



Ecological Appraisal

Land at Atterbury Gardens and Rear of
23-25 Richmond Road, Reading

May 2019

Report conditions

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Summary

An Ecological Appraisal was carried out in April 2019 at Land at Atterbury Gardens and Rear of 23-25 Richmond Road, Reading, to support a planning application for the construction of three new semi-detached dwellings.

The aim of the survey work was to assess the potential for the site to support a range of legally protected and notable habitats or species, for the proposal to affect any statutory or non-statutory designated sites, and to assess the proposed development in the context of relevant local planning policies.

The site comprises a large mature garden laid mainly to lawn, with a range of trees, mature garden shrubs, and herbaceous areas as well as several outbuildings and small areas of hardstanding. The existing main house and part of the garden at 23 Richmond Road is outside the application boundary.

The survey work identifies that the site supports habitats of generally low ecological value.

The survey finds no evidence that the site supports badgers, dormice, water vole, otter, or great crested newts. It is concluded that the development is unlikely to adversely affect bats or bat roosts.

Localised clearance of small areas of garden shrub vegetation may adversely affect nesting birds, while site clearance along the western boundary features has some low potential to harm individual reptiles. A range of measures are presented to avoid direct impacts to these species through sensitive site clearance methods.

In the absence of mitigation, the development has the potential to reduce the ecological functionality of the Green Link that runs through the site. An Ecological Constraints and Opportunities Plan is presented; If implemented, this would serve to maintain and reinforce the ecological functionality of the Green Link through the site and would serve to enhance the biodiversity value of the site overall.

1. Introduction

Objectives

- 1.1. The purpose of this study was to gather ecological information about the site Atterbury Gardens and Richmond Road, and assess the impacts of the development proposals for the site on any identified ecological receptors to support a planning application with Reading Borough Council.
- 1.2. This took the form of a Preliminary Ecological Appraisal. This work comprised an Extended Phase 1 survey of the garden, supported by desk-based assessment work to understand the wider ecological context and to identify and understand any relevant local policies.
- 1.3. Initial survey work may need to be followed up where necessary by species-specific survey work. If necessary, this report recommends further species-specific survey work.
- 1.4. If the survey work and any subsequent analysis identifies likely impacts to biodiversity, the information gathered would be used to develop an appropriate and proportionate strategy to avoid, mitigate and where necessary, compensate for any such impacts.

Site Description

- 1.5. The application site comprises a two garden plots, now a single large garden area, between Richmond Road and Atterbury Gardens. The site is approximately 0.15ha. The garden is mainly laid to well-maintained lawn with a range of mature and younger trees, hedges, herbaceous borders, and shrub beds. There are several small garden outbuildings and small areas of hardstanding. The main existing site access is from Atterbury Gardens to the northern boundary of the site.
- 1.6. The site location is shown in Appendix 1.

Proposed works

- 1.7. The proposed development is for the construction of three new detached houses with associated garages, access, parking, gardens, open space, and landscaping at the site, as shown in the proposed site plan at Appendix 1.

Limitations

- 1.8. All areas of the site were fully accessible and visible during the survey work. The weather was dry, overcast, with negligible wind and a temperature of 15°C.
- 1.9. There are no significant limitations to the survey work.

2. Methods

Desk Study

- 2.1. A desk-based assessment was carried out on 17th April 2019. This used a variety of information. Online ecological data (MAGIC¹) was used to gain information on designated sites and priority habitats within 1km of the Site. Aerial photos and Ordnance Survey mapping (again via MAGIC and Google.co.uk) were used to gain an understanding of the landscape context of the site.
- 2.2. A formal data request for data from the Thames Valley Environmental Records Centre (TVERC) was not undertaken at this time. It was considered that the scale of the site and nature of the development was such that there was limited value in obtaining further data. This decision may be re-visited if the design alters or if further survey work were to identify that further data would be necessary.
- 2.3. A review of previous planning history at the site was carried out as well as a review of relevant local plan policies.

Field Survey

- 2.4. A visual survey was carried out on 25th April 2019 by Adam Egglesfield of AE Ecology, an experienced ecological surveyor with over ten years' experience of a range of ecological survey work and who holds a current licence to survey bat roosts. The surveyor carried out a methodical investigation of all accessible areas of the site, examining adjacent contextual areas to identify the presence of, or habitat considered suitable for supporting, legally protected or notable species or habitats. Key and representative areas of habitats within the site were identified and assessed.
- 2.5. An assessment was made of the presence of and potential impacts to adjacent notable habitats and designated sites.

¹ Multi-Agency Geographic Information for the Countryside - <http://magic.defra.gov.uk/>

- 2.6. The site was inspected for field signs of badger *Meles meles* such as badger setts, latrine sites, dung piles, well-used trails, prints, foraging activity, and hairs.
- 2.7. An assessment was made of the suitability of habitat on site to support hazel dormice *Muscardinus avellanarius*. Key habitats for this species are woodland, scrub and hedgerows, particularly where these offer dense vegetation to nest or hibernate in along with food resources such as hazelnuts, fruiting and nectar-rich plants (e.g. hawthorn, bramble) and honeysuckle (for nesting material). The presence of important landscape-scale habitat linkages between suitable habitats was considered.
- 2.8. The survey also included a consideration of the site's suitability to support breeding bird species. These will utilise a broad range of habitats, including structures such as houses and outbuildings, trees, scrub, isolated shrubs, dense herbaceous vegetation (terrestrial and aquatic) and open grassland.
- 2.9. The site's suitability to support reptiles was also considered. Key habitat features for reptiles include tussocky or patchy grassland, scrub edge, linear watercourses, ponds, compost heaps, brash piles and rubble/soil heaps. Linkage to suitable habitat within the surrounding landscape will increase the potential for reptiles to occur, although populations can occur within isolated or fragmented habitats even within urban areas.
- 2.10. An assessment was made of all water bodies and terrestrial habitat within the site and within the surrounding landscape for their suitability to support populations of amphibians, particularly great crested newt *Triturus cristatus* (GCN).
- 2.11. Trees were assessed for their potential to support bats, using methods guided by and consistent with that set out in Collins (ed) (2016). Relevant trees were inspected from ground level to identify evidence of bat activity and/or identify the presence of any features that could potentially support roosting bats such as rot holes, flaking bark, cracks or splits and areas of extensive deadwood.
- 2.12. Trees were inspected using Opticron Discovery 10x42 close-focussing binoculars and where necessary and safely possible, a ladder. High-powered torches (Clulite Clubman CB2 and Lenser P7.2) were used to illuminate

potential roost and roost access features. A Ridgid Seesnake CA-300 endoscope was used to investigate any internal cavities where necessary.

- 2.13. An assessment was made of the suitability of the site and the surrounding landscape to support foraging and/or commuting bats. The assessment was based on the presence of key habitat features such as woodland, scrub, hedgerows, grassland, and open water and watercourses, which are highly attractive to bats as both a foraging resource and as commuting routes. The presence of such habitats, particularly in a mosaic with other suitable habitats, typically increases the potential for structures to be exploited by bats where suitable roost and access opportunities are present. The presence of unlit semi-natural vegetation and habitat linkages between the site and the surrounding landscape were also considered.

3. Results

Desk study

- 3.1. Appendix 2 shows the location of the site and its surrounding relevant ecological interest features produced from MAGIC:

Designated sites and notable habitats

- 3.2. There are no statutory designated sites such as Sites of Special Scientific Interest (SSSI) or Local Nature Reserves (LNR) within the search area.
- 3.3. The area around the site is largely mature residential and suburban in character. There are some small patches of urban woodland within the residential setting, although the nearest is approximately 500m to the south west.
- 3.4. The River Thames lies just outside the search area to the south west.

Protected and notable species

- 3.5. There are several records of licences being granted for developments affecting bats within the search area, all to the south-west of the A4074 nearer the more open habitats towards the River Thames that lies just outside the search area.

Previous ecological survey work

- 3.6. Ecological survey work was carried out in 2014 on part of the current application site (Green Earth Ecology, 2014). This study was confined to the northern and western part of the current site. The study found no features of ecological interest and identified that the on-site buildings at that time did not have the potential to support bats.

Field survey

Habitats

- 3.7. The main habitats present at and around the site are shown in the Phase 1 habitat map in Appendix 3.

- 3.8. The majority of the site is managed close-mown amenity grass lawn (Target Note (TN) 1 on the Phase 1 habitat map and Photos 1 and 2 on the photo sheet in Appendix 5). There is a low number of common herb species within the amenity grass mix, typical of established domestic gardens. Species noted include daisy *Bellis perennis*, dandelion *Taraxacum officinale* agg. creeping buttercup *Ranunculus repens*, white clover *Trifolium repens*, common mouse-ear *Cerastium holosteoides*, and yarrow *Achillea millefolium*.
- 3.9. There are two semi-mature apple *Malus* sp. and a semi-mature cherry *Prunus* sp. trees to the middle area of the lawn (see Photo 3).
- 3.10. The lawn areas are generally mown close up to the site boundaries, with only small fringes of ruderal or sparse introduced garden shrubs and herbaceous vegetation along the fenced boundaries.
- 3.11. There are three small buildings at the site (B1-B3 on the Phase 1 map). These are described in more detail in relation to bats, below.
- 3.12. Two of the buildings (B2 and B3) lie towards the northern corner of the site near the boundaries. There are small areas of ephemeral vegetation, tall ruderal and developing bramble scrub between these buildings and the boundary fences (Photos 4-6). Vegetation behind Building B3 includes cleavers *Galium aparine*, dandelion, common nettle *Urtica dioica*, wild strawberry *Fragaria vesca*, cow parsley *Anthriscus sylvestris*, pendulous sedge *Carex pendula* and spear thistle *Cirsium vulgare* (TN2). The vegetation behind Building B2 is largely bramble *Rubus fruticosus* agg.
- 3.13. There is an area of ephemeral and ruderal vegetation developing over an area of hardstanding between B2 and B3 (Photo 7), with a short hornbeam *Carpinus betulus* hedge (H3) to the boundary. This vegetation (TN3) includes white deadnettle *Lamium album*, field bindweed *Convolvulus arvensis*, broad-leaved dock *Rumex obtusifolius*, dandelion, common nettle, bramble, buddleia *Buddleja davidii*, hedge garlic *Alliaria petiolata*, and ground elder *Aegopodium podagraria*.
- 3.14. There is an old concrete shed base to the north east boundary, becoming overgrown with small areas of ruderal and bramble scrub (TN4, Photo 8).

- 3.15. The main access from Atterbury Gardens is through a timber gate in the northern site boundary. Adjacent to this is a small area of gravel driveway, becoming colonised by short ephemeral vegetation (TN5, Photo 9). Species recorded here include yarrow, broad-leaved dock, cleavers, ribwort plantain *Plantago lanceolata*, dandelion, green alkanet *Pentaglottis sempervirens*, common nettle, and forget-me-not *Myosotis arvensis*.
- 3.16. There is a non-native garden shrub hedge to the north-western boundary (H1, Photo 10), with a narrow strip of common nettle and other short ephemeral vegetation to the base.
- 3.17. To the northern end of the south-west boundary is a short, steep, bank with a copper beech hedge (H2) along the top forming the site boundary. (Photo 11). The majority of this bank supports longer, occasionally mown grass with herb species including Spanish bluebell *Hyacinthoides hispanica*, bramble, dandelion, germander speedwell *Veronica chamaedrys*, primrose *Primula vulgaris*, ground elder and hogweed *Heracleum sphondylium* (TN6). Hedge garlic and lords-and-ladies *Arum maculatum* were noted along the base of the hedge.
- 3.18. Smaller areas of denser ruderal vegetation were noted to either end of the bank, with TN7 supporting bramble, buddleia, common nettle, green alkanet, and white deadnettle. Patches of variegated yellow archangel *Lamium galeobdolon* subsp. *Argentatum* were noted here (Photo 12).
- 3.19. To the south of the bank, along the south-eastern boundary of this section of the plot is a narrow strip of ruderal and ephemeral vegetation behind a low stone wall (Photos 13 and 14, TN8). Species noted here include green alkanet, primrose, ground elder, common nettle, cleavers, broad-leaved dock, white deadnettle, great willowherb *Epilobium hirsutum*, wood avens *Geum urbanum*, buddleia, creeping buttercup *Ranunculus repens*, dandelion, and Spanish bluebell. The boundary behind this is a timber close-board fence. Variegated yellow archangel was also noted here.
- 3.20. The southern part of the south-east boundary is formed from a post and wire fence with a defunct mixed native (largely hazel *Corylus avellana*) and garden shrub hedge (H5, Photo 15), with a narrow fringe of ephemeral and ruderal vegetation including green alkanet, dandelion, common nettle and ground

elder. There is an off-site mature Leylandii hedge (H5) to the other side of the boundary fence.

- 3.21. The north-eastern boundary is formed from a post and wire fence with occasional sparse garden shrubs and ruderal / ephemeral vegetation with bare earth (Photo 16). Species (TN9) include common nettle, cleavers, ivy *Hedera helix*, Spanish bluebell, bramble, and elder. There is an off-site mature Leylandii hedge (H4).

Bats

- 3.22. There are three outbuildings at the site. These have been assessed as set out in Table 1, below:

Table 1 - Building bat roost assessment

Building ref (in Appendix 3)	Description	Photo ref in Appendix 2	Roost assessment
B1	Small simple typical timber garden shed. Single-skinned. No concealed voids / crevices. Internally light due to window.	17	<i>Negligible</i>
B2	Timber garden shed with corrugated metal / plastic roof. Single-skin waney-edge timber, no internal wall or ceiling / roof cavity. Timbers highly warped with large gaps between them unsuitable for bat roosts. Light inside due to transparent plastic roof panels, windows, and gaps to walls. No evidence of bat use.	18-20	<i>Negligible</i>
B3	Brick workshop / garage, timber and felt roof. Single-skin walls and roof, no concealed cavities or voids. No evidence of bat use.	21-22	<i>Negligible</i>

- 3.23. The majority of trees at the site are young and small with no potential to support bats. One of the apple trees to the centre of the site was noted to have a cavity to it (Photo 23). This was investigated and found not to extend

into the main stem beyond approximately 20mm and was considered too small to support bats.

- 3.24. The garden itself presents a relatively open habitat, with more structurally-diverse boundary features. The key on-site foraging resources are the vegetated boundaries, while the majority of the site only offers poor-quality foraging habitat
- 3.25. Overall, it is likely that there is an established local bat population and that bats will regularly forage over the garden opportunistically as part of wider foraging and commuting activity. However, the garden itself is not considered to offer high quality foraging habitat or to be of significant value in the local context.

Badger

- 3.26. No signs of badger (e.g. setts, latrines, runs, hairs or footprints) were noted within the site or immediate surrounding accessible areas. The surrounding area is residential with no areas of woodland or other typical habitat that is likely to support badgers. It is therefore concluded that there are no setts within the site or in the immediately adjacent areas and that badgers are likely absent from the site.

Hazel dormouse

- 3.27. Dormice are highly associated with areas of woodland (particularly Ancient Woodland and woodland with coppice management), hedgerows and continuous scrub. The site is set within an residential area in the suburbs of Reading, with no extensive dormouse habitat nearby. It is considered that dormice are likely absent from the site.

Breeding birds

- 3.28. The garden scrub and trees at the site and around the boundaries, as well as the small outbuildings may support small numbers of more widespread bird species, although no direct evidence was seen.

Reptiles

- 3.29. The site is generally well-managed and does not offer any extensive areas of rougher or longer grass or areas of debris, compost heaps or log piles. There

are numerous narrow fringes of ruderal and rougher vegetation around the site boundaries that are however nominally suitable for supporting individual or smaller numbers of more widespread reptile species such as slow worm *Anguis fragilis*.

- 3.30. There is extensive debris to several of these areas including sections of discarded roofing felt, timber panels, and plastic sheets / old compost bags. These were searched thoroughly, and although conditions were considered optimal for conducting searches for reptiles, no reptiles were seen.

Water vole and otter

- 3.31. Water vole and otter are typically associated with watercourses and larger lakes / ponds. There are no watercourses on or adjacent to the site. Otter and water vole are considered to be absent from the site.

Great crested newt

- 3.32. There are no ponds on site. Examination of aerial photos and Ordnance Survey maps shows no ponds within 500m of the site.
- 3.33. It is therefore considered that great crested newts are likely absent from the site.

4. Discussion

Planning policy and legislation

4.1. Paragraph 175 of the National Planning Policy Framework (NPPF) (MHCLG, 2018) requires that when determining planning applications, if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused.

4.2. Policy CS36 'Biodiversity and Geology' of the Reading Borough Council Adopted Core Strategy (revised 2015) states that:

"Development should retain, protect and incorporate features of biodiversity or geological interest (including protected species and their habitats) found within the application site into their schemes."

4.3. The supporting text to the policy states that

"Protected species identified by the Species Action Plan of the Reading Biodiversity Action Plan (BAP) and their habitats must also be protected from any direct or indirect harm resulting from development."

4.4. Policy DM17 (Green Network) of the Reading Borough LDF Sites and Detailed Policies Document (2012) states that:

"New development shall demonstrate how the location and type of open 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."

- 4.5. Many species of animal are legally protected under both domestic or international law (the Wildlife and Countryside Act 1981 (as amended)² and the Conservation of Habitats and Species Regulations 2017³ respectively).
- 4.6. With reference to bats, hazel dormice, and great crested newts, these are European Protected Species (EPS). This legislation makes it an offence to kill, injure or disturb them, or to destroy or damage their breeding sites and resting places (even when the animals are not present). For such work to legally proceed, Natural England (the Government's statutory nature conservation agency) will issue a licence for the work to be able to proceed legally, subject to the proposals meeting certain criteria.
- 4.7. The following sections consider the potential impacts on any identified ecological features and whether the development would be in accordance with policy and legislation. Where the previous section has identified that the relevant species or habitat is likely absent, these have not been considered further.

Potential impacts on sites, habitats and species

Designated sites

- 4.8. There are no statutory designated sites in the local area. The development will not affect any such sites.

Local sites - Green Link

- 4.9. A previous application here (ref 141625) for two detached houses was refused in part because the proposed development was considered contrary to Policy DM17 as the proposal:

“results in fragmentation of gardens within a designated Green Link on the Development Plan Proposals Map, without suitable mitigation for wildlife. The layout therefore fails to demonstrate how this intensive development can provide

² <http://www.legislation.gov.uk/ukpga/1981/69>

³ <https://www.legislation.gov.uk/uksi/2017/1012/contents/made>

for landscaping suitable to the character of the area and the maintenance of the designated Green Link.”

- 4.10. The Reading Borough Council Proposals Map shows that a Green Link passes through the site, between the recreation ground to the south of Richmond Road and the streets to the north. This green link is shown in Figure 1, below (application site in red outline):

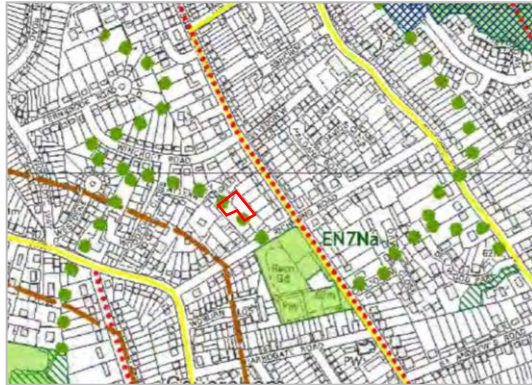


Figure 1a – Green Link (from RBC Proposals Map)



Figure 1b – Green Link overlain on aerial photo (from Google.co.uk/maps)

- 4.11. Figure 2, below, compares the site layout of the previous (refused) application and the current proposal.

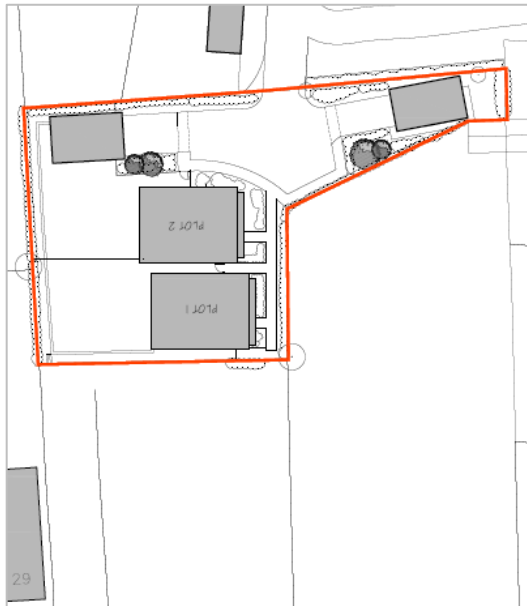


Figure 2a – Previous proposal



Figure 2b – Current proposal

- 4.12. The current proposal is for a larger number of dwellings than the previous proposal (three detached rather than two detached dwellings). However, as

can be seen from Figure 2, the current proposed layout removes the garage block from the north-east corner, thus allowing for a more cohesive area of open space and boundary along the western edge of the northern part of the site. The current proposal also allows a more open aspect along the western edge of the site, allowing the opportunity to retain and enhance the green link.

- 4.13. The current proposal therefore appears to be a more appropriate layout to maintain the functionality of the Green Link. However, in the absence of a scheme to ensure suitable measures are included in the scheme to conserve and enhance the retained more open areas and boundary features, there is a risk that the functionality of the Green Link may be eroded.

Vegetation and habitats

- 4.14. The habitats within the development footprint are of negligible intrinsic ecological interest beyond the site level. There are no notable / Priority habitats present at the site. Therefore, the development is unlikely to result in any adverse impacts to notable habitats.

Bats

- 4.15. The landscape in the immediate area around the house offers generally lower-quality bat foraging habitat, although in the context of a more urban environment, the larger, more mature garden plots do offer good foraging habitat for a range of species more adapted to urban environments.
- 4.16. As discussed, the site lies along a recognised Green Link and as such the development does have the potential to adversely affect local bat foraging and commuting habitat if the functionality of the Green Link is eroded, for example through a reduction in suitable habitat extent and structure, and the introduction of new external lighting.

Nesting birds

- 4.17. The site as a whole is likely to support more common and widespread species of breeding bird during the spring and summer. Clearance of any taller shrubs and trees may result in harm to any occupied nests that may be present. However, the majority of more suitable habitat at the site will be retained and

the scale of habitat removal is therefore such that this would not result in a significant adverse impact to the local bird nesting resource.

Reptiles

- 4.18. It is concluded that the site has the potential to support small numbers or individual more widespread species of reptile. Examination of the previous ecology report for the site (Green Earth, 2014) shows that the site was previously more managed and had negligible reptile suitability. There are no extensive areas of suitable reptile habitat immediately adjacent to the site from which reptiles would readily colonise, although the adjacent mature gardens may support small numbers of slow worm.
- 4.19. Therefore, it is concluded that the development will not result in the loss of any significant areas of reptile habitat. However, in the absence of avoidance measures, there is a low risk that the development would harm individual animals during site clearance.
- 4.20. The most likely location for any slow worms or other reptiles is the top of the bank to the northern part of the south-western boundary, and the strip of rougher vegetation along the south-eastern boundary of the northern part of the site. The location of these areas is shown on the Ecological Constraints and Opportunities Plan (ECOP) in Appendix 4.

Impact assessment summary

- 4.21. In summary, the habitats at the site were found to be of limited ecological value beyond the site level, and no notable habitats were present. No impacts to designated sites are anticipated.
- 4.22. The development has the potential to reduce the ecological functionality of the Green Link.
- 4.23. The development has the potential to adversely affect bat foraging and commuting habitat, nesting birds, and potentially individual reptiles.
- 4.24. The following section sets out a strategy to address these impacts.

5. Recommendations

Maintenance of Green Link

- 5.1. A sensitive landscaping scheme utilising a range of native trees, hedgerow plants and ground flora, together with ensuring that this part of the site remains unlit, would serve to ensure that the site continues to be permeable to a range of species and would continue to provide a locally-useful 'stepping stone' for species such as invertebrates, urban birds, and small mammals.
- 5.2. The ECOP set out in Appendix 4 identifies the key areas where opportunities exist for maintaining the Green Link as a functional part of the wider local ecological network. The recommended features for inclusion in the development are:
- Extensive use of native hedge and tree species to the boundary features.
 - Planting species-rich grass mixes along the western edge of the site
 - Planting a small number of specimen native-species trees. It is likely that the most appropriate would be species that do not become too overbearing in the urban environment. It is suggested that species such as crab apple *Malus sylvestris*, rowan *Sorbus aucuparia*, hazel, or bird cherry *Prunus padus* may be most appropriate.
 - Ensuring any new lighting is minimised and that the western edge of the site is maintained as a dark corridor to avoid impacts to nocturnal wildlife such as bats and hedgehogs.
 - Ensuring that any new fences include a good number of gaps (at least two per boundary length) to allow hedgehogs and other small mammals to pass through.

Bats

- 5.3. It is recommended that any new external lighting ensures that the western part of the site remains unlit to ensure that this is retained as a dark corridor.
- 5.4. The inclusion of a structurally diverse range of native species in the soft landscaping as described above will ensure that the site – particularly the western part, along the line of the Green Link – provides an enhanced strip of foraging habitat.

- 5.5. It is also recommended that the development includes two in-wall integrated bat roost units at the locations shown in the ECOP. These should be installed high up at the apex of the south-eastern and south-western gable ends.

Nesting birds

- 5.6. It is not anticipated that the development will require extensive vegetation clearance. However, some small areas of localised clearance are likely to be needed to prepare the site for demolition and construction.
- 5.7. Clearance of suitable nesting bird habitat should be therefore carried out during the autumn and winter – between September and February inclusive. Birds will not be nesting during this period, removing the risk of harming active nests.

Reptiles

- 5.8. Clearance of the areas identified in the ECOP should be carried out in a sensitive manner at an appropriate time of year:
- Any physical structures such as the stone wall itself and any larger piles of debris or cut vegetation should be dismantled during the warmer months (March-September inclusive) to ensure that hibernating reptiles are not uncovered (hibernating reptiles are likely to die if disturbed and exposed).
 - Any reptiles found should ideally be allowed to move off into adjacent habitat on their own. Alternatively, they can be carefully removed by hand.
 - Vegetation should be strimmed to a height of no lower than 200mm, and the arisings removed. The area should then be left for at least 24 hours. This will allow any reptiles present to disperse out of the area to adjacent habitats on their own accord.
 - The area can then be strimmed down to ground level.

Invasive species

- 5.9. The areas of variegated yellow archangel, which is an invasive plant as listed in the Wildlife and Countryside Act, should be appropriately removed and cleared from site to avoid its further spread.

6. Conclusions

- 6.1. The Ecological Appraisal at Land at Atterbury Gardens / Rear of 23-25 Richmond Road, Reading identified that the site supports habitats of generally low ecological value.
- 6.2. The survey found no evidence that the site supports roosting bats, badgers, dormice, water vole, otter, or great crested newts.
- 6.3. The development will not adversely affect any designated sites of nature conservation value.
- 6.4. In the absence of mitigation, the development has the potential to reduce the ecological functionality of the Green Link that runs through the site.
- 6.5. Localised clearance of small areas of garden shrub vegetation may adversely affect nesting birds.
- 6.6. In the absence of avoidance measures, site clearance along the western boundary features has the potential to harm individual reptiles.
- 6.7. A range of measures are presented to avoid direct impacts to species through sensitive site clearance methods.
- 6.8. Areas of variegated yellow archangel should be appropriately cleared and removed.
- 6.9. An Ecological Constraints and Opportunities Plan is presented that if implemented would serve to maintain and reinforce the ecological functionality of the Green Link through the site and would serve to enhance the biodiversity value of the site overall.

References

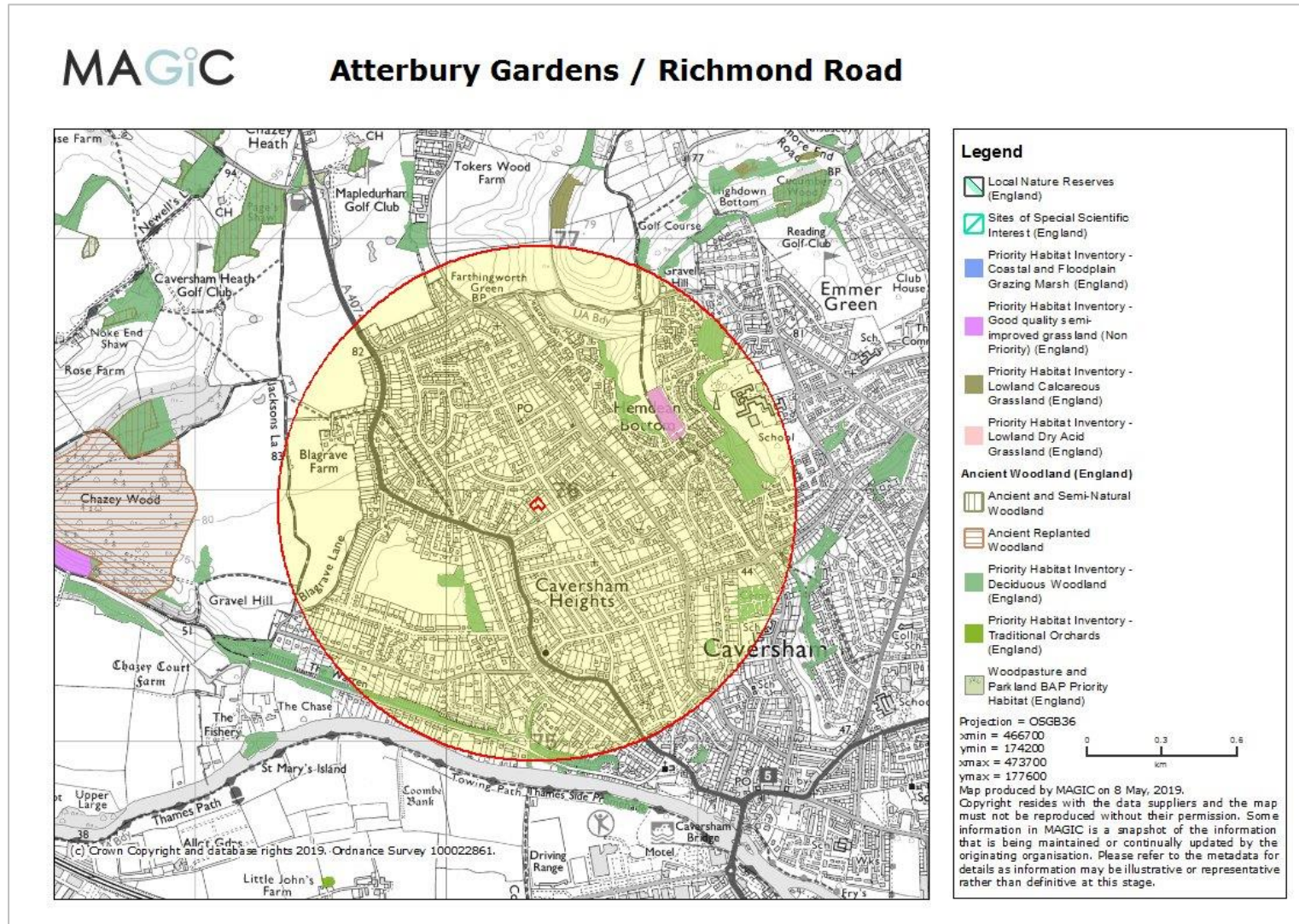
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- Green Earth Arboricultural & Environmental Consultants (2014). *25 Richmond Road, Reading, Berkshire, RG4 7PR Ecological Survey*
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Appendix 1 – Proposed site plan and location

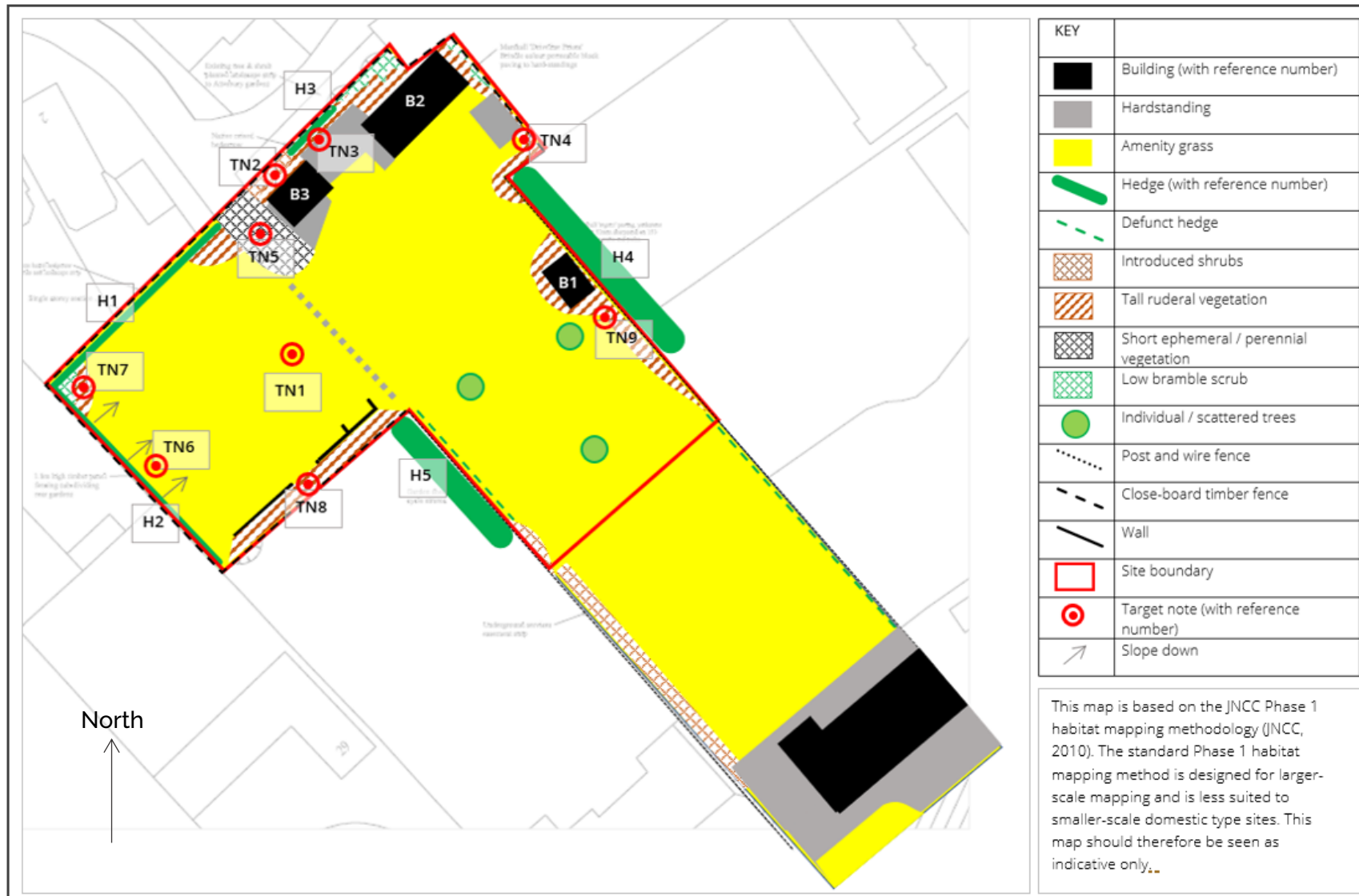


(taken from plans produced by TPO Design to support the planning application)

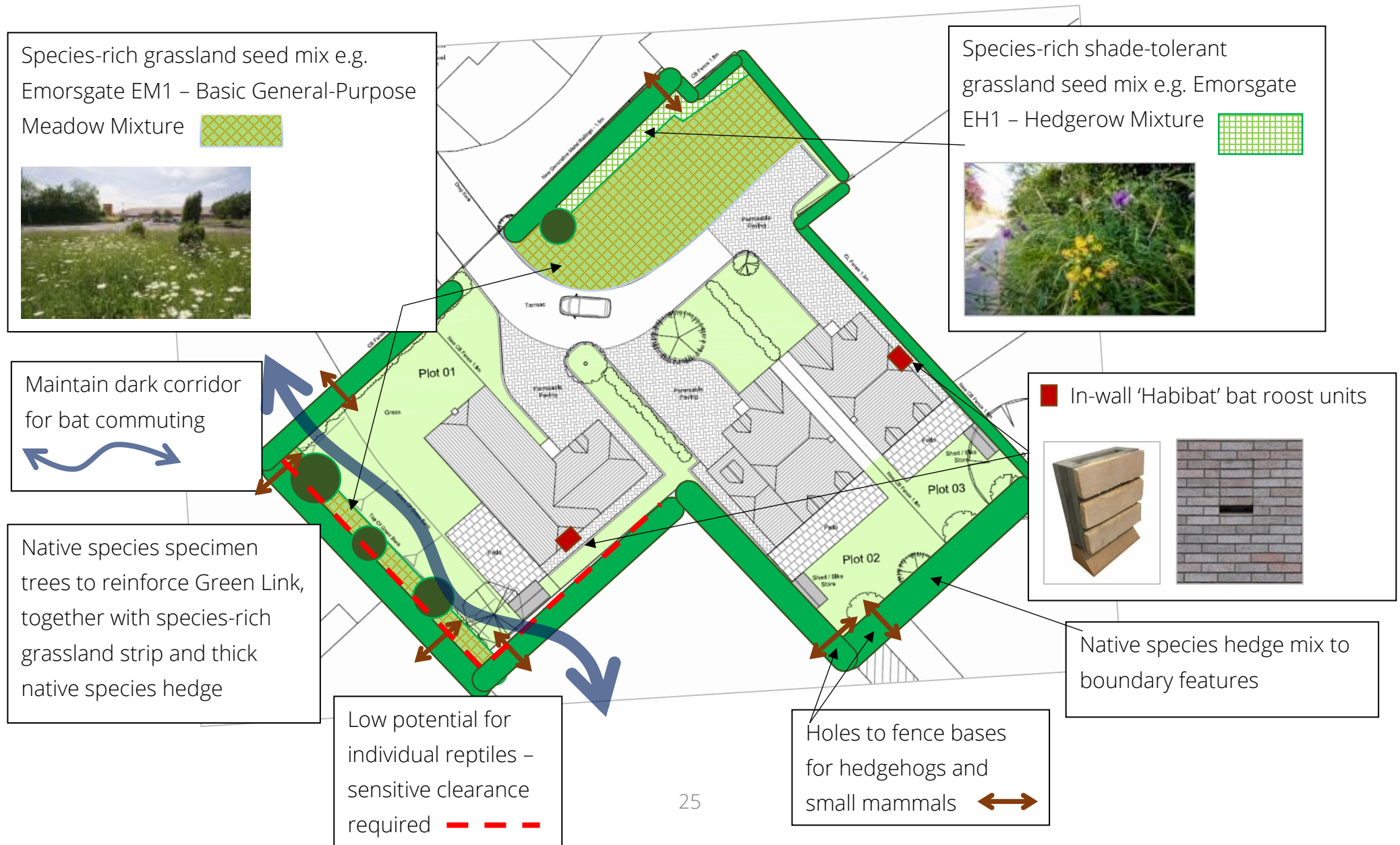
Appendix 2 – MAGIC map



Appendix 3 – Phase 1 Habitat Map



Appendix 4 – Ecological Constraints and Opportunities Plan



Appendix 5 – Photos



Photo 1 Amenity grass lawn



Photo 2 Amenity grass lawn



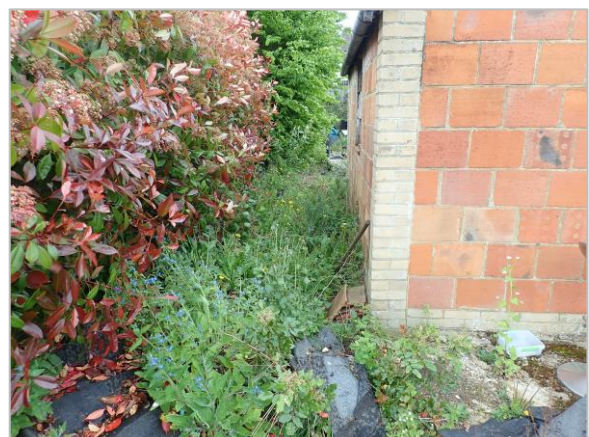
Photo 3 Fruit trees in garden



*Photo 4 Ruderal and bramble scrub
behind building B2*



Photo 5 Ruderal vegetation behind B2



*Photo 6 Shorter ruderal / ephemeral
vegetation (TN2) behind B3*



Photo 7 Ruderal and ephemeral vegetation at TN3



Photo 8 Ephemeral vegetation and ruderals / bramble to old shed base (TN4)



Photo 9 Ephemeral vegetation to gravel by entrance (TN5)



Photo 10 H1 - hedge to NW boundary



Photo 11 Bank to northern end of SW boundary (TN6)



Photo 12 Variegated yellow archangel to TN7



Photo 13 South-western boundary of northern part of site



Photo 14 TN8 – ruderal and ephemeral vegetation behind stone wall



Photo 15 H5 to boundary



Photo 16 North-east site boundary



Photo 17 Building B1



Photo 18 Building B2



Photo 19 Internals of Building B2



Photo 20 Large gaps showing daylight to Building B2



Photo 21 Building B3



Photo 22 Internals of Building B3



Photo 23 Cavity to tree