Ecological Deliverability Report

Land at Wool, Dorset

The Lulworth Estate, Redwood Partnership and

Mr A Jackson

May 2019

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1 Introduction, background and approach

1.1 Introduction

1.1.1 EAD Ecology was commissioned by the Lulworth Estate, Redwood Partnership and Mr A Jackson ('the proposed applicants') to undertake an ecological deliverability study of land identified for residential development in the emerging Purbeck Local Plan Submission Version (January 2019; Policy H5) around the village of Wool, Dorset (approximate NGR SY 832 863; refer to Figures 1-3), hereafter referred to as 'the site'.

1.1.2 The study is documented in this report and includes the following:

- Ecological baseline of the site.
- Assessment of the site in terms of suitability for development.
- Ecological constraints and opportunities for development of the site.

1.1.3 The study considers two potential development scenarios; a 470-unit scheme that has been identified in Policy H5 of the emerging Local Plan, and a larger 650-unit scheme that is being promoted by the proposed applicants. Illustrative masterplans for the two development scenarios are shown on Figures 2 and 3. Both scenarios would encompass four land parcels, which are shown as Areas 1 to 4 on Figure 1, and referred to accordingly hereafter. Table 1.1 provides a summary of the land parcels in relation to the proposed allocation and previous iterations of development options.

Table 1.1: Summary of proposed development land parcels

Parcel number	Purbeck Local Plan Submission Version January 2019 – Policy H5 Wool	Purbeck DC SHLAA (Jan. 2019) land parcel reference	Savills 470-unit masterplan parcel reference
Area 1	Land to the west of Chalk Pit Lane and Oakdene Road – up to 320 homes	SHLAA/0081	C
Area 2	Land to the north west of Burton Cross Roundabout – up to 30 homes	A sub-component of SHLAA/0099	F
Area 3	Land to the north east of Burton Cross Roundabout – up to 90 homes	(north) SHLAA/0086	G1 and small part of G2
		(south) SHLAA/0123	J
Area 4	Land to the north of the railway line – up to 30 homes	SHLAA/0085	H

1.1.4 This report also includes an ecological deliverability study of two areas to the south of the proposed development parcels, which have been identified as potential areas of 'Suitable Alternative Natural Greenspace' (SANG) to support the proposed residential development. These areas comprise Coombe Wood and an area within a Scheduled Monument to the south of Area 1, referred hereafter as the proposed 'Coombe Wood SANG' and 'Scheduled Monument SANG' respectively; refer to Figure 1. The SANG areas have been proposed to mitigate impacts from potential recreational pressure on the nearby Dorset Heaths European Sites arising from the proposed development; refer to Paragraphs 3.2.5 and 3.2.6 for further information.

1.1.5 All work has been undertaken in accordance with BS42020:2013 and the Chartered Institute of Ecology and Environmental Management's (CIEEM) Code of Practice.

1.2 Legislation and planning policy

Wildlife legislation

1.2.1 The following wildlife legislation is relevant to the potential development of the site:

- Conservation of Habitats and Species Regulations 2017 (as amended).
- Wildlife and Countryside Act 1981 (as amended).
- Countryside and Rights of Way Act 2000.
- Natural Environment and Rural Communities Act 2006.
- Protection of Badgers Act 1992.
- Hedgerow Regulations 1997 (as amended).

1.2.2 A summary of relevant wildlife and species legislation is provided in Appendices 1 & 2.

National planning policy

1.2.3 The National Planning Policy Framework (NPPF, 2019) includes the Government's policy on the protection of biodiversity through the planning system. A summary of the relevant sections of the NPPF is provided in Appendix 3.

Local planning policy

1.2.4 The site lies within Purbeck District; the following policies of the Adopted Purbeck Local Plan Part 1 (2012) are relevant to the ecological assessment of the proposed development (refer to Appendix 4 for Policy text):

- Policy BIO: Biodiversity and Geology
- Policy PH: Poole Harbour

1.2.5 The following policies of the emerging Purbeck Local Plan 2018 – 2034 (Submission Version, January 2019) are also relevant (refer to Appendix 4):

- Policy E7: Conservation of protected sites
- Policy E8: Dorset Heathlands
- Policy E9: Poole Harbour
- Policy E10: Biodiversity and geodiversity

1.2.5 The supplementary planning document 'The Dorset Heathlands Planning Framework 2015-2020' is also relevant, due to the proximity of the site to the Dorset Heathlands SPA.

1.3 Approach

Ecological baseline

1.3.1 The ecological baseline of the site and the SANG areas (hereafter referred to collectively as the 'Survey Area') was derived through desk study and site survey.

Desk Study

1.3.2 Biodiversity information was requested for a study area of 2km radius around the Survey Area (extended to 5km for previous records of bats) from Dorset Environmental Records Centre (DERC). Information requested included the location and details of the following:

- Designated sites of nature conservation importance (statutory and non-statutory; extended to 10km for European statutory designated sites and 5km for other statutory sites using the Defra MAGIC website; refer to Appendix 5);
- Previous records of protected and/or notable species, including Priority Species (Species of Principal Importance for Conservation in England) listed on Section 41 of the Natural Environment and Rural Communities (NERC) Act (2006)).

1.3.3 The DERC data search was completed on 28 February 2019, and the MAGIC search was undertaken on 26 February 2019.

Site Survey

1.3.4 Extended Phase 1 Habitat surveys of the Survey Area were undertaken on 5 August and 15 September 2015, 16 June 2017 and 5 March 2019; refer to Figure 4 for the results of the 2019 survey. The surveys followed guidelines published by JNCC (2010) and Institute of Environmental Assessment (1995) and identified the main habitat types on the site and the presence/potential presence of protected and notable species. The results of the survey were detailed on a Phase 1 Habitat plan, with target notes used to identify specific features of ecological interest; refer to Figure 4. A botanical species list was recorded, although no attempt was made to record every plant species on the site (refer to Appendix 7).

1.3.5 Further (Phase 2) Protected Species surveys were undertaken within the Survey Area between 2016 and 2018, comprising hedgerow, great crested newt, reptile, breeding bird, hazel dormouse, badger, bat activity and bat roost surveys Further details of these surveys are provided in Table 1.2.

Table 1.2: Summary of Phase 2 ecological surveys

Survey	Date				Details
	Area 1	Areas 2-4	Coombe Wood	Scheduled Monument	
Hedgerow survey	August 2016	July 2017	n/a	n/a	Survey of hedgerows to determine potential status as 'important' under Hedgerows Regulations 1997.
Great crested newt survey	April-June 2017	April-June 2017	eDNA only – June 2016	n/a	Habitat Suitability Index (HSI), eDNA and 'Presence/ Absence' surveys for great crested newt of all suitable waterbodies within likely dispersal range for the species (English Nature, 2004 and Biggs *et al*, 2014).
Reptile survey	June-Aug 2016	June-Aug 2017	June-Aug 2016	May-July 2018	Deployment of artificial refugia in suitable habitat around the site, followed by seven checks, in accordance with Froglife (1999).
Breeding bird survey	May-June 2016	April-June 2017	May-June 2016	Covered in Area 1	Three visits to produce an estimate of the number of breeding pairs or territories within the survey area,

Table 1.2: Summary of Phase 2 ecological surveys

Survey	Date				Details
	Area 1	**Areas 2-4**	**Coombe Wood**	**Scheduled Monument**	
					following adapted Common Bird Census (CBC; Gilbert *et al* 1998).
Hazel dormouse survey	June-Sept 2016	May-Oct 2017	June-Sept 2016	Covered in Area 1	Deployment of nest tubes followed by six checks for signs of presence in accordance with Bright *et al* (2006). Feeding-sign survey also undertaken.
Badger survey	July and Oct 2016	July 2017	July 2016	May 2018	Search for signs of badger activity e.g. setts, prints, latrines (Harris *et al*, 1989).
Bat activity survey	May-Oct 2016	April-Oct 2017	May-Oct 2016	Covered in Area 1	Manual activity transects and static detector surveys in accordance with BCT Guidelines (Collins, 2016).
Bat roost survey	n/a	June 2017	Sept 2016	n/a	Preliminary roost assessment of all trees on site in accordance with BCT Guidelines (Collins, 2016).
Otter and water vole survey	n/a	June 2017	n/a	n/a	Survey of suitable habitat for signs of otter and water vole (Environment Agency, 1999 and Strachan *et al*, 2011).

2 Ecological baseline

2.1 Designated sites of conservation importance

European designated sites

2.1.1 Seven European-designated sites occur within 10km of the site boundary, refer to Table 2.1. Conservation Objectives for the sites are provided in Appendix 6.

Table 2.1: European designated sites within 10km of proposed application site

Site Name	Distance and direction from site	Designated features
Dorset Heaths Special Area of Conservation (SAC)	1.5km west	• Northern Atlantic wet heaths with *Erica tetralix* • European dry heaths • Depressions on peat substrates of the *Rhynchosporion* • *Molinia* meadows on calcareous, peaty or clayey-silt-laden soils (*Molinion caeruleae*) • Calcareous fens with *Cladium mariscus* and species of the *Caricion davallianae* • Alkaline fens • Old acidophilous oak woods with *Quercus robur* on sandy plains • Southern damselfly • Great crested newt
Dorset Heathlands Special Protection Area (SPA)	1.5km west	• Dartford warbler • Nightjar • Woodlark • Wintering hen harrier • Wintering merlin
Dorset Heathlands Ramsar	1.5km west	• Supports one nationally rare and 13 nationally scarce wetland plant species, and at least 28 nationally rare wetland invertebrate species. • Has a high species richness and high ecological diversity of wetland habitat types and transitions, and lies in one of the most biologically-rich wetland areas of lowland Britain, being continuous with three other Ramsar sites: Poole Harbour, Avon Valley and The New Forest. • Contains northern and southern Atlantic wet heaths with cross-leaved heath and Dorset heath and acid mire with *Rhynchosporion*.
Dorset Heaths (Purbeck & Wareham) & Studland Dunes SAC	8.5km east	• Embryonic shifting dunes • Shifting dunes along the shoreline with *Ammophila arenaria* ('white dunes') • Atlantic decalcified fixed dunes (*Calluno-Ulicetea*) • Humid dune slacks • Oligotrophic waters containing very few minerals of sandy plains • Northern Atlantic wet heaths with cross-leaved heath

Table 2.1: European designated sites within 10km of proposed application site

Site Name	Distance and direction from site	Designated features
		• Temperate Atlantic wet heaths with Dorset heath and cross-leaved heath and European dry heaths • Depressions on peat substrates of the *Rhynchosporion* • Bog woodland • Southern damselfly • Great crested newt
Isle of Portland to Studland Cliffs SAC	4.1km south	• Vegetated sea cliffs of the Atlantic and Baltic Coasts • Semi-natural dry grasslands and scrubland on calcareous substrates (*Festuco-Brometalia*) • Annual vegetation of drift lines • Early gentian
Poole Harbour SPA	8.6 km east	• Breeding common tern • Breeding Mediterranean gull • Aquatic warbler on passage • Little egret on passage • Wintering avocet • Wintering little egret • Wintering black-tailed godwit • Wintering shelduck • Regularly supports at least 28,000 waterfowl
Poole Harbour Ramsar	8.6km east	• The best and largest example of a bar-built estuary with lagoon characteristics (a natural harbour) in Britain. • Supports two species of nationally rare plant, one nationally rare alga and at least three British Red data book invertebrate species. • Includes examples of natural habitat types of community interest - Mediterranean and thermo Atlantic halophilous scrubs, in this case dominated by shrubby sea blite, as well as calcareous fens with swamp sawgrass. Transitions from saltmarsh through to peatland mires are of exceptional conservation importance as few such examples remain in Britain. • The site supports nationally important populations of breeding waterfowl including common tern and Mediterranean gull. Over winter the site also supports a nationally important population of avocet. • Assemblages of international importance of wildfowl. • Qualifying populations of common shelduck and black-tailed godwit.

Nationally designated sites

2.1.2 Nine Sites of Special Scientific Interest (SSSI) and one Local Nature Reserve (LNR) are located within 5km of the site; refer to Table 2.2.

Table 2.2: Nationally designated sites within 5km of proposed application site

Site Name	Distance and direction from site	Designated features
Oakers Wood SSSI	4.9km north	Designated for its ancient woodland
Lulworth Park & Lake SSSI	2.1km south-east	Designated for its ancient woodland and lake which is of interest for its wetland bird community.
Oakers Bog SSSI	4.8km north	Designated for its rich assemblage of heathland plants and animals.
Povington and Grange Heaths SSSI	2km east	Designated for its heathland and well-developed bog systems.
South Dorset Coast SSSI	2.8km south	Designated for its internationally important geological interest with a rich range of wildlife habitats supporting populations of several rare plants and animals
Stokeford Heaths SSSI	2.6km north-east	Designated for its lowland heathland areas and is of international importance for its plant and animal communities.
Winfrith Heath SSSI	1.1km west	Designated for its lowland heathland areas and is of international importance for its plant and animal communities.
River Frome SSSI	0.2km north	Designated for its aquatic and bankside vegetation and river fauna.
Turners Puddle Heath SSSI	1.5km north-east	Designated for its nationally rare heathland species.
Eight Acre Wood LNR	1.3km north-east	Designated for its ancient woodland.

Non-statutory designated sites

2.1.3 There are 27 non-statutory sites within 2km of the Survey Area; refer to Appendix 5. These comprise 21 Sites of Nature Conservation Interest (SNCIs), four Habitat Restoration Sites and two Conservation Verges. There are also eight trees highlighted by the Greenwood Trees scheme. New Buildings Conservation Verge runs along the minor road between Coombe Wood and the Scheduled Monument and to the west of Area 1, designated for 'Scabious, Chicory and other bright, attractive flora'. The closest SNCIs to the site are Oakley Wood and Westwood Coppice, both of which are designated as Ancient Semi-natural Woodland and lie approximately 100m south and east of Coombe Wood respectively. The majority of Coombe Wood is identified as Ancient Replanted Woodland, with a small area of Ancient Semi-natural Woodland located in the centre of the site; refer to Appendix 5.

2.2 Habitats within the site boundary

2.2.1 The habitat descriptions below are based on the Phase 1 surveys and should be read in conjunction with the habitat map target notes (TNs); refer to Figure 4. All plant species are referred to using common names; nomenclature follows Stace (2010); refer to Appendix 4 for botanical species list, including scientific names.

2.2.2 In summary, the site comprised:

- *Area 1:* Three arable fields bounded by species-poor hedgerows.
- *Area 2:* A single arable field bounded by a species-rich hedgerow to the south; amenity grassland and a species-poor hedgerow to the east; semi-natural broadleaved woodland to the north; and a species-rich hedgerow to the west.
- *Area 3:* Two arable fields and an area of horse-grazed poor semi-improved grassland with areas of tall ruderal, dense bracken and bramble scrub. Field boundaries comprised fencing, species-rich and species-poor hedgerow and scattered coniferous trees.
- *Area 4:* Field of horse-grazed poor semi-improved grassland bounded by fencing, dense scrub and species-poor hedgerow.
- *Scheduled monument SANG:* This comprised the southern sections of the three arable fields within Area 1, also bounded by species-poor hedgerows.
- *Coombe Wood SANG:* Dominated by semi-natural broadleaved woodland, plantation coniferous woodland and mixed plantation woodland. Other habitats present included dense scrub, dense bracken and a pond.

2.2.3 Detailed habitat descriptions are provided below.

Amenity grassland

2.2.4 An amenity grassland verge was present along the southern boundary of Areas 2 and 3. This was heavily managed, with a short-mown sward dominated by perennial rye grass, white clover and creeping buttercup.

Arable

2.2.5 Areas 1 and 3 were dominated by arable habitats and at the time of survey comprised an oat crop. It is understood that the land is managed under an agri-environment scheme and a number of arable weeds were recorded within the crop, including corn-cockle, corn marigold, scented mayweed, field pansy and common poppy. There were no significant margins to the crop and no notable plant species were identified. Therefore, this habitat is not analogous with the Priority Habitat 'Arable Field Margins'. Field margins measured 1m-3m and comprised coarse grasses and ruderal species.

Bare ground

2.2.6 This habitat comprised several access tracks and footpaths through Coombe Wood.

Buildings

2.2.7 A wooden stable building with a flat corrugated roof was located in Area 4. There were also several small metal buildings associated with the reservoir in Coombe Wood.

Broadleaved trees

2.2.8 Occasional mature and semi-mature broadleaved trees were present within hedgerows and along field boundaries within the site. Species included oak, ash, beech and sycamore.

Bracken

2.2.9 This habitat was present along several field boundaries within Areas 2 and 3 and along track edges and rides cut for pylons in Coombe Wood.

Dense and scattered scrub

2.2.10 Small sections of dense and scattered bramble scrub were present across the site. An area of dense bramble scrub was present around the reservoir in Coombe Wood.

Hedgerows

2.2.11 Hedgerows occurred along most of the field boundaries within the site. These were predominantly between 1.5m and 3m tall and were a mix of unmanaged hedgerows and hedgerows subject to regular agricultural management (i.e. annual flailing). Mature hedgerow trees, mainly pedunculate oak, ash and willow, occurred along several of the hedgerows. Shrub species included hawthorn, blackthorn, willow, field maple, elm, hazel, holly, dog-rose and elder. The ground-flora was generally species-poor and included upright hedge-parsley, lords-and-ladies, wood avens, dog's-mercury, harts-tongue fern, soft shield-fern, ground-ivy and ivy. The hedgerows on site did not qualify as 'Important' under the ecological criteria of the Hedgerow Regulations 1997 (as amended). 'Hedgerows' are a Priority Habitat.

Improved grassland

2.2.12 Area 2, the western part of Area 1 and the majority of the Scheduled Monument SANG comprised improved grassland, dominated by perennial rye-grass, with some herbaceous species including yarrow and white clover.

Introduced shrub

2.2.13 Introduced shrub extending from the gardens on the eastern boundary of Area 1 was recorded, with species present including privet, dogwood and barberry. Introduced shrub was also present along the eastern boundary of Area 4, associated with adjoining gardens, and comprised lilac and other ornamental species.

Marshy grassland

2.2.14 A small area of marshy grassland was present in Areas 2 and 3, and was dominated by soft rush, with silverweed also present.

Poor semi-improved grassland

2.2.15 Poor semi-improved grassland occurred in Areas 3 and 4. Both areas had a short sward, with Area 4 grazed by horses. Herbaceous species included white clover, creeping buttercup, creeping thistle, yarrow, common sorrel and common cat's-ear. Poor semi-improved grassland was also present over the covered reservoir in Coombe Wood and was dominated by cocksfoot, perennial rye-grass and Yorkshire fog.

Plantation broadleaved woodland

2.2.16 This habitat adjoined the railway line on the southern boundary of Area 4 and comprised semi-mature oak, silver birch, rowan, field maple, Scot's pine and sweet chestnut.

Plantation coniferous woodland

2.2.17 Plantation coniferous woodland dominated by Corsican pine, with occasional Douglas fir, Norway spruce, larch, birch and hazel, was present in several areas of Coombe Wood. The ground flora was limited in these areas, and dominated by bracken.

Plantation mixed woodland

2.2.18 This habitat dominated the southern section of Coombe Wood and comprised a range of coniferous and broadleaved tree species, including birch, larch, hazel, oak, Douglas fir, willow

species, Corsican pine, Norway spruce, ash and sycamore. Understory species included blackthorn, holly and hawthorn.

Semi-natural broadleaved woodland

2.2.19 This habitat was present through the central part of Coombe Wood. The canopy was dominated by pedunculate oak with occasional downy birch. The shrub layer comprised principally hazel with occasional holly, grey willow, goat willow, field maple and pedunculate oak. There was a rich ground flora comprising a number of woodland indicator species including: bluebell, dog's mercury, wood millet, primrose, hairy wood-rush, yellow archangel and wood sorrel. Patches of ivy, bramble and bracken were also present.

Standing water

2.2.20 A small area of shallow standing water was present in the north-western part of Area 1. A pond was present in the centre of Coombe Wood; this was shallow (<30cm) and measured approximately 8m in diameter. The water was heavily shaded by overhanging trees, with floating sweet grass but little other associated aquatic vegetation. Marginal vegetation comprised remote sedge, soft rush, woody nightshade and brooklime.

Tall ruderal

2.2.21 Tall ruderal habitats occurred along some field margins and were by dominated by common nettle, with frequent hogweed.

Wet ditch

2.2.22 A wet ditch was present in Area 3, dominated by tall ruderal species including nettle, hogweed and false-oat grass.

2.3 Surrounding habitats

2.3.1 The village of Wool lies to the north-east of the Survey Area. The rest of the surrounding area comprised arable habitats to the south and predominantly pasture to the north, bounded by hedgerows with small areas of broadleaved woodland.

2.4 Protected and notable species

2.4.1 The following section provides a summary of desk study results and protected and notable species surveys undertaken within the site; refer also to Ecological Constraints Plans (Figures 5 and 6).

Plants

Desk study

2.4.2 Numerous notable plant species have been recorded within the 2km study area, comprising:

- 3 Priority Species (southern grey physcia, marsh stitchwort and tubular water-dropwort);
- 1 Nationally Rare Species (box);
- 9 Nationally Scarce Species (southern grey physcia, variegated horsetail, brown beak-sedge, box hair-grass, mossy stonecrop, hairy bird's-foot trefoil, *Caloplaca ochracea*, *Flavoplaca dichroa* and *Weddellomyces epicallopisma*);
- 33 IUCN Species (of status near-threatened or worse);
- 2 Dorset Action Plan species (allseed and chaffweed);
- 10 species listed on the Dorset Rare Plant Register (variegated horsetail, marsh helleborine, brow beak-sedge, bog hair-grass, mossy stonecrop, hoary cinquefoil, marsh speedwell, hairy bird's-foot trefoil, chaffweed and allseed); and,

- 115 Dorset Notable Species.

2.4.3 The desk study also identified two species which receive legal protection under the Wildlife & Countryside Act 1981 (southern grey physcia and bluebell); refer to Appendix 2.

Site survey

2.4.4 No notable plant species were recorded during the Phase 1 survey. The presence of bluebell within woodland and hedgerow habitats was considered possible, but the presence of other notable plant species within the site is considered unlikely.

Invertebrates

Desk Study

2.4.5 Numerous notable plant species have been recorded within the 2km study area, comprising:

- 1 European Protected Species (stag beetle);
- 1 species protected under the Wildlife and Countryside Act (stag beetle);
- 13 Priority Species (stag beetle, black oil-beetle, dingy skipper, grizzled skipper, wall, small heath, grayling, white admiral, silver-studded blue, buff ermine, white ermine, cinnabar and hornet robberfly);
- 9 IUCN Species (of status near-threatened or worse);
- 3 Nationally Scarce species (stag beetle, hornet robberfly and *Ampedus sanguiolentus*); and,
- 4 Dorset Notable Species (dingy skipper, grizzled skipper, grayling and white admiral).

Site survey

2.4.6 The majority of habitats within the site were considered likely to support a range of common / widespread invertebrate species; the presence of notable invertebrates within the proposed development areas was considered unlikely. Broadleaved woodland and associated habitats in Coombe Wood were suitable for a range of invertebrates, this could include Priority Species such as stag beetle.

Amphibians

Desk Study

2.4.7 The desk study identified records of great crested newt, smooth newt, palmate newt, common frog and common toad from a residential garden adjoining the north-eastern boundary of the site.

2.4.8 Great crested newt is legally protected, a Priority Species and Dorset BAP Species. Common toad (Priority Species), common frog, smooth newt and palmate newt receive partial legal protection.

Site survey
Area 2

2.4.9 Ordnance Survey mapping identified one pond within 250m of Area 2, located to the west of the site within the Police headquarters. eDNA analysis of this pond confirmed evidence of great crested newt. Further population estimate surveys (bottle trapping) recorded no evidence of this species; it was therefore concluded that the pond supported a small / transitory population of great crested newts.

Coombe Wood SANG

2.4.10 Suitable amphibian breeding habitat was recorded in one pond within Coombe Wood during the Extended Phase 1 survey. eDNA analysis confirmed the presence of great crested newt within this

pond. A further waterbody was identified on Ordnance Survey mapping within 250m, to the east of Coombe Wood, but was found to have dried up and did not, therefore, provide suitable breeding habitat. Woodland and marginal habitats within Coombe Wood provided suitable terrestrial habitat for amphibians, including great crested newt and the Priority Species common toad.

2.4.11 No further amphibian breeding habitat was found within 250m of the survey area.

Reptiles

Desk Study

2.4.12 The desk study identified records of slow-worm, grass snake, common lizard, smooth snake and sand lizard within 2km of the site. All common native reptiles are legally protected and are Priority Species. Sand lizard and smooth snake receive additional legal protection.

Site survey
Areas 1 to 4

2.4.13 The presence of slow-worm was confirmed within each of the Areas 1-4, together with a 'low' population of grass snake in Area 4 (Froglife, 1999). Records were associated with field margins in each of the parcels. No suitable habitat for smooth snake or sand lizard occurred within the site.

Scheduled Monument SANG

2.4.14 A 'low' population of slow-worm was recorded along field boundaries within the Scheduled Monument SANG area.

Coombe Wood SANG

2.4.15 A 'good' population of slow-worms and 'low' populations of grass snake and common lizard were recorded alongside the track in the centre of Coombe Wood.

Birds

Desk Study

2.4.16 Table 2.3 lists notable species recorded within the 2km study area. All wild birds are legally protected, and a number have been identified as 'Red' or 'Amber' Species of Conservation Concern (Eaton *et al*, 2015) and / or Priority Species. Bird species listed on Schedule 1 of the Wildlife and Countryside Act receive additional protection against disturbance when nesting.

Table 2.3: Notable bird species recorded within 2km of the site

Species	BOCC status	Priority Species	WCA Schedule 1 Species	Birds Directive
Goldeneye	Amber			
Mute swan	Amber			
Greylag goose	Amber			
Shelduck	Amber			
Wigeon	Amber			
Gadwall	Amber			
Teal	Amber			
Mallard	Amber			
Garganey	Amber		✓	
Shoveler	Amber			
Little egret				Annex 1

Table 2.3: Notable bird species recorded within 2km of the site

Species	BOCC status	Priority Species	WCA Schedule 1 Species	Birds Directive
Bittern	Amber	✓	✓	Annex 1
White stork				Annex 1
Hen harrier	Red		✓	Annex 1
Kestrel	Amber			
Merlin	Red		✓	Annex 1
Hobby			✓	
Peregrine			✓	Annex 1
Oystercatcher	Amber			
Golden plover				Annex 1
Lapwing	Red	✓		
Snipe	Amber			
Curlew	Red	✓		
Woodcock	Red			
Green sandpiper	Amber		✓	
Mediterranean gull	Amber		✓	Annex
Common gull	Amber			
Lesser black-backed gull	Amber			
Herring gull	Red	✓		
Great black-backed gull	Amber			
Black-headed gull	Amber			
Stock dove	Amber			
Cuckoo	Red	✓		
Barn owl			✓	
Tawny owl	Amber			
Short-eared owl	Amber			Annex 1
Nightjar	Amber	✓		Annex 1
Swift	Amber			
Kingfisher	Amber		✓	Annex 1
Wryneck	Red	✓	✓	
Cetti's warbler			✓	
Willow warbler	Amber			
Woodlark		✓	✓	Annex 1
Skylark	Red	✓		
House martin	Amber			
Meadow pipit	Amber			
Grey wagtail	Red			
Dunnock	Amber	✓		
Fieldfare	Red		✓	
Song thrush	Red	✓		
Redwing	Red		✓	
Mistle thrush	Amber			
Dartford warbler	Amber		✓	Annex 1
Marsh tit	Red	✓		
Starling	Red	✓		
House sparrow	Red	✓		

Table 2.3: Notable bird species recorded within 2km of the site

Species	BOCC status	Priority Species	WCA Schedule 1 Species	Birds Directive
Linnet	Red	✓		
Brambling			✓	
Common crossbill			✓	
Bullfinch	Amber	✓		
Reed bunting	Amber	✓		

Site survey

Areas 1-4 and Scheduled Monument SANG

2.4.17 A total of 37 species were recorded within these areas, including:

- Skylark, which probably bred with five territories recorded. This is a Priority Species and Red-listed Species of Conservation Concern (Eaton *et al* 2015).
- House sparrow and starling, which are both also Red-listed Priority Species. These species were considered likely to be using the site for foraging and collecting nest material, with breeding thought to have occurred within adjacent residential properties.
- Dunnock, which probably bred. This is an Amber-listed Priority Species.

Coombe Wood SANG

2.4.18 A total of 32 species were recorded within the site, all of which were confirmed, probable or possible breeders. This included:

- Hobby and firecrest, which probably bred. They are both listed on Schedule 1 of the Wildlife and Countryside Act 1981 (as amended) and receive special protection when nesting.
- Song thrush and spotted flycatcher, which probably bred, and marsh tit, which was confirmed breeding. These are all Priority Species and Red-listed Species of Conservation Concern (Eaton *et al* 2015).
- Dunnock, bullfinch, stock dove and willow warbler. All are Amber-listed Species of Conservation Concern; dunnock and bullfinch are also Priority Species.

Hazel dormouse

Desk Study

2.4.19 There are no records of hazel dormouse within the study area. Hazel dormouse is a legally protected Priority Species.

Site survey

2.4.20 Woodland and hedgerow habitats within the survey area provided suitable habitat for this species, however no evidence was found. Previous surveys recorded a single dormouse in a hedgerow outside of the site, approximately 800m to the east of the survey area.

Badger

Desk Study

2.4.21 There are several records of badger within the study area, including one record within the survey area. Badgers and their setts are legally protected.

Site survey
Area 2

2.4.22 Three single-hole outlier setts were found along the north-western boundary with a further single-hole found in the south-west corner.

Area 3

2.4.23 A single-hole outlier sett was found along the tree line in the middle of the site.

Scheduled Monument SANG

2.4.24 A single-hole outlier sett was found adjacent dense scrub in the centre of the proposed SANG area.

Coombe Wood SANG

2.4.25 Badger evidence was found throughout Coombe Wood comprising likely main setts in both the north and the south, and subsidiary and annex setts in the northern half of the site. Badger latrines were also found throughout the site.

2.4.26 No further badger setts were found within the survey area.

Bats

Desk Study

2.4.27 At least 12 bat species were identified within the extended 5km study area, including scarce / light sensitive species such as greater horseshoe, barbastelle and grey long-eared bat.

2.4.28 The nearest bat roost record to the site was of a common pipistrelle day roost, 900m to the north-west of the site. The nearest grey long-eared roost is 2.6km to the south-east of the site, and the nearest greater horseshoe bat roost is 3.1km to the east of the site. All bats and their roosts are legally protected; a number are also Priority Species, refer to Appendix 1.

Site survey
Bat roosts

2.4.29 Area 2 contained a number of trees with moderate or high bat roost suitability along the eastern, western and southern boundaries. Up to 56 trees with 'moderate' or 'high' bat roosting suitability were identified in Coombe Wood SANG, although it is not expected that these would be affected by the proposed layout. No trees with bat roost suitability were identified in Areas 1, 3 or 4.

Bat activity: transect surveys
Area 1 / Scheduled Monument SANG

2.4.30 A total of 172 bat registrations were recorded at listening points during the six bat activity surveys. At least five bat species were with 'moderate' to 'high' levels of bat activity were recorded around the south-east corner of Area 1 and 'moderate' to 'low' levels recorded elsewhere. These species were common pipistrelle (approximately 66% of all bat passes), soprano pipistrelle (14%), noctule (12%), serotine and *Myotis* species (3%).

Areas 2, 3 & 4

2.4.31 A total of 265 bat registrations were recorded at listening points during the seven bat activity surveys. At least seven bat species were recorded within Areas 2-4, these comprised common pipistrelle (approximately 55% of all bat passes), soprano pipistrelle (18%), *Myotis* species (12%), serotine (8.5%), noctule (1.8%), barbastelle (1.8%) and Leisler's (<1%). 'Moderate' to 'high' levels of bat activity were recorded around the south-west corner of Area G (where insect would prey

would be abundant due to the presence of horse manure) and 'moderate' to 'low' levels recorded elsewhere.

Coombe Wood SANG

2.4.32 A total of 167 bat registrations were recorded at listening points during the six bat activity surveys. Five bat species were recorded; the highest levels of activity were recorded near the north-western boundary. Overall, transect survey data recorded 'moderate' levels of activity. Species included common pipistrelle (approximately 73% of all bat passes), soprano pipistrelle (18%), serotine (4%), noctule (3%) and *Myotis* species (2%).

Bat activity: static surveys
Area 1 / Scheduled Monument

2.4.33 At least eight bat species were recorded during the static surveys at 'low' to 'moderate' levels. Species included common pipistrelle (approximately 63% of all bat passes), soprano pipistrelle (12%), *Nyctalus* species (10%), noctule (6%), *Myotis* species (3%). Greater horseshoe, barbastelle, long-eared species and serotine comprised the remaining 4%.

Areas 2, 3 & 4

2.4.34 At least ten bat species were recorded in Areas 2, 3 and 4 during the static surveys. 'Moderate' to 'high' levels of bat activity were recorded along the southern boundary of Area 2 and 'moderate' to 'low' levels recorded elsewhere. Species included common pipistrelle (68.5%), soprano pipistrelle (15%), serotine (3%), barbastelle (3%), *Myotis* species (<1%), Nathusius' pipistrelle (<1%), noctule (<1%), Leisler's (<1%), long-eared species (<1%) and greater horseshoe bat (<1%).

Coombe Wood SANG

2.4.35 At least seven bat species were recorded within Coombe Wood during the static surveys. These were common pipistrelle (80% of all bat passes), soprano pipistrelle (16%), *Myotis* species (1%), noctule (<1%), serotine (<1%), barbastelle (<1%) and long-eared species (<1%). 'Moderate-High' levels of activity were recorded in the south-west with 'moderate' levels recorded towards the middle of the wood.

Otter

Desk Study

2.4.36 There are a number of otter records within the study area, the nearest of which is 340m north of the site. Otter is a legally protected Priority Species.

Site survey

2.4.37 No evidence of this species was recorded within the site. The presence of otters within the site was therefore considered unlikely.

Water vole

Desk Study

2.4.38 There are several records of water vole within the study area, including a record close to the northern boundary of the site.

Site survey

2.4.39 No evidence of this species was recorded within the site. The presence of water vole within the site was therefore considered unlikely.

Other mammals

Desk Study

2.4.40 The desk study identified the presence of the Priority Species brown hare and hedgehog within the study area.

Site survey

2.4.41 Hedgerows, woodland and grassland habitats provided suitable habitat for hedgehog and brown hare. The presence of other notable mammal species was considered unlikely.

3 Conclusions and recommendations

3.1 Ecological suitability of site for development

3.1.1 There are no overriding ecological constraints to the development of the site, either for the 470- or 650-unit schemes. Development could be undertaken in accordance with biodiversity policies within the National Planning Policy Framework (NPPF), the Adopted and emerging Local Plans, and in accordance with Purbeck District Council's obligations under the Conservation of Habitats and Species Regulations 2017 (as amended). Appropriate development design could ensure that significant adverse effects on biodiversity were avoided, and that a net 'biodiversity gain' could be achieved.

3.1.2 There are a number of potential ecological constraints and opportunities in relation to development, which are considered in Section 3.2 below. Section 3.3 provides information on the further assessment that would be undertaken to support a planning application, to ensure compliance with relevant planning policies and legal compliance in respect of designated sites and protected species. Where constraints are identified, measures would be required to ensure that significant adverse effects on biodiversity were avoided or mitigated. It is considered that such measures would be achievable as part of development proposals and/or within the construction programme

3.2 Potential ecological constraints and opportunities

European Sites

3.2.1 Consultation with Natural England has been undertaken between 2015 and 2019 to consider the potential effects of the allocation on European Sites. The results of the 2015 consultation, including supporting information, are documented in a separate 'Habitats Regulations Appraisal Statement', which accompanied previous (Regulation 18) submissions to Purbeck District Council (EAD Ecology, September 2015).

3.2.2 Natural England confirmed, during consultation in 2015, that an effect on European Sites, including the Dorset Heaths, as a result of changes in air quality arising from traffic would not be expected. This is reflected in the Habitats Regulations Assessment of the Local Plan Review (Hoskin et al, 2018), which states that measures integrated into the Local Plan would provide 'a robust mechanism to ensure that development would not adversely affect the European Sites'.

3.2.3 The potential effects arising from the development and proposed avoidance measures, agreed during consultation with Natural England, are summarised in Table 3.1; further detail is provided below.

Table 3.1: Potential adverse effects on European Sites and agreed avoidance measures

Potential Adverse Effect	Avoidance measures
Increased recreational pressure on Dorset Heaths.	• Provision of Suitable Alternative Natural Greenspace (SANG) at Coombe Wood / Scheduled Monument area. • Contribution towards Strategic Access Management and Monitoring (SAMM).
Changes in water quality affecting Poole Harbour SPA / Ramsar	Confirmation that the proposed development could deliver 'nutrient neutrality'.

Dorset Heaths SAC and Dorset Heathlands SPA and Ramsar Site

3.2.4 The results of the consultation and agreed avoidance measures in Table 3.1 reflect the findings of the Habitats Regulations Assessment of the Local Plan Review (Hoskin *et al*, 2018) and The Dorset Heathlands Planning Framework 2015-2020 Supplementary Planning Document (2016). Further information on proposed mitigation / avoidance measures is provided below.

Proposed Coombe Wood and Scheduled Monument Area SANG

3.2.5 It is proposed that Coombe Wood and the Scheduled Monument Area are to be combined and managed as Suitable Alternative Natural Greenspace (SANG) to mitigate potential adverse impacts on the Dorset Heathland European Sites as a result of increased recreational pressure from the proposed development. The principles of the proposed SANG have been agreed with Natural England and Historic England, and no overriding ecological constraints that would preclude development of Coombe Wood and the Scheduled Monument area as a SANG have been identified. It is expected that the SANG would include all of the Scheduled Monument Area together with a proportion of Coombe Wood; the area within Coombe Wood could be increased to accommodate a 650-unit allocation or future allocation of up to 1000 dwellings.

3.2.6 Coombe Wood is currently subject to management as commercial forestry and there is also some limited informal public access along the central track within the site. The development of the proposed SANG presents a significant opportunity to implement management to enhance the biodiversity value of the site, e.g. through the restoration of existing plantation coniferous woodland to native broadleaved woodland, and creation of a series of rides and glades along proposed walking routes. Where features of biodiversity importance have been identified (e.g. trees with bat roost potential and badger setts), detailed design and appropriate management (e.g. routing of footpaths and retention of existing broadleaved trees) would ensure that these features are protected and enhanced. The implementation of the SANG would be achieved through implementation of a management plan, to be agreed with Natural England and Purbeck District Council. It is expected that the Lulworth Estate would be responsible for the in-perpetuity management of the SANG; 'step in' rights, should these be required, would also be agreed with Purbeck District Council in the event that Lulworth Estate were unable to undertake the required management.

Strategic Access Management and Monitoring (SAMM)

3.2.7 The development would provide SAMM payments, secured by S.106 Agreement, in accordance with the Dorset Heathlands Planning Framework SPD, or any updated requirements at the time of development.

Poole Harbour SPA and Ramsar Site

3.2.8 The proposed development is located within the Frome catchment, which is hydrologically linked to Poole Harbour. In accordance with the HRA of the emerging Local Plan (Hoskin *et al*, 2018), there would be a requirement to incorporate measures into the development to ensure that 'nutrient neutrality' was achieved. This would comprise the conversion of land currently managed as arable to 'untilled land', such as permanent pasture or woodland, which would not be subject to fertilisation. The Lulworth Estate has confirmed that suitable land within its control would be available, and Natural England has agreed that nutrient neutrality within the site could be achieved.

Other sites of nature conservation importance

3.2.9 Effects on other statutory and non-statutory designated sites are considered unlikely. Avoidance / mitigation measures identified above would ensure that adverse effects on the component SSSIs

of the European Sites would be avoided. No mechanisms or pathways have been identified likely to affect non-statutory sites in the vicinity of the site.

Summary: Designated sites of conservation importance

3.2.10 With the provision of appropriate avoidance / mitigation measures, it has been agreed with Natural England that development of up to 1000 new dwellings within Wool could be accommodated with no adverse effect on the integrity of European Sites. Therefore, the proposed 470- or 650-unit developments could be undertaken in accordance with Purbeck District Council's obligations under the Conservation of Habitats and Species Regulations 2017 (as amended). No impacts to other designated or non-statutory sites of nature conservation value are foreseen, and therefore compliance with Policy BIO of the Adopted Purbeck Local Plan Part 1 (adopted 2012) and Policies E7 and E8 of the emerging Local Plan (2018 - 2034) could be achieved.

Habitats

Areas 1, 2, 3 & 4 and Scheduled Monument Area

3.2.11 Hedgerows are a Priority Habitat and are considered to be of moderate ecological importance. The other dominant habitats within these areas (i.e. arable and improved and poor semi-improved grassland) are of low ecological importance.

3.2.12 The emerging development proposals could incorporate integrated landscape and ecological principles that would ensure that key habitats within the site were retained and enhanced. Hedgerows could be retained and protected within the development and new woodland and hedgerow planting would enhance this ecological resource and provide connectivity. Where hedgerow loss was unavoidable, for example through the creation of site access, this could be mitigated through the creation of new species-rich native hedgerows integrated into the wider green infrastructure provision.

3.2.13 In addition to habitat protection, habitat creation and enhancement could be delivered, providing a net gain in Priority Habitats such as species-rich hedgerow, wetland (including ponds) and wildflower meadow. Furthermore, habitat creation could be delivered through an integrated approach with landscape, amenity and drainage proposals e.g. multifunctional spaces such as parkland and SuDS. This could increase the diversity of habitat types within the site and also reinforce the site's connectivity. Taking these proposals into account, the development would, therefore, comply with biodiversity policies in the NPPF and Policy BIO of the Adopted Local Plan and Policy E10 of the emerging Local Plan; refer to Appendices 3 and 4.

3.2.14 Long-term management of the site could be ensured through implementation of a Landscape and Ecological Management Plan (LEMP). This would ensure that the development would provide 'biodiversity gain'.

Coombe Wood

3.2.15 The habitats of moderate to high ecological value within the Coombe Wood are considered to be broadleaved woodland and ponds; these are 'Priority Habitats'. The plantation woodland and dense bracken habitat are considered to be common and widespread habitats of low ecological value.

3.2.16 As discussed in Paragraph 3.2.6, creation of the SANG presents opportunities to enhance woodland habitats, and restore areas of broadleaved woodland within the ancient woodland areas. The implementation of the SANG Management Plan could deliver a net gain in biodiversity whilst establishing a recreational area designed to mitigate adverse effects on the nearby Dorset

Heaths European Sites. this would represent a significant ecological benefit over the current and ongoing commercial forestry management regime that would otherwise continue.

Protected and notable species

Survey Area

3.2.17 The presence of any legally protected or notable species would be taken into account during development design, planning and subsequent requirement for Natural England Mitigation Licences (where relevant). Mitigation and enhancement measures could be integrated with both the layout and construction programme to ensure species protection and legal compliance (including those listed below). Development could, therefore, be undertaken in accordance with species-related biodiversity policies in the NPPF and Policy BIO of the Adopted Local Plan and Policy E10 of the emerging Local Plan; refer to Appendices 3 and 4.

3.2.18 Measures that could be incorporated into the development to avoid significant negative effects, ensure legal compliance and provide enhancement for protected and notable species could include (refer also to Figures 5 and 6):

- *Amphibians and reptiles:* To ensure that no reptiles or amphibians were killed or injured during site clearance, standard mitigation (e.g. capture and translocation or habitat manipulation under ecological supervision) could be undertaken. New habitat, such as wildflower meadow and wetland / ponds, could enhance the site for reptiles and amphibians. Effects on great crested newt populations are considered unlikely; depending on the detailed proposals development could be carried out under a Method Statement or Natural England Mitigation Licence to ensure legal compliance.
- *Birds:* Direct impacts to nesting birds could be avoided through clearance of suitable vegetation outside of the main bird-breeding season or under ecological supervision. New habitat creation could provide new nesting and foraging habitat for birds, and provision of integrated boxes within buildings could provide increased nesting opportunities for Priority Species such as swift.
- *Bats:* The development design could ensure that key habitat corridors were integrated into green infrastructure within the development, which could be enhanced through new habitat creation. The lighting design for the development could ensure that 'dark' corridors were maintained. It is expected that the majority of trees with potential to support roosting bats could be retained; where impacts to confirmed bat roosts could not be avoided this could be undertaken under Natural England Mitigation Licence, and replacement roost features created. Bat boxes could be integrated into new buildings to increase roosting opportunities within the site.
- *Badgers:* New habitat creation within the development could provide new foraging opportunities for badgers. Where possible, development would avoid badger setts, otherwise closure under Natural England Development Licence may be required to ensure legal compliance. The proposed SANG layout within Coombe Wood could avoid impacts to badger setts.

Summary of potential constraints and opportunities

3.2.19 Overall, it is considered that adverse effects could be mitigated and net gain provided by:

- Measures to ensure effects on European designated sites, including the Dorset Heaths and Poole Harbour, were mitigated.
- The retention and protection of key habitats within the site.
- Implementation of an integrated landscape and ecological design in the site that would increase habitat diversity, deliver Priority Habitats and create robust wildlife corridors.

- Species-specific measures to avoid, reduce or compensate for adverse effects.
- Implementation of LEMPs (for both the Development Area and the SANG) to secure effective long-term management of new and retained habitats.

3.3 Assessment

3.3.1 An Ecological Impact Assessment (EcIA) or Ecology Chapter for an Environmental Statement (ES) would be produced to support a planning application for the site; this would be carried out in accordance with CIEEM Guidelines (2018) and BS 42020:2013 Biodiversity – Code of Practice for Planning and Development. The EcIA would be supported by a detailed baseline, including the full results of ecological surveys summarised in Section 2 of this report.

3.3.2 In accordance with its obligations under the Conservation of Habitats and Species Regulations 2017 (as amended), Purbeck District Council would be required to undertake a Habitats Regulations Assessment of the development proposals. Information to inform this assessment would be provided by the applicant, either as part of the EcIA or as a 'Shadow' HRA report.

3.3.3 A Construction Ecological Management Plan (CEcoMP) and Landscape and Ecological Management Plan (LEMP) would integrate habitat and species mitigation and enhancement measures that would be delivered during construction and operational phases respectively. These documents would either be included in the planning application or produced subsequently to satisfy relevant planning conditions.

3.3.4 Any development within Dorset must have a 'Biodiversity Mitigation & Enhancement Plan' (BMEP) in place to enable a certificate of approval to be issued by the Dorset Council Natural Environment Team (NET). The proposed EcIA, CEcoMP and LEMPs would provide sufficient information in accordance with this requirement and for a BMEP to be submitted with a future planning application

3.4 Conclusion

3.4.1 There would be no overriding ecological constraints to the proposed 470- or 650-unit schemes. Mitigation and avoidance measures could ensure that there would be no significant adverse effects on European, national or local designated sites of nature conservation importance. Through the integration of ecological mitigation and enhancement measures into the development layout, it is considered that 'biodiversity gain' could be achieved. Accordingly, development could be undertaken in full compliance with biodiversity policies set out in the National Planning Policy Framework (2019), the Adopted Purbeck Local Plan (2012) and emerging policies of the Purbeck Local Plan Submission Version (January 2019). In addition, development could be undertaken in full compliance with wildlife legislation.

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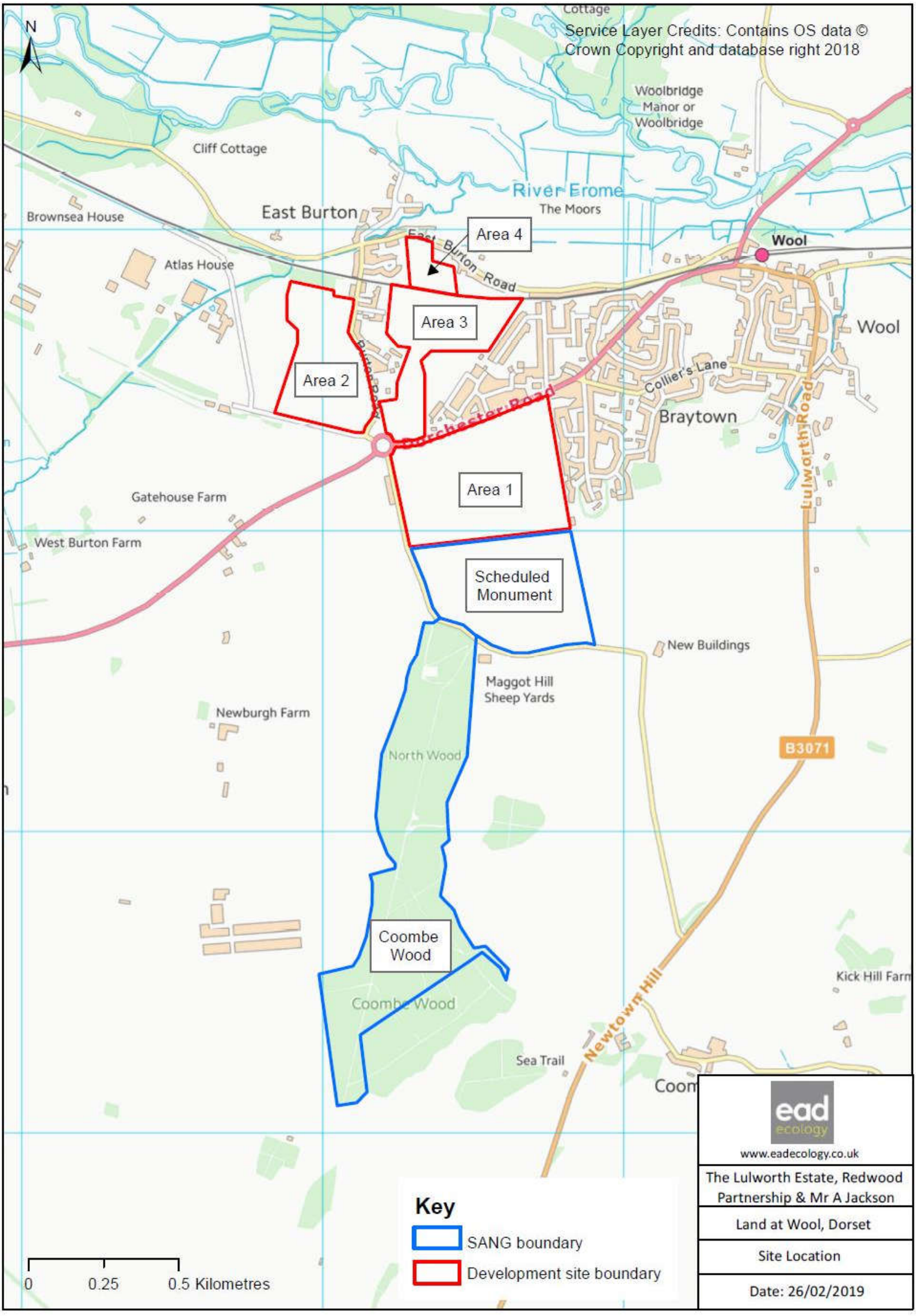
Figure 1: Site location plan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Service Layer Credits: Contains OS data © Crown Copyright and database right 2018
Cliff Cottage
Woolbridge Manor or Woolbridge
River Erome
The Moors
Brownsea House
East Burton
Area 4
East Burton Road
Wool
Atlas House
Area 3
Area 2
Wool
Collier's Lane
Braytown
Dorchester Road
Lulworth Road
Area 1
Gatehouse Farm
West Burton Farm
Scheduled Monument
New Buildings
Maggot Hill Sheep Yards
Newburgh Farm
North Wood
B3071
Coombe Wood
Coombe Wood
Kick Hill Farm
Newtown Hill
Sea Trail
Key
SANG boundary
Development site boundary
0
0.25
0.5 Kilometres
ead ecology
www.eadecology.co.uk
The Lulworth Estate, Redwood Partnership & Mr A Jackson
Land at Wool, Dorset
Site Location
Date: 26/02/2019

Figure 2: Vision plan (470 houses)

Wool Vision Plan - 470 homes

Approximate Total no. of new dwellings:	470 homes
Total housing area:	13.22ha

title	Wool Vision Plan - 470 homes		
project	Wool Masterplan	revision	-
client	Wald Estate/Redwood Partnership	date	03 December 2018
job no	WPL 425429	drawn by	SM
drawing no	MP001	checked by	RB

- Land reserved for future school, if required
- Neighbourhood Equipped Area for Play
- Local Equipped Area for Play
- Public open space
- SuDS basin/public open space
- SuDS swale
- Existing public right of way
- Proposed pedestrian and cycle link to wider countryside/rights of way
- Site Boundary
- Scale 1:5000 @A3

urban design studio
Southampton
Birmingham
Cambridge
London
Oxford
savills.com/urbandesign
savills

Figure 3: Vision plan (650 houses)

Wool Vision Plan - 650 homes

Approximate Total no. of new dwellings:	650 homes
Total housing area:	18.15ha

title	Wool Vision Plan - 650 homes
project	Wool Masterplan
client	Weld Estate/Redwood Partnership
job no	WPL 425429
drawing no	MP002
revision	-
date	03 December 2018
drawn by	SM
checked by	RB

- Land reserved for future school, if required
- Neighbourhood Equipped Area for Play
- Local Equipped Area for Play
- Public open space
- SuDS basin/public open space
- SuDS swale
- Existing public right of way
- Proposed pedestrian and cycle link to wider countryside/rights of way
- Site Boundary
- Scale 1:5000 @A3

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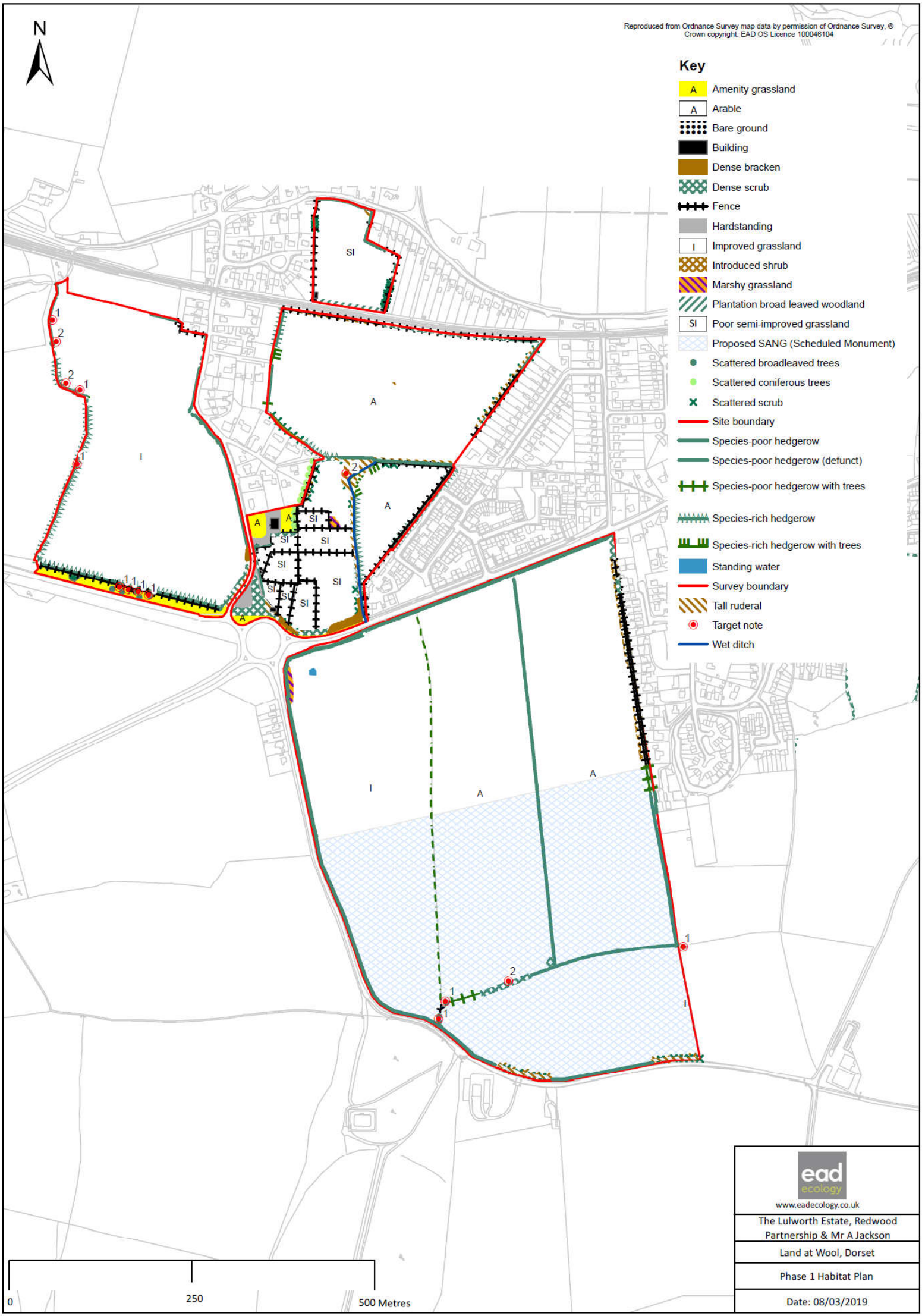
Figure 4: Phase 1 habitat plan and target notes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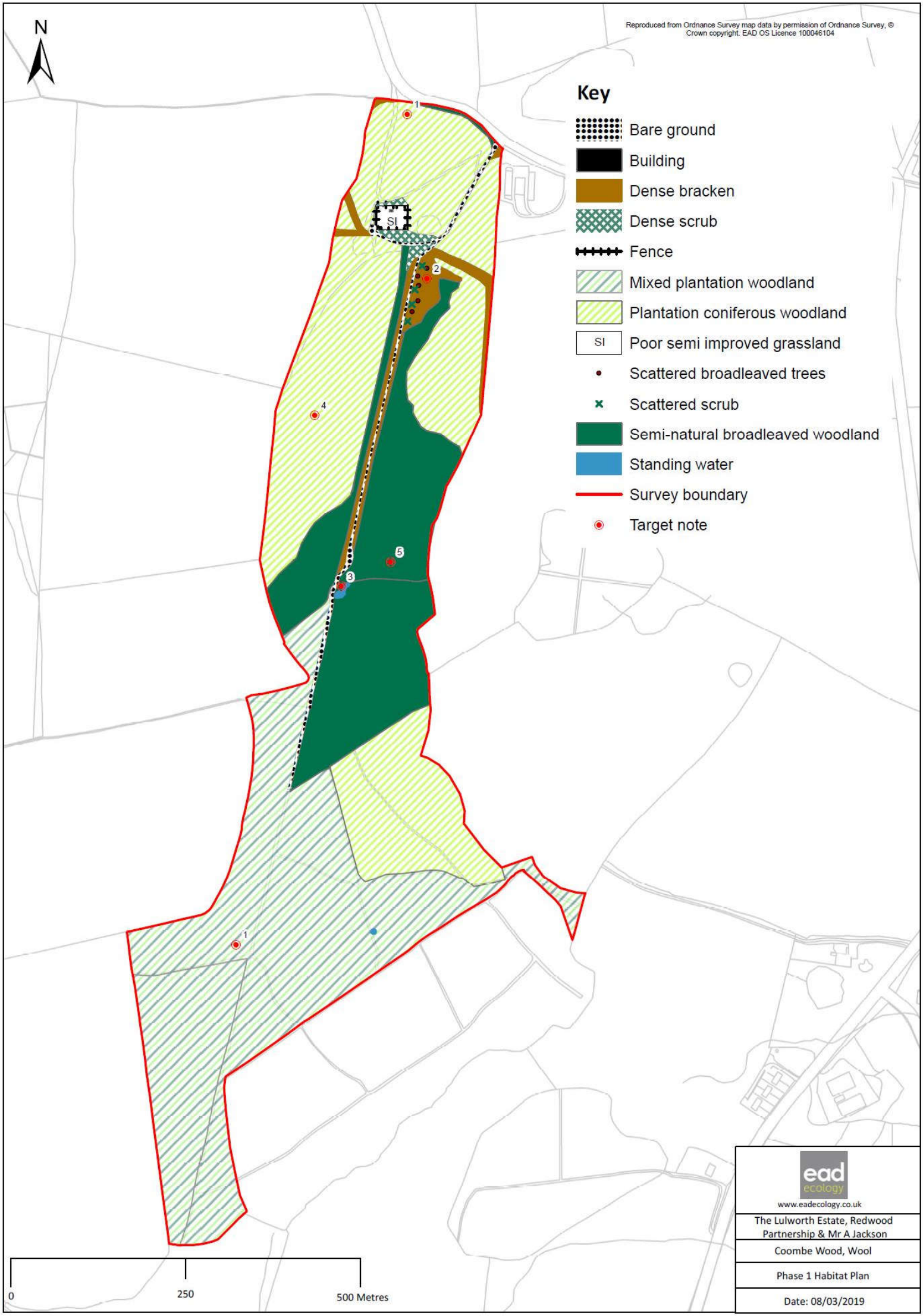
Reproduced from Ordnance Survey map data by permission of Ordnance Survey, © Crown copyright. EAD OS Licence 100046104
Key
A Amenity grassland
A Arable
Bare ground
Building
Dense bracken
Dense scrub
Fence
Hardstanding
I Improved grassland
Introduced shrub
Marshy grassland
Plantation broad leaved woodland
SI Poor semi-improved grassland
Proposed SANG (Scheduled Monument)
Scattered broadleaved trees
Scattered coniferous trees
Scattered scrub
Site boundary
Species-poor hedgerow
Species-poor hedgerow (defunct)
Species-poor hedgerow with trees
Species-rich hedgerow
Species-rich hedgerow with trees
Standing water
Survey boundary
Tall ruderal
Target note
Wet ditch
0
250
500 Metres
www.eadecology.co.uk
The Lulworth Estate, Redwood Partnership & Mr A Jackson
Land at Wool, Dorset
Phase 1 Habitat Plan
Date: 08/03/2019

Target number	Description
1	Tree with bat roost potential
2	Single hole badger sett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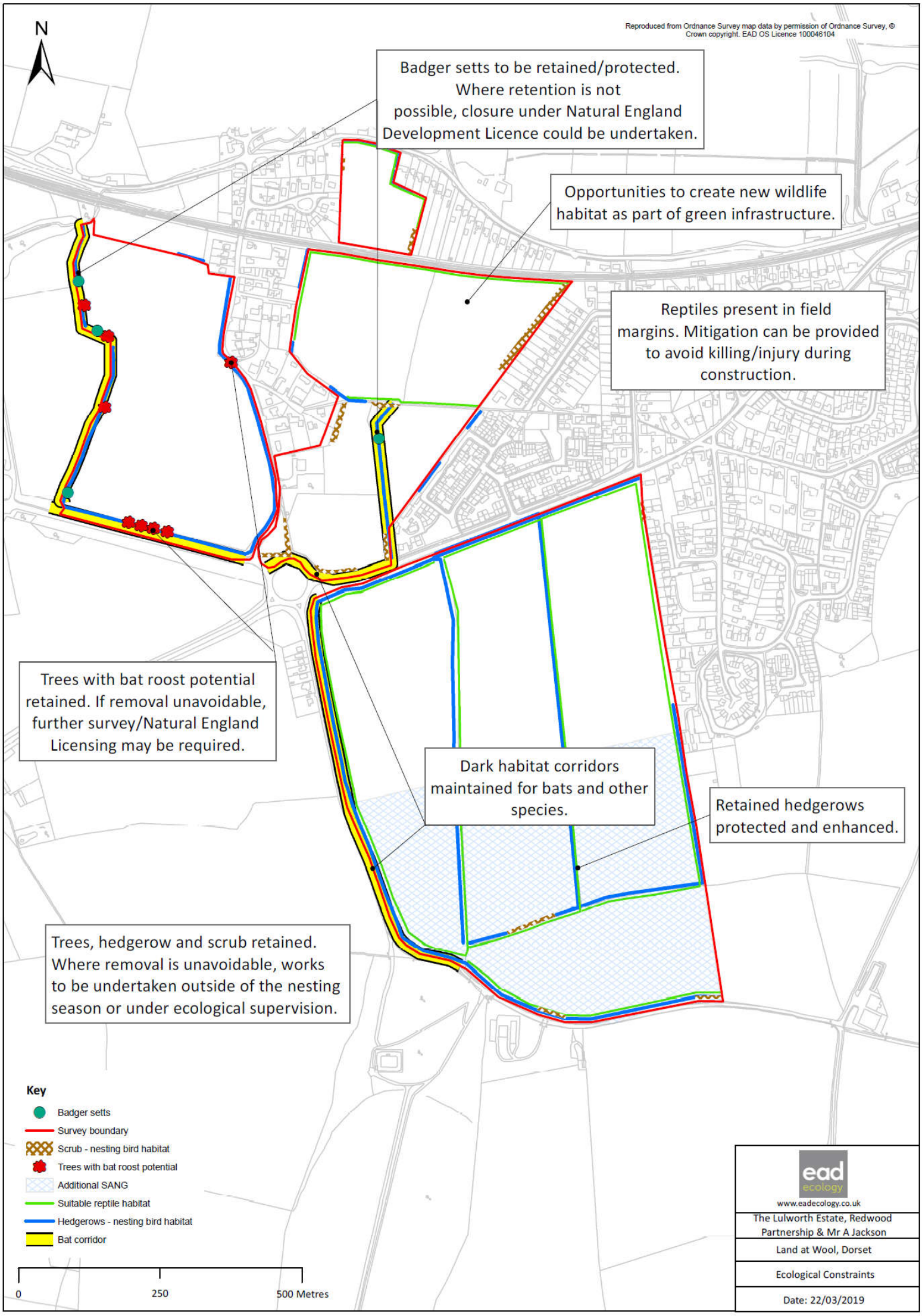
Key
Bare ground
Building
Dense bracken
Dense scrub
Fence
Mixed plantation woodland
Plantation coniferous woodland
SI
Poor semi improved grassland
Scattered broadleaved trees
Scattered scrub
Semi-natural broadleaved woodland
Standing water
Survey boundary
Target note
1
2
3
4
5
SI
0
250
500 Metres
ead ecology
www.eadecology.co.uk
The Lulworth Estate, Redwood Partnership & Mr A Jackson
Coombe Wood, Wool
Phase 1 Habitat Plan
Date: 08/03/2019

Target number	Description
1	Likely main badger setts.
2	Dense bracken habitat along path in middle of site.
3	Pond heavily shaded by woodland. Great crested newt eDNA recorded.
4	Plantation coniferous woodland comprising Scot's pine with understorey dominated by bracken.
5	Semi-natural broadleaved woodland dominated by oak with a rich and varied ground flora including many woodland indicator species.

Figure 5: Ecological constraints plan (Areas 1 to 4 and Scheduled Monument)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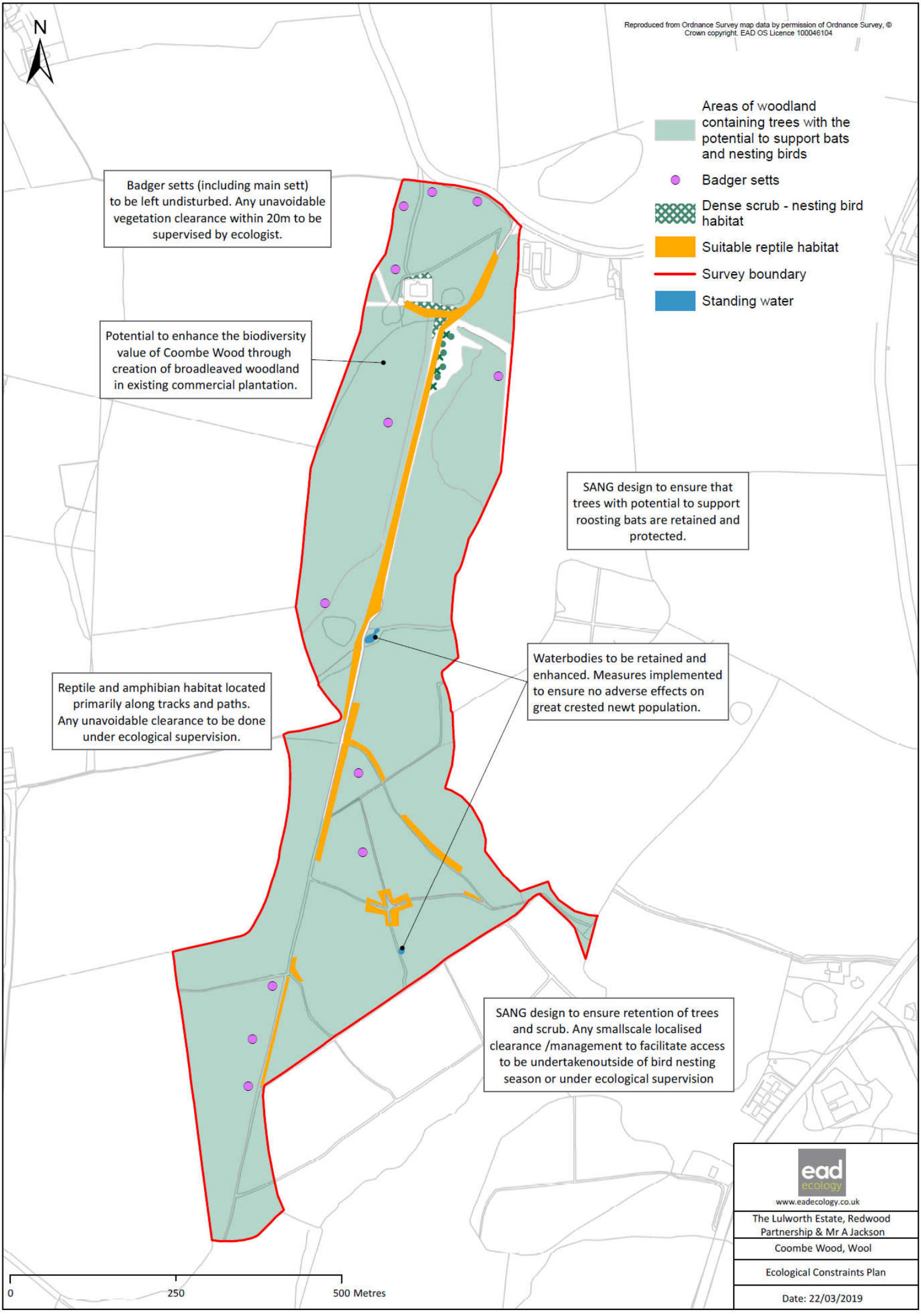
Badger setts to be retained/protected. Where retention is not possible, closure under Natural England Development Licence could be undertaken.
Opportunities to create new wildlife habitat as part of green infrastructure.
Reptiles present in field margins. Mitigation can be provided to avoid killing/injury during construction.
Trees with bat roost potential retained. If removal unavoidable, further survey/Natural England Licensing may be required.
Dark habitat corridors maintained for bats and other species.
Retained hedgerows protected and enhanced.
Trees, hedgerow and scrub retained. Where removal is unavoidable, works to be undertaken outside of the nesting season or under ecological supervision.
Key
Badger setts
Survey boundary
Scrub - nesting bird habitat
Trees with bat roost potential
Additional SANG
Suitable reptile habitat
Hedgerows - nesting bird habitat
Bat corridor
0
250
500 Metres
ead ecology
www.eadecology.co.uk
The Lulworth Estate, Redwood Partnership & Mr A Jackson
Land at Wool, Dorset
Ecological Constraints
Date: 22/03/2019

Figure 6: Ecological constraints plan (Coombe Wood)


N
Reproduced from Ordnance Survey map data by permission of Ordnance Survey, © Crown copyright. EAD OS Licence 100046104
Areas of woodland containing trees with the potential to support bats and nesting birds
Badger setts
Dense scrub - nesting bird habitat
Suitable reptile habitat
Survey boundary
Standing water
Badger setts (including main sett) to be left undisturbed. Any unavoidable vegetation clearance within 20m to be supervised by ecologist.
Potential to enhance the biodiversity value of Coombe Wood through creation of broadleaved woodland in existing commercial plantation.
SANG design to ensure that trees with potential to support roosting bats are retained and protected.
Waterbodies to be retained and enhanced. Measures implemented to ensure no adverse effects on great crested newt population.
Reptile and amphibian habitat located primarily along tracks and paths. Any unavoidable clearance to be done under ecological supervision.
SANG design to ensure retention of trees and scrub. Any smallscale localised clearance /management to facilitate access to be undertakenoutside of bird nesting season or under ecological supervision
0
250
500 Metres
ead ecology
www.eadecology.co.uk
The Lulworth Estate, Redwood Partnership & Mr A Jackson
Coombe Wood, Wool
Ecological Constraints Plan
Date: 22/03/2019

Appendix 1: Wildlife legislation

Wildlife Legislation

Conservation of Habitats and Species Regulations 2017 (as amended)
These Regulations, also referred to as the 'Habitats Regulations', implement the EC Directive on the Conservation of Natural Habitats and of Wild Flora and Fauna (92/43/EEC) and the EC Directive on the Conservation of Wild Birds (79/409/EEC). The Regulations provide for the designation and protection of 'European Sites' (Natura 2000 sites). They convey a statutory requirement for local planning authorities to undertake a 'Habitats Regulations Assessment' of the potential impacts of plans and projects, including development proposals, on European Sites. The provisions also include protection of 'European Protected Species' (EPS). Under the Regulations, local planning authorities have to consider three 'derogation tests' when deciding whether to grant permission for a development that affects an EPS, which are as follows:

- the development must be for over-riding public interest or for public health and safety;
- there are no satisfactory alternatives to the proposed development; and
- the favourable conservation status of the EPS concerned must be maintained.

Wildlife and Countryside Act 1981 (as amended)
This Act is the principal wildlife legislation in Great Britain. It includes provisions for important habitats to be designated and protected as Sites of Special Scientific Interest (SSSIs). Numerous plant and animal species, and the places that they use for shelter and protection, are also protected under the Act, including all birds, their nests and eggs.

Countryside and Rights of Way Act 2000
Referred to as the CROW Act, this legislation increases the protection of SSSIs and strengthens wildlife enforcement action. The Act also strengthens the protection of protected species under the Wildlife and Countryside Act 1981 (as amended) through the introduction of a new offence of 'reckless disturbance'.

Natural Environment and Rural Communities Act 2006
This Act places a duty on all public bodies and statutory undertakers to have due regard to the conservation of biodiversity in all their functions. It also requires the publication of a list of habitats and species of principal importance for the conservation of the biodiversity. This list, known as the Section 41 list, includes all Priority Habitats and Species of Principal Importance for the Conservation of Biodiversity in England.

Protection of Badgers Act 1992
This Act was introduced primarily for animal welfare reasons, as opposed to species conservation. It provides protection of badgers and their setts.

Hedgerow Regulations 1997 (as amended)
These Regulations include provisions for the protection of hedgerows and make it an offence to remove 'important' hedgerows without consent from the local planning authority. Where planning permission is granted for a development proposal, the removal of 'important' hedgerows is deemed to be permitted.

Appendix 2: Species legislation

Invertebrates

A number of UK invertebrates are protected by international and national legislation, including the EC Habitats Directive (1992) and the Wildlife and Countryside Act 1981 (as amended). In addition, numerous species are Priority Species.

Plants

All wild plants are protected against unauthorised removal or uprooting under Section 13 of the Wildlife and Countryside Act 1981 (as amended). Plants listed on Schedule 8 of the Act (e.g. stinking goosefoot, red helleborine, monkey orchid) are afforded additional protection against picking, uprooting, destruction and sale. Bluebell (*Hyacinthoides non-scripta*) is protected against sale only. Further species are also protected under the Conservation of Habitats and Species Regulations 2017.

Notable plant species include those that are listed as:

- Nationally vulnerable **–** A taxon is Vulnerable when the best available evidence indicates that it meets any of the criteria A-E for Vulnerable, and is therefore considered to be facing a high risk of extinction in the wild (Cheffings C M & Farrell L (Eds) (2005) *Species Status No. 7 – The Vascular Plant Red Data List for Great Britain*, JNCC (online).
- Nationally scarce – species recorded in 16-100 hectads in Great Britain.
- Nationally rare – species occurring in 15 or fewer hectads in Great Britain.

Section 14 of the Wildlife and Countryside Act 1981 (as amended) prohibits the planting of certain invasive plant species in the wild, or otherwise causing them to grow there. Prohibited plants are listed on Part 2 of Schedule 9 and include Japanese knotweed, Himalayan balsam and giant hogweed.

Amphibians

There are seven native amphibian species present in Britain. These are afforded varying degrees of protection under national and European legislation. Great crested newts (*Triturus cristatus*) and their habitat are afforded full protection under UK and European legislation, including the Wildlife and Countryside Act 1981 (as amended), the Countryside and Rights of Way (CRoW) Act 2000 and the Conservation of Habitats and Species Regulations 2017. Together, this legislation makes it illegal to:

- Deliberately capture, injure or kill a great crested newt.
- Damage or destroy any place used for shelter or protection by great crested newts, including resting or breeding places; or intentionally or recklessly obstruct access to such a place.
- Deliberately, intentionally or recklessly disturb great crested newts.

Great crested newt and common toad (*Bufo bufo*) are Priority Species.

Reptiles

Slow-worm (*Anguis fragilis*), viviparous/common lizard (*Zootoca vivipara*), adder (*Vipera berus*) and grass snake (*Natrix natrix*) are protected under the Wildlife and Countryside Act 1981 (as amended) against intentional killing and injuring. These species are also Priority Species.

Birds

The bird breeding season generally lasts from March to early September for most species. All birds are protected under the Wildlife and Countryside Act (1981) (as amended) and the Countryside & Rights of Way (CRoW) Act 2000. This legislation makes it illegal, both intentionally and recklessly, to:

- kill, injure or take any wild bird.
- take, damage or destroy the nest of any wild bird while it is being built or in use.
- take or destroy the eggs of any wild bird.

Furthermore, birds listed on Schedule 1 of the Wildlife & Countryside Act 1981 (as amended) are protected against intentional or reckless disturbance whilst nest building and when at or near a nest containing eggs or young. Dependent young of Schedule 1 species are also protected against disturbance.

In addition to this legal protection, the leading governmental and non-governmental conservation organisations in the UK have reviewed the population status of the birds regularly found here and produced a list of birds of conservation concern. Of the 244 species assessed, 67 were placed on the Red List of high conservation concern, 96 on the Amber List of medium conservation concern and 81 on the Green List of low conservation concern:

- Red list species are those that are Globally Threatened according to IUCN criteria; those whose population or range has declined rapidly in recent years; and those that have declined historically and not shown a substantial recent recovery.
- Amber list species are those with an unfavourable conservation status in Europe; those whose population or range has declined moderately in recent years; and those with internationally important or localised populations.

Badgers

Badger (*Meles meles*) is a widespread and common species. However, they are legally protected under The Protection of Badgers Act 1992, due to animal welfare concerns. Under this legislation it is illegal to:

- Wilfully kill, injure, take, or cruelly ill-treat a badger, or attempt to do so.
- Intentionally or recklessly interfere with a sett by disturbing badgers whilst they are occupying a sett, damaging or destroying a sett, or obstructing access to it.

A badger sett is defined in the legislation as "*any structure or place, which displays signs indicating current use by a badger*".

Bats

There are 18 species of bats found in the UK, 17 of which are known to breed here. The conservation status of these species is summarised in the table below:

Common name	Scientific name	IUCN Red List*	Priority Species
Greater horseshoe	*Rhinolophus ferrumequinum*	LC	Yes
Lesser horseshoe	*Rhinolophus hipposideros*	LC	Yes
Daubenton's	*Myotis daubentonii*	LC	No
Brandt's	*Myotis brandtii*	LC	No
Whiskered	*Myotis mystacinus*	LC	No

Common name	Scientific name	IUCN Red List*	Priority Species
Natterer's	*Myotis nattereri*	LC	No
Bechstein's	*Myotis bechsteinii*	NT	Yes
Alcathoe bat	*Myotis alcathoe*	DD	No
Greater mouse-eared	*Myotis myotis*	LC	No
Common pipistrelle	*Pipistrellus pipistrellus*	LC	No
Soprano pipistrelle	*Pipistrellus pygmaeus*	LC	Yes
Nathusius' pipistrelle	*Pipistrellus nathusii*	LC	No
Serotine	*Eptesicus serotinus*	LC	No
Noctule	*Nyctalus noctula*	LC	Yes
Leisler's	*Nyctalus leisleri*	LC	No
Barbastelle	*Barbastella barbastellus*	NT	Yes
Brown long-eared	*Plecotus auritus*	LC	Yes
Grey long-eared	*Plecotus austriacus*	LC	No

*IUCN categories: LC Least Concern, NT Near Threatened, DD Data Deficient

All bat species are afforded full protection under UK and European legislation, including the Wildlife and Countryside Act 1981 (as amended) and the Conservation of Habitats and Species Regulations 2017. Together, this legislation makes it illegal to:

- Deliberately capture, injure or kill a bat.
- Damage or destroy a bat roost; or intentionally or recklessly obstruct access to bat roosts.
- Deliberately, intentionally or recklessly disturb a bat, including in particular any disturbance which is likely:
  - to impair their ability to survive, to breed or reproduce, or to rear or nurture their young, or
  - in the case of animals of a hibernating or migratory species, to hibernate or migrate; or
  - to affect significantly the local distribution or abundance of the species to which they belong.

A bat roost is defined in the legislation as "*any structure or place which a bat uses for shelter or protection*". Roosts are protected whether or not bats are present at the time.

Otter

Otters (*Lutra lutra*) are fully protected under UK and European legislation, including the Wildlife and Countryside Act 1981 (as amended), the Countryside and Rights of Way (CRoW) Act 2000 and the Conservation of Habitats and Species Regulations 2017. Together, this legislation makes it illegal to:

- Deliberately capture, injure or kill an otter.
- Damage or destroy any structure or place used for shelter or protection by an otter; or intentionally or recklessly obstruct access to such a place.
- Deliberately, intentionally or recklessly disturb an otter whilst it is occupying a structure or place which it uses for shelter or protection.

Otter is a Priority Species.

Water vole

Water vole (*Arvicola amphibious*) are afforded full protection under the Wildlife and Countryside Act 1981 (as amended), which make it illegal to:

- Kill, injure or take a water vole.
- intentionally or recklessly destroy, damage or obstruct access to any structure or place that is used by a water vole for shelter or protection.
- intentionally or recklessly disturb a water vole whilst it is in a place used for shelter or protection.

Water vole is a Priority Species.

Common/Hazel dormouse

The hazel dormouse (*Muscardinus avellanarius*) is fully protected under UK and European legislation, including the Wildlife and Countryside Act 1981 (as amended), the Countryside and Rights of Way (CRoW) Act 2000 and the Conservation of Habitats and Species Regulations 2017. Together, this legislation makes it illegal to:

- Deliberately capture, injure or kill a dormouse.
- Damage or destroy any structure or place used for shelter or protection by a dormouse; or intentionally or recklessly obstruct access to such a place.
- Deliberately, intentionally or recklessly disturb a dormouse whilst it is occupying a structure or place which it uses for shelter or protection.

Hazel dormouse is a Priority Species.

Appendix 3: National planning policy

National Planning Policy Framework (2019)

The National Planning Policy Framework (NPPF; 2019) includes the Government's policy on the protection of biodiversity through the planning system. Local plan policies and planning decisions should seek to minimise impacts on biodiversity and provide net gains in biodiversity. Planning policies should promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species (e.g. Habitats and Species of Principal Importance) linked to national and local targets.

When determining planning applications, local planning authorities should apply the following principles:

- if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;
- development on land within or outside a Site of Special Scientific Interest likely to have an adverse effect on it (either individually or in combination with other developments) should not normally be permitted. The only exception is where the benefits of the development in the location proposed clearly outweigh both its likely impact on the features of the site that make it of special scientific interest, and any broader impacts on the national network of Sites of Special Scientific Interest;
- development resulting in the loss or deterioration of irreplaceable habitats (such as an ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists; and
- development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to incorporate biodiversity improvements in and around developments should be encouraged, especially where this can secure measurable net gains for biodiversity.

Furthermore, planning decisions should minimise impacts on and provide net gains for biodiversity.

The NPPF establishes the need to identify a hierarchy of international, national and local wildlife sites through planning policy. However, it does not specifically address policy in relation to the protection of European Sites (such as Special Areas of Conservation) as these are dealt with separately through the process of Appropriate Assessment under the Conservation of Habitats and Species Regulations 2017 (as amended).

Appendix 4: Relevant local planning policy

Planning Purbeck's Future: Purbeck Local Plan Part 1 (adopted 2012)

Policy BIO: Biodiversity and Geology

Policy BIO: Biodiversity & Geodiversity

Purbeck's biodiversity and geodiversity will be protected, managed and enhanced through:

- The promotion of Strategic Nature Areas as identified on the Nature Map (Map 3);
- Efforts to enhance, link and create habitats to enable adaptation to climate change;
- Projects associated with the Purbeck Nature Improvement Area and the achievement of 'Wild Purbeck';
- Encouraging development proposals to incorporate biodiversity having regard to District design guidance;
- Maintaining regionally important geological and geomorphological sites (RIGS) for their scientific and educational value; and
- Allowing natural processes to continue along the coast in order to protect any wildlife and geological features maintained by active erosion, as reflected in the Shoreline Management Plan policy.

New Development

New development:

- Will need to ensure that there are no adverse effects upon the integrity of European protected sites (SPA, SAC, Ramsar, possible SAC, potential SPA).
- Within the vicinity of areas that support nationally significant numbers of Annex 1 bird species (nightjar and woodlark), undertake a risk based approach to ensure that there is no significant adverse effect upon these species and their habitats.
- Will need to ensure that there are no adverse impacts upon SSSI, for example an indirect effect of disturbance from increased public access.
- Will need to demonstrate that it avoids significant adverse impacts upon Sites of Nature Conservation Interest (SNCI), National Nature Reserves (NNR), Local Nature Reserves (LNR), Ancient Woodland, aged or veteran trees, wetland interests (for example, watercourses, ponds, reedbeds), and Habitats of Principal Importance. Any significant adverse impacts on these sites and features which cannot be avoided through location on an alternative site, must be adequately mitigated, or, as a last resort, compensated.
- Should incorporate any opportunities for biodiversity in and around the development

In considering the acceptability of proposals, the Council will assess their direct, indirect and cumulative impacts relative to the significance of the nature conservation value, and balance them against other sustainable development objectives.

Policy PH: Poole Harbour

Policy PH: Poole Harbour

Water Quality
New development may be required to incorporate measures to secure effective avoidance and mitigation of the potential adverse effects of nutrient loading on the ecological integrity of the Poole Harbour internationally designated sites.

The Council will work with neighbouring local authorities, the Environment Agency, Wessex Water and Natural England, supported by other relevant stakeholders, to secure effective and deliverable mitigation, and mechanisms that will fund and enable implementation of these measures.

Recreational Pressures
The Council will work with neighbouring local authorities, statutory bodies and landowners to manage shoreline access to Poole Harbour and implement the Poole Harbour Aquatic Management Plan to manage water based activities.

Purbeck Local Plan 2018-34 (Submission Version, January 2019)

Policy E7: Conservation of protected sites

Policy E7: Conservation of protected sites

Development will only be permitted where it would not lead to an adverse effect upon the integrity, either alone or in-combination, directly or indirectly, of nationally, European and internationally protected nature conservation sites.

The Council will determine applications adversely affecting these sites in accordance with the recommendation of the relevant assessments under the Habitats Regulations and Supplementary Planning Documents as appropriate.

Policy E8: Dorset heathlands

Policy E8: Dorset heathlands

Development will only be permitted where it would not lead to an adverse effect upon the integrity, either alone or in-combination, directly or indirectly, of heathlands protected at the national, European and international level for their biodiversity.

To ensure that sites are not harmed, residential development involving a net increase in dwellings or other uses such as tourist accommodation and equestrian-related development:

a. will not be permitted within 400 metres of heathland, as shown on the policies map, unless, as an exception, the type and occupier of residential development would not have an adverse effect upon the sites' integrity (e.g. nursing homes such as those limited to advanced dementia and physical nursing needs); and

b. between 400 metres and 5km of heathland such development will provide mitigation in accordance with the advice set out in the Dorset Heathlands Supplementary Planning Framework 2015-2020 SPD or appropriate to the adverse effects identified.

Policy E9: Poole Harbour

Policy E9: Poole Harbour

Proposals for development will not be permitted that would lead to any adverse effects upon the integrity, either alone or in combination directly or indirectly of the Poole Harbour SPA, SSSI and Ramsar site.

Nitrogen neutrality

Development proposals for any net increase in homes, tourist accommodation or a tourist attraction, will provide mitigation in accordance with the advice set out in The Nitrogen Reduction in Poole Harbour SPD, if the sewerage drains into the Poole Harbour catchment.

Recreational effects

The Council is working with the Borough of Poole to develop a Recreation in Poole Harbour SPD. Development proposals for any net increase in homes, tourist accommodation or a tourist attraction around the edges of the harbour (as defined in the SPD) will need to avoid or mitigate adverse impacts arising from recreational activity on Poole Harbour.

Policy E10: Biodiversity and geodiversity

Policy E10: Biodiversity and geodiversity

Applications for development that affect biodiversity and geodiversity, and any sites containing priority species and habitats as well as those of local importance, including Sites of Nature Conservation Interest (SNCI), Local Nature Reserves (LNR), Ancient Woodland, and veteran trees will be permitted where they:

a. ensure any features of nature conservation, biodiversity and geodiversity interest are protected to prevent or avoid any adverse impact and are appropriately managed;
b. incorporate measures to reduce and / or mitigate disturbance of sensitive wildlife habitats throughout the lifetime of the development; and
c. seek opportunities to enhance biodiversity and geodiversity through the restoration, improvement or creation of habitats and/or ecological networks.

Within the vicinity of areas that support nationally significant numbers of Annex 1 bird species (including nightjar and woodlark), the applicant will need to demonstrate to the Council's satisfaction that there is no significant adverse effect upon these species and their habitats.

Biodiversity appraisal

A biodiversity appraisal must be submitted where there are protected or important species and habitat features, as set out in the Dorset Biodiversity Protocol, within the site or close to it. The appraisal will need to demonstrate that the development will not result in any adverse impacts. The appraisal must involve consultation with the Council and, as appropriate, Natural England.

Appendix 5: Designated sites of nature conservation importance

(Information from DERC and Defra MAGIC website)

MAGiC

Wool - European sites 10km

Legend

- Ramsar Sites (England)
- Special Areas of Conservation (England)
- Special Protection Areas (England)

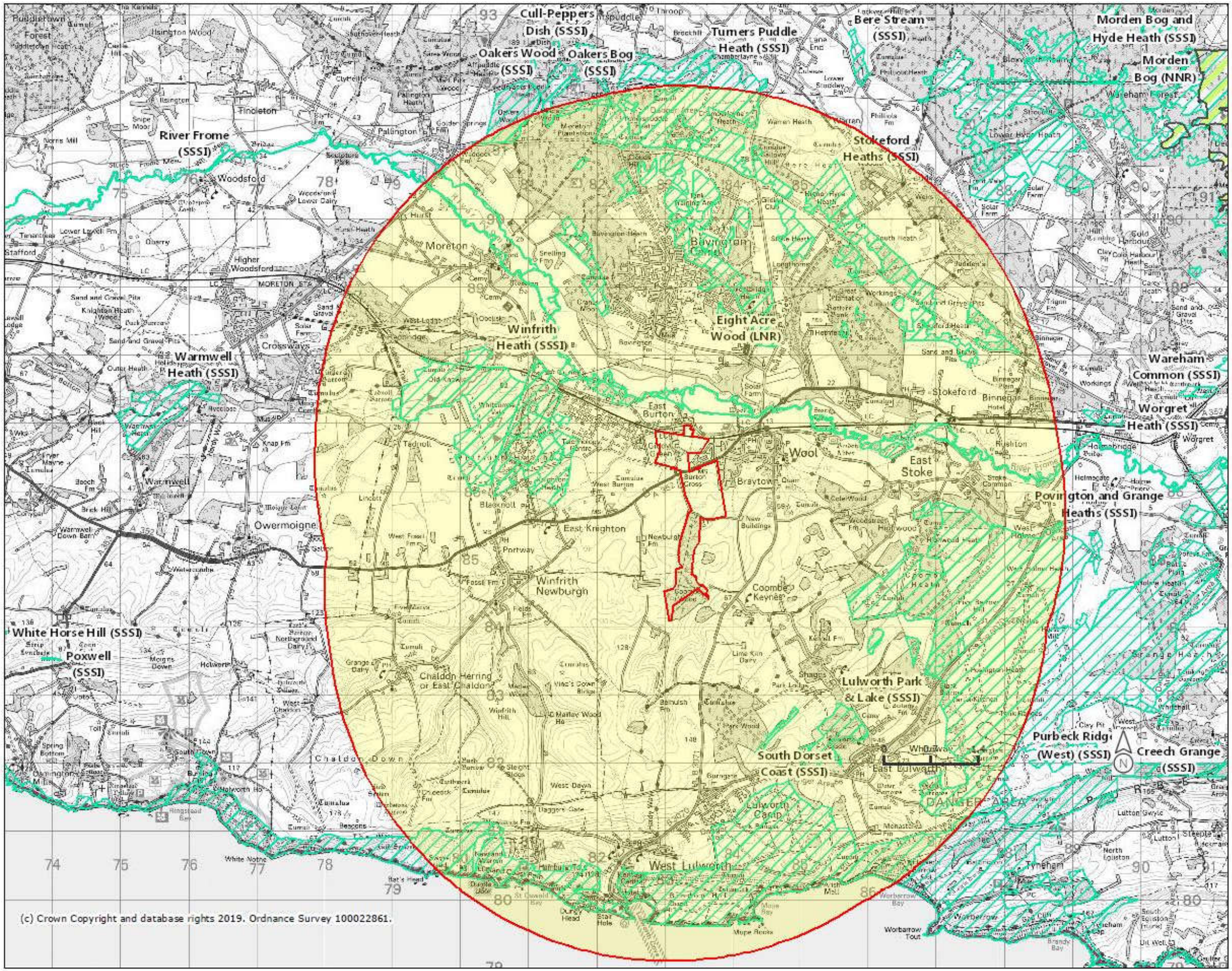
Projection = OSGB36
xmin = 356400
ymin = 73750
xmax = 407000
ymax = 99510

0 2 4
km

Map produced by MAGIC on 11 March, 2019.

MAGiC

Wool - National sites 5km



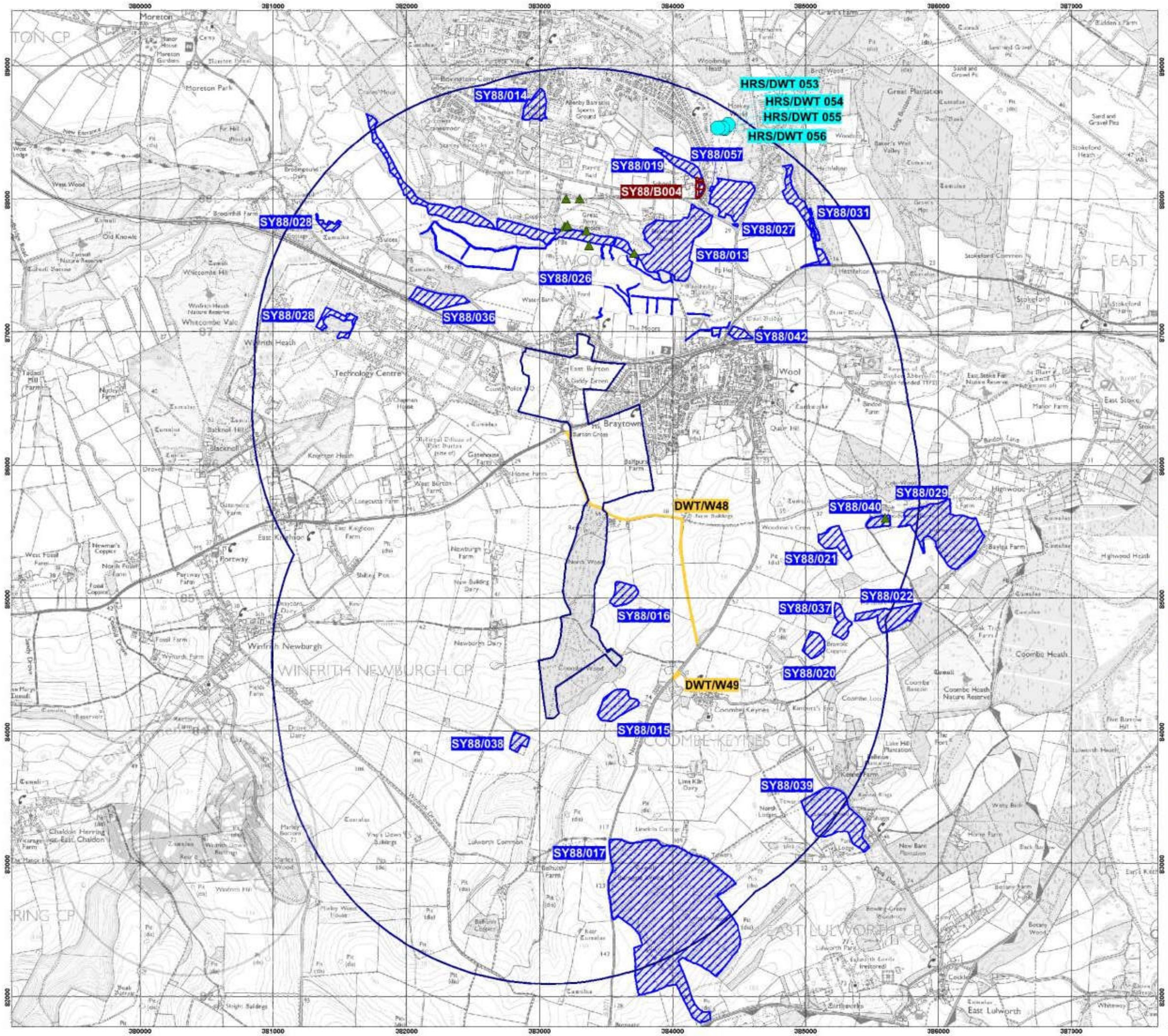
Legend

- Local Nature Reserves (England)
- National Nature Reserves (England)
- Sites of Special Scientific Interest (England)

Projection = OSGB36
xmin = 368100
ymin = 78830
xmax = 396500
ymax = 93320

0 1 2 km

Map produced by MAGIC on 11 March, 2019.



DERC

Dorset Environmental Records Centre

Wool
Dorset

Local Sites

Key:

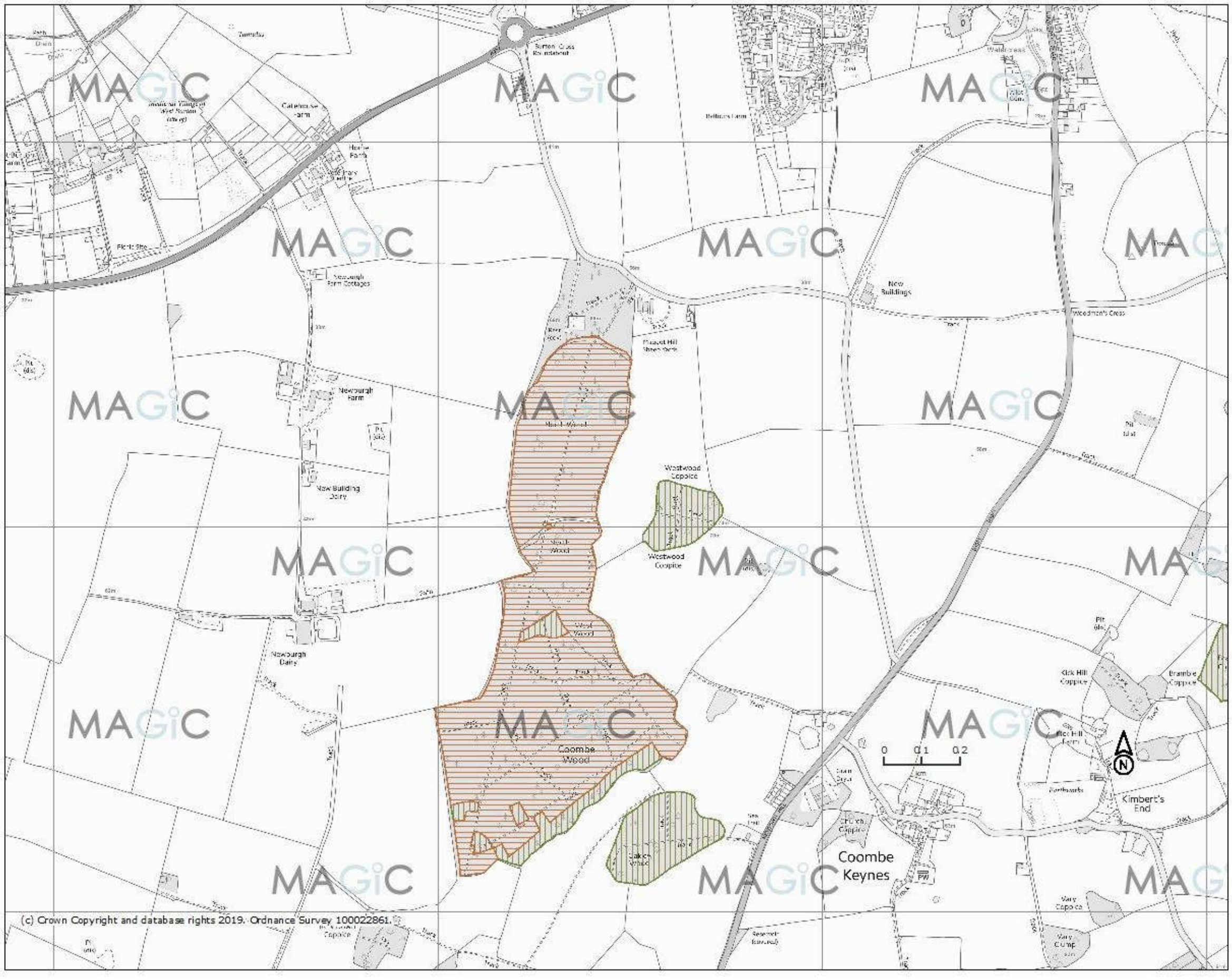
- Dorset Wildlife Trust (DWT) Reserve
- Habitat Restoration Site
- Habitat Restoration/Creation Site (Ponds)
- Local Geological Site (LGS)
- Local Nature Reserve (LNR)
- Local Community Nature Reserve (LCNR)
- Monitored Conservation Verge
- Site of Nature Conservation Interest (SNCI)
- Veteran Tree Site
- Veteran Greenwood Tree
- Area of interest & 2km search area

Scale 1:27500 @ A3

N W E S

Environmental Services, County Hall, Dorchester DT1 1XJ Dorset County Council

Coombe Wood, Wool location of ancient woodland



Legend

Ancient Woodland (England)

- Ancient and Semi-Natural Woodland
- Ancient Replanted Woodland

Projection = OSGB36
xmin = 380900
ymin = 83860
xmax = 386000
ymax = 86340

0 0.15 0.3
km

Appendix 6: Conservation objectives of European designated sites

European Site Conservation Objectives for Dorset Heaths Special Area of Conservation Site Code: UK0019857

With regard to the SAC and the natural habitats and/or species for which the site has been designated (the 'Qualifying Features' listed below), and subject to natural change;

Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring;

- **The extent and distribution of qualifying natural habitats and habitats of qualifying species**
- **The structure and function (including typical species) of qualifying natural habitats**
- **The structure and function of the habitats of qualifying species**
- **The supporting processes on which qualifying natural habitats and the habitats of qualifying species rely**
- **The populations of qualifying species, and,**
- **The distribution of qualifying species within the site.**

This document should be read in conjunction with the accompanying *Supplementary Advice* document, which provides more detailed advice and information to enable the application and achievement of the Objectives set out above.

Qualifying Features:

H4010. Northern Atlantic wet heaths with *Erica tetralix*; Wet heathland with cross-leaved heath

H4030. European dry heaths

H6410. Molinia meadows on calcareous, peaty or clayey-silt-laden soils (*Molinion caeruleae*); Purple moor-grass meadows

H7150. Depressions on peat substrates of the *Rhynchosporion*; Depressions on peat substrates

H7210. Calcareous fens with *Cladium mariscus* and species of the *Caricion davallianae*; Calcium-rich fen dominated by great fen sedge (saw sedge)*

H7230. Alkaline fens; Calcium-rich springwater-fed fens

H9190. Old acidophilous oak woods with *Quercus robur* on sandy plains; Dry oak-dominated woodland

S1044. *Coenagrion mercuriale*; Southern damselfly

S1166. *Triturus cristatus*; Great crested newt

European Site Conservation Objectives for Dorset Heathlands Special Protection Area Site Code: UK9010101

With regard to the SPA and the individual species and/or assemblage of species for which the site has been classified (the 'Qualifying Features' listed below), and subject to natural change;

Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the aims of the Wild Birds Directive, by maintaining or restoring;

- **The extent and distribution of the habitats of the qualifying features**
- **The structure and function of the habitats of the qualifying features**
- **The supporting processes on which the habitats of the qualifying features rely**
- **The population of each of the qualifying features, and,**
- **The distribution of the qualifying features within the site.**

This document should be read in conjunction with the accompanying *Supplementary Advice* document, which provides more detailed advice and information to enable the application and achievement of the Objectives set out above.

Qualifying Features:

A082 *Circus cyaneus*; Hen harrier (Non-breeding)
A098 *Falco columbarius*; Merlin (Non-breeding)
A224 *Caprimulgus europaeus*; European nightjar (Breeding)
A246 *Lullula arborea*; Woodlark (Breeding)
A302 *Sylvia undata*; Dartford warbler (Breeding)

European Site Conservation Objectives for Dorset Heaths (Purbeck and Wareham) and Studland Dunes Special Area of Conservation Site Code: UK0030038

With regard to the SAC and the natural habitats and/or species for which the site has been designated (the 'Qualifying Features' listed below), and subject to natural change;

Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring;

- **The extent and distribution of qualifying natural habitats and habitats of qualifying species**
- **The structure and function (including typical species) of qualifying natural habitats**
- **The structure and function of the habitats of qualifying species**
- **The supporting processes on which qualifying natural habitats and the habitats of qualifying species rely**
- **The populations of qualifying species, and,**
- **The distribution of qualifying species within the site.**

This document should be read in conjunction with the accompanying *Supplementary Advice* document, which provides more detailed advice and information to enable the application and achievement of the Objectives set out above.

Qualifying Features:

H2110. Embryonic shifting dunes

H2120. Shifting dunes along the shoreline with *Ammophila arenaria* ("white dunes"); Shifting dunes with marram

H2150. Atlantic decalcified fixed dunes (*Calluno-Ulicetea*); Coastal dune heathland*

H2190. Humid dune slacks

H3110. Oligotrophic waters containing very few minerals of sandy plains (*Littorelletalia uniflorae*); Nutrient-poor shallow waters with aquatic vegetation on sandy plains

H4010. Northern Atlantic wet heaths with *Erica tetralix*; Wet heathland with cross-leaved heath

H4020. Temperate Atlantic wet heaths with *Erica ciliaris* and *Erica tetralix*; Wet heathland with Dorset heath and cross-leaved heath*

H4030. European dry heaths

European Site Conservation Objectives for Isle of Portland to Studland Cliffs Special Area of Conservation Site Code: UK0019861

With regard to the SAC and the natural habitats and/or species for which the site has been designated (the 'Qualifying Features' listed below), and subject to natural change;

Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring;

- **The extent and distribution of qualifying natural habitats and habitats of qualifying species**
- **The structure and function (including typical species) of qualifying natural habitats**
- **The structure and function of the habitats of qualifying species**
- **The supporting processes on which qualifying natural habitats and the habitats of qualifying species rely**
- **The populations of qualifying species, and,**
- **The distribution of qualifying species within the site.**

This document should be read in conjunction with the accompanying *Supplementary Advice* document, which provides more detailed advice and information to enable the application and achievement of the Objectives set out above.

Qualifying Features:

H1210. Annual vegetation of drift lines

H1230. Vegetated sea cliffs of the Atlantic and Baltic coasts

H6210. Semi-natural dry grasslands and scrubland facies: on calcareous substrates (*Festuco-Brometalia*); Dry grasslands and scrublands on chalk or limestone

S1654. *Gentianella anglica*; Early gentian

European Site Conservation Objectives for Poole Harbour Special Protection Area Site Code: UK9010111

With regard to the SPA and the individual species and/or assemblage of species for which the site has been classified (the 'Qualifying Features' listed below), and subject to natural change;

Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the aims of the Wild Birds Directive, by maintaining or restoring;

- **The extent and distribution of the habitats of the qualifying features**
- **The structure and function of the habitats of the qualifying features**
- **The supporting processes on which the habitats of the qualifying features rely**
- **The population of each of the qualifying features, and,**
- **The distribution of the qualifying features within the site.**

This document should be read in conjunction with the accompanying *Supplementary Advice* document, which provides more detailed advice and information to enable the application and achievement of the Objectives set out above.

Qualifying Features:

A048 *Tadorna tadorna*; Common shelduck (Non-breeding)
A132 *Recurvirostra avosetta*; Pied avocet (Non-breeding)
A156 *Limosa limosa islandica*; Black-tailed godwit (Non-breeding)
A176 *Larus melanocephalus*; Mediterranean gull (Breeding)
A193 *Sterna hirundo*; Common tern (Breeding)
Waterbird assemblage

Appendix 7: Plant species list

Scientific Name	Common Name
Trees	
Acer campestre	Field maple
Acer pseudoplatanus	Sycamore
Betula pendula	Silver birch
Castanea sativa	Sweet chestnut
Carpinus Betulus	Hornbeam
Corylus avellana	Hazel
Crataegus monogyna	Hawthorn
Fagus sylvatica	Common beech
Fagus sylvatica f. purpurea	Copper beech
Fraxinus excelsior	Ash
Ilex aquifolium	Holly
Pinus sylvestris	Scot's pine
Populus sp.	Poplar species
Ligustrum vulgare	Wild Privet
Prunus padus	Bird cherry
Prunus spinosa	Blackthorn
Quercus robur	Pedunculate oak
Salix sp.	Willow species
Sambucus nigra	Elder
Ulmus sp.	Elm species
-	Cypress species
Shrubs	
Buddleja davidii	Butterfly bush
Cornus sanguinea	Dogwood
Rosa sp.	Rose sp.
Rubus fruticosus agg.	Bramble/Blackberry
Herbs	
Achillea millefolium	Yarrow
Allium ursinum	Ramsons
Artemisia vulgaris	Mugwort
Arum maculatum	Lords-and-Ladies
Bryonia dioica	White bryony
Calystegia sepium	Hedge bindweed
Capsella bursa-pastoris	Shepherd's purse
Cichorium intybus	Common chicory
Cirsium arvense	Creeping thistle
Cirsium vulgare	Spear thistle
Cirsium palustre	Marsh thistle
Epilobium sp.	Willowherb sp.
Equisetum arvense	Horsetail
Eupatorium cannabinum	Hemp agrimony
Filipendula ulmaria	Meadowsweet
Galium aparine	Cleavers
Geranium dissectum	Cut-leaved Crane's-bill
Glebionis segetum	Corn marigold
Hedera helix	Ivy

Scientific Name	Common Name
Heracleum sphondylium	Hogweed
Hypochaeris radicata	Common cat's-ear
Geranium molle	Dove's-foot Crane's-bill
Glechoma hederacea	Ground-ivy
Linaria vulgaris	Common toadflax
Lythrum salicaria	Purple loosestrife
Matricaria chamomilla	Scented mayweed
Mercurialis perennis	Dog's Mercury
Mentha aquatica	Water mint
Nasturtium officinale	Water cress
Papaver rhoeas	Common poppy
Pulicaria dysenterica	Fleabane
Ranunculus repens	Creeping buttercup
Rumex acetosa	Common sorrel
Rumex obtusifolius	Broad-leaved dock
Scrophularia nodosa	Common figwort
Trifolium repens	White clover
Urtica dioica	Common nettle
Viola arvensis	Field pansy
Grasses, sedges and rushes	
Arrhenatherum elatius	False oat-grass
Carex pendula	Pendulous sedge
Dactylis glomerata	Cock's-foot
Festuca rubra	Red fescue
Holcus lanatus	Yorkshire-fog
Juncus effusus	Soft rush
Lolium perenne	Perennial rye-grass
Phragmites australis	Common reed
Poa pratensis	Smooth meadow-grass
Poa trivialis	Rough Meadow-grass
Ferns and horsetails	
Dryopteris dilatata	Broad buckler-fern
Phyllitis scolopendrium	Hart's-tongue
Polystichum setiferum	Soft Shield-fern
Pteridium aquilinum	Bracken

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