



End House

Construction Environmental
Management Plan (Biodiversity)

October 2024

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Document Control Sheet		Disclaimer
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Issue Purpose	Planning Submission	
Report Prepared For	Westway Construction Ltd	
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Approved By	Ryan Thrower	
Date of Issue	23 rd October 2024	

1 Introduction

NRG Consulting have been appointed to undertake a Construction Environmental Management Plan (CEMP) – Biodiversity for the proposed development at **Land Adjacent To Lane End House, Shinfield Road, Shinfield, RG2 9BB**

The scheme has planning permission; Wokingham Borough Council Planning Reference: 222304) and the description of development is:

Full application for the proposed erection of 6no. dwellings, with associated landscaping and access.

Planning Condition 10 states:

10. CEMP (Biodiversity)

No development shall take place (including demolition, ground works, vegetation clearance) until a construction environmental management plan (CEMP: Biodiversity) has been submitted to and approved in writing by the local planning authority. The CEMP (Biodiversity) shall include the following:

- a) Risk assessment of potentially damaging construction activities.*
- b) Identification of 'biodiversity protection zones'.*
- c) Practical measures (both physical measures and sensitive working practices) to avoid or reduce impacts during construction (may be provided as a set of method statements).*
- d) The location and timing of sensitive works to avoid harm to biodiversity features.*
- e) The times during construction when specialist ecologists need to be present on site to oversee works.*
- f) Responsible persons and lines of communication.*
- g) The role and responsibilities on site of an ecological clerk of works (ECOW) or similar competent person.*
- h) Use of protective fences, exclusion barriers and warning signs. The approved CEMP shall be adhered to and implemented throughout the construction period strictly in accordance with the approved details, unless otherwise agreed in writing by the local planning authority.*

Reason: To minimise impacts on biodiversity. Relevant policy: Paragraphs 179 and 180 of the NPPF.

Site Context

The development site is located northwest of Lane End House, Shinfield, Berkshire, covering an area of approximately 0.36 hectares. The site is positioned at the end of a new residential development and was formerly an amenity greenspace and carpark associated with the now-demolished Lane End House.

Proposed Development

The proposed development involves the construction of six residential dwellings including associated landscaping and access infrastructure. The construction will require groundworks for foundation, road access and utility installations. As a result, removal of certain habitats such as grassland and dense scrub will be necessary.

Three existing trees along the southern boundary are proposed for removal. These include two category U poplars and one category C sycamore. The removal of these trees will be compensated through the planting of native mixed-species trees such as birch, hornbeam, and pedunculate oak. The existing hedgerow along this boundary will also be enhanced to support local wildlife.

The development will retain and protect important ecological features, including the existing treeline along the western boundary and native hedge on the southern boundary. The landscaping strategy also includes ornamental planting areas, flowering species and aims to provide nesting and foraging opportunities for birds, invertebrates, and mammals.

Ecology Background

A **Preliminary Ecological Appraisal (PEA)** (updated May 2021) and **Reptile Survey** by John Wenman Ecological Consultancy confirms that the site is not subject to any statutory or non-statutory designations for its wildlife interest. However, three Local Wildlife Sites (LWSs) are located within 1km of the site: The Grove, Shinfield Park, Nores Hill, and Pearman's Copse, are all situated on the opposite side of the M4, which acts as a barrier to wildlife movement. The closest, The Grove, is approximately 120m to the north and consists of grassland, scrub, and broadleaved woodland.

The site survey conducted on 27th April 2021 identified a variety of habitats, including unmanaged poor semi-improved grassland dominated by grasses such as creeping bent, red fescue, and perennial ryegrass. Scattered broadleaved and coniferous trees, including Scots pine, crab apple, and western red cedar, were also present. A patch of dense bramble scrub was located in the southeast corner and tall ruderal vegetation, including nettles and bramble, encroached in the grassland in some areas. Ephemeral and short perennial vegetation was found to have colonised the former car park, while intact species-poor hedgerows of hazel and hawthorn defined the southern and eastern boundaries, with some invasive wall cotoneaster noted. Additionally, bat boxes were observed on some trees, suggesting potential bat activity within the site.

The site also supports a range of fauna. The native hedgerows provide valuable commuting and foraging opportunities for local bat populations. Additionally, two Lombardy poplars and a Scots pine tree contain potential roost features, offering moderate to low bat roost potential. The rough grassland and hedgerows present suitable habitat for amphibians and reptiles, although no evidence of great crested newts have been found, and a previous reptile survey also confirmed the absence of reptile species. The survey also found no indicators of notable mammal species however the existing hedgerows were identified as an important corridor for notable mammal and bird species. The scattered trees, bramble patches, and hedgerows also provide nesting and foraging opportunities for common bird species.

The **Arboricultural Impact Assessment** prepared by SJ Stephens Associates concludes that no trees of any significance are proposed for removal and new building has been kept back from trees to provide adequate separation distances to ensure their future sustainability. The accompanying Tree Protection Plan (included as Appendix 2) includes recommendations of fencing, shading for the trees retained as well as a No-dig construction area which will be adhered to during the development of the site.

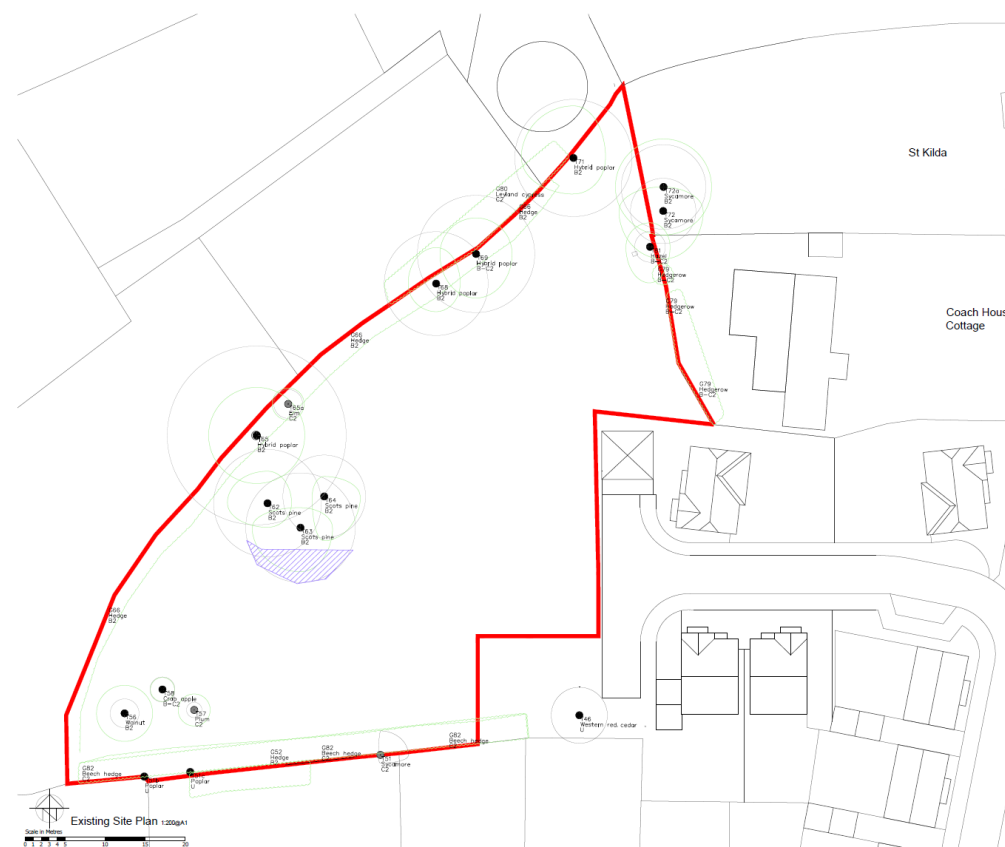


Figure 1: Existing Site Plan

2 Risk Assessment of Construction Activities

The construction activities and the corresponding mitigation measures to minimise impacts on local wildlife—including nesting birds, foraging bats, and small mammals—are detailed in the table below.

Construction Activity	Potential Risk	Mitigation Measures
Vegetation Removal and Ground Clearance	Clearance works involving the removal of grassland, bramble patches, tall ruderal vegetation, and ephemeral/short perennial vegetation may lead to habitat loss for species such as nesting birds, foraging bats, and small mammals. the removal of vegetation along hedgerows, may reduce connectivity for commuting and foraging species such as bats and birds. Additionally, ground clearance, if done outside recommended seasons, could destroy active nests or disturb ground-dwelling fauna	Vegetation removal, including grassland, bramble patches, and tall ruderal vegetation, will be carefully managed to minimise habitat loss for species like nesting birds, foraging bats, and small mammals. Mitigation measures will include: • Conducting vegetation clearance outside the bird nesting season (March to August) or, where necessary, under supervision by a qualified ecologist to confirm the absence of active nests. • Ensuring the Ecological Clerk of Works (ECOW) oversees vegetation clearance, particularly in sensitive areas. • Retaining important features where feasible and restoring cleared areas with native vegetation
Tree Removal and Root Zone Impact	The removal of two poplar trees and one sycamore along the southern boundary will have significant impacts on any nesting birds or roosting bats in the area. Additionally, any construction activity such as compaction from machinery or storage of material near the root protection areas of retained trees could cause damage to the root systems, harming tree health and the associated habitat.	The removal of two poplar trees and one sycamore along the southern boundary may affect nesting birds or roosting bats, while construction activities near the root protection areas (RPA) of retained trees could cause root damage. To mitigate this: • Conducting vegetation clearance outside the bird nesting season (March to August) or, where necessary, under supervision by a qualified ecologist to confirm the absence of active nests. • Installing protective fencing and warning signs around retained trees and their RPAs, following guidance set out by the arboricultural report provided by SJ Stephens Associates. • Restricting machinery access and material storage within the RPAs to prevent root compaction and damage. • Using no-dig construction methods where necessary to minimise root disturbance.
Noise and Vibration from Machinery	Construction activities will generate noise and vibration that can disturb sensitive wildlife, particularly nesting birds, bats, and small mammals. Prolonged exposure to loud machinery may drive such fauna away from the site, affecting the overall ecology of the site. Vibration from heavy equipment, especially near potential bat roosting sites, may impact bat species present on-site	Construction noise and vibration may disturb sensitive wildlife, such as nesting birds, bats, and small mammals. To minimise this: • Limit noisy activities to daylight hours to minimise disturbance to nocturnal species, such as bats. • Install temporary noise barriers where feasible. • Use low-vibration machinery near sensitive habitats, particularly in areas with bat roost potential, as well as within root protection areas
Artificial Lighting During Construction	Excessive artificial lighting, particularly near areas where bats are known to forage and roost (such as along hedgerows and tree lines), could disrupt foraging and commuting activities and can delay emergence from roosts.	Excessive lighting during construction can disrupt nocturnal wildlife, especially bats. Mitigation measures include: • Using directional lighting aimed away from hedgerows and tree lines where bats forage and roost. • Using low-intensity, warm-coloured lights. Limiting lighting use to the minimum necessary hours, ideally switching off all unnecessary lighting at night
Soil Compaction and Contamination	Heavy machinery and vehicles moving across the site can lead to soil compaction which can reduce water infiltration and may impact future planting and vegetation establishment in the area. Additionally, improper storage of materials and accidental spillage of chemicals, oils, or fuel could lead to contamination of the soil, impacting the ecology of the site.	Soil compaction from heavy machinery and potential contamination from spills can severely impact future planting and vegetation growth. To mitigate this: • Access for heavy machinery will be restricted to designated routes, away from sensitive ecological areas like RPAs and BPZ's. • Ground protection matting will be used to minimise compaction in work zones near trees or other vegetation. • Chemicals and fuel will be stored in designated areas with proper containment, and workers will be trained on spill response protocols to prevent contamination
Works Impacting Hedgerows and Wildlife Corridors	The existing hedgerows along the western and southern boundaries provide important wildlife corridors for species such as birds, bats, and small mammals. Construction activities, including the movement of vehicles and potential damage during the installation of infrastructure, may reduce the functionality of these corridors.	Hedgerows along the site boundaries serve as important wildlife corridors for species such as birds, bats, and small mammals. To protect these corridors: • Protective fencing and warning signs will be installed around hedgerows to prevent accidental damage from machinery and materials. • Connectivity will be maintained by providing temporary wildlife corridors or passageways during construction.

Table 2.1: Risk Assessment

3 Feature Specific Measures

3.1 Biodiversity Protection Zones

For this development, Biodiversity Protection Zones (BPZ) have been established to safeguard particular ecologically valuable features and mitigate potential construction impacts. These zones include sensitive habitats such as hedgerows, retained trees, and areas which provide habitat for a range of species.

Hedgerows

The hedgerows located along the western and southern boundaries provide important corridors for commuting and foraging species, such as bats and birds. These hedgerows will be retained and should be protected throughout the construction phase with protective fencing and warning signs to prevent accidental damage. No construction activities, vehicle movement, or material storage will be permitted within these zones, ensuring they remain undisturbed.

Trees

Trees which are retained on-site, particularly along the western boundary, have Root Protection Areas (RPAs) as detailed in the arboricultural report provided by SJ Stephens Associates. These trees and their root protection areas are also classified as biodiversity protection zones and measures should be put in place to ensure their protection during development (see Appendix 2).

These Biodiversity Protection Zones will be monitored by an Ecological Clerk of Works (ECoW) to ensure compliance with ecological and arboriculturally protection measures throughout the construction process.

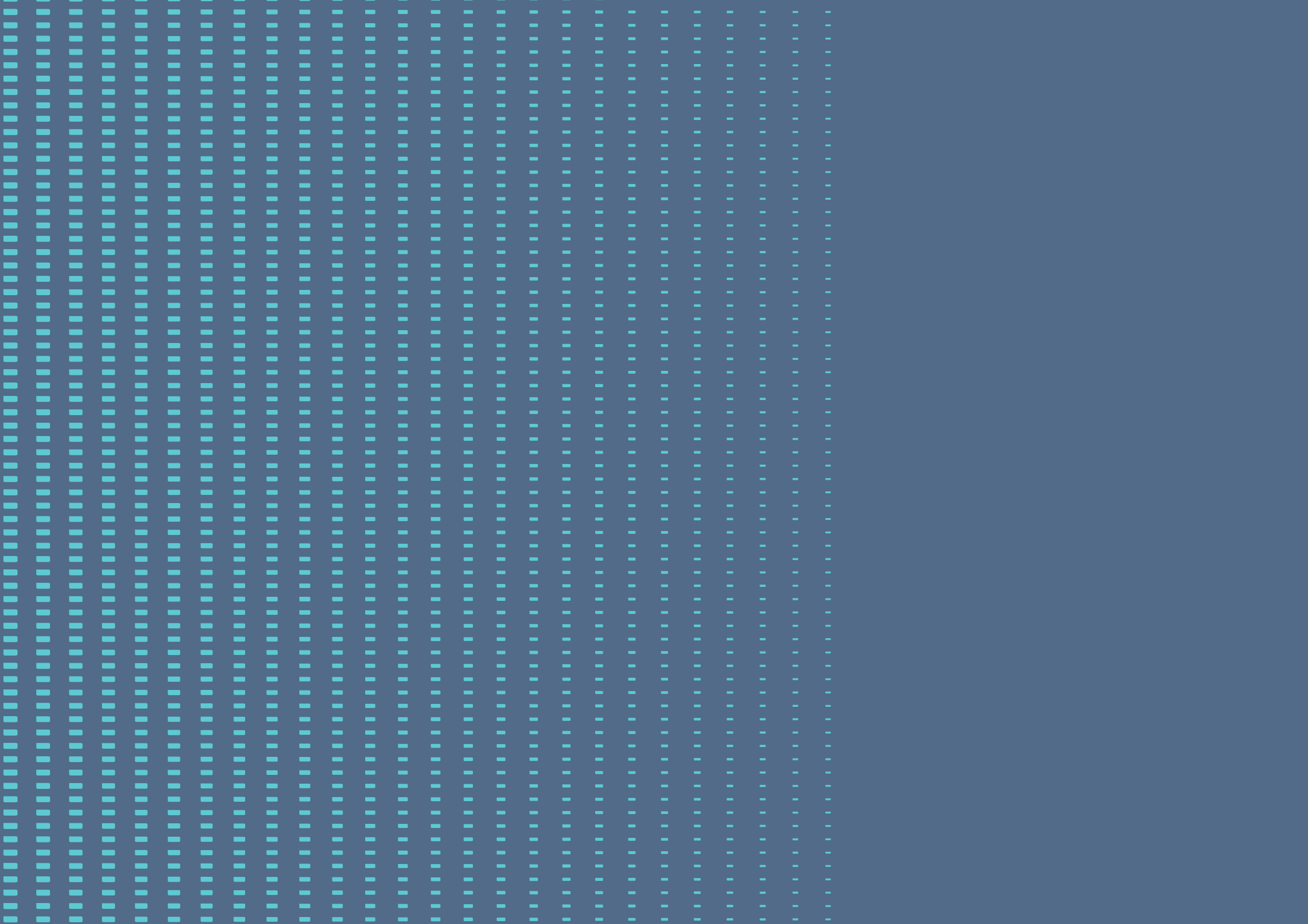
3.2 Timing of Works

The timing of works Should be scheduled to minimise disruption to existing species. Vegetation clearance, including the removal of trees and shrub patches, should be undertaken outside the bird nesting season (March to August). If clearance happens outside of this time, pre-clearance checks should be completed by a qualified ecologist to confirm the absence of nests. If active nests are discovered, tree removal should not commence until the fledglings have left the nest.

3.3 Ecological Clerk of Works

An Ecological Clerk of Works (ECoW) should be appointed to carry out a site induction at the start of the project and to explain the biodiversity protection zones to the site workers. They should also ensure all fencing and signage is correct before the commencement of works. The ECoW is also required to visit the site at regular intervals to ensure that the mitigation measures are being enforced.

The presence of an ECoW may also be required if any tree removal or ground clearance is conducted during the bird breeding season (March to August). The site manager should retain at all times, the contact details of an ecological clerk of works if any unexpected wildlife issues arise.





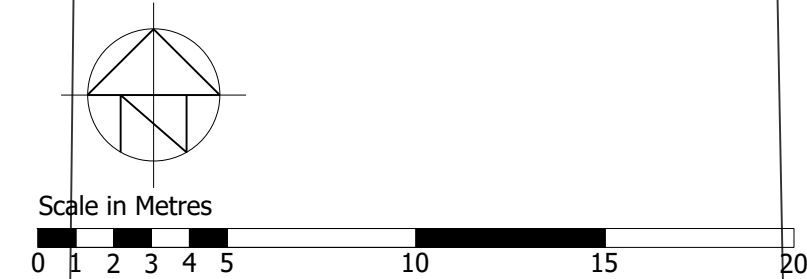
Existing Location and Block Plan
For 6 House Units at
Lane End House, Shinfield

CLIENT	Nova Developments (Reading) Ltd	JOB NO. C-1624	DRAWING NO. (08)25	REV. P2	CROWTHER ASSOCIATES
PROJECT	Proposed Housing Development at Lane End House, Shinfield, Reading	SCALE 1:200/1250@A1	DATE Mar 2021	DRAWN JJ	

Appendix 1



4 bed house - 160 x 3 (unit 2,3 & 6)	=	480 sqm
3 bed house - 115 x 1 (unit 1)	=	115 sqm
3 bed semi - 120 x 2 (unit 4 & 5)	=	240 sqm
TOTAL (6 units)	=	835 sqm



Appendix 2

