| **HABITAT REGULATIONS ASSESSMENT**<br>**CONSERVATION OF HABITATS AND SPECIES REGULATIONS 2017 (as amended by The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019)** | |
|---|---|
| **The Site** | |
| **UK National Site Network name(s)** | Bath & Bradford on Avon Bat Special Area of Conservation (SAC) |
| | The site is designated under Article 4(4) of the Habitats Directive as it hosts the following species listed in Annex 2 of the Directive: -<br><br>Annex II species that are a primary reason for selection of this site:<br>• Greater Horseshoe Bat (GHB) R*hinolophus ferrumequinum*<br>This site in southern England includes the hibernation sites associated with 15% of the UK Greater Horseshoe bat population and is selected based on the importance of this exceptionally large over-wintering population.<br><br>163 GHB were recorded at the Fraylings site at Combe Down in 2017. This site was provided as an alternative roost site to the Byfield SSSI (a component of the SAC) during the Combe Down Mine stabilisation project.<br><br>• Bechsteins bat *Myotis bechsteinii*<br>Small numbers of Bechsteins bats have been recorded hibernating in abandoned mines in this area, though maternity sites remain unknown.<br><br>Annex II species present as a qualifying feature, but not a primary reason for site selection:<br>• Lesser Horseshoe Bat *Rhinolophus hipposideros*<br>The Bath & Bradford on Avon SAC site comprises an extensive network of caves, mines and manmade tunnels which are used by bats for hibernation, mating and as a staging post prior to dispersal. The stone mines have been identified as a |

| | |
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| | hibernation site for Lesser Horseshoe bats. 135 Lesser Horseshoe adults were recorded in Byfield in June<br>2017. |
| **Component Site/s of Special Scientific Interest (SSSIs)** | Combe Down and Bathampton Down Mines SSSI |
| **Conservation Objectives** | The conservation objectives for the European interest on the SSSI are to maintain*, in favourable condition, the habitats for the populations of:<br>• Greater Horseshoe Bat (*Rhinolophus ferrumequinum*)<br>• Lesser Horseshoe Bat (*Rhinolophus hipposideros*)<br>*Maintenance implies restoration if the feature is not currently in favourable condition. |
| **Project site address:** | Sulis Down, Bath. |
| **Site Owner:** | Hignett Family Trust Manor Farm, South Stoke, Bath<br>Jamie Rodriguez, Sulis Manor, Burnt House Road, Bath |
| **The Proposal** | |
| **Type of application:** | Hybrid Planning Application comprising a full application for a new access road, and an outline application for 300 houses and associated infrastructure. |
| **Application reference no:** | 22/02169/ EOUT |
| **National Grid reference:** | ST 743615 |
| **Brief description of proposal:** | Construction of a new access road through the grounds to the north of Sulis Manor House, and for construction of 300 houses and associated infrastructure on the eastern part of Sulis Down. The proposals include two new bat roosts and measures to safeguard and enhance habitat for horseshoe bats. |

**Introduction and Background**

This document provides a record of the Habitats Regulations Assessment (HRA) undertaken for planning application reference 22/02169/EOUT in accordance with the Conservation of Habitats and Species Regulations 2017 (as amended 2019).

The 2017 regulations transpose the requirements the EC Habitats Directives into to UK law and are designed to protect the integrity of European Sites. Following Brexit, the regulations were amended in 2019; under these new regulations the UK has established a national site network that includes both Special Areas of Conservation and Special Protection Areas. The network objectives are set out under regulation 16A.

(2) The management objectives of the national site network are:

(a) to maintain at, or where appropriate restore to, a favourable conservation status in their natural range (so far as it lies in the United Kingdom's territory, and so far, as is proportionate)—

(i) the habitat types listed in Annex I to the Habitats Directive; and

(ii) the species listed in Annex II to that Directive whose natural range includes any part of the United Kingdom's territory;

Under Regulation 63 (as amended), if a plan or project is not connected with or necessary for the management of a European site and is likely to have a significant effect on the site, the competent authority must carry out an Appropriate Assessment of its implications for the site in view of the site's conservation objectives.

The current application site falls within 1.2km of the Combe Down and Bathampton Down Mines Site of Special Scientific Interest (SSSI), which is a component site of the Bath & Bradford on Avon Bats Special Area of Conservation (SAC).

In this instance it is recognized that the development could have impacts upon the SAC supporting habitat and upon undesignated roost sites used by SAC bats associated with the Bath & Bradford on Avon Bat SAC. The project is not considered likely to affect any other Natura 2000 sites. An Appropriate Assessment of the implications of the project for the qualifying features of the Bath & Bradford on Avon Bat SAC has therefore been undertaken as set out below.

The project is a hybrid planning application for the construction of a new access road through the northern grounds of Sulis Manor House (full planning application) leading to a new residential development of up to 300 houses and associated infrastructure on arable land to the east of Sulis Manor (outline planning application).

The new access road will result in the demolition of four known horseshoe bat roosts in the outbuildings to the north of Sulis Manor and will sever connecting woodland habitat around the roosts used for foraging and as a flyway. Two buildings are used by greater horseshoes as night roosts, two buildings as lesser horseshoe night roosts and one building as a day roost by lesser horseshoe bats. These are shown as Outbuildings B1, B2 and C1 on Map 4.1 of Appendix 3: Bat Survey Data 2021, that accompanies this Shadow HRA. The day roost is a likely lesser horseshoe bat mating roost.

The residential development site extends across 2 arable fields (Well Ground and Little Broadclose) and part of a third arable field (Great Broadclose) on the eastern side of the plateau. These fields are bounded on 3 sides by a series of dilapidated stone walls, supporting scattered scrub, marginal coarse grassland, and tall herbs/ruderals. The western boundaries are demarcated by mature hedgerows grading into broadleaved woodland within Sulis Manor grounds, with a short section adjoining existing houses and gardens forming part of Sulis Meadows.

The southern boundary is demarcated by a mixed plantation woodland approximately 20 years old (the southern tree belt), with species rich hedges, stone walls and a farm track which forms the southern boundary of the proposed development. Detailed descriptions of the habitats recorded on site are given in Technical Appendix 9.0 Ecology report and assessment submitted as part of the ES.

Surveys have shown that the southern tree belt is well used by Greater and Lesser Horseshoe bats and is recognized as a flyway of regional importance for Horseshoe bats. There is a new bat barn erected alongside this flyway (the Eastern bat barn). This was completed in summer 2022 and is regularly monitored to ascertain if it is being used by horseshoe bats.

The project has identified impacts on the bat roosts within Sulis Manor grounds due to the construction of a new access road and has the potential to disturb bats using the regionally important bat flyway through the southern tree belt which adjoins Phases 3 & 4 of the proposed residential development. Ultimately the project must be compliant with the legal obligation to maintain 'favourable condition' as set out in the Conservation Objectives of the SAC and is therefore subject to an HRA.

**Designations**

The development site itself does not include land with any statutory designations but is close to a component SSSI of the Bath & Bradford on Avon Bats SAC (see above). However, it includes a tree belt considered to be of regional importance as a flyway for horseshoe bats which provides an integral link between the SSSI and important foraging areas in the wider landscape.

The development site affects four known horseshoe bat roosts in the outbuildings of Sulis Manor grounds protected under national legislation.

It includes a field known as Derrymans, identified as part of the proposed mitigation for the loss of bat roosts and foraging areas within Sulis Manor grounds. Derrymans field is part of the Fullers' Earth Works - Southstoke Valley complex SNCI. The field itself was identified as neutral grassland semi improved as part of the Phase 1 habitat surveys (carried out in the 1980's) but was brought into arable cultivation between 2012 to 2018. It was then resown with an agricultural ley in autumn 2018 and has subsequently developed into a mixed grassland sward containing a range of wildflowers. A

botanical survey carried out in 2022 by Phil Quinn showed that the field can best be described as a ryegrass - clover grassland with tall ruderals supporting a range of opportunistic wildflowers and is well used by pollinators and other insects. A copy of the botanical survey is included as Appendix 2 that accompanies this Shadow HRA. This field already includes proposals for horseshoe bat mitigation associated with Phase 1.

**Proposed works.**

Details of the proposal are as submitted for planning application reference 22/02196/EOUT which is available to view online on the Bath & North East Somerset Council Planning website.

**Summary of the conclusions of the assessment**

This application (reference 22/02169/FUL) has been considered in light of the assessment requirements of regulation 61 of the Conservation of Habitats and Species Regulations 2017 by Bath & North East Somerset Council which is the competent authority responsible for authorising the project and any assessment of it required by the Regulations.

Following an appropriate assessment in accordance with the Regulations, the competent authority has ascertained that the project would not have an adverse effect on the Bath and Bradford on Avon Bat SAC either alone or in combination with other plans or projects.

| Qualifying Features, Sensitive Interest Features & Assessment of Potential Impacts | |
|---|---|
| **Is the proposal directly connected with or necessary to the management of the European site for nature conservation?** | No |

The qualifying "sensitive interest features" for the Combe Down and Bathampton Down Mines SSSI component of the SAC are listed below.

This appropriate assessment includes consideration of each of the attributes listed by Natural England in the Favourable Condition tables for the maternity and hibernation roosts of the Combe Down and Bathampton Down Mines SSSI. It also considers the objectives of the Site Improvement Plan.

**Sensitive Interest Features potentially affected:**

Use by bat species *Rhinolophus ferrumequinum* and *Rhinolophus hipposideros* of the network of caves, mines and manmade tunnels for hibernation, mating and as a staging post prior to dispersal.
Habitat used by the above bat species of the SAC, including connective habitat and habitat features used for commuting and/or foraging.

The bats using the SAC rely on a range of features and habitats outside the designated site boundaries. These include calcareous grassland, scrub and woodland, linear features such as tree lines and watercourses and connecting habitats; important to bats as feeding corridors and commuting routes. Features that are significant in terms of their contribution to sustaining the bat population of the SAC are also subject to protection under the Habitats Directive. Most GHB feeding activity is concentrated in an area within 4km of their roost sites, exceptionally up to 15km and beyond.

**Factors affecting the Bath and Bradford on Avon Bats SAC:**
Natural England published a Site Improvement Plan (SIP) for the Bath and Bradford on Avon Bat SAC in 2015 (SIP011). This identifies a number of threats to the site and a series of actions to safeguard the SAC interests in the long term. The SIP lists the following key impacts that should be considered in relation to any proposed development:
Loss and damage to roost sites
Disturbance to bats
Loss and damage of foraging habitats
Loss and damage to flight lines

High level 'Conservation Objectives' for the Bath and Bradford on Avon Bat SAC have been identified by Natural England (30 June 2014 v20):

The overarching aims are to 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 the habitats of qualifying species
- the structure and function of the habitats of qualifying species
- the supporting processes on which the habitats of qualifying species rely
- the populations of qualifying species, and,
- the distribution of qualifying species within the site

| Assessment of Effects on Favourable Condition Attributes for the Site | | | |
|---|---|---|---|
| **Favourable Condition Attribute table for Combe Down and Bathampton Down Mines SSSI (NE2009).** | | | |
| **SSSI Attribute** | **Measure** | **Natural England Favourable Condition Target** | **Likely Significant Effect** |
| Roost Entrance | Size, position and accessibility. | Unobstructed roost entrance large enough for bats to fly through unimpeded. No unplanned new entrances causing a change to ventilation. No change in size sufficient to affect airflow and internal temperature. | No effect. |
| Entrance security | State of grille or security fence | Grille in good condition with no evidence of forced entry through or around the grille and no damage caused by attempts at entry. Security fence in sound condition. | No effect. |
| External vegetation. Flight lines from roost to surrounding habitat and feeding habitat. | Presence of vegetation at entrance and connecting to surrounding habitat. | Vegetation present close to entrance but not obstructing it. Habitat connectivity maintained. | Habitat connectivity potentially affected if no mitigation. |
| Light levels | Degree of shading from the sun; presence of artificial lights | No significant shading of the main roost area by trees so that solar heating can occur. No artificial lights shining on entrance or associated flight paths. | No effect. |

| | | | |
|---|---|---|---|
| Disturbance | Degree of human activity around roost / Noise, human activity, unauthorised Access. | Human access to roost area controlled and limited; no significant increase since previous visit. | No effect. |
| General condition of site | Geological stability | Entrance and roost areas used by the bats stable. No recent falls or signs of geological instability. | No effect. |
| Signs of bats | Presence of fresh droppings in summer. Hibernating bats present in winter. | Droppings pile beneath roost, with fresh droppings on top. No significant decrease in area covered by droppings. No significant decrease in numbers of bats using the site | No effect |
| Internal conditions | Temperature, light level, ventilation. | Cool (8-120C) and dark, once beyond the entrance zone. No significant unplanned change to ventilation or temperature regime. No toxic substances present. | No effect. |

**The status of the other component parts of the SAC are:**

Box Mine- all units in favourable condition (2012 – 2015); up to 280 greater horseshoe and over 300 lesser horseshoe bats recorded hibernating in this mine complex. Numbers of Bechstein's bats are not published.

Brown's Folly – two units are identified for their bat interest; both are in favourable condition. Numbers of bats at this site are not published.

Winsley Mine - one unit, which is in favourable condition. Over 100 greater horseshoe bats regularly hibernate at this site.

**Survey information and project description**

**Survey Results:**

Comprehensive bat activity surveys were undertaken across the application site and adjoining areas by Kestrel Wildlife Ltd in 2020 and 2021. These included use of static bat detectors and walked transects. In addition, emergence surveys were carried out at the known bat roosts in the outbuildings at Sulis Manor, and of the main Manor House. The trees within the northern grounds of Sulis Manor were inspected for potential bat roost features both in 2015 (Kestrel Wildlife) and in again in 2018 (Ethos Environmental Planning). None of the trees within the northern part of Sulis Manor grounds were identified as of moderate or high potential for roosting bats.

The surveys conform to good practice surveys guidelines in use at the time and the approach was agreed with Natural England and B&NES LPA.

The methodology and overview of the results of these surveys are provided in Technical Appendix 9.0 Ecology Report and Assessment as part of the ES for this application. The full data from the bat surveys is presented in Appendix 3: Bat Survey Data 2021 that accompanies this Shadow HRA. The results are presented here in 3 sections, firstly for the grounds to the north of Sulis Manor including the identified horseshoe roosts, secondly the results for the arable fields and southern tree belt to the east, and finally the results for Derrymans field as a proposed mitigation site. In addition, seasonal bat surveys were carried out in northern part of Sulis Manor grounds in 2020 as reported to B&NES and Natural England in December 2020; this information is also summarized in section 1 below.

1. **Survey results for the outbuildings and northern grounds of Sulis Manor (these will be affected by the full planning application for a new access road):**

Greater and lesser horseshoe bats roost in three outbuildings (one building supporting two roosts) in the grounds to the north of Sulis Manor house. Two buildings are used by greater horseshoes as night roosts, two buildings as lesser horseshoe night roosts and one building as a day roost by lesser horseshoe bats. These are shown as Outbuildings B1, B2 and C1 on Map 4.1 of Appendix 3: Bat Survey Data 2021. The day roost is a likely lesser horseshoe mating roost, located in the rear section of the dilapidated orchid greenhouse (marked as OB C1 on Map 4.1).

The outbuildings were surveyed using static loggers placed inside the outbuildings for 5 nights per building in August and September 2021, the full results are given in Section 4.3.2 in Appendix 3. This shows the importance of the outbuildings for lesser horseshoe bats particularly building B (East), which corresponds to OB-B2 as shown on Map 4.1.

Use of the outbuildings by greater horseshoes is more limited with the main focus in building B West (shown as OB-B1 on Map 4.1). Overall use by horseshoe bats was higher in September than August.

During the 2021 walked transects a total of 9 lesser horseshoes were encountered, all in close proximity to the outbuildings; no greater horseshoes were recorded in the area around the outbuildings or the woodland to the north in 2021. This compares with 33 encounters with lesser horseshoe bats and 6 encounters with greater horseshoe bats, all in the immediate vicinity of the outbuildings in 2020. No horseshoe bats were encountered in the woodland to the north of the outbuildings.

One static logger (at location 2 as shown on the map in Section 3.4 in Appendix 3) was placed between the outbuildings, on the edge of the woodland. This recorded a total of 110 greater horseshoe passes and 1,518 lesser horseshoe passes during the survey season. The full information is given in Section 3.5 in Appendix 3.

Targeted surveys for Bechsteins Bats were carried out within Sulis Manor grounds in 2015 and again in 2021; no Bechsteins were recorded during these surveys.

**2. Survey results for the arable fields and southern tree belt to the east of Sulis Manor (horseshoe bat interests may be potentially affected by the outline Planning application for Phases 3 & 4)**

**Walked transect surveys:** The information derived from the walked transects on the eastern part of the plateau is given in Section 2 in Appendix 3. This clearly shows that most of the horseshoe bat activity is concentrated along the southern tree belt. A small number of lesser and greater horseshoes use the central tree belt (a total of 8 lesser horseshoes and 4 greater horseshoes respectively), while just 3 lesser horseshoe bats were encountered flying along the edge of Sulis Meadows during the walked transects. No horseshoe bats were encountered moving along the eastern boundary of the proposed development of Phases 3 & 4 during the transect surveys. Similarly, no horseshoe bats were encountered along the western boundary adjoining Sulis Manor grounds, or using the fragmented boundary between Little Broadclose and Well Ground (i.e. along the north – south boundary between Phases 3 & 4 of the proposed development).

**Static logger surveys:** Four static loggers were placed along the southern tree belt at locations 3, 4, 10 and 5 (as shown on the map in Section 3.4 in Appendix 3). The total numbers of greater and lesser horseshoes at each location across the survey season is shown overleaf:

| Static logger location | Number of greater horseshoe (GHS) passes | Number of lesser horseshoe (LHS) passes |
|---|---|---|
| 3 | 50 | 214 |
| 4 | 154 | 588 |
| 10 | 96 | 236 |
| 5 | 58 | 23 |

**Table showing the total number of horseshoe bat passes recorded by static loggers at 4 locations along the southern tree belt during the 2021 surveys.**

The table in Section 3.5 of Appendix 3 shows that:

- Apart from the large amount of lesser horseshoe bat activity recorded at Location 2 (which is not surprising as the logger was placed between the three key outbuildings used by this species on a regular basis), most of the activity recorded for this species centered on the southern tree belt/flyway at Locations 4, 10 and 3, with reduced activity at Locations 6 and 5.

- Greater horseshoe bats also showed more activity along the southern flyway, especially at Locations 4 and 10 (which recorded 42% of all GHB records between them), with reduced activity at Locations 3, 5 and 6.

- When examining Locations 8 and 9, it is clear that most lesser horseshoe bats prefer to fly within the wooded areas along the eastern edge of Sulis Manor (Location 8) rather than out along the field edge (Location 9), although the same does not hold true for greater horseshoe bats.

- Overall, Location 7 did not record many greater or lesser horseshoe bat passes.

The static logger survey results show that the main greater and lesser horseshoe bat flyway follows the southern tree belt to the south of the development site. This supports an overall movement of horseshoe bats from east to west shortly after sunset. Smaller numbers of lesser horseshoes were also recorded along the eastern boundary of Sulis Manor grounds, both within the woodland (with 14 GHS and 62 LHS at location 8) and along the edge of the field forming the western boundary of Phase 3 of the proposed development (24 GHS and 3 LHS at location 9).

The southern tree belt is a flyway that has become established over the past 15 – 20 years, as the trees were planted around 2000. It runs north of, and in places adjoins, a large block of mature broadleaved woodland that runs east – west along the escarpment linking into South Stoke valley. Both the escarpment woodland and South Stoke valley are well known foraging areas for horseshoe bats. The tree belt continues along the plateau eastward to South Stoke Lane where it provides flyways through large gardens and tree lines to the south linking in to South Stoke valley and to the east.

The overall survey results showed that both greater and lesser horseshoe bats use Sulis Down plateau, following a well-established flyway through the southern tree belt shortly after dusk, moving from east to west and foraging on route. Most of the horseshoe bat activity was recorded along the southern tree belt and farm track along the boundary of the application site, and around the outbuildings within Sulis Manor grounds, with some limited activity both within the woodland along the eastern boundary of Sulis Manor and along the western boundary of Phase 3. The walked transect data showed very small numbers of horseshoe bats were recorded along the central tree belt and with only one lesser horseshoe recorded moving northwards along Sulis Meadows boundary features to the Wansdyke. The open arable fields were not used by horseshoe bats.

**3. Survey results for Derrymans Field (proposed mitigation site)**

Bat activity surveys on Derrymans field, part of the proposed mitigation area for losses of existing grassland within Sulis Manor grounds and areas adjacent to the outbuildings used by horseshoes for foraging, revealed very little lesser horseshoe activity during the walked transects with only 5 encounters with lesser horseshoes and 1 greater horseshoe encounter along its southern boundary, as shown in Section 2.3.1 in Appendix 3.

One static logger was located next to the south-eastern corner of the field within the southern tree belt (location 1 on the map in Section 3.4 in Appendix 3). This recorded fairly low numbers of horseshoe bat passes through the survey season with 15 GHS and 23 LHS recorded.

**Evaluation of horseshoe bat use of the Application Site**

The horseshoe bats recorded within the Application Site are likely to be part of the meta-population linked to the Bath and Bradford on Avon Bat SAC. The Application Site is within the 4 km sustenance zone for greater horseshoe bats roosting in the mines and it is likely that the Application Site is used by greater horseshoes from an unknown maternity roost to the east of Sulis Down.

The Application Site lies within the 2 km sustenance zone for lesser horseshoe bats roosting in the mines and breeding in Byfield Mine. The discovery of a likely mating roost for lesser horseshoes in the Sulis Manor outbuildings is almost certainly important in relation to this maternity colony.

The most important horseshoe bat features of the Application Site are:

- roosts for lesser and greater horseshoe bats in the outbuildings of Sulis Manor grounds
- the flyway through the southern tree belt; this is used by both horseshoe species as a flyway providing access to foraging areas further west, and for some foraging on route.
- links between the Application Site and the escarpment woodland and foraging areas in South Stoke valley.

**Project Description**

**Site details:**
The Application Site (AS) comprises three distinct areas in terms of habitats:

Firstly, the grounds to the north of Sulis Manor House. These consist of a block of mature broadleaved woodland (mainly beech) with stands of mixed conifers, ornamental trees and shrubs. The outbuildings lie immediately to the south of the woodland; these were once greenhouses and garden sheds but have been partially modified in recent years as temporary classrooms. The remainder of grounds consist of a lawned area of semi-improved, calcareous grassland. The area directly impacted by the road extends to 0.4 ha.

Secondly, the fields to the east of Sulis Manor extending to just over 12 ha. Two of the fields are identified for residential development, together with the southern margins of an arable field immediately to the north. All are in intensive arable production, currently sown to winter barley. They are separated by dilapidated stone walls with scattered shrubs, forming fragmented hedgerows of blackthorn with occasional elder and hawthorn. To either side of the stone wall/ hedges there is a strip of coarse grassland, nettles and bramble scrub.

A 20m wide belt of young, mixed plantation woodland runs along the northern boundary of the two arable fields. This was planted in 2008 but has not been successful and is suffering from extensive ash die back. Following agreement with Forestry Commission the eastern end of this tree belt was removed in autumn 2022 with a replacement woodland planted in South Stoke valley. The western end of this central tree belt will be thinned to remove ash and smaller trees, while a number of larger, specimen trees will be retained. For the purposes of this report, it is treated as if the central tree belt has been removed and, in terms of baseline habitats, it is replaced by modified grassland as shown on the habitat map.

The southern tree belt is approximately 20 years old and has been thinned recently to remove trees badly affected by ash dieback. It consists of beech, black walnut, Corsican (black) pine, wild cherry and common lime with self-seeded sycamore and dogwood. There is no understorey, the ground flora is dominated by grassland and is mown periodically.

The AS includes several marginal habitats that will not be impacted directly by the development these include an existing road to the south-east and a farm track along the southern boundary. Two species rich hedgerows border the northern edge of the road and farm track. The southern tree belt, hedgerow, and farm track link directly to the escarpment woodland along part of its length. The AS

also includes a strip along the northern boundary of the cricket pitch and the eastern barn.

Thirdly, Derrymans field to the west of Sulis Down plateau comprises a triangular field which was cultivated as arable until 2018 when it was replanted with a ryegrass/ clover mix. Subsequently the field has been mown periodically. A recent survey by Phil Quinn (July 2022) showed it comprised a modified grassland and tall ruderals with a range of opportunistic wildflowers used by pollinators. The margins of this field are being replanted with woodland as part of the mitigation works for the first phase of residential development at Sulis Down. A new bat barn (the western bat barn) has been built (2021) and is designed to provide a new roost for lesser horseshoe bats, as part of this development. The northern part of Derrymans field has been identified as a suitable location for an area of allotments extending to approximately 0.4 ha with the central part of Derrymans (extending to just over 1 ha) is available as mitigation for the current application.

A habitat map is included in Appendix 4 of Technical Appendix 9 of the ES. Further information on the baseline habitats is also given in the Defra Biodiversity metric 3 undertaken by Nicholas Pearson Associates and recently submitted to B&NES in February 2023.

The results of the bat surveys showed that the following habitats are important to horseshoe bats using the AS:

- the horseshoe bat roosts in the outbuildings in Sulis Manor grounds
- beech dominated mature woodland and mixed/ornamental shrubs around the outbuildings; interestingly their use of this area is largely confined to a small area immediately around the outbuildings and does not extend into the woodland to the north of Sulis Manor grounds.
- the southern tree belt
- the southern farm track and adjoining escarpment woodland to the south

Small numbers of horseshoe bats were recorded using the following boundary habitats:

- the hedgerow along the along the western boundary alongside Sulis Meadows running north to the Wansdyke, this will not be affected by the development
- the central tree belt
- the eastern stone wall/ fragmented hedgerow running alongside a Public Right of Way north to the Wansdyke.
- the hedgerow/ woodland along the eastern boundary of Sulis Manor (data from static loggers).

However, due to the low numbers of bats observed along these boundaries during the walked transects (see Section 2.3.2 in Appendix 3), these commuting routes are not considered important in the wider site context.

The Application Site lies 1.2 kms from the Combe Down and Bathampton Down Mine complex and SAC at its nearest point (the eastern edge of the site).

**Development details:**
This is a hybrid planning application on land adjoining Odd Down, Bath, known as Sulis Down, comprising:

(i) Outline application for Phases 3 and 4 for up to 300 dwellings; landscaping; drainage; open space; footpaths and emergency access; all matters reserved, except access from Combe Hay Lane via the approved Phase 1 spine road (details of internal roads and footpaths reserved);

(ii) Detailed application for the continuation of the spine road (from Phase 1), to and through Sulis Manor and associated works comprising: the demolition of existing dilapidated buildings and tree removal; drainage; landscaping; lighting; and boundary treatment; to enable construction of the spine road; and

(iii) Detailed application for landscaping; mitigation works; allotments; including access; on the field known as Derrymans.

Full details of the proposal, planning history and context are set out in the Planning Statement. The details of the proposed development are set out in the plans, reports, Environmental Statement, technical appendices, and Further Environmental Information that accompany the Planning Application.

The development is planned and designed to maintain and enhance the current levels of horseshoe bat activity in and around the AS, particularly the regionally important flyway along the southern tree belt. The potential impacts on horseshoe bats and proposed mitigation are set out in the next section.

Consultation with BaNES and NE. The bat survey protocols were agreed with BaNES and NE prior to the 2021 surveys. The planning application itself was subject to pre-application discussions with BaNES and NE in early 2022. Following a resubmission in December 2022, further dialogue with BaNES and Natural England took place on 2 February 2023 and further environmental information relating to future management of the southern tree belt, lighting along the western boundary of Phase 3 and skylark mitigation was submitted in February 2023.

**Discussion and Assessment of potential effects and their significance for the Qualifying Features of the Bath and Bradford on Avon Bat SAC**

The potential impacts on qualifying features of the Bath and Bradford on Avon bat SAC arising from the proposed application are as follows:

**Sulis Manor grounds:**

- Loss of roosts sites within Sulis Manor grounds due to construction of the new access road resulting in direct impacts on known greater and lesser horseshoe bat night roosts and day roosts for lesser horseshoe bats. This may affect the conservation status of these two species.
- Impacts of lighting along the new access road both during construction and in the operational phase, affecting flyways and foraging within the grounds and surrounding area.
- Loss of woodland and grassland foraging habitat within Sulis Manor grounds with direct impacts due to the footprint of the new road, and indirect impacts of road lighting, increased traffic at night and increased disturbance during daylight hours.

These impacts are likely to affect the structure and function of the habitats of qualifying species and the distribution of qualifying species within the site.

**Phases 3 & 4 residential development and associated infrastructure:**

- Impacts of lighting on the southern tree belt from street lighting, roads and residential lighting resulting in disruption to the flyway.
- Increased disturbance of the southern tree belt and surrounding foraging habitat to the south.
- Impacts of lighting along the western boundary of Phase 3 affecting horseshoe bat commuting habitat within Sulis Manor woodland.

These impacts are likely to affect the extent and distribution of the habitats of qualifying species, the structure and function of the habitats of qualifying species and the distribution of qualifying species within the site.

## Incorporated Mitigation

The following mitigation proposals for horseshoe bats are included within the planning application (Incorporated Measures). These are set out in two sections, firstly, measures associated with the full planning application for the new access road through Sulis Manor grounds and secondly, measures associated with the residential development outline planning application for Phases 3 & 4. These are shown on the Ecological Mitigation and Enhancement Plan. (EMEP see Dwg No. A-500 Rev A Ecological Mitigation and Enhancement Plan). This sets out the location and details of the planned mitigation for bats, as well as other ecological habitats and species.

### 1. Sulis Manor grounds

**1.1 Mitigation measures for loss of bat roosts:**

Subject to the granting of a protected species licence from Natural England, the current bat roosts within Sulis Manor grounds will be demolished to make way for the new adopted roadway. Advance mitigation measures are already in place to replace these roosts. Two new bat barns have been built; their locations are shown on Sulis Down Phases 3 & 4 Green Infrastructure Strategy Plan NPA 11192 ZZ ZZ DR L 1500 dated 17/12/22. The details of these new bat barns are set out in the plans accompanying planning permissions no 17/02588/EFUL for Phase 1 (implemented) and the Eastern Bat Barn PP18:00456: FUL (implemented). Both bat barns are secured under the terms of a Section 106 entered into by the applicant (Hignett Family Trust) and Bath and North East Somerset Council dated 18th August 2019. (The 2019 Section 106 Agreement).

#### 1.1.1. Eastern Bat Barn

The eastern bat barn adjoins the regionally important bat flyway through the southern tree belt which lies immediately north of the barn and is designed for greater horseshoe bats. The barn is surrounded by a 10m buffer zone; this area will be replanted as a wildflower meadow with scattered native trees and shrubs in autumn 2022 in accordance with the approved Ecological Management and Enhancement Plan (PP18:00456: FUL).

Currently the eastern bat barn is in secure management for 10 years (2019 Section 106 Agreement). As part of the additional mitigation measures for this planning application, the long-term management and maintenance of the eastern bat barn and the land immediately surrounding it (the 10 m buffer zone) will be extended in perpetuity as part of the development. This is set out in the new Ecology Mitigation and Enhancement Plan and will be secured within the terms of a new Section 106

agreement.

In discussion with Bath and North East Somerset Council, the terms of the Section 106 will be reviewed and resubmitted as part of the revisions to the planning application.

**1.1.2 Western Bat Barn**

The western bat barn adjoins an important hedgerow that forms the eastern boundary of Derrymans field; the hedgerow continues southwards to link into the western end of southern tree belt and the escarpment woodland. It is designed for lesser horseshoe bats and is surrounded by 0.9 ha of native, broadleaved woodland, planted in autumn 2022 as part of the planning permission for Phase 1. The western bat barn and the broadleaved woodland are already under secure long-term management as part of 2019 Section 106 Agreement.

**1.1.3 New night roosts**

As agreed with Natural England on 2 February 2023 four new night roosts suitable for horseshoe bats will be located in or adjoining the southern tree belt (within the current red line boundary) to mitigate for the loss of the existing night roosts.

**1.1.4 Conclusion**

Given that the existing roosts in Sulis Manor grounds are in a poor state of repair and have been subject to disturbance in recent years, the two new bat barns provide much greater security for horseshoe bats and are located next to established flyways. They are designed as maternity roosts and both barns are fully operational. They will be monitored for 5 years post-construction and monitoring commenced in August 2022. Their future maintenance will be secured under a combination of the 2019 Section 106 Agreement and a new Section 106 Agreement which will need to accompany a planning permission for Phases 3 & 4. The parties to both agreements are the landowner and Applicant (Hignett Family Trust) and the Bath and North East Somerset Council. Four additional night roosts will be built and secured as part of the current application.

Destruction of the existing roosts in Sulis Manor grounds due to the construction of the new access road will be carried out under licence from Natural England. The licence will set out a detailed method statement for these works, which will require satisfactory maintenance, management and monitoring of the new roosts and surrounding habitats.

**1.2 Mitigation measures for loss of foraging habitat:**

Approximately 0.4 ha of woodland, garden shrubs and grassland habitats will be lost within the corridor of the new roadway, with indirect impacts on the mature beech woodland to the north of the

road route (a further 0.4 ha approximately).

The woodland to the north will be retained and is protected under a Tree Preservation Order. Evidence from the static loggers and walked transect show that this beech woodland is not well used by horseshoe bats. Given that the horseshoe roosts in the outbuildings will be relocated the loss of foraging bat foraging in the northern block of woodland is considered insignificant.

To mitigate for the direct loss of foraging habitat under the footprint of the new road (0.4ha) it is proposed to provide two new areas of horseshoe foraging habitat as follows:

- Derrymans field, 400 m to the west of Sulis Manor grounds. This will comprise a mixture of neutral grassland wildflower meadow and calcareous grassland. The meadow will extend westwards from the western bat barn and will link with the Phase 1 broadleaf planting (0.92 ha), thus providing high quality, sheltered foraging close to the new roost.

  The plan for Derrymans field is shown in Sulis Down Phases 3 & 4 resubmission of December 2022. See NPA-11192-XX-ZZ-DR-L-3001-S4-P10_Derrymans Landscape GA Plan. The new grassland and meadow will be established in the first available season following commencement of development and thereafter maintained in perpetuity. This will be detailed as a further element of the Ecology Mitigation and Enhancement Plan and secured via the new Section 106 Agreement.
- New woodland planting in 30 Acres. A new area of broadleaved woodland extending to just over 1 ha will be planted to the east of the proposed development. The new woodland will occupy the southern and eastern corner of an arable field known as 30 Acres South. It adjoins the southern tree belt and will extend the woodland northwards alongside South Stoke Lane. The details are shown on plan reference NPA-11192-XX-ZZ-DR-L-3010-S4-P03_Replacement Tree Planting Strategy. This will compensate for the tree losses within Sulis Manor grounds and will strengthen the southern tree belt for horseshoe bats.

**1.3 Mitigation measures to minimise disruption to flyways.**

The new adopted road across Sulis Manor grounds will disrupt flyways in around Sulis Manor due to severance and lighting. The impact on horseshoe bats is likely to be small because once the roosts are lost there will be no focus for horseshoe bats to the north of Sulis Manor House. However, other bat species do roost within the house itself, commuting and foraging in the grounds and surrounding areas. Bats will continue to be able to commute southwards through Sulis Manor grounds. To reduce impacts on other bat species heading northwards, the adopted highway will be lit overnight with road lights progressively dimmed between 22.00 and 07.00 hrs; lights will be dimmed to 10% of normal output between 23.00 and 06.00 hrs as set out in Dwg no: 4242-ID-DR-1001 P01 Street lighting strategy Access Road full output. The overnight dimming regime is set out in the key. This will allow some movement

of bats other than horseshoes across the road to link northwards to the Wansdyke.

As horseshoe bats move into the new bat barns for roosting, we envisage that their current flyways to the north and south of the outbuildings and foraging areas within Sulis Manor grounds will be used far less frequently than at present.

**2. Phases 3 & 4 residential development and associated infrastructure.**

**2.1 Mitigation measures to avoid lighting impacts on southern tree belt.**

**The regionally important flyway within the southern tree belt extends from the boundary with Sulis Manor to South Stoke Lane:** The development contains mitigation measures to ensure that light levels along the northern edge of the southern tree belt will be less than 0.2 lux on the horizontal plane and less than 0.4 lux in the vertical plane ("target light levels"). This will create a "dark corridor" along the entire length of the southern tree belt, to ensure its continued use as a horseshoe bat flyway. This will be achieved by a combination of careful layout, design of built development and buffer zones and can be regulated by planning conditions and planning obligations. The target light levels adjoining the southern tree belt are set out in Sulis Down Phases 3 & 4 Lighting Parameter Plan PP 005 Rev B and is supported by a Lighting Impact Assessment. In contrast to the roadway through Sulis Manor grounds, as this part of the planning application is in outline, lux contour plans have not been produced but instead an assessment of light spill levels has been modelled to determine the lux levels at the dark corridor within the southern tree belt. This modelling has been assessed against specific house types and fenestration similar to Phase 1, using conservative assumptions to determine likely light spill. Light spill from adopted street lights fronting onto the houses have also been included in the modelling. The supporting evidence shows that with control on the number of storeys and the provision of a sufficient buffer located to the north of the southern tree belt, the target light levels are achievable.

The buffer zone between the tree belt and the development is a minimum of 14 m, as shown on the EMEP, to ensure the required target lighting levels to safeguard the dark corridor can be met. The buffer zone will form part of the green infrastructure (GI) within the site, as shown on the Green Infrastructure Parameter Plan Dwg No. PP 004 - Rev B

The dark corridor (Southern Tree Belt dark zone), the target light levels, the extent of the Buffer zone, the Edge of development area, the Southern edge building line and the control over number of storeys is set out in the relevant Parameters Plans, including Dwg No. PP 001 Rev B Land Use Parameter Plan, Dwg No. PP 003 Rev B Building Heights Parameter Plan and Dwg No. PP 005 - Rev B

Lighting Parameter Plan). These parameters will be secured through appropriately worded planning conditions and the Section 106 agreement as set out in the EMEP Rev A.

**Existing access road from the east:** This has been identified as an emergency access route into the development and will remain unlit as at present see the Lighting Parameters Plan P005 – Rev B.

**2.2 Other boundaries:**

Results of the bat surveys show that the eastern and northern boundaries of the Phases 3 & 4 are not well used by horseshoe bats and lighting will not have an adverse impact in these areas. The western boundary of the proposed development, alongside Sulis Manor, is used by horseshoes mainly flying through the woodland itself, rather than along the boundary. Following discussions with BaNES and Natural England in February 2023 it was agreed to limit lighting levels along the western boundary of Phase 3 to less than 0.2 lux on the horizontal plane and less than 0.4 lux in the vertical plane within 1m to the west of the boundary with Sulis Manor woodland. The details have been modelled by The Lighting Bee and are set out in the Lighting Impact Assessment and Light Spill Addendum submitted in Feb 23 and the Lighting Parameters Plan P005 – Rev B. Again the mechanism to secure these light levels along the western boundary of Phase 3 will be through planning conditions and the Section 106 agreement, as set out on the EMEP Rev A.

**2.3 Public access:**

Footpaths around the development within bat sensitive areas, for example the southern farm track and footpaths through the southern tree belt will remain unlit. Although there will be an increase in recreational pressure within the site the overall risk is of disruption to flyways from people carrying torches and headlamps is considered negligible. There will be temporal separation between horseshoe use of the flyways shortly after sunset and people either returning from work, walking or jogging earlier in the evening. The Lighting Parameters Plan P005 – Rev B confirms those areas of the development where there will be no artificial lighting.

**2.4 Mitigation measures to maintain and enhance key habitat connectivity around the site.**

The emphasis on improving habitat connectivity is centred on protection and enhancement of the southern tree belt and ensuring links to good foraging habitat to the south, west and east of Sulis Down plateau are maintained. North – south links for horseshoes will be severed by lighting along the new access and spine road running east – west through the development. The bat survey results demonstrated that relatively few horseshoe bats use the central tree belt, and none use the public footpath to the east of the site. Currently small numbers of lesser horseshoes use the existing footpath and hedgerow alongside Sulis Meadows, and the eastern boundary with Sulis Manor woodland.

The southern tree belt has been heavily thinned over the past year to control ash dieback. A programme of native tree and shrub planting will be implemented to strengthen the tree belt and to create greater structural diversity as set out in the Management and Enhancement of the Southern Tree Belt Addendum submitted in February 2023. Future management will aim to create a mature closed canopy woodland with a varied understory to maintain the horseshoe bat flyway and enhance bat foraging. This management work will be extended along the southern tree belt to its junction with South Stoke Lane (all within the applicant's ownership) to consolidate the flyway and improve habitat connectivity eastwards for bats. The extent of the tree belt that will be enhanced is shown on the Ecological Mitigation and Enhancement Plan, EMEP Rev A and the long-term management of the flyway will be secured as part of the Section 106 agreement for the proposed development.

The buffer zone to the north of the tree belt and broad band of GI identified on the Green Infrastructure Parameter Plan NPA Dwg no. PP003 – Rev B will allow for the creation of new foraging habitats around the proposed development. Planting will comprise native trees and shrubs interspersed with wildflower meadows using grassland and herbs suited to the geology of the site.

In addition to the new woodland planting proposed at the eastern end of the southern tree belt alongside South Stoke Lane opportunities for further expanding the southern tree belt are proposed in the vicinity of the Eastern Bat Barn. On the southern side of the existing tree belt, an area has been identified for additional planting; along the boundary adjoining the cricket pitch field linking into the eastern bat barn. This will increase the depth of the tree belt and provide better links into the escarpment woodland to the south will be secured through planning conditions and the Section 106 agreement and is set out on the EMEP Rev A.

In response to consultation the new footpath link northwards from Phases 3 & 4 to the Wansdyke has been moved away from the boundary alongside Sulis Meadows. It will now run through the middle of an arable field, Great Broadclose, directly northwards from the residential development; this shared use path will be unlit, see Lighting Parameter Plan PP 005 -Rev B.

The fragmented stone wall and hedgerow forming the eastern link alongside the public footpath running from South Stoke to the Wansdyke will be defined by re-construction of the stone wall, bordered by GI planting along the western side to reinstate and strengthen the flyway. Currently this route is rarely used by horseshoes but is used by other bat species, particularly pipistrelles.

**2.4 Mitigation measures to manage recreational pressures on site.**

A key principle for the development is to provide adequate access to green infrastructure and public

open space within the boundaries of the Application Site and to reduce people impacts beyond the site boundary particularly southwards into South Stoke Valley. This is in accordance with the requirement 'to minimise harm to adjacent grazing regimes and habitats' set out in the Placemaking Principles.

The Green Infrastructure Parameter Plan PP 003 – Rev B and the Parameter Plan for Access and Movement Parameter Plan PP 002 - Rev B show the extent of GI proposed around and within the site together with the existing and proposed footpath and cycleway links. Key points are:

- The permissive footpaths across the site and surrounding plateau that have been created over the past 20 years will be retained and can accommodate increased use. Additional management work will be carried out to facilitate recreational use. For example, the provision of footpaths through the tree belt linking into longer, recreational routes around the development. The main footpaths through the tree belt will be further defined by dense understorey planting in certain areas to deter people from venturing off the footpaths. The understorey planting will be implemented early in the construction phase to allow the shrubs to establish before residents move into the development.
- A new north-south link to the Millennium viewpoint is proposed together with the creation of new north – south footpath links across the site.
- There will be a network of shared use paths within the development, including a new route located north of the Southern Tree Belt through the new tree planting in 30 Acres South linking to South Stoke Lane; this will remain unlit. The footpaths through the southern tree belt will not be open to cyclists.

**2.5 Mitigation measures to manage recreational pressures off site.**

The escarpment woodland and farm land to the south of the application site are important foraging areas for horseshoe bats which could be compromised by increased recreational access, this will managed through:

- Maintenance of existing fencing along the southern boundary to deter pedestrian/cycle access into the escarpment woodland to the south. This will effectively channel access into South Stoke Valley along established public footpaths that can be managed and monitored. Additional fencing to prevent people creating informal routes into the adjoining farmland will be implemented as set out in EMEP Rev A.
- A large proportion of the land in South Stoke valley is owned and managed by the Applicant (Hignett Family Trust). Currently recreational pressures within the valley are actively managed. The use of public footpaths in South Stoke valley will be monitored, and if problems occur remedial measures will be undertaken to control access, including fencing, improved

signage, locking of gates and public education, as appropriate.

- New residents will be made aware of the site's ongoing management and the importance of protecting key habitats, to ensure they respect and appreciate their local green space. Introduction of educational information will be provided to enhance knowledge and respect for green space and to increase ownership and responsibility by residents.

**2.6 Additional mitigation identified through the planning application process:**

Additional measures have been agreed through the course of determining the planning application and are included within the amended planning application proposals submitted in December 2022 and Further Environmental Information submitted in February 2023.

Specifically, these include:

- Changes to the management of Derrymans field to create a mixture of neutral grassland wildflower meadow and calcareous grassland. This will provide suitable bat foraging adjoining the western bat barn and support the SNCI status of Derrymans field.
- New tree planting to compensate for losses within Sulis Manor grounds has been moved to the east of Sulis Down. This will expand and enhance the southern tree belt for horseshoe bats.
- Four new night roosts suitable for horseshoes will be constructed within or adjoining the southern tree belt to mitigate for losses within the outbuildings at Sulis Manor.
- Further work has been undertaken on lighting to confirm the minimum extent of buffer zones to ensure that the target light levels of less than 0.2 lux on the horizontal plane and less than 0.4 lux in the vertical plane within the southern tree belt can be achieved.
- The lighting levels along the western boundary of the development (adjoining Sulis Manor woodland) have been reduced to ensure that target light levels of less than 0.2 lux on the horizontal plane and less than 0.4 lux in the vertical plane within 1m of the woodland edge can be achieved to safeguard horseshoe bats commuting and foraging within the woodland itself.
- The shared use path north to the Wansdyke has been moved to a central location in Great Broadclose. This will eliminate any impacts on lesser horseshoe bats using the hedgerow adjoining Sulis Meadows

The mitigation measures and the mechanisms to secure them have been set out in the Parameter Plans and the Ecological Mitigation and Enhancement Plan. (EMEP see Dwg No. A-500 Rev A) which will be secured via appropriately worded planning conditions and in the Section 106 Agreement.

**2.7 Conclusions**

The mitigation strategy to safeguard the SAC features of interest proposed by the project is coherent and robust and is supported by detailed survey information. The establishment of new, purpose-built

horseshoe bat roosts adjoining existing flyways will provide secure roosting opportunities for the species and enhance the potential to establish viable breeding roosts close to the SAC and known foraging areas nearby. Loss of foraging habitat in Sulis Manor grounds has been adequately mitigated by the new woodland creation in 30 Acres South and by the creation of a wildflower meadow in Derrymans field, close to the new western bat barn.

The potential impacts of lighting on flyways used for access to foraging areas has been adequately mitigated. In addition, additional planting within the southern tree belt and the restoration of a wildflower meadow in Derrymans field will ensure there is no reduction in available foraging areas in terms of extent and/or quality.

**Integrity test and conclusion**

Project details and incorporated mitigation measures have been assessed in terms of their likely effectiveness, delivery mechanisms, the timescales involved, and in relation to the scale and significance of potential impacts. The mitigation measures are considered to be robust and sufficient to avoid significant impacts on the qualifying features of the SAC. Bath & North East Somerset Council therefore conclude that the project will not affect the integrity of the Bath and Bradford on Avon bat SAC.

Consideration of “in combination” effects has been undertaken as part of this assessment.

**Consideration of effects on the National Site Network in combination with other plans or projects.**

**Background Core strategy allocation: Odd Down**

The application site forms part of a larger strategic allocation at Odd Down, within the B&NES adopted Core Strategy. The HRA for the most significant policy changes to the Core Strategy (as approved by Council on 4th March 2013) concluded that whilst there was some potential for significant impacts to result from development at Odd Down, Ensleigh, and Weston, this could be avoided by inclusion of development requirements within the strategic policies, and through the requirement of the Placemaking Plan to be subject to the HRA process. Subsequently a series of Placemaking Principles were set out and agreed between B&NES and Natural England and are set out under Policy B3a: Land adjoining Odd Down, Bath Strategic Site Allocation, in the Core Strategy.

A HRA was carried out on these Core Strategy Amendments (November 2013) and considered the impacts of key amendments to Policy B3A affecting land at Odd Down, including the Placemaking Principles. The HRA concluded:

"On the basis of objective information available, and on the assumption that all development requirements are secured and properly implemented, the likelihood of a significant effect on the SAC identified is excluded in relation to these policy amendments. This applies to the implementation of the policy change individually and 'in combination' with other plans".

**Consideration of the current application**

There have been two changes that are relevant to the Odd Down allocation since the Core Strategy was adopted. Firstly, the HRA was based on a housing allocation of 300 homes at Sulis Down, whereas the comprehensive masterplan for the strategic allocation is based on around 500 homes. The figure of 300 homes was clearly expressed as not being a cap on development subject to meeting all the Placemaking Principles. The second change is the discovery of horseshoe bat roosting sites, including a possible mating roost for lesser horseshoe bats, in the outbuildings to the north of Sulis Manor. The detailed bat surveys carried out over the Odd Down allocation from 2013 to 2015 and the 2020 - 21 bat survey work carried out as part of the current application, provide a strong evidence base on which to assess the potential impacts of these changes.

The proposed increase in housing numbers may not have adverse impacts on horseshoe bats provided the relevant Placemaking Principles can be met. These are included under Placemaking Principle 5 that requires the production of *"A Landscape and Ecological Mitigation Strategy and Management Plan (LEMP), as part of the Masterplan, to ensure satisfactory mitigation and protection to include:*

*Ecological Requirements*
*Protection of dark skies to the south and east of the location including zones of no artificial light adjacent to the protected tree belt and other ecological features retained or created within the site and in adjacent grazing lands. Light spill should be limited to no more than 1 lux (equivalent to a moonlit night)*
*Retention and cultivation of planting features and off-site habitat including the retention of hedgerows and tree belts, as indicated on the Concept Diagram*
*Safeguard skylark interest, through adequate mitigation or off-site compensation*
*New woodland planting along the southern boundary of the plateau, particularly to the east of Sulis Manor (i) within the site and (ii) offsite within the plateau in order to strengthen bat foraging and flight links with Horsecombe Vale*
*A recreational strategy to minimise harm to adjacent grazing regimes and habitats*
*Particular attention is to be given to ensure satisfactory mitigation and or compensation as appropriate of protected species and their habitat (including Priority Species)".*

The current application complies with the ecological requirements as set out. In relation to the horseshoe bats (as SAC features of interest) the requirements to control light spill, the provision of new woodland planting to strengthen bat foraging, flightline and the southern tree belt, and to provide a recreational strategy to minimise harm to grazing regimes and habitats have been met. Importantly the proposals combine with the agreed Phase 1 housing development to support a coherent, plateau wide strategy to safeguard and enhance horseshoe bat habitats and roosts.

Key to this has been the establishment of secure roosts sites linked via the southern tree belt, new planting to strengthen the southern tree belt and maintaining good flyways to the south, east and west of the plateau to consolidate links to foraging habitats particularly to the south and west of the plateau.

A LEMP has been submitted as part of the current application Sulis Down Phases 3 & 4: Landscape and Ecological Management Plan see document NPA-11192-XX-XX-RP-l-8001 March 2022 and NPA-11192-XX-ZZ-DR-L-3001-S4-P10_Derrymans Landscape GA Plan submitted in December 2022. These set out the detail for Derrymans field as part of the full application for the new access road. The proposed new tree planting on the eastern side of Sulis Down is shown on plan reference NPA-11192-XX-ZZ-DR-L-3010-S4-P03_Replacement Tree Planting Strategy.

The outline application for the further residential development of Phases 3 & 4 is accompanied by a series of Parameters Plans which set out the criteria to safeguard the southern tree belt as a regionally important bat flyway and provides supporting evidence that the required target levels for lighting can be met. As detailed plans are developed for Phases 3 & 4 these will be accompanied by a LEMP. In the interim a Management and Enhancement of the Southern Tree Belt Addendum was submitted in

February 2023 detailing future management of the southern tree belt to safeguard horseshoe bats.

Since the Placemaking principles were adopted the criteria in relation to lighting and the protection of dark corridors for horseshoe bats have been revised. The Lighting Impact Assessment demonstrates that the development can meet the more stringent targets set out in the Bat Conservation Trust's Guidance Note 08/18 Bats and Artificial Lighting in the UK in relation to the southern tree belt and the western boundary of phase 3 adjoining Sulis Manor grounds.

In terms of supporting the wider SAC objectives the provision of new secure bat roosts and supporting habitat around the two bat barns will provide potential for the establishment of additional maternity colonies within the core SAC area.

**Identification of relevant plans or projects: Relevant plans**

B&NES have recently adopted changes to Development Plan (Core Strategy 2014 and Placemaking Plan 2017) entitled Local Plan Partial Update (LPPU). This has included a review of new policies and allocations within the area and has been subject to an HRA – see inter alia, the Habitats Regulations Assessment of B&NES Local Plan Partial Update (submission December 2021) – Addendum, including updated Appendix C (in combination assessment of other plans and projects). This concluded that "subject to some recommendations for additional site development requirements for a limited number of allocations and a small change to one policy, the LPPU will not have an adverse effect on the integrity of any of the European sites included within the HRA, either alone or in combination with other plans and projects". No specific changes were made in the LPPU in relation to the Odd Down allocation, Policy B3A, the subject of this Planning Application.
Consequently, this Planning Application will not have an adverse effect on the Bath and Bradford on Avon Bat SAC alone, or in combination with, other plans.

**Relevant projects**

Consideration of in-combination effects for the proposed project are limited to the allocated site at Odd Down and the immediate surroundings. Consideration of the following projects have therefore been undertaken as part of this assessment:

1. Development of Phase 1 (currently under construction) Planning Permission no 17/02588/EFUL
2. The eastern bat barn (built) Planning Permission no 18/00456/FUL
3. Sulis Down Business Village – conversion of farm buildings to an estate office and gym. Planning application reference 22/01781/FUL. Outstanding objection on grounds of bat impacts - decision

pending.

4. Phase 1 allotments (Countryside Properties Ltd.) Planning application reference 22/01370/FUL - decision pending.

5. Odd Down park & ride extension Planning Permission no: 09/00305/EREG03; discharge of planning condition 5 reference: 22/03084/COND. Outstanding objection on grounds of bat impacts - decision pending.

6. Fullers Earthworks site – Parcel 7512, Fosseway, Bath. – Reprofiling of land for purposes of agricultural improvement, biodiversity benefits and landscape screening. Planning application reference 23/00021/FUL. Decision pending. Habitat change to include calcareous grassland and other biodiversity benefits – due to the nature of this proposal it is unlikely to have in combination effects.

7. Mount Pleasant Quarry – application to build four houses, Planning application reference 22/04505/FUL. Outstanding objection on grounds of bat impacts - decision pending.

8.Forestry Commission Tree scheme relating to the central tree belt. Agreed in 2022 with replacement planting in South Stoke valley.

As these projects are, or if approved, will be subject to appropriate mitigation measures and planning conditions to prevent any adverse impacts on horseshoe bats and supporting habitats this planning application will not have an adverse effect on the Bath and Bradford on Avon Bat SAC alone, or in combination with, other projects.

**Conclusion**

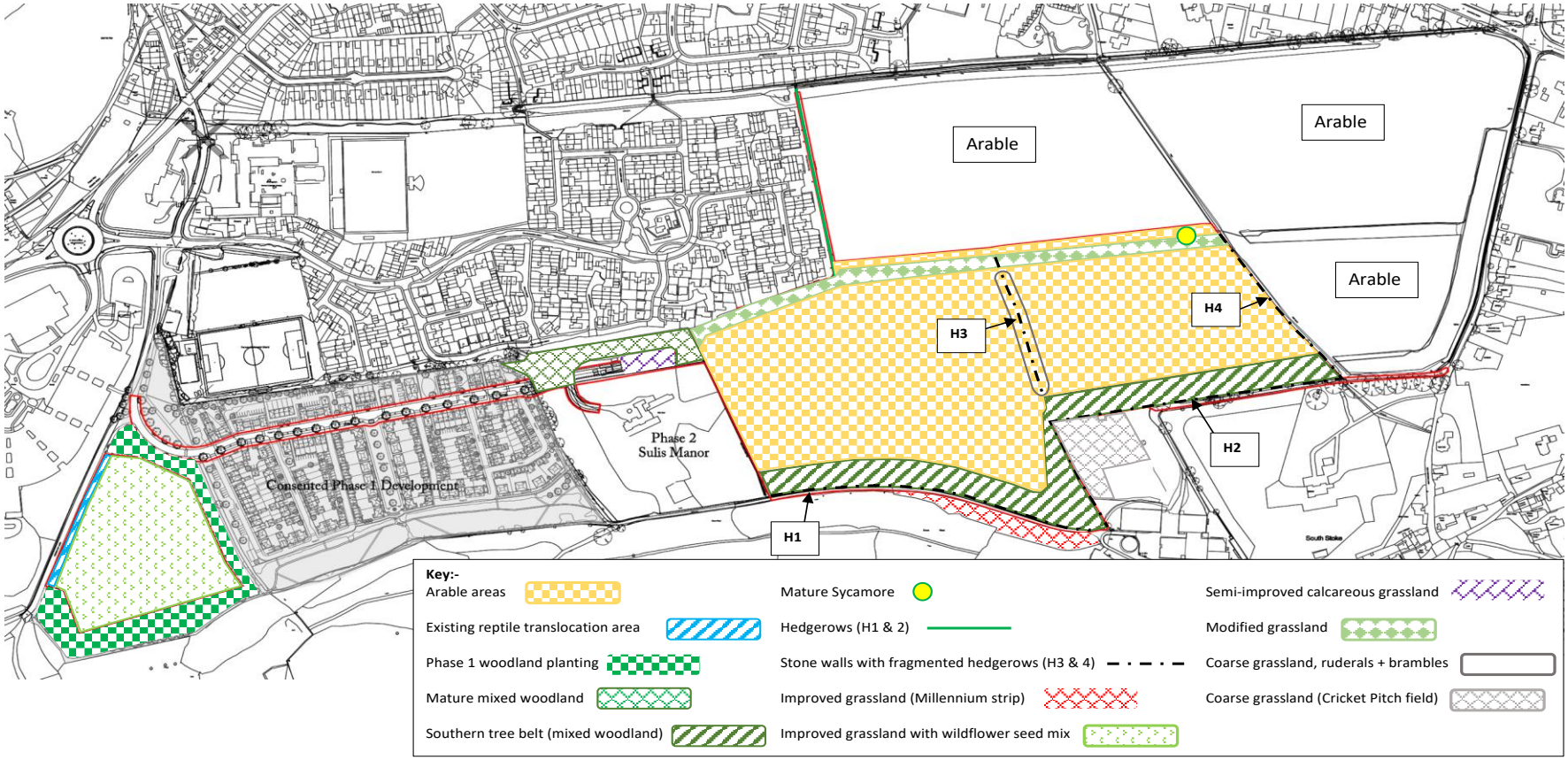
There are no Plans or Projects of sufficient size, scale, proximity or sensitivity that are likely to give rise to in combination effects.

| | |
|---|---|
| **Conclusion** | |
| On the basis of the information available, the project would not adversely affect the integrity of the national site network | |
| **Assumptions and limitations** | |
| It is assumed that the incorporated mitigation measures associated with the project will be secured through the planning process and will be implemented in full. | |
| **Is the potential scale or magnitude of any effect likely to be significant?** | |
| a) **Alone?**<br>(explain conclusion, e.g. in relation to *de minimus* criteria) | No |
| b) **In combination with other plans or projects?**<br>This is referred to in the discussion section above. | No<br><br>Any possible effects on the SAC arising from this project would be sufficiently minimal that the effects, even combined with effects of other plans or projects nearby or further afield, would not be considered to be significant.<br><br>The issue of cumulative or "in combination effects" will however continue to need careful consideration for the future Phases of the Sulis Down allocated site and all future projects at this or nearby sites. |
| **Councils' conclusion** | |
| Is the proposal likely to effect the integrity of the National site network? | No |
| Name of person undertaking the test of likely significant effect | |
| Job title | |
| Signed /date | |
| Name of supervising officer | |

| | |
|---|---|
| Job title | |
| Signed /date | |
| **Consultation with Natural England** | |
| Natural England comments on conclusion | |
| NE Officer | |
| Job title | |
| Signed/date | |
| | |

**Shadow HRA Supporting Information**

Appendix 1: Habitat Map of the Application Site (included overleaf)
Appendix 2: Botanical survey of Derrymans field July 2022 (provided as a separate document)
Appendix 3: Bat Survey Data 2021 (provided as a separate document)




**Appendix 1: Habitat Map of the Application Site**