



Biodiversity Enhancement and Mitigation Plan

115 Chatham Street, Reading

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1.0 INTRODUCTION

1.1 Brief

Full planning permission has been granted by Reading Borough Council for the demolition of the existing buildings and re-development of the site for fifty residential units (flats) with associated landscaping, amenity areas, car parking and refuse and cycle storage (under planning application reference 210349). This report is to address condition 8 included within the planning approval, which states:

‘No development shall commence on site (including demolition or preparatory works) until details of a habitat enhancement scheme are submitted to and approved in writing by the Local Planning Authority. The scheme is to include a programme for implementation and ongoing maintenance. The habitat enhancement scheme shall thereafter be implemented and adhered to in accordance with agreed programme.

REASON: Details are required prior to commencement as insufficient information was submitted with the application and in order to avoid harm to habitats and species whilst securing biodiversity enhancement in the long term. This accords with Paragraph 175 of the NPPF (2019), Policy EN12 of the Reading Borough Local Plan 2019, the Wildlife and Countryside Act 1981 (as amended) and The Conservation of Habitats and Species Regulations 2017’

The aim of this Biodiversity Enhancement and Mitigation Plan (BEMP) is to detail measures to ensure the delivery and long-term management of recommended mitigation and enhancements measures that will be implemented. The BEMP will be adhered to unless otherwise agreed in writing by the local planning authority.

1.2 Site Description & Location

The approximately 0.18 ha site comprises the vacant former Chatham Street Surgery and associated carpark, Chatham Street, Reading RG1 7JX (OS grid reference SU70867348) within central Reading (**Fig 1**). The site solely supports urban built habitat and sealed surfaces. The surrounding environ is urban, with Chatham Street to the north, and buildings/carparks to the east, west and south.

1.3 Proposed Development

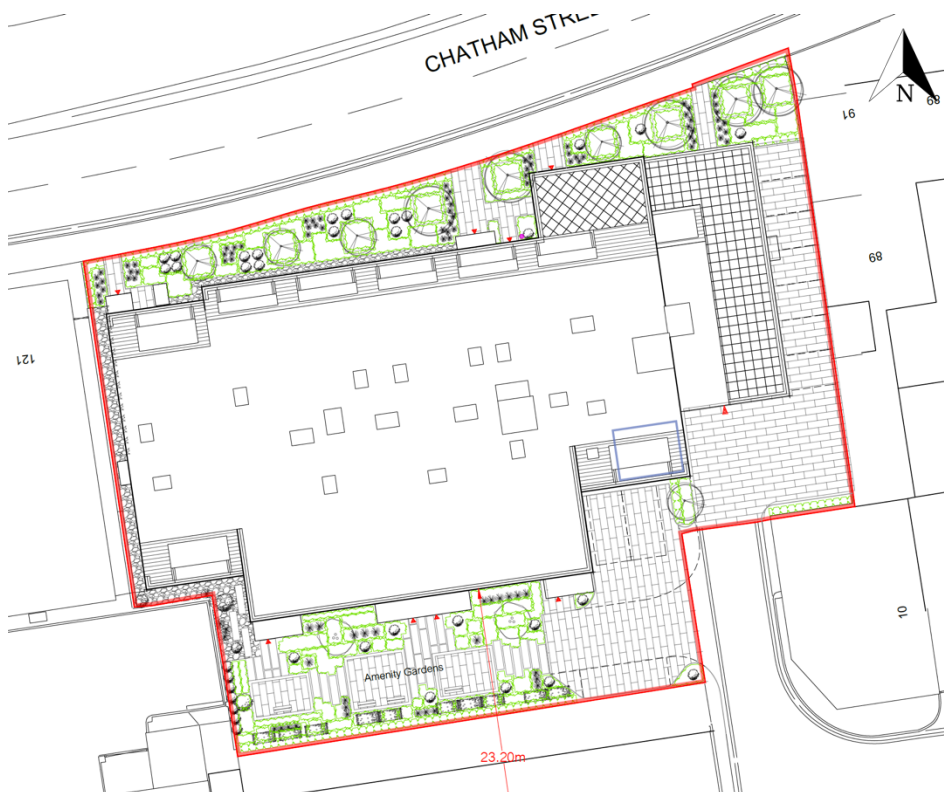
Planning permission ref 210349 covers the following works:

Demolition of the existing buildings on site and erection of a 3 - 5 storey building to provide 54 residential units (Class C3). Provision of private and communal external amenity areas, car and cycle parking and refuse storage.’

Figure 1. Aerial image of the site (Google Maps, 2022) with approximate redline boundary.



Figure 2. Proposed development of The Royal (courtesy of dha architecture Ltd, 2021).



2.0 RELEVANT LEGISLATION & POLICY

2.1 Legislation

2.1.1 Nesting Birds

All wild birds (resident, visiting and introduced species) in England and Wales and protected under the Wildlife and Countryside Act 1981. Under this piece of legislation, it is an offence to:

- Intentionally kill, injure or take any wild birds
- Intentionally take, damage or destroy the nest of any wild bird while it is being built or in use
- Intentionally take or destroy the eggs of any wild birds
- Have in one's possession or control any wild bird (dead or alive), part of a wild bird or egg unless obtained legally.

It must be demonstrated that developments have made all the reasonable effort to avoid breaking the law through appropriate surveys and the implementation of mitigation measures before undertaking any works that will affect nesting birds.

2.1.3 The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations (2019)

This instrument makes changes to the three existing instruments which transpose the Habitats and Wild Birds Directives so that they continue to work (are operable) upon the UK's exit from the European Union (EU). These include The Conservation of Habitats and Species Regulations 2017 and The Conservation of Offshore Marine Habitats and Species Regulations 2017. This instrument also amends section 27 of the Wildlife and Countryside Act 1981 to ensure existing protections continue. The intention is to ensure habitat and species protection and standards as set out under the Nature Directives are implemented in the same way or an equivalent way when the UK exits the EU.

This transposes the EU Habitats Directive (Council Directive 92/43/EEC) into UK domestic law. It provides protection for sites and species deemed to be of conservation importance across Europe. It is an offence to deliberately capture, kill or injure species listed in Schedule 2 or to damage or destroy their breeding sites or shelter. It is also illegal to deliberately disturb these species in such a way that is likely to significantly impact on the local distribution or abundance or affect their ability to survive, breed and rear or nurture their young.

In order for activities that would be likely to result in a breach of species protection under the regulations to legally take place, a European Protected Species (EPS) licence must first be obtained from Natural England.

2.1.4 The Wildlife and Countryside Act (1981) (as amended)

This is the primary piece of legislation by which biodiversity is protected within the UK. Protected fauna and flora are listed under Schedules 1, 5 and 8 of the Act. They include all species of bats, making it an offence to intentionally or recklessly disturb any bat whilst it is occupying a roost or to intentionally or recklessly obstruct access to a bat roost. Similarly, this Act makes it an offence to kill or injure any species of British reptiles and also makes it an

offence to intentionally kill, injure or take any wild bird or to take, damage or destroy their eggs and nests (whilst in use or being built).

2.1.5 The Countryside and Rights of Way Act (2000)

This Act places a duty on Government Ministers and Departments to conserve biological diversity and provides police with stronger powers relating to wildlife crimes.

2.1.6 NERC Act

The Natural Environment and Rural Communities (NERC) Act 2006 requires that public bodies have due regard to the conservation of biodiversity. This means that Planning authorities must consider biodiversity when planning or undertaking activities. Section 41 of the Act lists species found in England which were identified as requiring action under the UK Biodiversity Action Plan and which continue to be regarded as conservation priorities under the UK Post – 2010 Biodiversity Framework.

2.2 Policy

2.2.1 National Planning Policy Framework (NPPF)

Section 15 of the National Planning Policy Framework (NPPF) (2021) 'Conserving and enhancing the natural environment' states that planning policies and decisions should contribute to and enhance the natural environment. They should do this by protecting and enhancing sites of biodiversity and minimising impacts on and providing net gains for biodiversity, including establishing coherent ecological networks.

The plan states to protect and enhance biodiversity plans should identify, map and safeguard components of local wildlife-rich habitats and wider ecological networks. This includes the hierarchy of international, national and locally designated sites of importance for biodiversity, wildlife corridors and stepping stones that connect them. Plans should identify the protection and recovery of priority species and opportunities for securing measurable net gains for biodiversity.

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

- If significant harm to biodiversity resulting from a development cannot be avoided, adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;
- Development on land within or outside a Site of Special Scientific Interest, and which is likely to have an adverse effect on it (either individually or in combination with other developments), should not normally be permitted. The only exception is where the benefits of the development in the location proposed clearly outweigh both its likely impact;
- Development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists; and
- Development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to improve biodiversity in and around

developments should be integrated as part of their design, especially where this can secure measurable net gains for biodiversity or enhance public access to nature where this is appropriate.

2.3 Local – Reading Borough Council Local Plan

The Reading Borough Council Local Plan (Adopted November 2019) outlines a number of policies that seek to preserve and enhance the districts biodiversity. These include:

‘EN12: BIODIVERSITY AND THE GREEN NETWORK

a) *The identified Green Network, the key elements of which are shown on the Proposals Map, shall be maintained, protected, consolidated, extended and enhanced. Permission will not be granted for development that negatively affects the sites with identified interest or fragments the overall network. The Green Network comprises:*

- *Sites with identified biodiversity interest - Local Wildlife Sites, Local Nature Reserves, Biodiversity Opportunity Areas, protected and priority species and their habitats, Priority and Biodiversity Action Plan habitats, and the River Thames and all its tributaries (including the River Kennet and the Kennet & Avon Canal); and*

- *Areas with potential for biodiversity value and which stitch the Green Network together – designated Local Green Space and open green spaces, and existing and potential Green Links. New development shall demonstrate how the location and type of green space, landscaping and water features provided within a scheme have been arranged such that they maintain or link into the existing Green Network and contribute to its consolidation. Such features should be designed to maximise the opportunities for enhancing this network. All new development should maximise opportunities to create new assets and links into areas where opportunities are as yet unidentified on the Proposals Map.*

b) *On all sites, development should not result in a net loss of biodiversity and geodiversity, and should provide a net gain for biodiversity wherever possible. Development should:*

- *Protect and wherever possible enhance features of biodiversity interest on and adjacent to the application site, incorporating and integrating them into development proposals wherever practicable; and*

- *Provide new tree planting, wildlife friendly landscaping and ecological enhancements (such as wildlife ponds, bird and bat boxes) wherever practicable.*

In exceptional circumstances where the need for development clearly outweighs the need to protect the value of the site, and it is demonstrated that the impacts cannot be: 1) avoided; 2) mitigated or; 3) compensated for on-site; then new development will provide off-site compensation to ensure that there is “no net loss” of biodiversity. Provision of off-site compensation shall be calculated in accordance with nationally or locally recognised guidance and metrics. It should not replace existing alternative habitats, and should be provided prior to development.’

2.4 Biodiversity Action Plans & UK Post-2010 Biodiversity Framework

The UK Post-2010 Biodiversity Framework (JNCC & DEFRA, 2010) supersedes the UK Biodiversity Action Plan 1992-2012 (UKBAP), setting out goals relating to nature conservation at a UK scale, for example the reduction and reversal in the decline of threatened species and improving the status of biodiversity. The specific habitats and species contained within the UKBAP continue to be regarded as conservation priorities under the UK Post-2010 Biodiversity Framework, and are required to be a material consideration in the planning process under the 2021 NPPF.

3.0 ECOLOGICAL BASELINE

The following details the results from the ecology surveys completed by Aspect Ecology in 2021.

3.1 Habitats

In general, the parcel was considered to support habitats of negligible-site ecological value. The following habitats were applicable to this parcel of land during the most recent survey in January 2021.

3.1.1 Hardstanding

An area of hardstanding is present at the frontage of the building, comprising a tarmacked car park and small areas of gravel. The hardstanding is in reasonable condition, albeit some cracks and gaps are present. Vegetation is colonising the hardstanding in places, particularly the areas of gravel. The vegetation is restricted to common and widespread species including Buddleia *Buddleja*, Sow Thistle *Sonchus* sp., Spurge *Euphorbia* sp., Red Deadnettle *Lamium purpureum*, Willowherb *Epilobium* sp., Barren Brome *Bromus sterilis*, Cock's-foot *Dactylis glomerata*, Wall Barley *Hordeum murinum*, Canadian Fleabane *Erigeron canadensis*, Yellow Corydalis *Corydalis lutea* and Thyme-leaved Speedwell *Veronica serpyllifolia*.

3.1.2 Buildings

Two buildings that formed the previous GP Practice were noted on-site and are described in greater detail in respect of their bat potential in **section 3.2** below.

3.2 Bats

A preliminary roost assessment (PRA) was completed of all buildings in February 2021. Due to the presence of low numbers of potential roosting features (PRFs) noted around both buildings, they were assessed as supporting **low potential** for roosting bats. Internally, no evidence of bats was identified within any of the buildings.

During Phase II surveys no bats were recorded emerging from either building.

3.3 Nesting Birds

One bird's nest was identified within building b1a the during the PEA. In addition, bird activity was noted throughout the site during the PEA including Woodpigeons (*Columba palumbus*) and Blackbird (*Turdus pilaris*). Therefore, the site was considered **site** importance for nesting and breeding birds.

3.4 Desk Based Search

A desk study was originally completed in January 2021 including a 3km radius data request of protected and notable species, and information regarding statutory and non-statutory designated sites, to Thames Valley Environmental Records Centre (TVERC).

The site itself is not subject to any non-statutory or statutory designated sites. All designations in the surrounding area are well separated from the site by existing development and given the nature and scale of the proposals, these designations are unlikely to be affected.

4.0 MITIGATION, COMPENSATION AND RECOMMENDATIONS

This chapter addresses the relevant mitigation, compensation and enhancements required to provide appropriate protection to species found within the site. Mitigation refers to measures that can be undertaken to avoid or reduce ecological impacts. Compensation refers to measures taken in order to offset potential significant impacts and finally enhancements contribute towards a net gain for ecology.

Any updates to / deviations from this strategy must be undertaken by a suitably experienced Ecologist and agreed in writing with Reading Borough Council prior to implementation.

4.1 Construction Phase

4.1.1 Nesting Birds

To avoid disturbance of nesting birds or damage to their nests, any clearance of the boundary hedgerows/trees and demolition of the cottage, care facility and garage should be undertaken outside of the bird nesting season (typically March- August, dependent on weather). If this is not possible, the area to be cleared should be thoroughly checked by an ecologist immediately prior to clearance. If any active nests are found they should be left undisturbed with a suitable buffer of undisturbed vegetation (ca. 5m) until nestlings have fledged.

4.1.2 Bats

Should any considerable time (e.g. >12 months) elapse between the survey work detailed above and any development works, an updated survey should be completed.

Should any bats be encountered, works would need to stop and a suitably qualified ecologist contacted so that suitable mitigation can be agreed prior to works recommencing. This may potentially involve discussion with Natural England and acquisition of a development licence for works to resume.

4.2 Design Consideration & Ecological Enhancements

4.2.1 Planting

4.2.1.1 Preparation

On completion of construction works, all landscaped areas will be rotavated in preparation for future planting. This will not only prepare the ground to provide a good seed bed but will also remove any emerging undesirable ruderal vegetation (including Nettle and Bramble) to prevent competition with the new planting. Once the soil has been rotavated to a sufficient depth, the surface should be raked to produce a fine, firm surface free of obstructions.

4.2.1.2 Shrub Planting

Ornamental planting on the site will follow the recommendations outlined by the landscape architect. Where possible, species will comprise those that produce berries, fruit and nectar to provide feeding opportunities for a range of wildlife. Evening-scented species will enhance the site's potential to support foraging bats. It is beneficial that the flowers vary in colour (although pale flowers are more easily seen in poor light and to attract insects at dusk). Flowers with 'landing platforms' for insects (i.e. flowers from the Daisy and Carrot families) increase opportunities for insects and, in turn, foraging Badgers and bats.

4.2.1.3 Native Species Hedgerows

A native hedgerow will be planted up along the southern boundary of the site (**Plan 1**). The hedgerow will be planted using an equal mix of Oak (*Quercus robur*), Holly (*Ilex aquifolium*), Silver Birch (*Betulus pendula*) and Field Maple (*Acer campestre*) 90/120 bare root whips. All whips will be planted during the optimum season (October-April) and at a density of 4-6 per meter in two staggered rows approximately 30cm apart. Sixteen standard Oak and Field Maple trees (2m in height) will be planted at intervals throughout the hedgerow to provide a varied structure and to act as functional habitat whilst the whips grow. The trees will be planted to the same level as they were in their pots or the mark left from the soil at the nursey. They will be planted alongside stakes (inserted into the soil at a minimum depth of 60cm) to prevent uprooting by strong winds. These should remain in place for at least 2 years.

4.2.1.4 Scattered Trees

Considering the soil type and aesthetic priority of the landscaped area, 1.25-6m standard trees including Rowan (*Sorbus aucuparia*), Silver Birch (*Betula pendula*), Whitebeam (*Sorbus aria*), Hawthorn (*Crataegus monogyna*), Field Maple (*Acer campestre*), Crab Apple (*Malus sylvestris*), Callery Pear (*Pyrus calleryana*), Wild Service Tree (*Sorbus torminalis*), Bird Cherry (*Prunus avium*), Hornbeam and Black Alder (*Alnus glutinosa*) will be planted. Any non-native ornamental trees should prioritise flowering and fruiting trees to encourage a diversity of insects. It is beneficial that the flowers vary in colour (although pale flowers are more easily seen in poor light and to attract insects at dusk). Flowers with 'landing platforms' for insects (i.e. flowers from the Daisy and Carrot families) increase opportunities for insects and, in turn, foraging bats.

4.2.1.5 Honeysuckle

Trellises will be erected onto the southern elevation of the building and planted with native Honeysuckle (*Lonicera periclymenum*). Honeysuckle flowers are an important source of nectar for pollinating moths, butterflies and bees and the berries provide a source of food for birds during the late summer and autumn. This will be of local provenance (provenance certificates can be provided) and only the native species *Lonicera periclymenum* will be planted. The Honeysuckle will be planted during the optimum planting season (October-April) and guided onto the pergola.

4.2.2 Swift Bricks

To act as biodiversity enhancement, the new building will incorporate twelve Swift bricks.

The 'CJ Wildlife swift maxi nesting box' with entrance via a CJ Wildlife 'Cambridge swift fullface brick' will be used as it provides ideal nesting opportunities for Swifts and the fullface brick is available in different colours and can also be painted if necessary, to blend in with the surrounding brickwork. If this model is not available, an alternative swift box with internal floor space exceeding 400cm squared must be used. This feature will be installed at 6-7m above the ground, ensuring that there is unobstructed access for birds entering and leaving. The box will be installed under the eaves in shaded areas out of direct sunlight.

4.2.3 Bee Bricks

Six bee bricks will be installed on the southern elevation of the new building (**Fig 3**). These will form ideal places of shelter for solitary bees to deposit eggs safely. The bricks will be placed on the southern elevation, close to the landscaped area to the rear, and will have a clear flight path unblocked by vegetation. These bricks are designed to attract species such as Red Mason bees (*Osmia bicornis*) and Leafcutter bees (*Megachillidae* spp), both non-aggressive bees, and have the option of different brick colours. In combination with nearby ornamental plants, and new planting on-site, these bricks will improve opportunities for local bees.

Figure 3. Bee bricks to be incorporated within the newly converted building (NHBS).



4.2.4 Insect Hotels

Two wooden insect hotels will also be included within the amenity area to the south of the site (**Fig 4**). This will be a vertical structure made up of a variety of habitat types (including wood, brick, soil, hay) providing sheltering and egg-laying opportunities for a variety of invertebrates. This will provide an additional enhancement feature to the ecological buffer.

Figure 4. Insect hotel.



4.2.5 Integrated Bat Bricks

To act as biodiversity enhancement, the new block will incorporate six bat bricks. The bat bricks used will be the Ibstock Bat Brick B as they are available in a variety of different brick

colours and requires no maintenance (**Fig 5**). These boxes will be positioned as close to the eaves as possible and away from windows and sources of artificial light.

Figure 5. The Ibstock bat brick 'B' that will be incorporated into the new dwellings.



4.2.6 Hedgehog Homes

A Hedgehog home will also be incorporated into the wider landscaping of the development to enhance sheltering opportunities for local Hedgehogs (such as Igloo Hedgehog home or Hogitat Hedgehog house) (**Fig 7**). This will provide a rapidly declining species with a place to shelter/hibernate.

Figure 6. Igloo Hedgehog House (Amazon, 2020).



4.3 Safeguarding

The project manager will be responsible for appointing an ECoW to complete nesting bird checks and advising on the requirements for an updated bat survey. The ECoW will deliver a toolbox talk to site personnel on the content of the BEMP and the ecological constraints/sensitivities within the site. Following this initial briefing, it will be the responsibility of the site manager to provide the ECoW with a plan of works and the responsibility of the ECoW to illustrate any relevant mitigation measures required for each stage of works as per this report.

The safeguarding of the Swift, bat and bee bricks, and the insect hotels and Hedgehog Homes will be included within the deeds of the new block of flats to inform any new owners of their ecological sensitivity and protect them in perpetuity.

Please note once occupied, bat boxes are legally protected and can only be disturbed by a licensed Ecologist. New residents will be made aware of the legal protection status of bat roosts upon purchase of the properties containing these features.

All ecological planting and features recommended within section 4.0 will be maintained and monitored by the management company for a minimum period of 5 years following completion of the development. Any plants that have failed must be replaced like-for-like and any ecological features that become damaged will be replaced (i.e. the insect hotels and/or Hedgehog homes). A check on all planting and ecological features will also be completed by an ecologist within 3 months of construction finishing to check all features have been installed properly and to the feature's specifications. A report of the visit (including photos of the features) will then be submitted to the LPA.

5.0 CONCLUSION

This document has been prepared to bring together all the existing ecological information for the site otherwise known as '115 Chatham Street' with the aim of addressing all the ecological constraints identified and to provide opportunities for enhancement that are consistent with the aims of national and local planning policy. It is considered that should all aspects of this document be implemented, adequate mitigation can be achieved to minimise impacts to the favourable conservation status of protected and notable species, and a net gain in the site's biodiversity value will be achieved.

6.0 REFERENCES

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Front Elevation



Rear Elevation

Plan 1: Ecological Enhancements Plan (building features).

6 x Swift boxes

Integrated bat brick

Integrated bee brick

Trellis with honeysuckle



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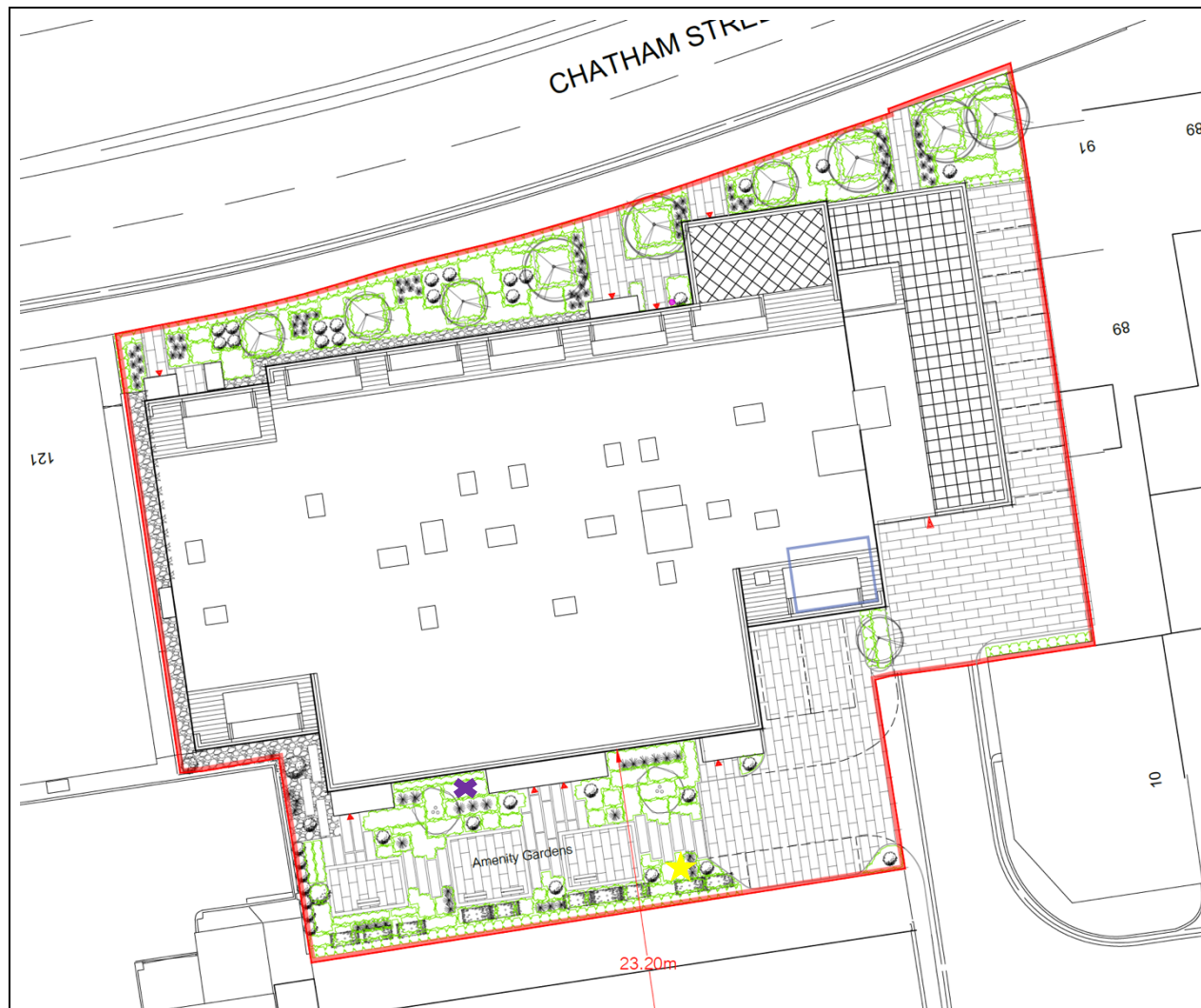
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Plan: Ecological Enhancements Plan (building features).

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Plan 2: Ecological Enhancements Plan
(landscape features).

★ Hedgehog home

✕ 2 x Insect hotels



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Job: 115 Chatham Street, Reading

Plan: Ecological Enhancements Plan (landscape features).

Date: 30/08/22

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