

Ecology Survey Report

Coach House at Prince's Mead School, Kings Worthy, Winchester, Hants SO21 1AN

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Report conditions

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Summary

Ecology survey work was carried out at the Coach House at Prince's Mead School, Kings Worthy, Hampshire, to support a planning application for a proposed single storey nursery extension to the rear of the building.

The Coach House is a Grade II listed building originally constructed in 1829 as the stable block for Worthy Park House, and now part of Prince's Mead School. It is of largely brick construction, with a pitched, timber-framed slate roof. There is a projecting portico centrally to the front elevation. There is an enclosed grassed play area to the rear (north) of the site, and an open hardstanding courtyard to the front (south).

Previous survey work in 2021 identified a maternity roost of soprano pipistrelle bats under slates and flashing to the left-hand side of the front south-facing portico roof.

Survey work in 2024 identified that the habitats at the site are of negligible ecological value, being mainly hardstanding and an area of worn species-poor amenity grass. There are two beech trees adjacent to the proposed nursery extension that are to be retained.

The survey work concludes that the development will not affect badgers, nesting birds, hazel dormice, reptiles, great crested newts, or riparian mammals. Assessment of the location of the bat roost and the potential effects of the development concludes that the development will not damage or disturb the roost, nor will it interrupt any key bat flightlines.

The development meets the criteria for being exempt from Biodiversity Net Gain requirements by virtue of its small size.

There are no recommendations for further survey work or species-specific mitigation measures.

1. Introduction

Objectives

1.1. The purpose of this assessment is to provide ecological information to support a planning application for a proposed single-storey extension at the Coach House building at Prince's Mead School, Kings Worthy.

Site Description

- 1.2. The Coach House is a Grade II listed building originally constructed in 1829 as the stable block for Worthy Park House, and now part of Prince's Mead School. It is of largely brick construction, painted white, although the rear elevation appears to be of flint with brick banding, also painted white.
- 1.3. The building has a pitched, timber-framed slate roof with hipped gable ends. The main ridge of the building runs east-west, with the front of the building facing south onto a courtyard area. There is a further short wing projecting north from the east end of the main building, also with a pitched hipped slate roof. There are concrete half-round ridge and hip ridge tiles to the main roof areas.
- 1.4. There is a projecting portico centrally to the front (south) elevation supported on four columns. This also has a slate roof, with a hipped front gable. The hip ridges of the portico are formed of rolled leadwork.
- 1.5. There is a cupola to the apex of the portico and main roof ridge with a square base short clock tower beneath it. The cupola base is of white-painted timber and leadwork, with a clock to the front elevation and a circular window to the rear.
- 1.6. There are several modern roof lights across the slate roof of the main eastwest building section. There are white painted board soffit boxes around all elevations.
- 1.7. Internally, there is accommodation across the ground floor, and built into the roof at first floor level across the main east-west section of the building. There is a loft space in the roof of the northwards projecting east wing of the building, and a small void within the clock tower section of the central cupola.

- 1.8. The Coach House is part of the larger Prince's Mead School, set in open countryside just outside Abbots Worthy, to the east of Kings Worthy and to the north of Winchester.
- 1.9. Photos 1 and 2 in Appendix 1 show the building's main elevations.

Proposed works

- 1.10. It is proposed to construct a small single-storey extension on the north-west corner of the existing building. The proposed extension will have a flat roof and will not tie into the existing roof structure of the building.
- 1.11. Plans in Appendix 3 show the existing and proposed layout.

Limitations

- 1.12. All external areas of the site were accessible at the time of the survey, along with external features of the building. The weather at the time of the survey was clear, dry, with a light breeze, and a temperature of 10°C.
- 1.13. Internally, there are two loft voids. These were not accessed at the time of the survey as the development proposals will not impact these areas. Previous survey work at the site has included inspection of the loft areas and their layout and structure were therefore familiar to the surveyor.
- 1.14. There are therefore no identified significant limitations to the visual survey work.

2. Methods

Desk study

- 2.1. A desk-based assessment was carried out on 1st March 2024. 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) were used to gain an understanding of the landscape context of the site. MAGIC was also used to identify if any licenses had been granted by Natural England for developments in the search area affecting European protected species (EPS).
- 2.2. A data request from the Hampshire Biodiversity Information Centre (HBIC) or the Hampshire Bat Group was not carried out at this time. Consideration of the value of seeking additional records on the context of the bat use of the site (if present) was taken after the site survey work.
- 2.3. Previous survey work carried out by AE Ecology in 2021 and 2023 to support an earlier planning application and subsequent Natural England mitigation licence. This was reviewed as part of the 2024 desk-based assessment.

Field survey

- 2.4. Field survey work was carried out on 8th March 2024 by Adam Egglesfield of AE Ecology, an experienced ecological surveyor with over twelve 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.
- 2.5. An assessment was made of the presence of and potential impacts to adjacent notable habitats and designated sites.
- 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.

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

- 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 the site to support amphibians, particularly great crested newt *Triturus cristatus* (GCN).
- 2.11. Visual bat survey work was guided by and consistent with that set out in the Bat Conservation Trust's 'Bat Surveys for Professional Ecologists: Good Practice Guidelines' 4th edition, (Collins, J. (ed) 2023).
- 2.12. The Coach House was subject to a careful external inspection. The aims of this were to identify evidence of bat activity and/or identify the presence of any features that could potentially support roosting bats or features through which bats could gain access to possible roost locations. Such features typically include missing, slipped, broken or bowed roof tiles, gaps around fascias and soffits, gaps in brickwork (such as missing mortar or expansion gaps), lifted chimney, roof, or window flashing, weatherboarding / cladding, and gaps around window and door casements.
- 2.13. The external inspection also aimed to identify any actual direct evidence of bat use such as droppings adhering to walls, floors or windowsills below gaps, or staining around possible access gaps.

- 2.14. Features were inspected using Opticron Discovery 10x42 close-focusing 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.
- 2.15. 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 3 shows the location of the site and its surrounding relevant ecological interest features produced from MAGIC.

Nationally and locally designated sites and notable habitats

- 3.2. The key ecological feature of the surrounding landscape is the broad corridor of the River Itchen, which flows east to west across the south of the search area, approximately 375m to the south. The River Itchen itself is designated as a Special Area of Conservation (SAC) for its internationally-important chalk stream habitats and populations of southern damselfly *Coenagrion mercuriale* and bullhead *Cottus gobio*. The river also supports important populations of Atlantic salmon *Salmo salar*, white-clawed crayfish *Austropotamobius pallipes*, brook lamprey *Lampetra planeri*, and otter *Lutra lutra*².
- 3.3. The river and much of the wider surrounding floodplain including areas of nationally important water-dependent habitat such as fen meadow, swamp, and pasture habitats are also designated as the River Itchen Site of Special Scientific Interest (SSSI). The SSSI designation also covers a wide range of plant species, invertebrates, mammals, fish, and birds.
- 3.4. The river corridor also includes areas of more ecologically important areas of grassland and woodland that lie outside these statutory designations.
- 3.5. More locally to the site itself, there is extensive woodland priority habitat to the north and west of the Coach House, while much of the grounds of the wider school supports wood pasture habitat.
- 3.6. Outside of these more ecologically important areas, the wider landscape is characterised by extensive arable fields to the north of the school, and south of the River Itchen, as well as to the east.
- 3.7. To the west lies the large village of Kings Worthy, a largely residential area, while the M3 motorway runs north-south to the east of the school.

² https://sac.incc.gov.uk/site/UK0012599

Protected species

- 3.8. Bat survey work by AE Ecology in 2021 to support a previous planning application and updated in 2023 to support a subsequent mitigation licence identified and confirmed the presence of a maternity roost for soprano pipistrelle *Pipistrellus pygmaeus* in the Coach House. This survey work recorded a peak count of 145 soprano pipistrelle bats using the roost. The roost at the site is located on the southern side of the roof, on the western side of the south-facing portico, under the slates. The access points are along the edge of the slates between the slate and the valley leadwork, and at gaps between the fascia and the lower edge of the slates over the eaves.
- 3.9. MAGIC holds two records of licenses being granted for works involving bats within the search area. These are both within the settlement of Kings Worthy between 900m and 1km to the west, affecting roosts for common pipistrelle *Pipistrellus pipistrellus* and brown long-eared bats *Plecotus auritus*. These developments did not affect maternity roosts.

Field survey

Habitats

- 3.10. The area to the north of the Coach House is an area of amenity land used by school pupils during break time. The area close to the building is laid to hardstanding and recycled rubber surfacing and has canopies for shade installed.
- 3.11. The rest of the area is amenity grassland and individual mature trees. The plan in Appendix 4 shows the habitats at the site.
- 3.12. The amenity grassland sward was close-mown at the time of the survey and appeared to have been recently re-sown as part of recent renovations and improvements to the Coach House. As such, it had limited herb diversity and was dominated by hard-wearing common amenity grass species, primarily perennial ryegrass *Lolium perenne*. See Photo 3. It was found to be heavily worn in places due to use by pupils.
- 3.13. The grassland at the site of the proposed nursery extension was found to be more damaged and compacted than the rest of the grassland area see Photos 4 and 5.

- 3.14. There are two large mature beech *Fagus sylvatica* trees adjacent to the location of the proposed extension (Photo 2). These are understood to be retained within the design.
- 3.15. The area to the front (south) of the Coach House is all hardstanding with negligible ecological interest see Photo 1.

Badger

- 3.16. No signs of badger (e.g. setts, latrines, runs, hairs or footprints) were noted within the site or immediate surrounding accessible areas. 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.
- 3.17. However, badgers are likely to be widespread in the surrounding landscape and the adjacent woodland may support active setts.

Hazel dormouse

- 3.18. Dormice are highly associated with areas of woodland (particularly Ancient Woodland and woodland with coppice management), hedgerows and continuous scrub. There are known populations of Dormice in the wider area.
- 3.19. Although the surrounding woodland may support the species as these areas offer highly suitable dormouse habitat, there are no suitable habitats for hazel dormouse at the site and they are considered to be likely absent.

Breeding birds

- 3.20. The grassland and hardstanding at the site is unsuitable for supporting nesting birds.
- 3.21. The individual trees may support nesting birds in the spring and summer, although the likelihood of this may be reduced by the higher levels of disturbance from the use of the area as a school playground.

Reptiles

3.22. There are no areas of rough grassland, larger or linked areas of ruderal vegetation, or other habitats on site suitable for supporting reptiles such as

slow worm *Anguis fragilis* or common lizard *Zootoca vivipara*. It is considered that reptiles are likely absent from the site.

Water vole and otter

3.23. Water vole and otter are associated with watercourses and larger lakes / ponds. There are no suitable habitats at or adjacent to the site to support these species.

Great crested newt

- 3.24. There are no ponds on site. The terrestrial habitats at the site do not provide significant areas of optimal refuge or foraging habitat, as these comprise disturbed and closely mown amenity grass and hardstanding.
- 3.25. Overall, it is considered that great crested newts are likely absent from the site.

Bat roosts

- 3.26. As highlighted above, the Coach House is known to support a soprano pipistrelle maternity roost, with a peak count of 145 bats recorded. The roost is located on the opposite side of the building from the proposed nursery extension (see plan in Appendix 4).
- 3.27. The roof of the Coach House was replaced in 2023 under a mitigation licence from Natural England, with all work overseen and assisted by AE Ecology. Monitoring of the roost is set to commence in the summer of 2024.
- 3.28. Examination of the roof area and other external features of the building found no potential roost or roost access points at or near the location of the proposed nursery extension. It should also be noted that during the extensive bat survey carried out recently at the site, no bats were seen to emerge from any areas of the roof near the proposed extension, and that this area has been recently re-roofed (Autumn 2023).
- 3.29. The proposed extension will not tie into the existing roof. It is therefore confidently concluded that the area affected by the proposals are unlikely to support bats or bat roosts.

Bat foraging and commuting habitat

- 3.30. The site itself is characterised by amenity grassland and hardstanding habitats that are of negligible value as a bat foraging resource. The surrounding landscape is of however of high value as a bat foraging resource due to the extensive woodland, and there is therefore likely to be a moderate degree of general opportunistic foraging activity over the site as bats will use this as an incidental part of their wider foraging areas. However, the site itself is not considered to be a key foraging resource.
- 3.31. Observation of the flightpaths of bats emerging from and returning to the maternity roost on the other side of the building identified that a reasonable proportion of the bats would overfly the site as they commute north towards the adjacent woodland. The flightline plan observed on previous surveys is shown in Appendix 4.

4. Discussion

Legislation and planning policy

- 4.1. Paragraph 186 of the National Planning Policy Framework (NPPF) (DLUHC, 2023) 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. Strategic Policy SD9 of the South Downs Local Plan would apply to development here. This requires that development proposals conserve and enhance biodiversity.
- 4.3. Many species of animal are legally protected under both domestic or international law (the Wildlife and Countryside Act 1981 (as amended)³ and the Conservation of Habitats and Species Regulations 2017⁴ respectively).
- 4.4. 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.
- 4.5. The following sections consider the potential impacts on any identified ecological features and whether the development would be in accordance with policy and legislation.

³ http://www.legislation.gov.uk/ukpga/1981/69

⁴ https://www.legislation.gov.uk/uksi/2017/1012/contents/made

Potential impacts on sites, habitats and species

Designated sites

4.6. The location of the construction activity is sufficiently far from the nearby SSSI and SAC and of a very small scale. As such, no impacts to the River Itchen are anticipated.

Vegetation and habitats

- 4.7. The broad swathe of ecologically rich habitats along the valley of the River Itchen to the south provides an extensive area of high-quality ecological resource, supporting a range of Priority Habitats and protected and notable species. However, the development footprint is currently hardstanding and well-worn amenity grass.
- 4.8. Overall, the habitats within the development footprint are of negligible intrinsic ecological interest.
- 4.9. The key habitat at the site are the two mature beech trees. These are outside of the footprint of the work and are being retained and protected.

Badger

4.10. Badgers are considered absent from the site. It is therefore concluded that the development will have no adverse impacts on badgers. Any excavation to construct the proposed extension will be sufficiently far from the adjacent woodland for there to be no likelihood of damage or disturbance to badger setts if present.

Hazel dormouse

4.11. Hazel dormice are considered absent from the site. It is therefore concluded that the development will have no adverse impacts on hazel dormice.

Breeding birds

4.12. The development will not affect any potential nesting bird habitat.

Reptiles

4.13. Reptiles are considered likely absent from the site. It is therefore concluded that the development will have no adverse impacts on reptiles.

Great crested newts

4.14. Great crested newts are considered likely absent from the site. It is therefore concluded that the development will have no adverse impacts on great crested newts.

Bats

- 4.15. The identified soprano pipistrelle maternity roost is on the opposite side of the building from the proposed extension. The proposed development will not affect the existing roof areas.
- 4.16. The roost is well contained within a discreet area of the roof at the front of the building and during the re-roofing, timber battens were fitted around the general roost area to prevent bats from dispersing further along the roof structure. There is therefore no risk that bats in the roost could travel within the roof fabric to a location nearer the proposed work area.
- 4.17. The development will therefore not damage or disturb the roost.
- 4.18. As discussed above, bat flightlines pass close to the location of the proposed extension (see plan in Appendix 4). However the proposed extension is a single storey, flat roofed structure, and will not impede the flightline of the bats as they typically fly at high level, generally observed at approximately the height of the lower parts of the canopy of the adjacent beech trees, outside of the extension footprint and above the level of its roof. The development will therefore not impede bat flightlines.

Impact assessment summary

4.19. In summary, it is not considered that the development will have any adverse impacts on habitats or species.

Biodiversity Net Gain

- 4.20. Under the Environment Act 2023, many new developments need to demonstrate how they will achieve 10% net gain in biodiversity. However, there are exceptions to this.
- 4.21. A development will be exempt from the requirement to deliver net gain if:
 - It does not affect any Priority Habitat and
 - It affects less than 25 square metres of habitat i.e. land that is not existing developed buildings, hardstanding, or other such 'urban' substrates.
- 4.22. At Princes Mead School, the total area of the proposed extension is approximately 70 square meters, while the redline boundary also encompasses the school driveway, the entirety of the existing Coach House, the grass play area, and some of the surrounding hardstanding.
- 4.23. However, the majority of the land within the redline boundary is not within the footprint of the proposed extension and any habitats within it such as most of the grassland will not be affected. The extension itself will largely be on existing hardstanding to the rear and side of the school and only a small part on the amenity grassland. Overall, the development will only affect approximately 20 square metres of the amenity grassland.
- 4.24. Therefore, the proposal meets the criteria for being exempt from providing Biodiversity Net Gain.

5. Recommendations

- 5.1. The development proposals are not considered likely to adversely affect any ecological features.
- 5.2. Therefore, there are no specific recommendations at this time for mitigation measures.
- 5.3. There are also no recommendations for any further survey work.

6. Conclusions

- 6.1. The ecological survey of the site of the proposed nursery extension at The Coach House, Princes Mead School identified that the site itself supports habitats of negligible ecological value.
- 6.2. The River Itchen lies within 1km of the site; however, this will not be affected by the development proposals.
- 6.3. The habitats at the site are dominated by common habitats of negligible ecological value.
- 6.4. The survey found no evidence that the site supports badgers, dormice, water vole, otter, reptiles, or great crested newts. The areas affected by the development have been assessed as presenting negligible bat roost suitability.
- 6.5. The works will not adversely affect foraging bats or bat flightlines.
- 6.6. There are no recommendations for further survey work or species-specific mitigation measures.

References

- Chartered Institute of Ecology and Environmental Management (CIEEM). (2013), Guidelines for Preliminary Ecological Appraisal. CIEEM; Winchester.
- Collins, J. (ed.) (2023). *Bat Surveys for Professional Ecologists: Good Practice Guidelines* (4th edn). Bat Conservation Trust; London.
- DLUHC, (2023). *National Planning Policy Framework*. Department for Levelling Up. Housing, and Communities; London.
- Mitchell-Jones, A. J. (2004). Bat Mitigation Guidelines. English Nature; Peterborough.

Appendix 1 – Photos



Photo 1 Front (south) elevation of Coach House



Photo 2 Rear (north) and side (west)
elevations – location of
proposed extension



Photo 3 General view of grassland to rear of Coach House



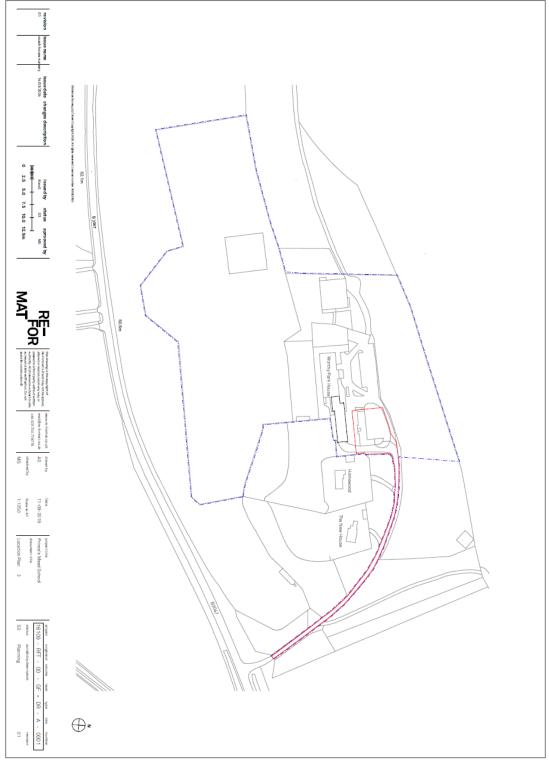


Photo 5 Sward at location of extension showing wear

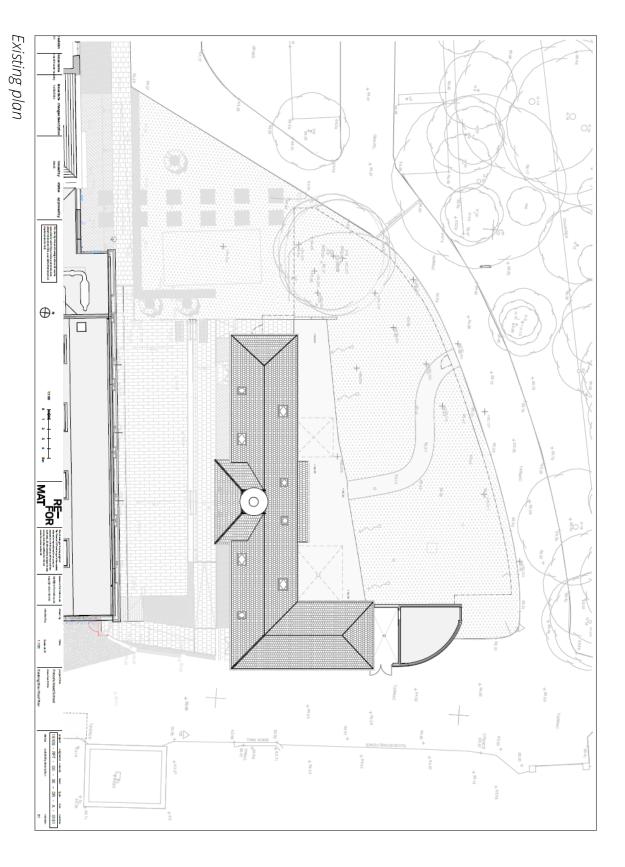


Photo 6 Existing building elevations where extension will tie in

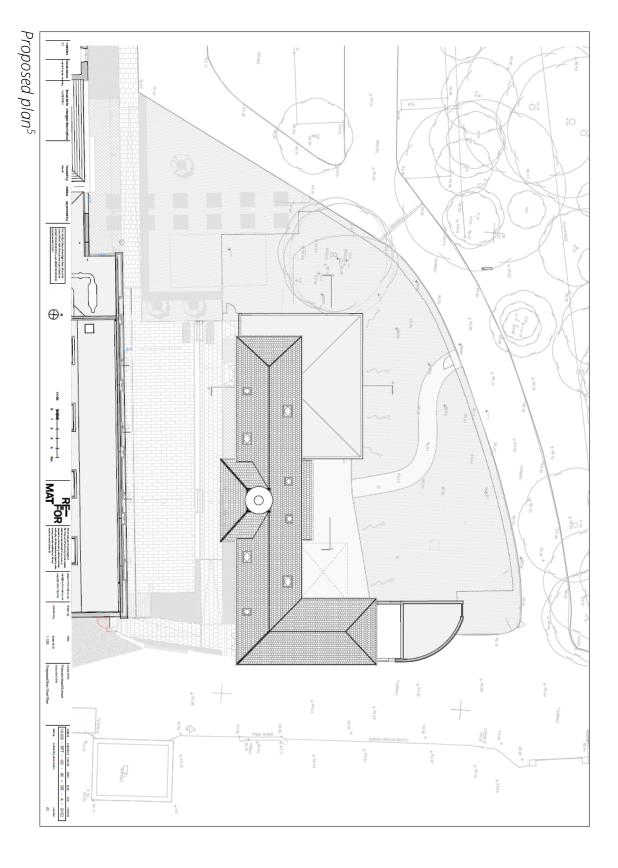
Appendix 2 – Existing and proposed plans



Application boundary

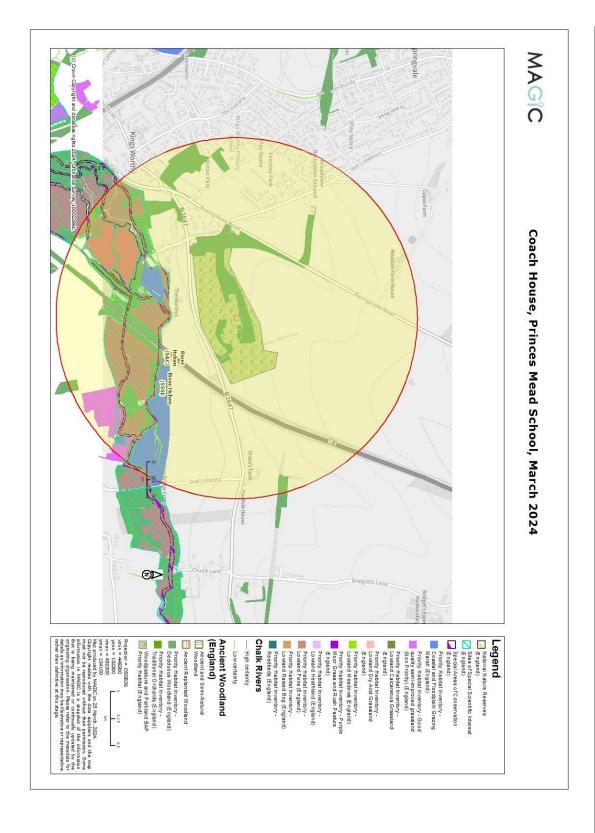


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 $^{\rm 5}$ From plans produced by Re-Format LLP, to support the planning application.

Appendix 3 – MAGIC Map



Appendix 4 – Survey findings

