

# Land West of Worthing Road, Southwater

## Phase 4

### Ecological Assessment

**June 2024**



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## **Phase 4**

### **Ecological Assessment**

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Report Ref: DFA24062V2

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## 1 INTRODUCTION

### 1.1 Background

- 1.1.1 Derek Finnie Associates was commissioned by Berkeley Homes (Southern Ltd (BHS)) to provide ecological advice in relation to an area of land to the south of Church Lane and east of Shaft Lane in Southwater, hereinafter referred to as the 'Site'. The Site had previously formed Phase 4 of BHS's wider *Land West of Southwater* development which received outline planning permission for residential development (Ref: C/14/059). This report has been prepared in support of a Section 73 Minor Material Amendment application to the approved Reserved Matter application associated to Phases 3, 2 and 4 of the development known as Braddacres Southwater.
- 1.1.2 The proposed changes relate to the unbuilt Phase 4 with the aim to deliver an alternative housing mix, amend the number of homes (a reduction of 4 compared to the extant consent) and an improved design. The proposed amendments are mainly in accordance with the approved outline application framework and no changes are proposed to the 3.2 and the other complete elements of the development.
- 1.1.3 The description of the development is described as Variation of condition 2 of application reference DC/24/077 (non material amendment to previously approved application DC/18/1246 to "The development hereby proposed comprises 19 new residential dwellings including 61 affordable dwellings." Variation of plan approved under condition 1 of application reference DC/18/1246 as detailed in the covering letter.
- 1.1.4 However, given the length of time that has passed since the original submission, Berkeley Homes have opted to re-assess the ecological conditions within the Site to ensure they have not changed significantly since the grant of outline permission.
- 1.1.5 To this end a suite of ecological surveys, including an Extended Phase 1 survey, [REDACTED] reptile survey and bat assessment were undertaken across the Site between April to July 2024, to ensure the current proposal is informed by up-to-date ecological information. These surveys build upon previous surveys undertaken by Derek Finnie Associates in 2013 and 2014 to inform the Environmental Statement submitted in support of the original outline application.
- 1.1.6 The following report outlines the methodologies employed throughout the ecological assessment, describes the current ecological status of the Site and discusses the ecological constraints to any future development, as well as options for biodiversity enhancement.

## 2 LEGISLATIVE FRAMEWORK

### 2.1 National policy and Guidance

#### *Legal Framework*

2.1.1 The legislative framework applicable to this assessment is summarised below.

#### International Conventions and Directives

- Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora (EC Habitats Directive);
- Council Directive 2009/147/EC on the Conservation of Wild Birds (Birds Directive);
- The Convention on the Conservation of Migratory Species of Wild Animals (Bonn Convention) 1979;
- The Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention) 1983; and
- Convention on Biological Diversity 1992.

#### National Legislation

- The Environment Act 2021
- The Wildlife and Countryside Act 1981 (WCA);
- The Conservation of Habitats and Species Regulations 2017;
- The Countryside and Rights of Way Act 2000 (CRoW);
- Natural Environment and Rural Communities Act 2006 (NERC);
- The Protection of Badgers Act 1992; and
- The Hedgerow Regulations 1997.

#### Statutorily Protected Sites

2.1.2 Local Nature Reserves (LNRs); National Nature Reserves (NNRs); Sites of Special Scientific Interest (SSSIs); Special Areas of Conservation (SAC); and Special Protection Areas (SPAs) contain examples of some of the most important natural and semi-natural ecosystems in Europe and receive strict protection under United Kingdom (UK) legislation. Although not strictly protected under legislation, Ramsar sites are given the same level of protection through policy.

#### Non-Statutory Sites

2.1.3 Non-statutory sites of county conservation value are designated by Local Planning Authorities (LPAs); within West Sussex these are known as County Wildlife Sites (CWS). Such sites are afforded a measure of protection in local development plans.

#### Protected Species

2.1.4 Under UK legislation, a number of species, including bats *Chiroptera* sp. and great crested newts *Triturus cristatus* are strictly protected from death, injury or harm; whilst places used for their shelter or rest are protected from damage, disturbance and



destruction. Certain species such as some reptiles and birds receive partial protection under UK legislation, e.g. protection from killing / injuring only or protection at certain times of the year only.

#### Invasive Weeds

- 2.1.5 The WCA 1981 makes it an offence to plant or otherwise cause to grow in the wild numerous species including Japanese knotweed *Fallopia japonica* and giant hogweed *Heracleum mantegazzianum*.

#### Non-Statutory Policies

- 2.1.6 The UK Biodiversity Action Plan (UK BAP) was established in response to the global Convention on Biological Diversity, 1992. Individual Action Plans define actions and measures to meet the conservation objectives defined in the strategy and specify measurable targets. They determine the broad habitats and species that are of value to the natural environment of the UK and identify actions and projects that could be undertaken to help protect or enhance the national biodiversity.
- 2.1.7 Local Biodiversity Action Plans (LBAPs) are implemented through planning policy, identifying habitats and species in need of conservation action at the local or regional level. BAPs in the UK have no statutory status but provide a framework for implementing conservation requirements.

#### *Planning Policy*

##### National Planning Policy

##### National Planning Policy Framework (2023)

- 2.1.8 The following objectives relating to biodiversity conservation are considered relevant to this assessment. The National Planning Policy Framework (NPPF) seeks to:
- Protect and enhance valued landscapes, geological conservation interests and soils;
  - Recognise the wider benefits of ecosystem services;
  - Minimise impacts on biodiversity and provide net gains in biodiversity, where possible, contribute to the Government's commitment to halt the overall decline in biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures;
  - Prevent both new and existing development from contributing to or being put at unacceptable risk from, or being adversely affected by unacceptable levels of soil, air, water or noise pollution or land instability;
  - Remediate and mitigate despoiled, degraded, derelict, contaminated and unstable land, where appropriate; and
  - Prevent the loss or deterioration of irreplaceable habitats, including ancient woodland and the loss of aged or veteran trees found outside ancient woodland, unless the need for, and benefits of, the development in that location clearly outweigh the loss.

Local Policy and Guidance

- 2.1.9 Policy 31 of the *Horsham District Planning Framework* (November 2015) is also relevant to the current proposal, and states:

*Policy 31*

*Green Infrastructure and Biodiversity*

1. Development will be supported where it can demonstrate that it maintains or enhances the existing network of green infrastructure. Proposals that would result in the loss of existing green infrastructure will be resisted unless it can be demonstrated that new opportunities will be provided that mitigates or compensates for this loss and ensures that the ecosystem services of the area are retained.

2. Development proposals will be required to contribute to the enhancement of existing biodiversity and should create and manage new habitats where appropriate. The Council will support new development which retains and /or enhances significant features of nature conservation on development sites. The Council will also support development which makes a positive contribution to biodiversity through the creation of green spaces, and linkages between habitats to create local and regional ecological networks.

3. Where felling of protected trees is necessary, replacement planting with a suitable species will be required.

4. a) Particular consideration will be given to the hierarchy of sites and habitats in the district as follows:

i. Special Protection Area (SPA) and Special Areas of Conservation (SAC)

ii. Sites of Special Scientific Interest (SSSIs) and National Nature Reserves (NNRs)

iii. Sites of Nature Conservation Importance (SNCIs), Local Nature Reserves (LNRs) and any areas of Ancient woodland, local geodiversity or other irreplaceable habitats not already identified in i & ii above.

b) Where development is anticipated to have a direct or indirect adverse impact on sites or features for biodiversity, development will be refused unless it can be demonstrated that:

i. The reason for the development clearly outweighs the need to protect the value of the site; and,

ii. That appropriate mitigation and compensation measures are provided.

5. Any development with the potential to impact Arun Valley SPA or the Mens SAC will be subject to a HRA to determine the need for an Appropriate Assessment. In addition, development will be required to be in accordance with the necessary mitigation measures for development set out in the HRA of this plan.

- 2.1.10 Although not strictly approved policy as yet, some weight has been given to the policies in the emerging Horsham District Local Plan 2023-2040 Regulation 19, specifically Policy 17:

*Strategic Policy 17: Green Infrastructure and Biodiversity*  
***Green Infrastructure***

1. Development will be supported where it can demonstrate that it maintains and enhances the existing network of green infrastructure and contributes to the delivery of public open space, the Local Nature Recovery Strategy, Nature Recovery Network, natural capital, ecosystem services and / or biodiversity. Green Infrastructure should be integral to the design and layout of development, and new provision, including green linkages, should be provided taking into account Natural England's green infrastructure guidance and the council's green infrastructure strategy. Provision should seek to optimise public access to open space and nature via foot, bicycle, wheeling, and also horse as appropriate.

2. Proposals that would result in any loss, degradation or harmful impacts to green infrastructure, or core areas of the Local Nature Recovery Strategy and Nature Recovery Network will be resisted unless it can be demonstrated that new opportunities will be provided that appropriately mitigates and / or compensates for the respective harm and ensures that the ecosystem services of the area are retained and enhanced. Development proposals will be expected to remove invasive species.

3. Proposals will be expected to retain and enhance existing priority habitats and trees, and accord with the aims and objectives of the Green Infrastructure and Local Nature Recovery Strategies. Habitat enhancement including additional hedgerow and tree planting must take account of the local landscape and habitat context. It should seek to optimise biodiversity, ecological connectivity and function, and climate change resilience.

4. Development likely to affect a watercourse and its associated corridor should seek to conserve and enhance its ecological, landscape and recreational value. This should include providing adequate natural buffer zones to the watercourse

***Biodiversity***

5. The Council will support appropriate new development which delivers at least 12% biodiversity net gain and:

a) Retains and enhances significant features of nature conservation value on development sites;

b) Makes a positive contribution to biodiversity and accords with the aims and objectives of the Green Infrastructure and Local Nature Recovery Strategies, through the creation of appropriate green spaces, that provide linkages



*between habitats to create local and regional ecological networks that enable the movement of wildlife through development sites; and / or*

*c) Following the principle of 'right habitat in the right place', significantly increases woodland or other habitats for the purpose of appropriately enhancing biodiversity, carbon sequestration, pollution control, and / or flood mitigation.*

*6. Relevant development proposals will be expected to deliver 12% biodiversity net gain and must submit Biodiversity Net Gain information to show how this will be achieved using the mandated Biodiversity Metric or the Small Sites Metric as appropriate and must abide by the metric trading rules. Submissions must make clear what will be provided to meet no net loss and what will deliver net gains. The net gain must be achieved through the delivery of appropriate on-site biodiversity net gain or, where this is not practicable, through off-site net gain within the District especially areas, as suitable to the habitats subject to gain, identified in the District's Green Infrastructure Strategy or the Local Nature Recovery Strategy, or as agreed by the Council. All such schemes, excluding any respective element using statutory biodiversity credits, must submit for approval by the Council a funded maintenance and management plan, including monitoring / reporting and appropriate enforcement processes, that secures the biodiversity net gains for at least 30 years.*

*7. All other development proposals must seek to demonstrate how measurable biodiversity net gains will be delivered.*

### ***Protected Sites and Species***

*8. Proposals must give appropriate consideration to protected and notable species. They will be expected to protect priority species and seek to aid their recovery, and must conserve, restore and enhance priority habitats, and should create and manage appropriate new habitats, taking into account pollination, where practicable.*

*9. Particular consideration will be given to the hierarchy of sites and habitats, including buffer areas, within the District, or functionally linked to, as follows:*

*a) Special Protection Areas (SPAs), Special Areas of Conservation (SACs) and Ramsar sites;*

*b) Sites of Special Scientific Interest (SSSIs), National Nature Reserves (NNRs), Veteran Trees, Ancient Woodland and other irreplaceable habitats;*

*c) Local Wildlife Sites (LWS), Local Nature Reserves (LNRs) and any areas of priority habitats including traditional orchards, local geodiversity, Core Sites in the emerging NRN and other irreplaceable habitats not already identified in a & b above.*

10. An appropriate buffer around woodland will be required, this will be at least 15m around Ancient Woodland or greater in accordance with good practice, and consideration should be given to the potential for protected species, such as bats, and impacts on hydrology. Around ancient and veteran trees a minimum buffer zone of at least 15 times larger than the diameter of the tree, or 5 metres from the edge of the tree's canopy whichever is the larger, will be required.

11. Where the felling of a tree is necessary, for example due to disease, replacement planting with a suitable tree species, age and location to retain and enhance the link with the wider network of habitats and Green Infrastructure, will be required.

12. Where development is anticipated to have a direct or indirect adverse impact on sites or features of importance to nature conservation, development will be refused unless it can be demonstrated that:

- a) The mitigation hierarchy has been applied and the objectives of a site's designation, where applicable, and integrity of the area will not be undermined;
- b) The reason for the development clearly outweighs the likely impact to notified features and / or the need to protect the value of the site; and
- c) Appropriate mitigation and compensation measures will be provided alongside the delivery of measurable biodiversity net gain as relevant.

13. Any development with the potential to impact the Arun Valley SPA / SAC / Ramsar site, The Mens SAC and / or Ebernoe Common SAC will be subject to a Habitats Regulation Assessment to determine the need for an Appropriate Assessment. In addition, development will be required to be in accordance with the necessary mitigation measures for development set out in the Habitat Regulation Assessment of this Plan.

2.1.11 Policy SNP of the Southwater Neighbour Plan was also considered:

***SNP18 - A Treed Landscape***

*SNP18.1. Development proposals should produce measurable enhancements to the treed environment to ensure biodiversity net gains (regardless of land ownership). Where existing trees or an area of woodland is to be lost, it must be replaced with trees or new woodland of greater environmental value on site or elsewhere within the Plan Area. Trees planted should be suitably mature and, as a minimum, conform to British Standard BS 3936-1 / Standard 10-12cm girth.*

*SNP18.2. Development proposals affecting areas of Ancient Woodland in the Plan area, as shown on the Policies Map, should provide long-term and measurable enhancements to them.*

*SNP18.3. Major development must provide a minimum of one new tree (conforming to British Standard BS 3936-1 / Standard 8-10cm girth) per 40m<sup>2</sup> of floor space created. This should be provided on-site or off-site within the Plan Area if there is nowhere suitable within the site. Measures will be implemented on any permissions granted to secure these trees and their survival. If these trees cannot be provided on site, and the applicant is unable to deliver the trees at an alternative location within the Plan Area, a commuted sum may be paid in lieu of tree planting.*



### 3.4 Reptile survey

- 3.4.1 A previous survey undertaken in 2013 did not identify any reptiles within the Phase 4 area of the wider site. However, surveys undertaken in 2019 within the adjoining Phase 5 land did identify small populations of common lizard, slow worm and grass snake. As there is some direct habitat connectivity between Phases 4 and 5, albeit sub-optimal, a reptile re-survey of the Phase 4 land was deemed to be warranted.
- 3.4.2 A total of 60 refugia, consisting of heavy-duty roofing felt approximately 0.5m<sup>2</sup>, were placed across the Site in line with best practice survey guidance. To maximise the efficiency of the survey the refugia were concentrated in areas which appeared to be more likely to support reptiles. The refugia were placed across the 5.2ha site at the density recommended by Froglife (1999) of 10ha<sup>-1</sup>.
- 3.4.3 The refugia generally heat up quicker than the surrounding environment, which makes them attractive to reptiles which need to attain a certain body temperature to hunt effectively. Thus, careful inspection of the refugia results in a more effective way to locate these often-elusive animals.
- 3.4.4 The refugia were placed on Site on the 19<sup>th</sup> May 2024 and allowed to 'bed in' for at 10 days before the survey proper began. The refugia will be checked on seven occasions throughout the survey period, on suitable days, which are classified as sunny, or partially sunny days, with little or no wind and an air temperature between 8°C and 19°C. To date, the refugia have been inspected on three occasions, specifically the 29<sup>th</sup> May, 6<sup>th</sup> June and the 12<sup>th</sup> June 2024
- 3.4.5 In addition to checking the artificial refugia, other suitable natural basking areas around the Site were carefully inspected from a short distance using Leica 10x32 BGA binoculars, expanding the search area to cover parts of the Site where refugia could not be placed.

### 3.5 Bat Survey

#### *Activity Surveys*

- 3.5.1 A suite of bat surveys was undertaken across the Site in 2013/14 in line with the guidance available at the time. The aim of the survey was to provide an indication of the level of bat activity within the Site as a whole to determine the potential magnitude of any adverse impact that may arise for the proposed outline scheme. The surveys comprised three dusk surveys across the Site during 2013.



- 3.5.2 Given the time that has elapsed since the previous surveys, as well as change in the guidance (see BCT 2023), additional surveys in 2024 were deemed appropriate to further build upon the results previously obtained. A total of six activity surveys and six static surveys will be undertaken across the 2024 survey season, with two activity and two static surveys already completed.

### **3.6 Survey Constraints**

- 3.6.1 Access was available to all areas of the Site. The surveys have been undertaken across several months over numerous years which allowed for a comprehensive picture of ecological receptors within the Site to be gained. Therefore, confidence in the results is high.
- 3.6.2 The survey was undertaken in line with the latest sectoral guidance from the Chartered Institute of Ecology and Environmental Management (CIEEM) and BS 42020: 2013 *Biodiversity – Code of Practice for Planning and Development*.

## 4 SITE DESCRIPTION

### 4.1 Desk Study

#### *Statutory Sites*

- 4.1.1 There are no statutory designated sites within 2km of the Site. The search area was then extended to 5km for European designated sites (SPA and SAC); no further records were returned.

#### *Non-statutory Designated Sites*

- 4.1.2 There are two non-statutory designated sites within 2km of the Site:

- The South Downs Link, Nutham Wood and Greatsteeds Farm Meadow; and
- Courtland Wood.

- 4.1.3 Details of the non-statutory designated sites are detailed below in Table 1.

**Table 1.** SNCIs within 2km of the Site.

| Site Name                                                               | Designation | Proximity to survey area | Description                                                                                                                                                                                                                          |
|-------------------------------------------------------------------------|-------------|--------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| The Downs Link, Nutham Wood & Greatsteeds Farm Meadow                   | SNCI        | 0.6km south east         | The Downs Link is a disused railway line which has developed into a species rich belt of shrubs. Adjacent to the Downs Link are a small herb-rich meadow and stream and some ancient woodland. A rare butterfly breeds on this site. |
| Courtland Wood                                                          | SNCI        | 0.9km north              | Relatively small ancient broadleaved woodland with Conifer introductions in the east. It has a varied structure dominated by Small Leaved Lime coppice in the west.                                                                  |
| <b>Key:</b><br><br><i>SNCI – Site of Nature Conservation Importance</i> |             |                          |                                                                                                                                                                                                                                      |

- 4.1.4 In addition to this, there are 14 areas of ancient woodland within 2km of the Site, a country park and a known ancient/veteran tree. An area of ancient woodland is contiguous with the southern Site boundary.

### *Protected and Notable Species*

- 4.1.5 The data search did not return any specially protected species, or species of a raised conservation status for the Site itself. However, previous surveys undertaken by Derek Finnie Associates in 2013, 2014 and 2019 had identified a low population of slow worms, common lizard and grass snake adjacent to the Site (within Phase 5), as well as relatively poor assemblage of bat species.

## 4.2 Field Survey

### *Phase 1 Survey*

- 4.2.1 The Site comprises former agricultural land which has been left fallow since the start of construction of the adjoining phase 3 land. Some of the land towards the north of the Site has been used for storage of materials for the Phase 3 site.
- 4.2.2 The following Phase 1 habitats were encountered throughout, and immediately adjacent to, the Site visits:
- Broad-leaved woodland;
  - Outgrown hedgerows;
  - Species poor, semi-improved grassland/fallow agricultural land;
  - Tall ruderal; and
  - Disturbed ground/ephemeral
- 4.2.3 Each habitat is described in turn below and depicted on Figure 1.

#### Broad-leaved woodland

- 4.2.4 A single block of broad-leaved woodland lies adjacent and contiguous with the Site along the southern boundary. The woodland block has been classified as Ancient Woodland and comprises a canopy of oak *Quercus* sp. and ash *Fraxinus excelsior*, with an understorey of birch *Betula pubescens*. The ground layer is impoverished, displaying moderately high levels of disturbance, but where vegetation is present it is dominated by bramble *Rubus fruticosus* agg. although bracken *Pteridium aquilinum* is locally dominant.

#### Hedgerows

- 4.2.5 The hedgerow along the eastern boundary (H3), separates the Site from the Phase 5 area. The southern section is more or less a line of continuous mature trees, comprising oak in the main. However, towards the north, the hedgerow changes character completely being dominated by well managed hawthorn, with few standard trees.
- 4.2.6 Along the northern section of the eastern boundary is an impoverished hawthorn and blackthorn dominated hedgerow.

#### Species poor, semi-improved grassland/fallow arable land

- 4.2.7 The majority of the Site comprises former agricultural land that has been colonised by a semi-improved, species poor grassland community; species associated more with tall ruderal habitats are also frequent throughout. Areas of soft brome *Bromus*



*hordeaceus* and Yorkshire fog *Holcus lanatus* are locally dominant; other graminoid species noted include perennial rye grass *Lolium perenne*, cock's-foot *Dactylis glomerata*, meadow foxtail *Alopecurus pratensis* and false oat grass *Arrhenatherum elatius*. There is a paucity of forbes within the sward, but where they are present, they are typical of tall ruderal habitat, such as charlock *Sinapis arvensis*, hoary cress *Lepidium draba*, common nettle *Urtica dioica*, common mallow *Malva sylvestris*, mugwort *Artemisia vulgaris*, creeping thistle *Cirsium arvensis*, hoary willowherb *Epilobium parviflorum* with the occasional patch of teasel.

#### Tall ruderal

- 4.2.8 Towards the north east of the Site, in an area previously used for storage, an area of tall ruderal habitat has developed dominated by common species typical of this habitat such as common nettle, common mallow, mugwort, creeping thistle, teasel and ragwort *Senecio jacobaea*.

#### Disturbed ground/ephemeral

- 4.2.9 At the north of the site ins an area that has previous been used for storage until recently, that has start ed to develop an ephemeral assemblage including annual meadow grass *Poa annua*, redshank *Persicaria maculosa* dandelion *Taraxacum officinale* agg. cats' ear *Hypochaeris radicata*, goosefoot *Chenopodium* sp and scarlet pimpernel *Anagallis arvensis*.

#### Non-native Invasive Species

- 4.2.10 No non-native species were recorded from the Site.

#### ***Fauna***



- 4.2.11 

#### Reptiles

- 4.2.12 No reptiles have been encountered within the Site during the partial survey so far undertaken in 2024. However, the survey will need to be completed before reptiles can be assumed to be absent from the Site; the final results will be submitted as an Addendum to this report.

#### Bats

#### *Activity Surveys*

- 4.2.13 The level of bat activity encountered within the Site to date in 2024, and the composite species, is similar to that recorded during previous surveys in 2013/2014, although the surveys are still ongoing. Again, a total of five species have been recorded throughout the survey period, with common pipistrelle being the most frequently encountered species, as summarised in Table 2.



**Table 2.** Summary of Bat Registrations

| Species             | 21/05/24 | 14/06/24 |
|---------------------|----------|----------|
| Common pipistrelle  | 15       | 11       |
| Soprano pipistrelle | 5        | 7        |
| Noctule             | 2        | 3        |
| Serotine            | 0        | 1        |
| <i>Myotis</i> sp    | 1        | 0        |

- 4.2.14 As would be expected, the majority of the registrations were associated with the mature tree belts, particularly along the eastern boundary of the Site.
- 4.2.15 The data from the static surveys conducted to date reflect the data collected from the activity surveys; full details of these will be submitted as an Addendum to this report.

#### Other fauna

- 4.2.16 Waterbodies are shown on the OS map along the western site boundary. However, these were dry throughout the 2019 and 2024 summer surveys, precluding the possibility of breeding amphibians within the Site. The nearest identified population of great crested newts is some 700m to the north of the Site. Hence, the probability of terrestrial phase amphibians being with the Site is negligible.
- 4.2.17 There are no known records of dormouse within 2km of the Site..

## 5 EVALUATION

### 5.1 Definition of ecological value

- 5.1.1 A geographical scale of reference is used when evaluating ecological receptors within a Site, in line with the latest sectoral guidance presented by CIEEM (2018), as summarised in Table 3. The evaluation categories for each receptor have generally been reached by applying accepted criteria, such as naturalness, rarity, fragility and diversity, first proposed by Ratcliffe (1977) and commonly used in the assessment of both statutory and non-statutory sites.
- 5.1.2 Where sites have already been designated on ecological grounds, the assessment reflects the geographical context of the designations. For example, sites designated under international legislation or treaties are assessed to be of International value, whilst sites designated under UK legislation are of National value.
- 5.1.3 Consideration is also given to legal protection afforded to any ecological receptor within the Site, as are species or habitats identified as 'priorities' for biodiversity conservation in the UK. Local Planning Authorities will often have a duty to consider such species or habitats throughout the planning process, hence their presence within a site is a material consideration.
- 5.1.4 Further frames of reference for individual species are provided by the Red Data Book system, such as the Vascular Plant Red Data List for Great Britain (Cheffings and Farrell 2006) or for birds by reference to the Birds of Conservation Concern (Stanbury et al. 2021).

**Table 3.** Ecological Evaluation Criteria

| Value/Importance            | Criteria                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|-----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| International<br>(European) | <p><b>Habitats</b><br/>An internationally designated Site or candidate Site (Special Protection Area [SPA]), provisional SPA, Special Areas of Conservation (SAC), candidate SAC, Ramsar Site, Biogenetic / Biosphere Reserve, World Heritage Site or an area that would meet the published selection criteria for designation. A viable area of a habitat type listed in Annex I of the Habitats Directive, or smaller areas of such habitat, which are essential to maintain the viability of a larger whole.</p> <p><b>Species</b><br/>Any regularly occurring population of internationally important species, threatened or rare in the UK (i.e. a UK Red Data Book species) or, of uncertain conservation status or, of global conservation concern. A regularly occurring, nationally significant population/number of an internationally important species.</p> |
| National<br>(English)       | <p><b>Habitats</b><br/>A nationally designated Site (Site of Special Scientific Interest [SSSI], National Nature Reserve [NNR], Marine Nature Reserve [MNR] or a discrete area), which would meet the published selection criteria for national designation (e.g. SSSI selection guidelines).</p> <p><b>Species</b><br/>A regularly occurring, regionally or county significant population/number of an internationally/nationally important species. Any regularly occurring population of a nationally important species, threatened or rare in the region or county.</p>                                                                                                                                                                                                                                                                                             |



| Value/Importance                                      | Criteria                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|-------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Regional<br>(South east)                              | <p><b>Habitats</b><br/>Sites that exceed County-level designations but fall short of SSSI selection criteria.</p> <p><b>Species</b><br/>Any regularly occurring, locally significant population of a species listed as being nationally scarce, which occurs in 16 of 100 10km<sup>2</sup> squares in the UK. A regularly occurring, locally significant population / number of a regionally important species. Sites maintaining populations of internationally/nationally important species that are not threatened or rare in the region or county.</p>                                                                                                                                                                                                                                                                                         |
| Authority Area<br>(e.g. County or District)           | <p><b>Habitats</b><br/>Sites recognised by local authorities, e.g. Local Wildlife Sites (LWS). County/District Sites that the designating authority has determined meet the published ecological selection criteria for designation, including Local Nature Reserves (LNR). A diverse and/or ecologically valuable hedgerow network. Semi-natural ancient woodland greater than 0.25ha.</p> <p><b>Species</b><br/>Any regularly occurring, locally significant population of a considered regional rarity or localisation. Sites supporting populations of internationally/nationally/regionally important species that are not threatened or rare in the region or county, and not integral to maintaining those populations. Sites/features scarce in the County / District or that appreciably enrich the County/District habitat resource.</p> |
| Local<br>(immediate local area or village importance) | <p><b>Habitats</b><br/>Areas of habitat that appreciably enrich the local habitat resource (e.g. species-rich hedgerows, ponds etc). Sites that retain other elements of semi-natural vegetation that due to their size, quality or the wide distribution within the local area are not considered for the above classifications. Semi-natural ancient woodland smaller than 0.25 ha.</p> <p><b>Species</b><br/>Populations/assemblages of species that appreciable enrich the biodiversity resource within the local context. Sites supporting populations of county/district important species that are not threatened or rare in the region or county and are not integral to maintaining those populations.</p>                                                                                                                                |
| Site level<br>(Limited ecological importance)         | Sites that retain habitats and/or species of limited ecological importance due to their size, species composition or other factors.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |

## 5.2 Site Evaluation

- 5.2.1 No part of the Site, or the immediate surrounding land is cover by any form of statutory of non-statutory designation on conservation grounds. The woodland block to the south east, outwith, but contiguous with the site boundary, is classified as being ancient in origin.
- 5.2.2 The majority of the Site supports former agricultural land that has been colonised by a semi-improved, species poor grassland community. It is species poor and dominated by widespread, common species. Hence is assessed as being of **Negligible** ecological value.
- 5.2.3 Perhaps the most significant ecological features within the Site is the hedgerows along the eastern boundary, between the Site and Phase 5. This would be largely unaffected by the proposal, although two small section would require removal to facilitate access

into Phase 5 and allow access to a play area. A summary of the ecological features, and an assessment under the Hedgerow Regulations 1997, is presented in Table 4.

**Table 4.** Hedgerow Evaluation

| Ref No. | Average number of woody species | Description of woody species   | Species rich | Description of ground flora                  | Features               | Likely classification in accordance with Hedgerow Regulations 1997 |
|---------|---------------------------------|--------------------------------|--------------|----------------------------------------------|------------------------|--------------------------------------------------------------------|
| H3      | 4                               | Hawthorn, blackthorn, oak, ash | Species poor | cock's-foot, bramble, common nettle, bracken | 2 - no gaps, standards | Not important                                                      |

5.2.4 Overall, the hedgerows would be assessed as being of **Local** value.

5.2.5 The bat assemblage within the Site comprised the most common and widespread species, although the distribution of serotine bat is restricted to the south east, which raises the value of the Site for bats slightly. Nevertheless, it would still be classified as being of **Local** value only (Wray *et al* 2010).

5.2.6 No other features, or species, of ecological value have been identified within the Site to date. However, surveys are still ongoing. A final evaluation of these features will be presented within an Addendum to this report. But it would appear the ecological receptors are of a similar value to those identified within the original Ecological Statement submitted to inform the online application.

## **6 DISCUSSION**

### **6.1 Potential Impacts**

- 6.1.1 The proposed development would result in the loss of the majority of the species poor, semi-improved grassland, which has been assessed as being of negligible ecological value. Hence, the resulting ecological impact of the construction of the proposed development would be negligible. Two small sections of hedgerow H3 would need to be removed to allow for the access into the neighbouring Phase 5 to the west. The.
- 6.1.2 Lighting in and around the development has the potential to have a negative impact upon the foraging activity of the local bat population. However, the lighting design for the Site would be carefully designed to ensure that light spillage onto the surrounding hedgerows is kept below 1 lux, which is equivalent to twilight. Hence there would be no significant negative impact upon bats.
- 6.1.3 The level of predicted impacts would be equivalent to those identified in the previous consented outline permission for the wider development approved under DC/14/0590; the level of impacts was previous deemed acceptable.

### **6.2 Ecological Enhancements**

- 6.2.1 The south and southwestern part of the Site will be given over to an ecological mitigation and enhancement area, that connects with the existing mitigation area to the north west and the proposed mitigation area to the south east; together these areas provide the biodiversity mitigation and enhancement for the whole of the wider *Land West of Southwater* development. Within the Phase 4 mitigation area, additional tree and scrub planting will be undertaken, creating a wider green corridor along the western boundary of the whole development. Combined with Phase 5 (the subject of a separate application) the Neighbourhood Plan Policy regarding tree coverage will be met, with 688 trees proposed across both phases. A species rich woodland mix will be sown under and around the new scrub and tree planting, which will grade into a species rich meadow mix. A 15m buffer to the ancient woodland is afforded with a sensitively designed landscaped buffer and redesigned attenuation pond.
- 6.2.2 In addition, a new pond will be created within the mitigation area to provide a new species rich habitat. Appropriate emergent and aquatic species will be planted in and around the waterbodies.
- 6.2.3 Full details of the habitat creation are presented within the Landscape Masterplans and Planting Schedules (Charnwood Landscape Design, Drawing No: CLDL-2434-04-01.01 *et seq.*) submitted with this application; an extract of architects Site Layout is attached as Appendix 2.

## **7 SUMMARY**

- 7.1.1 A suite of ecological surveys is being undertaken across the Land West of Southwater Phase 4 throughout the 2024 survey season. This builds upon previous survey work undertaken in 2013/2014. The Site was found to comprise former agricultural land, which has been colonised by species poor, semi-improved grassland. The Site bordered by outgrown hedgerows with numerous semi-mature broad-leaved trees along its eastern boundary.
- 7.1.2 The hedgerows were assessed to be of Local value, whilst the main habitat, species poor, semi-improved grassland/abandoned arable, was assessed as being of negligible ecological value. The bat population by contrast is of Local value.
- 7.1.3 Overall, there has been no significant change to the ecological value of the Site since the original outline permission was granted.
- 7.1.4 The proposed development would result in the loss of the majority of the semi-improved grassland field, as well as the ruderal and ephemeral habitats, which have been assessed as a resulting negligible ecological impact. A small amount of hedgerow will be removed which will be offset through new hedge creation elsewhere within the Phase.
- 7.1.5 Ecological mitigation and enhancement measure will be secured through the creation of species rich habitat within the Ecology Mitigation Area which will ensure the scheme will deliver a biodiversity gain.

## REFERENCES

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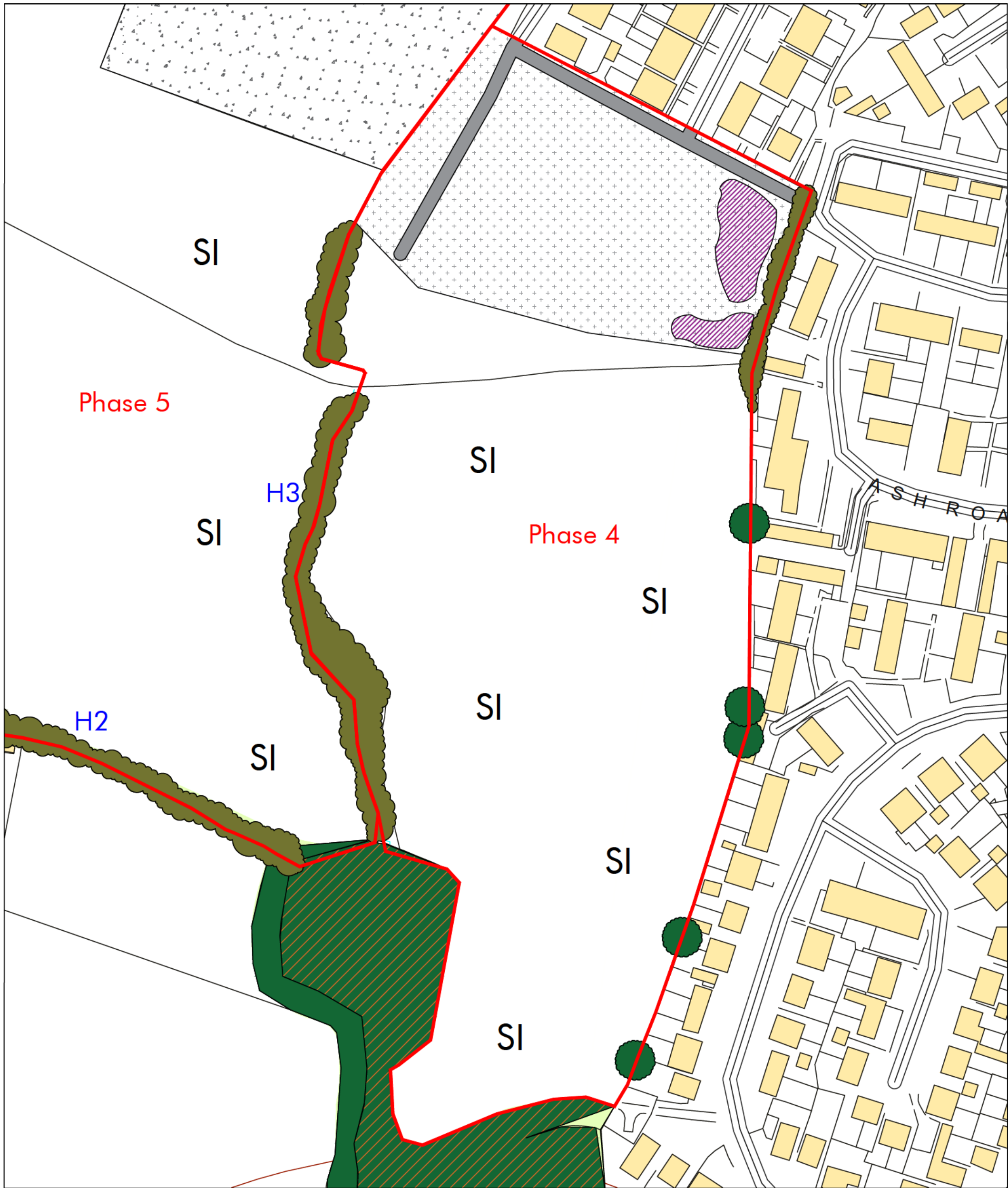
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- Legend
- Broad-leaved woodland
  - Ancient woodland
  - Hedgerow
  - SI Species-poor grassland
  - Tall ruderal
  - Disturbed ground/Ephemeral
  - Hardstanding



|            |                     |
|------------|---------------------|
| Figure No: | Figure 1            |
| Title:     | Phase 1 Habitat Map |
| Date:      | June 2024           |
| Project:   | Southwater Phase 4  |
| Client:    | Berkeley            |



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## Appendix 1

### Site Layout



- W 28.06.24 Layout updated with new mix for planning
- V 16.03.23 Electric charging points removed from adoptable roads
- U 14.03.23 Parking numbers updated to HA and S/O blocks as clouded
- T 02.09.21 Roundabouts reinstated between Blocks C & D. Garden walks to Plots 450 & 508 adjusted. Tree by Plot 508 relocated by the wall of Plot 507. Note 504 - 507 staggered & separated. Visitor parking space by Plot 507 relocated to create two opposite Plot 497.
- S 25.08.21 Block B removed from N.M.A. application. Visitor space amended. Tree between block C & D removed.
- R 19.05.21 Revisions to Footprints on Plots 367-514. Various amendments to suite revised plots. Electric vehicle charging points added. Footprint to Block B amended. Parking adjusted to suit. Car Barn removed from behind plots 473-474. Visitor spaces added.
- Q 13.12.18 Attenuation Basin details updated.
- P 29.10.18 Revisions to Footprints on Plots 358-362, 369-386, 392-395, 403, 404-420 & 447.
- N 18.09.18 Updated following Highways comments.
- M 26.07.18 Updated following LPA comments. Sub Station added adjacent Plot 368.
- L 17.05.18 Updated following IDL comments on highways. Alignment of Public Footpath adjacent Plots 421-447 revised following LPA comments.
- K 25.04.18 Updated following LPA comments.
- J 28.02.18 Various revisions from Plots 369-516.
- H 19.02.18 Road widths adjusted.
- G 06.02.18 Red line boundary adjusted. LPA's/LEAP added to drawing.
- F 22.01.17 House type on Plots 401 & 442 revised. Roof icons updated to accord with latest plans.
- E 24.11.17 Further revisions following LPA comments.
- D 12.10.17 Updated following LPA comments.
- C 17.07.17 Updated tree survey information added to layout.
- B 07.04.17 Plots 259 & 260 revised.
- A 01.04.17 Site Layout revised.

| REF                                                                                                                                                                    | DATE                          | REVISION |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|----------|
| DEVELOPMENT<br>PHASE 3.1 & 4<br>SOUTHWATER<br>WEST SUSSEX                                                                                                              |                               |          |
| DRAWING TITLE<br>SITE LAYOUT - SHEET 2 of 2                                                                                                                            |                               |          |
| <b>Berkeley</b><br>Designed for life<br>Berkeley Homes (Southern) Limited<br>Berkeley House, Bay Tree Avenue<br>Leatherhead<br>Surrey, KT22 7UE<br>Tel: (01372) 370400 |                               |          |
| DESIGN<br>TJR<br>DATE<br>JAN 24                                                                                                                                        | CHECKED<br>SCALE<br>1:5000@A0 | REV<br>W |