch Design
Bleathwood Lodges Country Park
Landscape Proposals

Scale	Drawn By
1:500 @ A1	TH
Date	Checked
Dec 2019	SJL
Project Number	Drawing Number
W2366	SK01

Revision
A

Andrew Davis Partnership LLP
Registration No. 06381973
Stalhamers Cottage, Rain Road, Worcs WR5 3GA
Tel: 01905 761200 Email: ad@andrewdavis.co.uk
www.adlandscapearchitects.co.uk

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