

Preliminary Ecological Appraisal (PEA)

Site: 77 Marlborough Road, Lancing Business Park
Lancing, BN15 8UF

Ref: 451773 / SJ1

Client: Industrial IT Systems



Prepared by:

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Revision	Description	Date
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EXECUTIVE SUMMARY

Gradwell Group was commissioned by Industrial IT Systems to undertake a Preliminary Ecological Appraisal (PEA) of 77 Marlborough Road, Lancing Business Park, Lancing, BN15 8UF. Planning permission is to be sought from Adur District Council for the demolition of an existing warehouse building and the erection of a new multi-storey facility including office, meeting and warehouse space.

The PEA was carried out in March 2026 and comprised a desk-based study and an extended Phase 1 habitat survey, following the Preliminary Ecological Appraisal Guidelines (CIEEM, 2017) and standard methodologies set out in the UK Habitat Classification User Manual (UK Habitat Classification Working Group, 2018).

The survey area encompasses approximately 0.09 hectares and includes developed land; sealed surfaces, buildings, modified grassland, bare ground and urban trees. The site is located in Lancing Business Park, Lancing, a large coastal village and civil parish in the Adur district of West Sussex, England, on the western edge of the Adur Valley. The site sits surrounding commercial development and warehouses, the wider landscape comprises of Brooklands Park and Lake, recreations areas, residential development and arable and pasture fields. The site has ecological limited connectivity to the surrounding landscape.

Habitats on the site have the potential to support various protected and/or notable species. This report outlines essential measures to safeguard wildlife during site clearance and construction, ensuring compliance with relevant wildlife legislation and minimising ecological impacts. In addition, recommendations are provided to enhance the site's biodiversity value post-development, delivering long-term ecological benefits.

Full details of these recommendations can be found beginning on Page 16 of this report. For ease of reference, a summary of key ecological considerations and proposed measures is provided in the table below.

This report has been prepared by a suitably qualified and experienced ecologist. The results and recommendations presented reflect the professional opinion of the author, based on information supplied by the client, details of the proposed development, and the findings of the desk study and field survey work.

REPORT INFORMATION

Site Address	77 Marlborough Road, Lancing Business Park, Lancing, BN15 8UF
Central Grid Reference	TQ 17718 03620
Report Author	Sam James BA (Hons) MA PGDip (Ecology) <i>ACIEEM</i>
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1) INTRODUCTION

Gradwell Group was commissioned by Industrial IT Systems to undertake a Preliminary Ecological Appraisal (PEA) of 77 Marlborough Road, Lancing Business Park, Lancing, BN15 8UF. Planning permission is to be sought from Adur District Council for the demolition of an existing warehouse building and the erection of a new multi-storey facility including office, meeting and warehouse space. The PEA was carried out in March 2026 and comprised a desk-based study and an extended Phase 1 habitat survey, following the Preliminary Ecological Appraisal Guidelines (CIEEM, 2017) and standard methodologies set out in the UK Habitat Classification User Manual (UK Habitat Classification Working Group, 2018).

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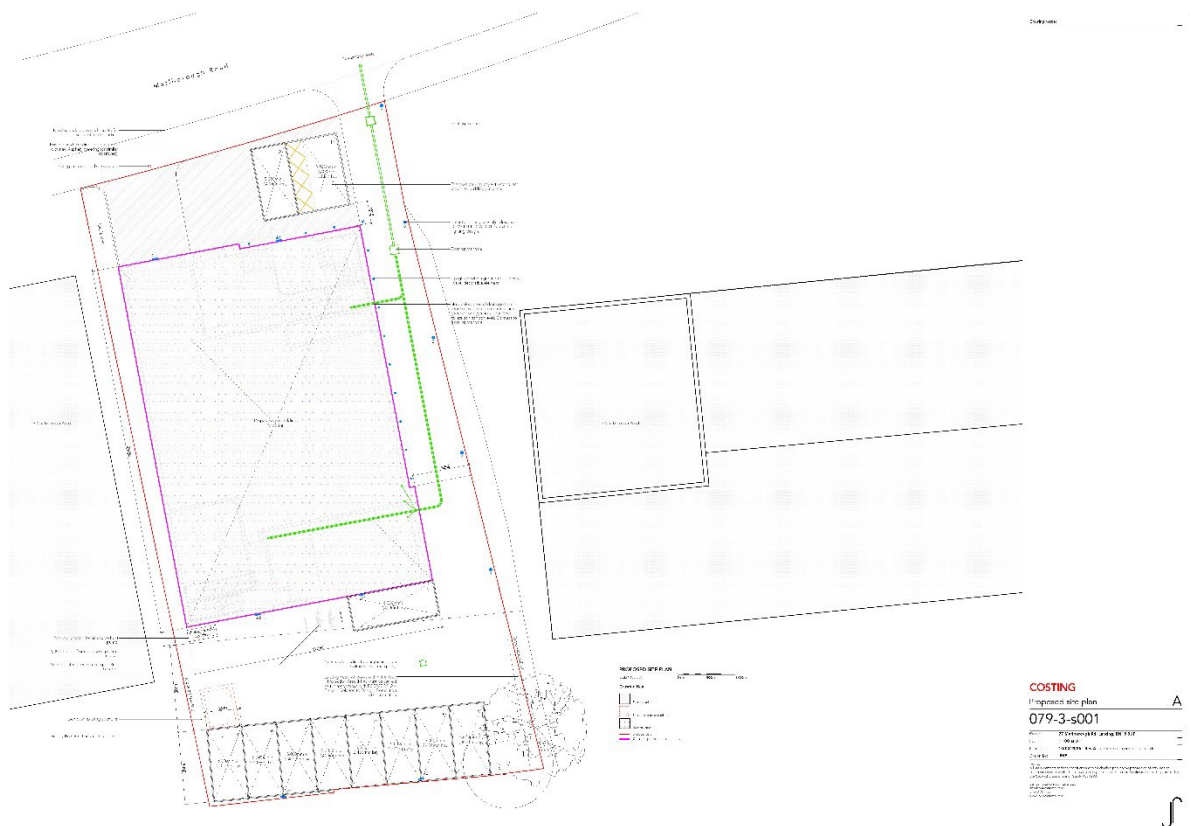


Figure 1: Proposed Site Plan

2) METHODS

The purpose and aims of the survey were to:

- To undertake a Preliminary Ecological Appraisal (including desktop data search) to determine the potential for protected species and/or habitats of conservation value.
- Analyse the results of a third-party biological record search to identify any protected / notable records and nature conservation designations within the local vicinity.
- Determine how the proposed works may impact on these species, habitats, designated sites or areas of nature conservation interest.
- Identify the requirement for further survey work, mitigation, compensation and / or assessment where necessary and propose suitable enhancements.

Desk Study Methodology

Existing ecological and nature conservation data relevant to the site was collated from various sources including the Multi-Agency Geographic Information for the Countryside (MAGIC) online database. Biological records have been requested from the local Environmental Records Centre; however, due to time constraints the request has not yet been fulfilled. Given the small-scale nature of the proposals, it is considered unlikely that receipt of these data would alter the recommendations or conclusions of this report. Once the information is received, the report can be updated accordingly. MAGIC Maps was used in March 2026 to undertake a 2km search for statutory designated sites for nature conservation and European Protected Species Mitigation Licences. MAGIC Maps was also used in March 2026 to assess whether the site may fall within a Site of Special Scientific Interest (SSSI) Impact Risk Zone (IRZ). All sites and record locations are given at an approximate distance from the site and coarse resolution records have not been analysed. Some records have been given at approximate distances or not included in the report where they are considered confidential; however, none of these records are relevant to the proposed development site.

The Ecological Survey Methodology

The survey was carried out on the 18th of February 2026 arriving at 10:30. The weather was 13°C, overcast, with scattered clouds and light winds (1/2 Beaufort Scale). No precipitation was encountered during the survey.

The survey was completed in accordance with the Preliminary Ecological Appraisal Guidelines (CIEEM, 2017) and standard methodology published in the UK Habitat Classification User Manual (UK Habitat Classification Working Group, 2018). The survey

involved walking over the site, mapping the main habitat types (in accordance with minimum mappable habitat sizes) and compiling a botanical species list and target notes to identify particular areas of interest or concern. Observations on the presence, or potential presence, of other certain protected species (e.g., badgers, nesting birds, reptiles and dormouse) and invasive / non-native species were recorded also. Riparian species (e.g., otter, water vole and white-clawed crayfish) have not been included in the assessment as there is not suitable water features on or adjacent to the site to support these species. The survey does not aim to be a comprehensive assessment of the presence or otherwise of all protected species on the site. There are a wide range of protected species, many of them can occur on one site and most require specialist expertise to locate them and / or seasonally constrained survey techniques to confirm their presence, and this is outside of the scope of this instruction. Phase 2 assessments and surveys have been recommended where appropriate.

Hedgerows, if on site were assessed following methodology provided in the Hedgerow Survey Handbook (DEFRA, 2007). Where relevant, a native hedgerow was defined as species-rich if the structural species included at least five native woody species in a surveyed 30m section of the hedgerow. The results were then compiled and assessed against qualifying criteria provided within the Hedgerow Regulations (1997) and the UK Biodiversity Action Plan / NERC Act (2006). Further information regarding legislation, policy and methodology for species relevant to this site and provided in full within Appendix 1 of this report. This is not considered to be an exhaustive list and it may be misleading to rely upon them as the information provided may not be up to date at the time of reading. Where there is doubt as to the current legal position then it is best to seek expert legal advice.

Zone of Influence

The zone of influence refers to the geographic extent of potential impacts of a proposed development. Given the small-scale nature of the development, the zone of influence is considered to be 250m from the application boundary for amphibians and reptiles, 30m for terrestrial mammals such as badgers, and within the area of impact for birds and bats. All other impacts are considered within the site boundary unless otherwise specified.

Site Evaluation

Following the preliminary survey, the site can be classified into one of six groups to establish whether the site is considered to hold ecological value at an international, national, regional, county, district or local / site scale (see Table 1). Targeted survey work is usually required to establish the significance of protected species within the site and this evaluation is only a guide.

Table 1. This table has been constructed following the CIEEM EcIA Guidelines (CIEEM, 2018). It contains definitions of the evaluation brackets thereby indicating the importance of each habitat type and their possible habitat status.

Ecological Value	Description / Example
International	An internationally designated site or candidate site. This includes habitats or species listed within Special Areas of Conservation, Special Protection Areas, Ramsar Sites, listed under Annex 1 of the Habitats Directive.
National	Sites that are designated at a UK level. This includes Sites of Special Scientific Interest, supporting nationally threatened or rare species.
Regional	Can include a significant population or number of any nationally important species at a regional level.
Country	Can include a feature identified as of critical importance within Section 41 of the NERC Act (2006).
District	Can include a regularly occurring, locally significant population or number of a regionally important species. A Key Habitat type included within the Biodiversity Action Plan or NERC Habitat of Principal Importance.
Local / Site	Designated sites for nature conservation such as Local Wildlife Sites or viable habitat / species populations considered of value at a county level (Local Biodiversity Action Plan species).

Survey Limitations

There are a small number of limitations, but it is considered that an accurate assessment of the site has been obtained:

- The desk study and field survey does not produce a comprehensive plant or animal species list as this will be limited by factors that influence their presence (such as activity and dormancy periods). However, an assessment can be made of the habitats within the survey area particularly given that the majority of the habitats are considered to be modified. It has also been possible to ascertain their corresponding nature conservation value and the potential for them to support any protected or priority species.

Report Lifespan

Given the transient nature of the subject, the survey results are considered valid for up to 18 months.

3) RESULTS

Desk Study – Statutory Sites

MAGIC maps returned one record of statutory sites for nature conservation within a 2km radius of the proposed site.

Table 2. Summary of Statutory Sites within a 2km Radius of the Application site.

Name/Type	Distance / Direction From site	Description
Widewater Lagoon LNR / Local Nature Reserves (England)	1.6km NE	Widewater Lagoon Local Nature Reserve (LNR) is an 8.8-hectare (22-acre) coastal, brackish water nature reserve situated in Lancing, West Sussex, England. It is a unique habitat, often described as a "hidden treasure," located between the sea defences of Lancing Beach and the A259 coast road.

The Natural England Site of Special Scientific Interest (SSSI) Impact Risk Zones layer, available via the MAGIC website, was reviewed to assess whether the site lies within any zones where proposed development might affect nearby SSSIs (or the SSSI components of SACs, SPAs, etc.). At this location, the Impact Risk Zone indicates that certain types of development, would trigger consultation with Natural England. It is unlikely the proposed development could fall into these categories, and therefore consultation with Natural England is not required. Given the distance of the site from the designated area, it is considered that any impacts arising from the proposals can be reasonably discounted.

Desk Study – Non-Statutory Sites

MAGIC maps returned no records of non- statutory sites for nature conservation within a 2km radius of the proposed site. A Construction Environmental Management Plan should be agreed with the local authority to ensure all potential risks are appropriately managed throughout works and to safeguard adjacent habitats.

Desk Study – Priority Habitats

MAGIC maps identified 19 records of priority habitat sites for nature conservation within a 2km radius of the proposed site, the majority being Intertidal Substrate Foreshore habitats associated with Lancing Beach. Priority habitats are not present within or adjacent to the

application boundary, the closest record is a Intertidal Substrate Foreshore habitat located 190m SE from the site. With the planned implementation of best practice construction measures, such as controls for water and dust pollution, no impacts are anticipated to these sites. A Construction Environmental Management Plan should be agreed with the local authority to ensure all potential risks are appropriately managed throughout works and to safeguard adjacent habitats.

Desk Study – Magic Maps (MAGIC)

A review of MAGIC Maps revealed no European Protected Species (EPS) licence applications within a 2km radius of the site.

UK Habitat Classification Survey and Habitat Evaluation

The results of the UK Habitat Classification Survey are presented below. The habitats on the site have been evaluated as having site value in relation to the immediate surroundings and a regional context.

Planning consent will be sought from Adur District Council, following a review of local guidance to determine the habitats' strategic significance. The Biodiversity Net Gain Guidance Document for the Local Planning Authorities was consulted.

Where no relevant plan, strategy, or policy exists, professional judgment may be used to classify habitats as having medium strategic significance, particularly if they provide a link between other strategic locations. Ecologist consultants may apply their judgment to this determination, but a strong justification will be required.

The following habitats and ecological features were recorded within or immediately surrounding the site:

- U; Urban; u1; Developed Land; Sealed Surface; u1b
- U; Urban; u1; Developed Land; Sealed Surface; Buildings; u1b5
- G; Grassland; g4; Modified Grassland;
- U; Urban; Artificial unvegetated, Unsealed Surface; u1c; Bare Ground; 510

Table 3. Habitats and features within and immediately surrounding the site.

Habitat/Feature	Description
U; Urban; u1; Developed Land; Sealed Surface; u1b	Areas of sealed, impervious surfaces comprising predominantly concrete, forming car parking and access road. Vegetation cover is minimal, consistently below 10%. The concrete is in low to moderate

	condition, showing some cracking and low levels of weed growth, indicating limited/low opportunities for natural successional growth.
U; Urban; u1; Developed Land; Sealed Surface; Buildings; u1b5	The site includes a warehouse building comprising a permanent, enclosed structure set on a sealed, impervious foundation. The building footprint forms a continuous area of built surface with no exposed soil or vegetated substrate present.
G; Grassland; g4; Modified Grassland	The grassland areas present are species-poor (typically fewer than nine species per m ²) and are dominated by fast-growing, competitive grasses, particularly rye-grasses <i>Lolium</i> spp., with occasional broadleaved herbs such as white clover <i>Trifolium repens</i> and dandelion <i>Taraxacum officinale</i> . The sward is uniformly short as a result of regular mowing, with limited structural diversity, areas of bare ground (>10%), and evidence of ongoing physical disturbance. The grassland is indicative of modified grassland that is likely to be successional in nature, having established following cessation of active management of a former arable crop habitat, rather than representing a semi-natural grassland community.
U; Urban; Artificial unvegetated, Unsealed Surface; u1c; Bare Ground; 510	An area of bare ground comprising exposed soil and unvegetated substrate is present along the western side of the building. The area supports very limited vegetation, with no discernible structure or species diversity that would provide ecological value for wildlife. Former trees were previously present within this area but have since been felled. No invasive species or notable pioneer growth were recorded at the time of survey. The habitat is heavily shaded due to its position between two buildings, resulting in suppressed vegetation growth and minimal ecological function.

Invasive Weeds Assessment

A thorough assessment was conducted to determine whether any invasive plant species listed under Schedule 9 of the Wildlife and Countryside Act 1981 (as amended) are present on the site. No species listed under Schedule 9 were recorded during the site survey.

However, it is important to note that the absence of identified Schedule 9 species during the survey does not guarantee their absence from the site. Some invasive species may not have been visible at the time of the assessment due to seasonal growth patterns or may exist in areas not fully accessible during the survey.

EVALUATION FOR PROTECTED AND NOTABLE SPECIES

Observations regarding the presence of, or opportunities for, any other protected, rare, or notable faunal species were made during the site visit.

ROOSTING BATS

There is no known bat roosts recorded within any of the buildings inside the application boundary. The building was assessed and found to not have features offering potential suitability for bats, as detailed in the table below. Evidence of bats - such as urine staining was not found and no live or dead individuals or droppings was observed externally on any of the building during the survey.

Table 3. Descriptions of the Buildings/Trees and their suitability for roosting bats.

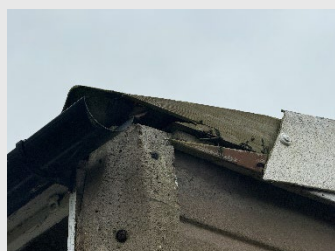
Feature	Description	Suitability
B1  North Elevation of B1 facing west  North elevation of B1 facing south  Eastern elevation of B1	Building 2 (B2) is an older warehouse-style structure of concrete panel construction, forming a detached unit within a wider commercial setting. The building sits on solid foundations and is surrounded by areas of hardstanding and managed grassland. The external elevations comprise prefabricated concrete panels set within concrete uprights. The panels are generally intact, with no significant cracks, lifted sections or deep crevices noted that would provide suitable roosting opportunities. The roof is shallow pitched and finished with corrugated metal sheeting. The roof covering appears relatively modern and tightly sealed, particularly in comparison to adjacent structures, with no missing sheets, lifted edges or exposed gaps observed. The ridge and verge details appear secure and guttering and downpipes are fixed flush to the building.	Negligible



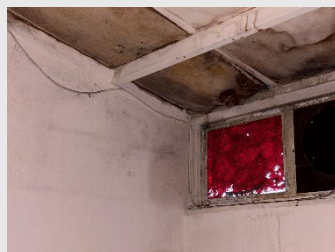
Western elevation of B1



Eastern elevation of B1



Gap in fascia on NE corner



Internal view of PRF

No obvious access points were identified along the eaves.

There is no separate roof void present. The underside of the roof covering is visible internally, and the internal space comprises open-span construction with no enclosed loft space. The absence of concealed cavities or insulated voids significantly limits roosting potential.

Windows are present along the elevations and are tightly sealed within their frames. A small gap was noted at the north-east corner of the building; however, internal inspection confirmed that this crevice does not extend into a suitable roosting cavity and lacks appropriate depth, shelter and thermal stability for roosting bats.

The building is in a generally weathered condition, with elements of deterioration and instability noted. Such conditions, combined with high internal light levels and lack of suitable crevice features, render the structure unfavourable for roosting bats.

A thorough inspection was completed, and no evidence of bats was recorded. This includes no droppings, staining, feeding remains or scratch marks.

Negligible suitability – no obvious features were identified that are likely to be used by roosting bats. While a small degree of uncertainty always remains, the building is considered highly unlikely to support a bat roost. No further surveys are considered necessary.

COMMUTING/FORAGING BATS

The application boundary is not adjacent to features which could support commuting and foraging bats (hedgerows and trees). Any development at the site is to be restricted to areas of less interest to bats such as the existing footprint of the building. Therefore, it is not anticipated that the development will impact upon any areas important for commuting / foraging bats. Mitigation measures have been provided in the next section which details the requirements for any new artificial lighting to ensure that impacts to foraging and commuting bat species remains negligible.

AMPHIBIANS AND REPTILES

The site comprises predominantly hardstanding and highly managed grassland, offering limited suitability for amphibians and reptiles. No features were identified that would provide suitable sheltering, basking, or refuge opportunities (e.g. log piles, rubble heaps, dense scrub, or unmanaged grassland). As such, the likelihood of supporting notable populations is considered low and no further survey work is required. However, all works should proceed in accordance with a Reasonable Avoidance Measures (RAMS) document to ensure compliance with relevant legislation. The RAMS should set out a phased vegetation clearance methodology, supervision requirements where necessary, and clear contingency procedures to be implemented should any reptiles or amphibians be encountered during site clearance or construction.

GREAT CRESTED NEWTS (GCN)

The site comprises predominantly hardstanding and highly managed grassland, offering limited suitability for Great Crested Newts (GCN). No waterbodies are present within the application boundary. One waterbody is located within 500 m of the site, approximately 350 m to the west; however, dispersal barriers including roads, buildings and areas of hardstanding separate the site from this feature. There are no connecting ponds or suitable commuting habitats linking the site to the wider landscape, further reducing the likelihood of GCN presence. The proposed works are anticipated to be confined to areas of low ecological interest, such as modified grassland and hardstanding. As such, no further survey work is considered necessary. However, all site clearance and construction should proceed in accordance with a Reasonable Avoidance Measures (RAMS) document to ensure compliance with relevant legislation. The RAMS should detail phased vegetation clearance, supervision requirements where appropriate, and clear contingency procedures to be implemented should GCN be encountered during works.

BADGER

Suitable sett-building opportunities are not present within the site. No evidence of badger activity (including setts, latrines, snuffle holes, or foraging signs) was recorded during the survey. The site provides limited suitable commuting routes. Although no direct impacts to badgers are anticipated, precautionary measures should be implemented during site clearance and construction to avoid accidental harm, no further badger-specific survey work is considered necessary.

NESTING BIRDS

The assessment was not undertaken during the active breeding bird season. Three bird species were seen and / or heard incidentally during the survey. These included Gull *Larus*, Common Pigeon *Columba livia* and blackbird *Turdus merula*. All the aforementioned birds are green listed Birds of Conservation Concern (BoCC) i.e., birds not showing moderate or severe declines. The trees and building provide areas suitable for nesting birds. The site is unlikely to support ground nesting birds. Given the nature of the proposed works, nesting birds should be considered further for their legal protection only. Any demolition should ideally be timed to avoid the nesting bird season (typically March to September inclusive). Further recommendations for mitigation and enhancements measures relating to nesting birds has also been provided.

HAZEL DORMOUSE

There are no granted European Protected Species (EPS) Mitigation Licences for hazel dormouse on MAGIC within a 2km radius of the site. They are considered likely to be absent from the expected areas of impact. Hazel dormice are not considered further in this report.

INVERTEBRATES

The peripheral habitats such as the mature trees may support important invertebrate assemblages but these are all set to be retained and unimpacted by the development. The remainder of site is unlikely to impact rare and / or notable invertebrates due to the limited diversity of plants and number of modified habitats. No other triggers were identified to suggest that the development will impact any protected or notable assemblage of invertebrates. They are not considered further in this report other than for possible enhancements.

OTHER SPECIES

It is possible that hedgehogs may utilise the site for foraging and commuting with preference likely given to the vegetated areas and boundary habitats. Precautionary working methods are considered sufficient for small mammals including hedgehogs and this will ensure there are no breaches in legislation during site clearance / construction activities. The site is unsuitable to support brown hare, polecat and harvest mouse and so they are not considered further in this report.

4) RECOMMENDATIONS

Recommendations for measures to avoid impacts on identified features of nature conservation interest, as well as opportunities for ecological enhancement, are provided below. The survey findings should be used to inform and guide any future development proposals.

Habitats / Biodiversity Net Gain

In line with local and national policy, the proposed development should seek opportunities to incorporate ecological enhancements. A Construction and Environment Management Plan (CEMP) could be considered and secured as a condition of planning. Dust prevention measures must also be detailed in a CEMP to ensure no adverse effects to adjacent habitats.

The development must also ensure that best practice measures are effectively implemented to ensure the protection of adjoining habitats. Chemicals must be securely stored on areas of hardstanding / another sealed surface, following COSHH guidelines. All those working on the site should have access to spill kits and appropriate training in their use.

It is recommended that the loss of trees is avoided as far as possible. Where this is not possible, losses should be minimised and compensated for appropriately by way of replacement tree planting elsewhere on the Site. As far as possible trees should be of native species, local provenance and appropriate to the soil/drainage conditions on the Site. Replacement of trees should be designed to maintain connectivity around and/or within the Site, in particular for bats and birds which are likely to be using the area, and as far as possible should be unlit.

Roosting Bats

If bats or evidence of bats (e.g., droppings, dead bats and/or staining) are found, then stop work immediately and contact an ecologist. An appropriate protection / mitigation strategy will need to be designed and submitted to the local planning authority. A European Protected Species Mitigation (EPSM) licence application will also be required.

A minimum of one bat box (e.g. Schwegler 1FR Bat Tube or Integrated Eco Bat Box Crevice) should be placed on or within the buildings post-development or trees within the site in accordance with the retailer's instructions (see Appendix 7). The boxes should be at least 4m above ground level, away from lights and not placed above / near windows.

Foraging and Commuting Bats

The requirements of any future lighting must be assessed and implemented in line with best practice guidance to inform a sensitive lighting strategy. Such guidance should include construction work being limited between the hours of dawn and dusk, site specific lighting practices (e.g., low-light levels and use of timers) and the avoidance of light spill onto boundaries and adjoining habitats.). These documents contain further information: BCT and ILP (2023) and Matthews et al. (2015).

The planting and buffering of existing habitats, including hedgerows and nectar-rich species, is encouraged and should be incorporated into any landscape plans. Species for linear features could include hawthorn, blackthorn, hazel, field maple and spindle. Night flowering plants such as honeysuckle, evening primrose, field scabious and vervain will benefit the invertebrate prey of bats.

Breeding Birds

Any vegetation removal (e.g., trees) and building demolition / conversion must avoid the nesting bird season (typically March to September inclusive) or otherwise be checked by a suitably qualified ecologist immediately prior to clearance / construction to check for nesting birds if undertaken during the nesting season. If any nests or evidence of nesting is found, then suitable buffer zones will have to be implemented until the chicks have fledged or until the nest has been confirmed as redundant. The netting of any suitable bird nesting habitat is prohibited (CIEEM and RSPB, 2019).

A minimum of two boxes should be erected on or within the buildings post-development or trees within the site. Suggestions for bird boxes include sparrow boxes (e.g., Schwegler 1SP), swift boxes (e.g., Ibstock Eco-Habitat for Swifts), starling boxes (e.g., Woodstone Starling Nest) and generalist boxes (e.g., Woodstone Build-In Box) (see Appendix 5).

General Recommendations

Planting additional trees, hedgerows and shrubs as part of a landscaping scheme should comprise native and locally appropriate species. If possible, species that provide pollen, nectar and fruit should form part of the landscaping to provide a food source for common birds. Species which could be considered include hazel, hawthorn, blackthorn, dog-rose, wayfaring tree, sweet-briar, dogwood, common buckthorn and guelder rose. Any hedgerows and trees to be retained must be protected in line with the British Standard: Trees in Relation to Design, Demolition and Construction (BS5837:2012).

These working methods are appropriate for mammal species of principal importance including hedgehogs as well as other species (e.g., herpetofauna):

- Prior to works commencing, any log piles, brash piles and stone piles must be removed carefully. If any species are discovered, then an ecologist should be contacted to advise or relocate the animal(s) to a suitable location, where appropriate.
- Work on the site may create rubble piles which may have the potential to be utilised as places of rest or shelter. Such debris must be removed from the site immediately or placed into skips prior to removal, or on pallets if to be reused.
- Escape routes must be provided within any pits dug for the foundations. Such ramps must be no steeper than 45 degrees in angle and must be constructed using rough wooden planks. Any excavations left open overnight must be checked first thing in the morning prior to works recommencing.
- Any exposed open pipes should be capped to prevent hedgehogs and other small mammals from gaining access.
- Undertake clearance and construction work between dawn and dusk in daylight hours.
- All vegetation and piles (e.g., brash, wood and deadwood) should be checked by hand prior to clearance / removal.
- If burning any cleared vegetation, carry this out immediately after piling to prevent hedgehogs from moving in prior to burning.
- If protected species are unexpectedly discovered, works must cease immediately, and a suitably qualified ecologist must be contacted. An appropriate protection / mitigation strategy will need to be designed and submitted to the local planning authority. A European Protected Species Mitigation (EPSM) licence application may also be required.
- Hedgehog highways are recommended to be incorporated into fences, to facilitate safe movement and provide suitable habitats for hedgehogs within the site.

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APPENDIX 1 – RELEVANT LEGISLATION

Please note, the below legislation and planning policy is not exhaustive, and this does not constitute legal advice.

Bats

Bats are a European Protected Species. Individual bats and their roosts have strict protection and are listed in Annex IV of the EC Habitats Directive 1992 (transposed into law through the Conservation of Habitats and Species Regulations 2017). Some bats have a higher conservation concern in Europe. The habitats supporting these species can be designated as Special Areas of Conservation and the bat species concerned are then listed under Annex II of the Habitats Directive. Species listed on Annex II include the barbastelle, Bechstein's bat, greater horseshoe and lesser horseshoe.

Substantial penalties, which include fines and custodial sentences, are now in place for offenders under the Conservation of Habitats and Species Regulations 2017. The actions and activities that are prohibited are:

- Deliberate capture, injury or killing of a bat,
- Damage or destruct a breeding site or resting place (even if currently vacant),
- Possess, control, transport, sell or exchange, or offer for sale or exchange, of any bat or any part of a bat or anything derived from one, and
- Deliberate disturbance of a bat, in particular disturbance which is likely to impair their ability to: survive, breed or reproduce; rear or nurture their young; hibernate; migrate; or affect the local distribution or abundance of the species.

The Wildlife and Countryside Act 1981 (as amended), which is the primary legislative Act covering wildlife in the UK, affords protection to all the species of bats in the UK. Various amendments have been made to the Act and recent changes include an offence for the reckless damage of roosts or disturbance of bats. Legal precedence also ensures that roost sites are protected on a regular basis year on year regardless of whether bats are present at the time of inspection.

Many bats are described as being of principal importance for the purpose of conserving biological diversity under Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006. The NERC Act places a biodiversity duty upon local and national government departments to ensure the conservation of biodiversity. The National Planning

Policy Framework (NPPF) also sets out the government's planning policies within England and this aims to promote and ensure sustainable development.

An assessment of any structures and trees within the site was also conducted. The assessment of the structures and trees follows best practice guidelines and techniques and the report has been written in line with recommendations within the new bat survey guidelines (Collins, 2023).

Any structures are initially assessed to have either high, moderate, low, negligible or no suitability to support roosting bats. This is based on the presence of suitable roosting features and also includes an assessment for bat evidence (e.g., feeding remains, staining, bat droppings and individual bats). The categories are allocated irrespective of the presence of a roost. For example, if a bat roost is confirmed to be present then the categorisation still stands but confirmed roost should be added (e.g., high suitability – confirmed roost). Structures assessed to have none or negligible roosting potential do not usually need further surveys. However, those with Low, Moderate or High potential or Confirmed will require additional surveys to confirm if bats are present and to characterise the roost. Buildings are categorised as follows:

- No ('none') suitability – no habitat features on site likely to be used by any roosting bats at any time of the year (i.e. a complete absence of crevices/suitable shelter at all ground/underground levels). No further surveys necessary.
- Negligible suitability – no obvious features on site likely to be used by roosting bats; however, a small element of uncertainty remains as bats can use and apparently unsuitable features on occasion. No further surveys necessary.
- Low suitability - a structure with one or more potential roost sites that could be used by individual bats opportunistically at any time of the year. However, these potential roost sites do not provide appropriate conditions (i.e., space, protection, shelter) and/or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats (i.e., unlikely to be used as a maternity roost and not a classic cool/stable hibernation site but could be used by individual hibernating bats). One presence / absence survey between May and August.
- Moderate suitability - a structure with one or more potential roost sites that could be used by bats due to their appropriate condition (i.e., size, shelter, protection) and surrounding habitat. However, it is unlikely to support a roost of high conservation value (with respect to roost type only such as maternity or hibernation). Two presence / absence surveys, which have to be three weeks apart, between May and September with at least one surveys between May and August.
- High suitability - a structure with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for

longer periods of time due to their conditions (i.e., size, protection, shelter) and surrounding habitat. These structures have the potential to support high conservation roosts e.g., maternity or classic hibernation site. Three presence / absence surveys (including for confirmed roosts), which have to be three weeks apart, between May and September with at least two surveys between May and August.

A Ground Level Tree Assessment (GLTA) for bats was also conducted which searches for potential roosting features within trees from the ground. This is a baseline survey only that determines whether there is an available roosting resource (e.g., woodpecker holes, natural holes, knotholes loose bark, cracks and splits) and the need for further survey and/or mitigation. Any Potential Roosting Features (PRFs) are then categorised as either negligible (no noteworthy potential roosting features) or:

- PRF-I - PRF suitable for individual bats or very small numbers of bats either due to the size or lack of suitable surrounding habitats (not a confirmed bat roost). No further surveys are necessary but precautionary method of works for removal and provision of roosting compensation is necessary.
- PRF-M - PRF suitable for multiple bats and may therefore be used by a maternity colony or known roost i.e., known roost present for example, through local records, evidence and sightings. Three climbing inspection surveys, at minimum three week intervals), are required for PRF-M features which should be undertaken May to September with at least two surveys between May and August. If climbing and inspection if not possible, then three dusk emergence surveys with night-vision aids will be required between May and September, with three-week minimum intervals), with at least two surveys between May and August. If a maternity colony is identified, then less invasive methods, such as dusk emergence surveys with night-vision aids should be employed.

The assessment of the site to support commuting and foraging bats follows best practice guidelines and techniques and the report has been written in line with recommendations within the new bat survey guidelines (Collins, 2023). The site is categorised as follows:

- Negligible suitability – no habitat features on site likely to be used by commuting or foraging bats. No survey effort required to establish the habitat value.
- Low suitability – habitats that could be used by low numbers of commuting bats such as an isolated gappy hedgerow or suitable, yet isolated, habitat that could be used by foraging bats such as individual trees. Survey efforts includes one Night-time Nat Walkover survey per active season (Spring – April/May, Summer – June/July/August and Autumn – September/October) and static automated surveys which include data collected over a five-night period in each aforementioned season.

- Moderate suitability – habitats that are well connected to the wider landscape that could be used by commuting bats such as tree lines and hedgerows or by foraging bats such as open water and scrub. Survey efforts includes one Night-time Nat Walkover survey per active season (Spring – April/May, Summer – June/July/August and Autumn – September/October) and static automated surveys which include data collected over a five-night period in each month from April to October.
- High suitability – habitats that are well connected to the wider landscape that are highly conducive to commuting bats such as river valleys and woodland edge or by foraging bats such as broadleaved woodland and grazed parkland. Survey efforts includes one Night-time Nat Walkover survey per active season (Spring – April/May, Summer – June/July/August and Autumn – September/October) and static automated surveys which include data collected over a five-night period in each month from April to October.

Badgers

Badgers and their setts are afforded strict protection under the Protection of Badgers Act 1992. This Act consolidates past badger legislation and, in addition to protecting the badger itself, makes it an offence to damage, destroy or obstruct badger setts. Badgers are also protected under Schedule 6 of the Wildlife and Countryside Act 1981 (as amended), and listed under Appendix III of the Bern Convention, as a species that is in need of protection but may be hunted in exceptional instances. Only badger setts that are currently in use are covered by wildlife legislation.

Surveys are undertaken in line with guidance in Surveying Badgers by Harris *et al.* (1989). A 30-metre zone of influence is considered appropriate for this species based on their known tolerance for disturbance. Any evidence (e.g., badger setts, latrines and snuffle holes) and suitability is noted by the surveyor as well as any disused holes.

Birds

All wild birds in the UK are protected under Section 1 of the Wildlife and Countryside Act 1981 (as amended) which makes it an offence to intentionally kill, injure or take any wild bird or to take, damage or destroy the nest or its eggs.

Some bird species, such as the barn owl, are listed in Schedule 1 of the 1981 Act and receive further protection, making it an offence to intentionally or recklessly disturb these birds whilst building a nest or in, on or near a nest containing eggs or young; or to disturb dependent young of such a bird.

The NERC Act (2006) inserts a new schedule into the Wildlife and Countryside Act (1981) to protect the nests of some bird species that regularly re-use their nests, even when the nests

are not in use. This protection currently applies to golden eagle, white-tailed eagle and osprey. Bird surveys are carried out in accordance with Bird Monitoring Methods (RSPB) (Gilbert *et al.*, 1998).

Reptiles

All British reptiles are listed under schedule 5 of the Wildlife and Countryside Act 1981 (as amended) and are therefore protected from intentional killing or injury. This is largely as a consequence of a national decline in numbers associated with habitat loss.

Two scarcer native British reptiles (smooth snake and sand lizard), are afforded 'full' protection. This legislation makes it an offence to intentionally or recklessly kill, injure, disturb, take, possess or sell these species (in all life stages). It is also illegal to damage, destroy or obstruct access to places they use for breeding, resting, shelter and protection.

All species of reptile are priority species in the UKBAP and have been adopted as Species of Principal Importance under Section 41 of the NERC Act (2006) in England (Section 42 in Wales).

Assessments consider information and methodology provided within the Reptile Habitat Management Handbook (Edgar *et al.*, 2010) and the Herpetofauna Workers Manual (Gent and Gibson, 2003).

Amphibians

Great crested newts and their habitats are fully protected by the Conservation of Habitats and Species Regulations (2017) and partially protected under the Wildlife and Countryside Act 1981 (as amended). This legislation makes it an offence to kill, injure or capture great crested newts, their young or eggs, or destroy / damage their ponds or places of shelter used for breeding or protection. The great crested newt is also a Priority species in the UK Biodiversity Action Plan (UKBAP) and had been adopted as a Species of Principle Importance in England under Section 41 of the NERC Act 2006.

The natterjack toad is fully protected under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) and Schedule 2 of The Conservation of Habitats and Species Regulations 2017 making it a European Protected Species. The natterjack toad is also a priority species under the UK Biodiversity Action Plan.

The pool frog is protected under the Conservation (Natural Habitats &C.) Regulations 1994 (as amended). As a European protected species, the deliberate capturing, disturbing, injuring or killing of this species is prohibited, as is damage or destruction of its breeding sites or resting places. The pool frog is also a priority species under the UK Biodiversity Action Plan due to a 100% decline over 25 years (1980-2005).

Common toads are also designated UKBAP species due to a serious decline of populations across large areas of southern, eastern and central England, thought to be mainly due to changes in habitat management, mortalities on the roads, and climate change.

Great crested newt site assessments are undertaken in accordance with English Nature (2001) and Langton *et al.* (2001). Any aquatic and terrestrial habitats on the site and in the immediate vicinity were assessed for their suitability for use by great crested newts. Great crested newts have been known to travel up to 500m between breeding ponds and suitable habitats. However, they are more likely to remain between the breeding pond and up to 250m away if there are suitable terrestrial habitats. Therefore, a desk-based search was undertaken prior to the ecological survey for ponds up to 250m from the site using aerial imagery and OS mapping. The terrestrial habitat between the site and these ponds, and therefore connectivity to the site, was also considered (if applicable). Major barriers such as major roads or fast-flowing watercourses are likely to prevent dispersal of great crested newts to the wider environment.

Habitat Suitability Index (HSI) assessments provide a mechanism by which the suitability of a pond to support great crested newts can be objectively assessed in order to assist the identification of ponds potentially supporting this species (Oldham *et al.*, 2000). For the HSI assessment, the locations of waterbodies within a 250m radius of the site were identified from online aerial photographs and a 1:10,000 scale OS map. A HSI assessment was undertaken on each waterbody with ecological connectivity. To make the HSI assessment, the standing waterbody is scored in relation to 10 suitability indices: location, waterbody area, pond drying, water quality, shade, waterfowl presence, fish presence, number of standing waterbodies in the local area, terrestrial habitat, and macrophyte cover. Each of these features is awarded a score between 0 and 1, and a final score is calculated, also between 0 and 1. This final score enables the standing waterbody to be ranked in terms of its suitability (poor <0.5, below average 0.5 - 0.59, average 0.6 - 0.69, good 0.7 - 0.79 or excellent > 0.8) and an estimate made of the predicted presence of great crested newts within the standing waterbody. The presence of any great crested newt eggs or individual great crested newts were also recorded if applicable as well as the descriptions of the aquatic and surrounding terrestrial habitats. Further surveys, in the form of eDNA surveys or traditional methods (e.g., bottle trapping) may be required, if presence / absence and a population assessment is required. A general assessment for other amphibians was also undertaken.

Dormice

Common dormice and their habitats are fully protected by both the Wildlife and Countryside Act 1981 (as amended) and the Conservation of Habitats and Species Regulations (2017). This legislation makes it an offence to kill, injure, disturb or capture dormice, or destroy or obstruct their resting or breeding places.

The dormouse is also a priority species under the UK Biodiversity Action Plan and has been adopted as a species of Principal Importance in England under Section 41 of the NERC Act 2006 (section 42 in Wales) and so is protected from any adverse effects as a result of development.

Hedgehogs

Hedgehogs are UK Biodiversity Action Plan (BAP) species, and therefore must be taken into consideration as part of development planning.

All Mammals

The Wild Mammals (Protection) Act 1996 offers protection to all wild species of mammal, irrespective of other legislation, and focuses on animal welfare, rather than conservation. Unless covered by one of the exceptions, one is guilty of an offence if they mutilate, kick, beat, nail or otherwise impale, stabs, burns, stones, crushes, drowns, drags or asphyxiates any wild mammal with intent to inflict unnecessary suffering. Its application is typically restricted to preventing deliberate harm to wildlife in general during construction works and similar.

The Wildlife and Countryside Act 1981 (as amended)

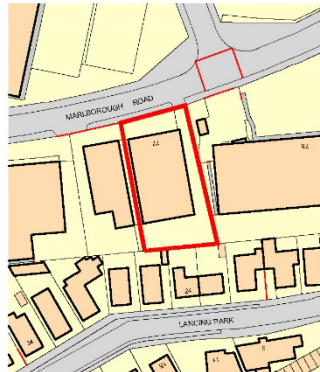
The Act and its various amendments have been created from pre-existing legislation and support the Conservation of Habitat and Species Regulations (2017, as amended) in implementing the Berne Convention (1979) and Directive 2009/147/EC on the conservation of wild birds. The schedules within this Act provide a list of protected species and habitats as well as prohibited actions. The Act also contains measures for controlling invasive non-native species under Schedule 9 and amendments to a number of laws including public rights of way. Further details have been provided above for specific species.

The Conservation of Habitats and Species Regulations 2017 (as amended)

These Regulations are the primary method by which the Council Directive 92/43/EEC under Conservation of Natural Habitats and of Wild Fauna and Flora (the 'Habitats Directive') is transposed for England and Wales and their territorial seas. These Regulations form the basis for implementation of Europe's nature conservation policy through habitat and species level protection. It also requires the designation of European sites known as Special Areas of Conservation (SAC). Taken collectively with the Special Protection Areas (SPAs), which are underpinned by the Birds Directive, these form the Natura 2000 Network of protected sites. Public bodies must exercise their nature conservation responsibilities in order to ensure compliance with these Regulations. These Regulations also require conservation of natural habitats and habitats of species through selection process which are afforded protection under the Habitats Directive. The Regulations contain provision for the appropriate management of sites such as the control of damaging operations special nature conservation

orders and restoration orders. The Regulations offer strict protection to European Protected Species under Schedule 2 and plants under Schedule 5. Such offences may include the deliberate capture, killing, disturbance or trade of these animals. Similarly, plants listed under schedule five are typically protected from picking, collection, cutting destruction or trade.

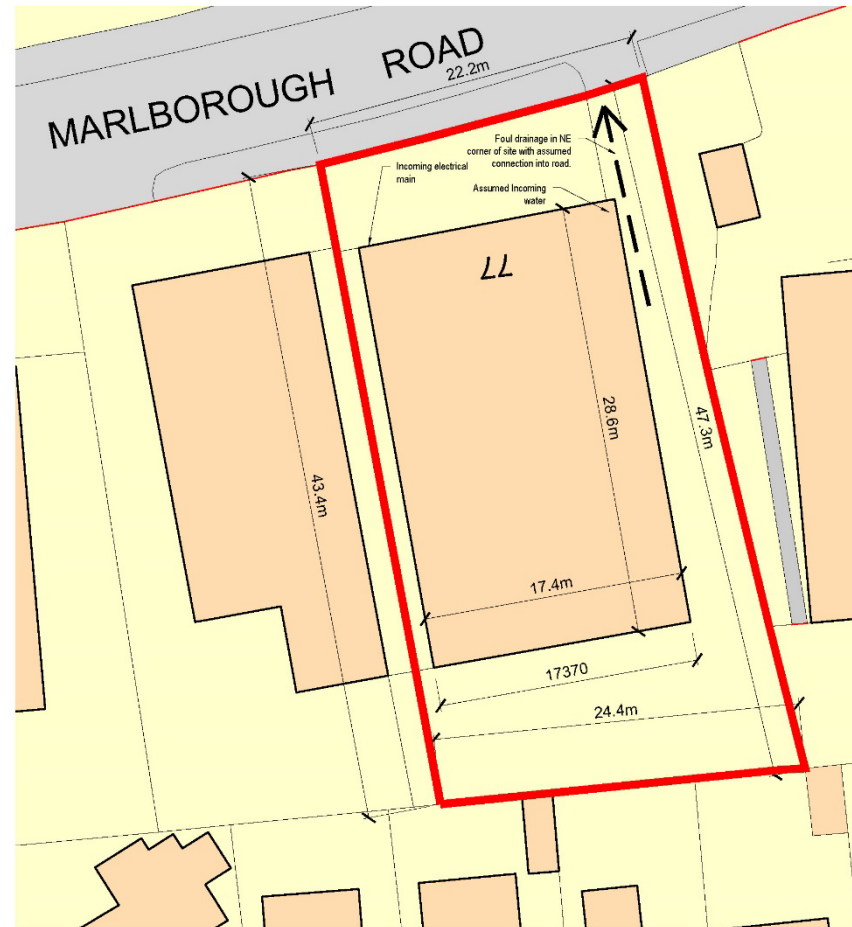
APPENDIX 2 – EXISTING SITE LAYOUT & LOCATION PLAN



SITE LOCATION PLAN 1:1250



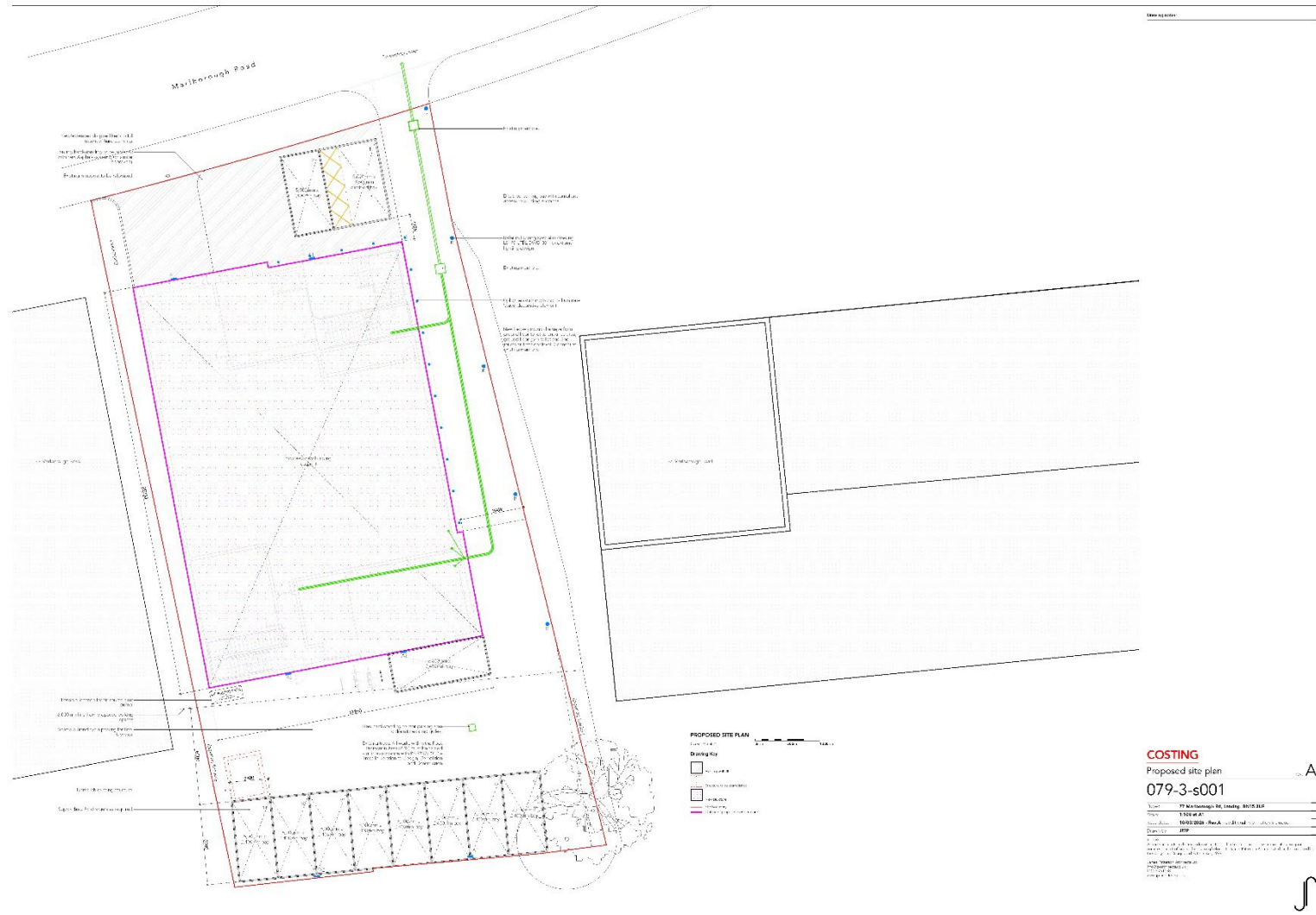
Site Area Approx 1053m²
Building Footprint Approx 495m²



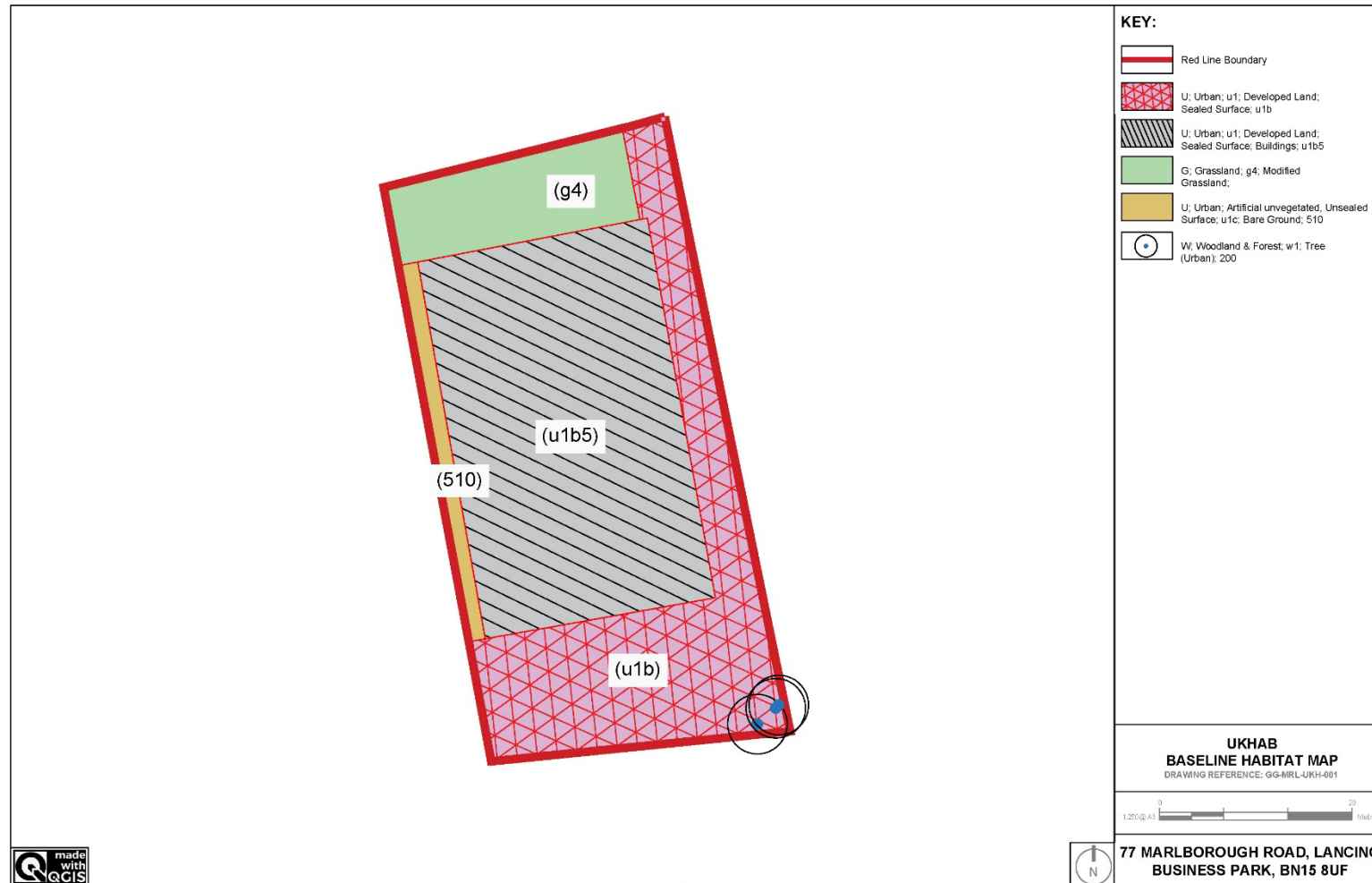
SITE BLOCK PLAN 1:250

[illegible]

APPENDIX 3 – PROPOSED SITE



APPENDIX 4 – UKHAB SURVEY



APPENDIX 5 – SITE PHOTOS



View facing the front of B1



View facing the front of B1



View facing the south-east corner



View facing the rear of B1



View facing the south-east corner



View facing the western side of B1

APPENDIX 6 – ENHANCEMENT RECOMMENDATIONS



WoodStone Build-In Open Nest Box



Schwegler 1SP Sparrow Terrace



Ibstock Eco-Habitat for Swifts



Integrated Eco Bat Box, Crevice



Schwegler 1FR Bat Tube



Invertebrate Tower / Log Pile

END OF REPORT

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