

Preliminary Roost Assessment

Survey site:

Old Manor, Shaftenhoe End, Barley, Royston, Hertfordshire, SG8 8LE

Client:

Phillip and Celia Noblet

Survey date:

03rd April 2025

Project:

This report is prepared to inform a planning application for: Extension to the lodge, and internal renovations of the main house, to include skylights and reglazing of the western extension.

PRA survey methodology and legislation can be found in the Arbtech Supplement: [PRA Methodology and Legislation - 2025.](#)

The site survey was undertaken by Carly Preen, Graduate Ecologist - Bat Licence 2024-12326-CL17-BAT.					
Date of survey	Temperature (°C)	Humidity (%)	Cloud Cover (%)	Wind (mph)	Rain
03/04/2025	14	40	0	0.7	None
PRA Survey Factor		Detailed using desk study and site survey. This table may include further work you will need to commission (if any) to obtain planning permission or comply with legislation for other consent. All clients are expected to read and understand this section, or to contact the lead surveyor for advice.			
See Location plan in Appendix 1, PRA Map in Appendix 2, and Proposed plan in Appendix 3					
Background and Site Location					
Summary of site location and surrounding habitats		Grid ref: TL40803779 Size of survey area: 1.075h On site habitats: The site is situated in the rural area of Barley, Royston. It consists of four buildings. Two residential properties, a summer house, and a garage/workshop. There is also a small shed and greenhouse at the north of the property. The onsite habitat comprises mature deciduous woodlands, with hedgerows, and scattered mature trees. There are large gardens, with short sward lawn, and vegetated planters and beds. There is a large pond to the south of the property, and areas of sealed and unsealed surface creating walkways around the house and grounds. The habitat value of the site is high. Surrounding habitats: The site is surrounded by a number of similar sized residential properties, and a number of smaller detached properties, each with large associated gardens/ land. The surrounding habitat is woodland in nature, with the wider area comprising agricultural farmlands on four sides. From aerial imagery,			

	many of the fields appear to have mature hedgerows with scattered trees which provides connectivity between the site and nearby residential areas and wider areas of habitat. There are a small number of priority habitats within 2km as detailed below. <table><tr><th>Habitat Type</th><th>Number of Areas</th><th>Distance and direction of closest area</th></tr><tr><td>Priority Habitat Inventory - Traditional Orchards (England)</td><td>4</td><td>~350m west</td></tr><tr><td>Ancient Woodland (England)</td><td>5</td><td>~700m south</td></tr><tr><td>Priority Habitat Inventory - No main habitat but additional habitat exists (England)</td><td>3</td><td>~800m northwest</td></tr><tr><td>Woodpasture and Parkland BAP Priority Habitat (England)</td><td>1</td><td>~1800m southwest</td></tr></table>	Habitat Type	Number of Areas	Distance and direction of closest area	Priority Habitat Inventory - Traditional Orchards (England)	4	~350m west	Ancient Woodland (England)	5	~700m south	Priority Habitat Inventory - No main habitat but additional habitat exists (England)	3	~800m northwest	Woodpasture and Parkland BAP Priority Habitat (England)	1	~1800m southwest
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<i>EPSL and bat roost records (2km radius)</i>	Known roosts from previous survey work or local knowledge: None Magic EPSL records 2km radius: There are no EPSL’s within 2km of the site.															
<i>Designated sites</i>	On site designations - None. 2km radius – There are no designated sites within 2km. 10km radius (bat SACs only) – none.															
<i>Previous survey data</i>	A search for historical bat records has not been undertaken. However, given the low impact and small scale of the works it is not anticipated that the purchase of historical records data will add any significant weight or alter the conclusions and recommendations outlined in this report.															
<i>Limitations</i>	The survey was conducted without limitations.															

Field survey results**Summary****B1**

B1 is a three-storey, listed, residential property. The building is brick-and-mortar in construction, with areas of rendering and wood cladding. The roof is complex in structure and constructed of overlapping clay tiles. There are a large number of raised field tiles, with some missing tiles interspersed. There are small gaps around the eaves where the original beams protrude through the wall, and gaps at the bargeboard. The void has been fully converted into a third storey, with a small void below the pitch that is inaccessible.

The habitat value of B1 is moderate.

B2

B2 is a pitched and gabled residential property, with a roof comprised of overlapping clay tiles. The walls are constructed of brick and mortar, with areas of timber cladding. The roof has multiple lifted tiles particularly at the eaves, but no other external roosting features. Due to the construction of the building, there are two, small, inaccessible voids on the northern elevation.

The habitat value of B2 is moderate.



Figure 1: B1



Figure 2: B2

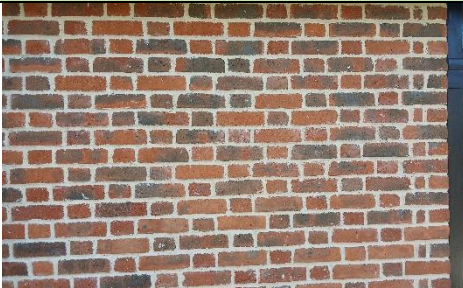
B1				
Feature	Materials	Condition/description	Suitability/access/evidence of bats	Photos
Walls	Brick and mortar, with areas of rendering, and wood cladding.	The building is predominantly brick and mortar with rendering. There is wood cladding on the western most extension of the property. The brickwork and rendering is in good condition with no gaps or missing mortar. The areas of cladding are in good condition with no raised or warped areas that would create gaps.	The walls present no roosting opportunities for bats.	  

Roof	Complex roof structure. Pitched. Tiled with overlapping clay tiles.	The roof is complex in structure and covered in overlapping clay tiles. The majority (>90%) of the tiles are raised, with a small number (<5) of missing tiles interspersed.	The roof provides roosting opportunities for crevice dwelling species. Given the volume of raised tiles, the roof could support large numbers of bats.	
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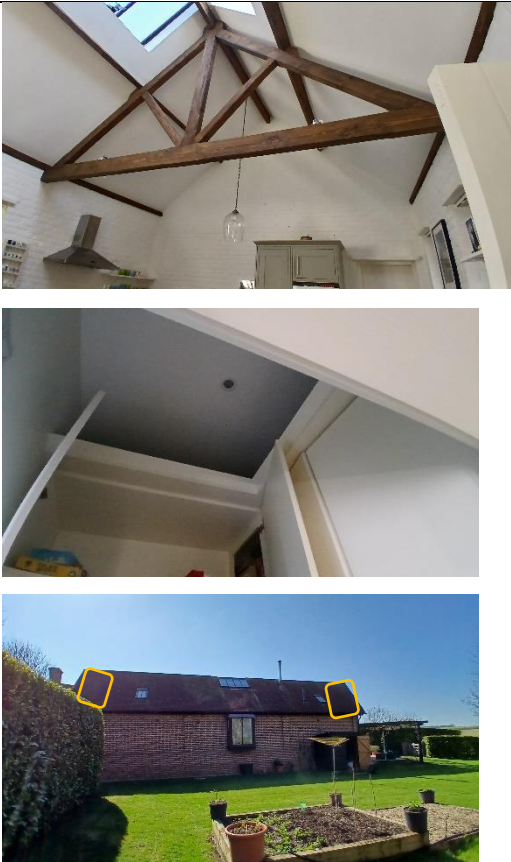
Eaves	Closed. Gutter lined.	Eaves are closed and lined with guttering. Guttering is in good condition with no damaged or missing areas. Original timbers protrude, opening up small gaps between brickwork and timbers.	The eaves present no roosting opportunities for bats. Protruding timbers will provide roosting opportunities for small numbers of crevice dwelling species.	 
Bargeboards	Timber bargeboards	Timber bargeboards on the southern elevation have gaps present between the bargeboard and the brickwork.	The bargeboards would provide roosting opportunities for a small number of crevice dwelling species.	

Doors/ Windows	Timber	Doors and windows fit tight within the frames, and the frames sit tightly to the surrounding brickwork/ cladding.	Doors and windows present no roosting opportunities for bats.	 
Internal Void - Cellar	Brick-and-mortar	The only void in the property is the cellar, which sits below the northwestern side of the property. The walls are comprised of brick and mortar. There is a small window which provides a good amount of light to the region. There are no ingress points for bats.	The void provides no roosting opportunities for bats.	

				
Internal Void - Roof	Unknown. Likely to be original timbers.	The voids here have been converted into liveable spaces, with the exception of a small area above the conversion, where the rooms have been created with a flat ceiling, rather than pitched to the ridge. There is no access to the void. The area of remaining void is approximated to be <1m in pitch, and be comprised of original rafters.	The conversions provide no roosting opportunities for bats. There is likely access to the remaining void via tile gaps, and whilst a bat presence cannot be ruled out, the low pitch here is likely to make the area sub optimal for void dwelling species.	

B2				
Feature	Materials	Condition/description	Suitability/access/evidence of bats	Photos
Walls	Brick-and-mortar. Areas of timber cladding.	B3 is brick-and-mortar in construction, with areas of timber cladding. The brickwork and cladding are in good condition with no areas of damage or missing mortar.	The walls present no roosting opportunity for bats.	
Roof	Pitched and gabled.	The roof is pitched and gabled, with overlapping clay tile. The roof has multiple (~60%) raised field tiles throughout, particularly at the hips. There is a small flat-roofed porch on the southern elevation, with no lifts or damage to the felt.	The pitched roof could provide roosting opportunities to larger numbers of bats and could allow for ingress points internally.	 

Eaves	Closed. Gutter lined.	Eaves are closed and lined with guttering. The guttering is in good condition with no missing or damaged areas.	The eaves present no roosting opportunities for bats.	
Bargeboards	Timber	The bargeboards are in good condition and does not lift away from the brickwork.	Bargeboards present no roosting opportunities for bats.	
Doors/ windows	uPVC	Doors and windows fit tight within the frames, and the frames sit tightly to the surrounding brickwork/ cladding.	Doors and windows present no roosting opportunities for bats.	

Internal Void	Inaccessible	The dwelling predominantly extends floor to ceiling throughout, with the exception on two small voids. The voids sit above storage closets and have no access. The regions these are in correlate to the eastern and western corners of the dwelling, on the northern elevation.	The interior of B2 provides no roosting opportunities for bats. It is unclear what the void spaces here look like, however they are tall and relatively narrow, which would make them sub-optimal for void dwelling species.	 Figure 3: Approximate Locations of the Voids in B2.
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Buildings in the wider complex

Within and immediately adjacent to the red line boundary are two additional buildings that form part of the wider site complex but are not included within the proposed development footprint. These buildings are identified on the Preliminary Roost Assessment (PRA) map. Neither structure contains internal voids, although both exhibit a small number of raised tiles that could provide limited roosting opportunities for crevice-dwelling bat species. Given the overall size of the site, the extent of surrounding gardens, and the limited nature of the proposed works, it is considered unlikely that there will be any direct or indirect impacts on these buildings.



<i>Habitat value</i>	The overall habitat value of B1 is rated as moderate. The design of the roof structure, with its extensive array of raised field tiles, creates favourable conditions for roosting—particularly for crevice-dwelling species. Although the volume of raised tiles suggests potential, the limited size and steep pitch of the small void may restrict access for void-dwelling species, rendering it sub-optimal for such use. Similarly, B2 is also assessed as having a moderate habitat value. The abundance of raised roof tiles indicates that B2 is likely to support a greater number of crevice-dwelling species. However, it is important to note that there are two voids on the northern elevation (located at the eastern and western sides) that remain inaccessible. The extent of the modifications applied to B2 necessitates a cautious approach in interpreting the value of these inaccessible voids. The immediate surroundings of the site offer excellent foraging and commuting opportunities. The presence of scattered mature trees, deciduous woodlands, and an adjacent waterbody contributes significant value to the habitat. The wider landscape retains a rural character, characterized by extensive woodlands, further scattered mature trees, and agricultural fields. This rural matrix provides strong connectivity between the site and other valuable habitats in the broader landscape. No European Protected Species Licenses (EPSLs) have been recorded within the local area. Given the rural nature of the location, this absence likely reflects a relatively low volume of planning and developmental activities rather than indicating a lesser abundance of bat populations in the vicinity.
<i>Foreseen Impacts</i>	Roosting habitat [Buildings] B1: The majority of the works to B1 are internal and will occur over the first and second storeys only, having no contact with the ceiling or roof, and will therefore have no impacts on any bats roosting in the building. The

	addition of skylights to the roof of the western extension will impact any bats present and could result in the destruction or damage of roosts, or the death or injury of bats present. B2: A proposed extension is planned to the northern elevation of B2. If present, roosts will be damaged or destroyed, and any bats could be injured or killed. Foraging and commuting habitat The proposed works are unlikely to create a significant amount of additional light-spill. No impacts on foraging or commuting habitats are foreseen.
Recommendations	Buildings <i>B1 - Two bat emergence/re-entry survey are required on the western extension of B1 during the active bat season (May – September) to confirm presence/likely-absence of bats roosting in or on the buildings. The survey visits should be completed during the optimal survey period mid-May to August inclusive. The survey effort should be supported by night vision aids (NVA).</i> <i>Two surveyors are required to provide full coverage of the building's elevations. Infrared cameras should be used as an aid.</i> <i>B2 - Two bat emergence/re-entry survey is required on the western extension of B1 during the active bat season (May – September) to confirm presence/likely-absence of bats roosting in or on the buildings. The survey visits should be completed during the optimal survey period mid-May to August inclusive. The survey effort should be supported by night vision aids (NVA).</i>

	Three surveyors are required to provide full coverage of the building's elevations. Infrared cameras should be used as an aid. Lighting mitigation may be required based on the outcome of the night bat survey. If the surveys indicate the presence of roosts a license application to Natural England will be required to proceed with the works. This is applied for with the help of a class 2 licensed bat ecologist after planning permission is granted, but before commencement of works. The surveys will help determine the type and conditions of the license. The application requires that all surveys have been undertaken within the most recent active bat season and planning permission must have been granted and all relevant wildlife-related conditions have been discharged prior to submission. Foraging and commuting habitat To be determined after phase two surveys. Other buildings on site To protect potential bat roosts, it is recommended to establish a 5-meter buffer zone around all buildings within the complex. This buffer should be free from site traffic, storage, lighting, access points, or any development activities to prevent disturbances to existing roosts.
Enhancements	Suggested biodiversity enhancements To be determined after further surveys.

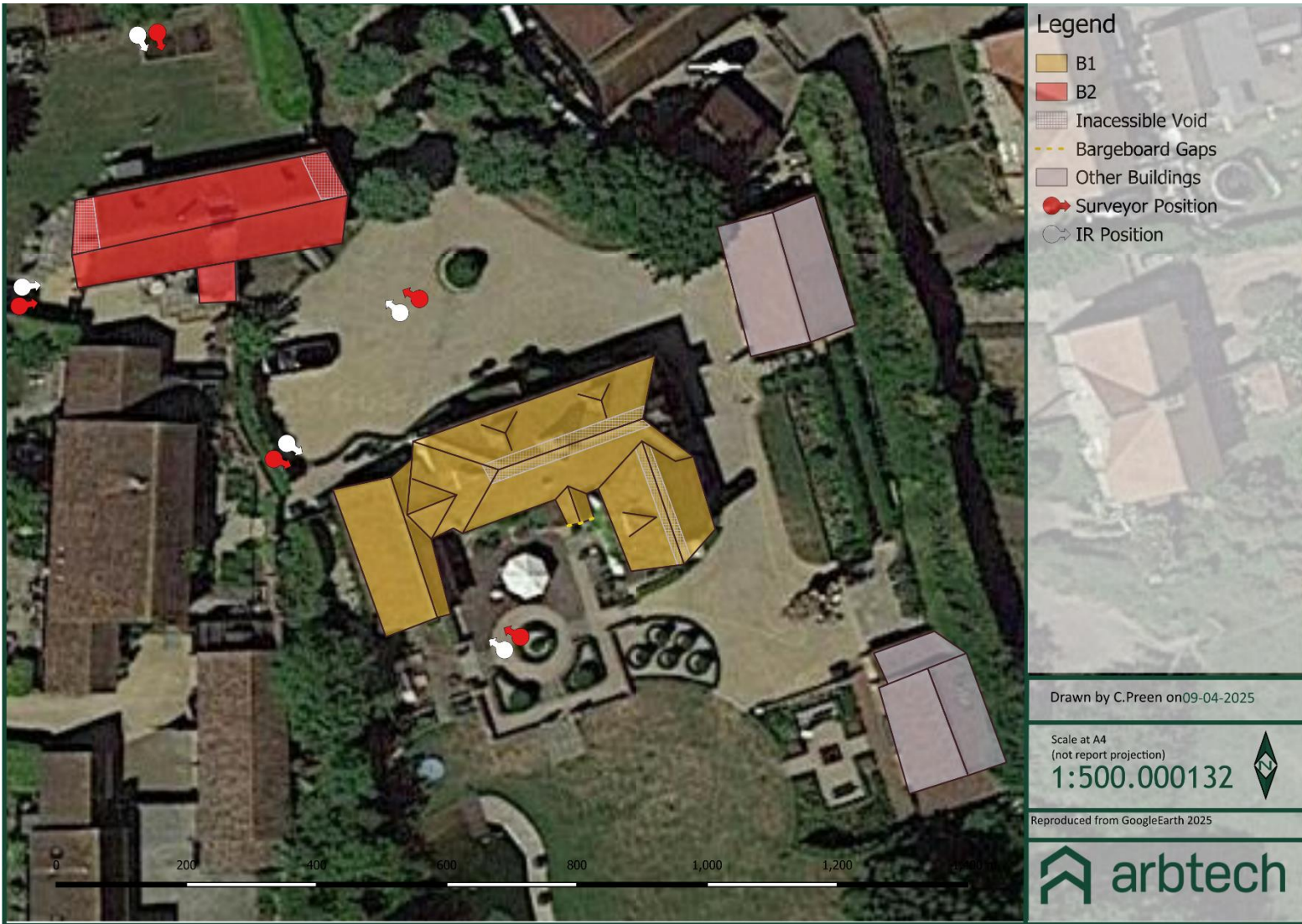
Nesting Birds	
<i>Summary of Survey Findings</i>	Buildings No evidence of roosting or nesting birds was identified in B1 or B2. These buildings are considered suitable for roosting and nesting birds, which could utilise gaps under the tiles. Trees and vegetation No bird nests were identified within the trees on-site; however, they all offer nesting opportunities and nest-building resources for birds. Barn owls The site is considered unsuitable for Barn owls.
<i>Foreseen Impacts</i>	Buildings B1 and B2 - The proposed development could result in the destruction or the disturbance and subsequent abandonment of active bird nests. Trees No nests were identified but the vegetation on site will support nesting birds which may cause disturbance, nest failure, or abandonment due to the proposed development. Barn owls No impacts foreseen.

<i>Recommendations</i>	Buildings B1 and B2 - Any external works should be undertaken outside the period 1st March to 31st August. If this timeframe cannot be avoided, a close inspection of the building should be undertaken prior to the commencement of work. All active nests will need to be retained until the young have fledged. Precautions should be taken with machinery and noise levels when working close to any retained nests so as not to disturb any nearby nesting birds during construction works. At least a 3-5m buffer should be created between any machinery and active nests until the young have fledged. Trees Any works should be undertaken outside the period 1st March to 31st August. If this timeframe cannot be avoided, a close inspection of the vegetation should be undertaken prior to the commencement of work. All active nests will need to be retained until the young have fledged. Precautions should be taken with machinery and noise levels when working close to any retained nests so as not to disturb any nearby nesting birds during construction works. At least a 3-5m buffer should be created between any machinery and active nests until the young have fledged. Barn Owls None
<i>Enhancements</i>	Suggested biodiversity enhancements The installation of a bird box on the building will provide additional nesting habitat for birds e.g. Schwegler No 17 Swift Nest Box (buildings) Schwegler 1SP Sparrow Terrace (buildings) Or a similar alternative brand.

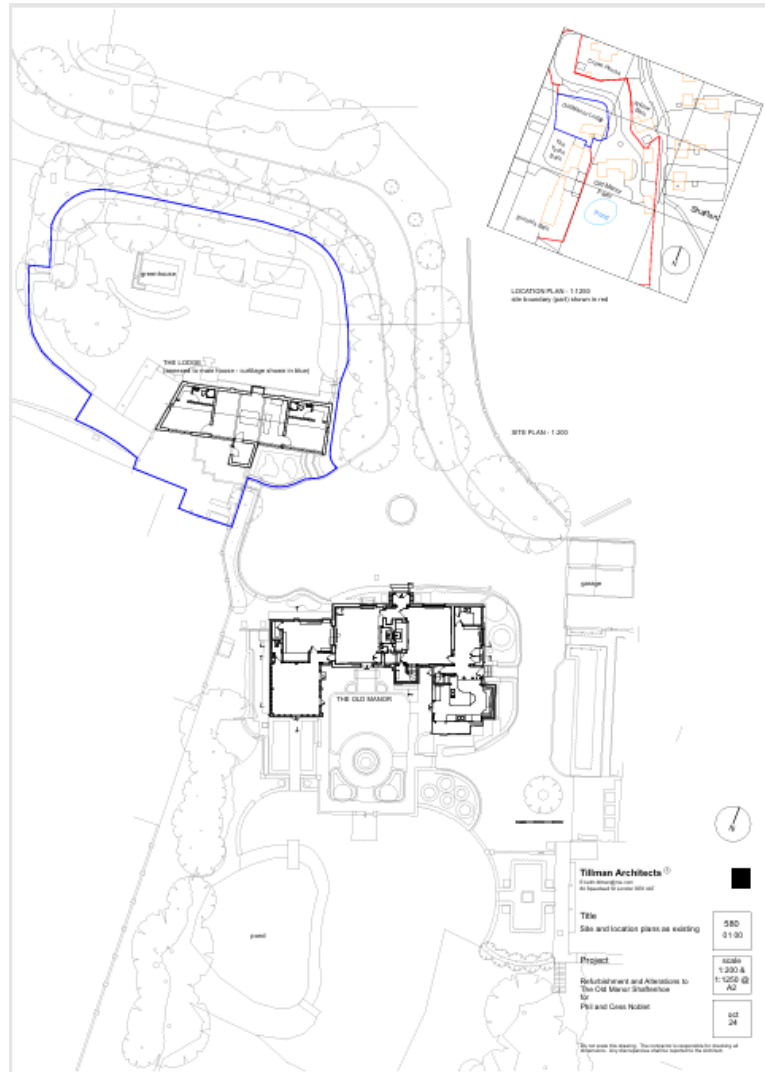
Appendix 1: Location Plan

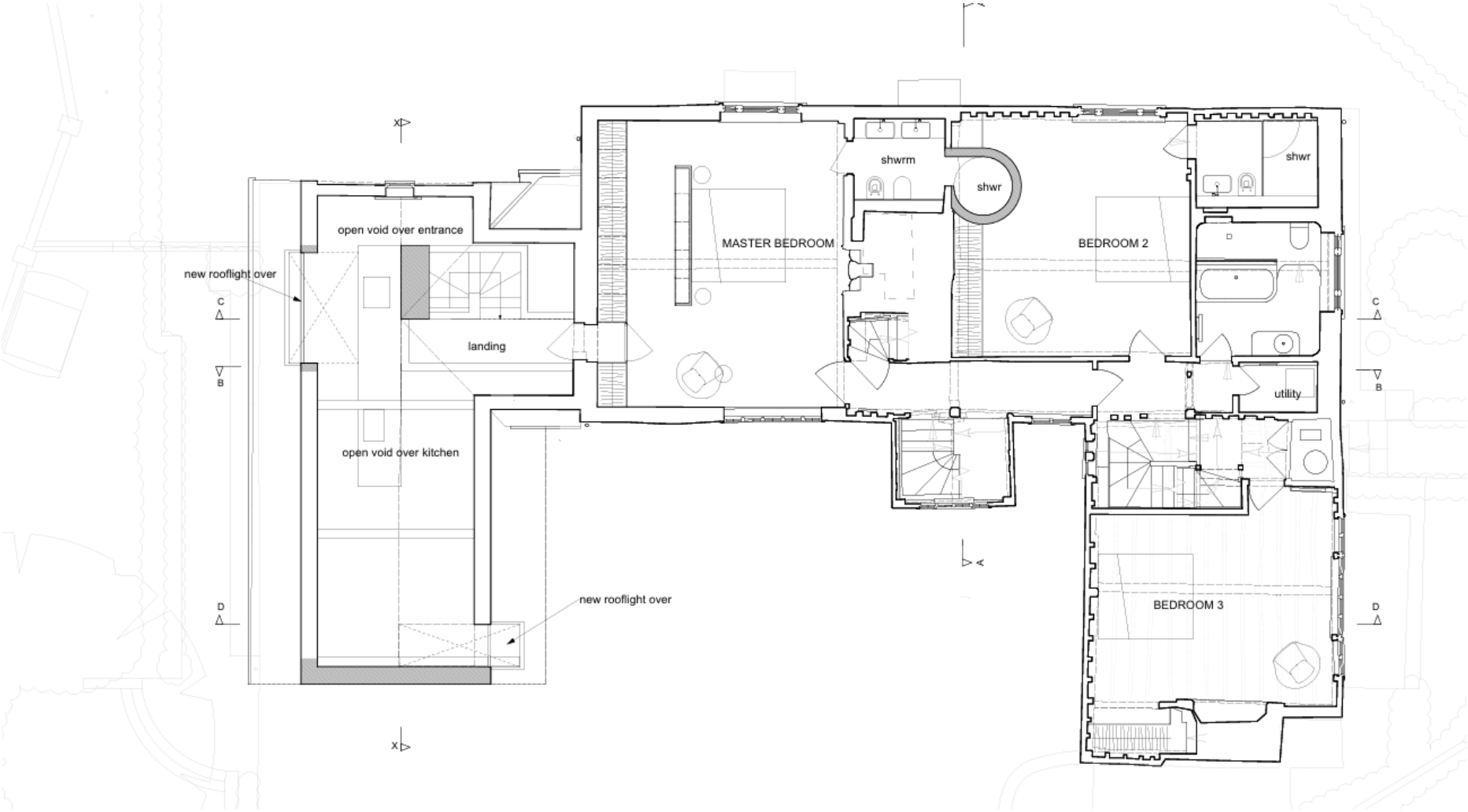


Appendix 2: PRA Plan

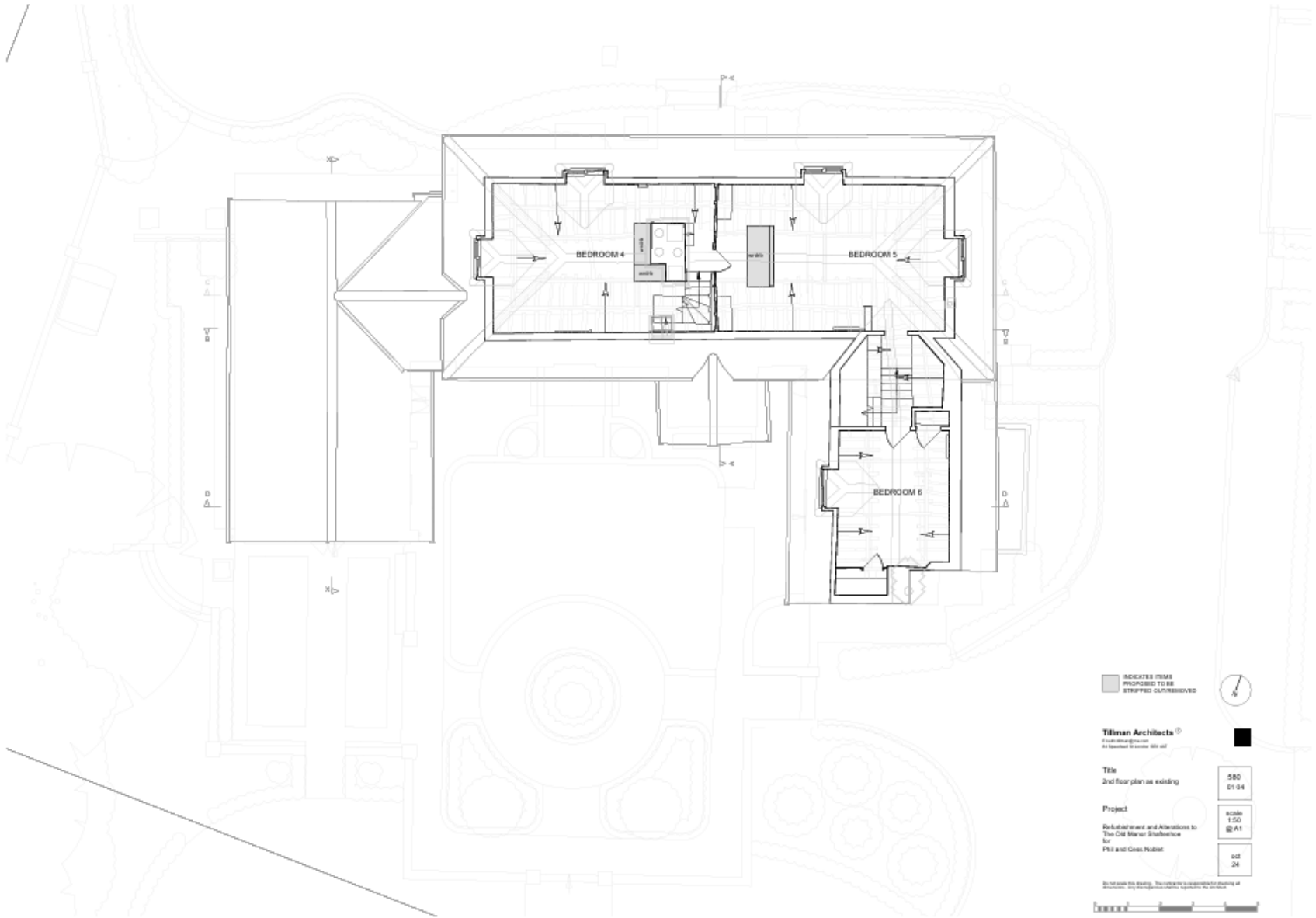


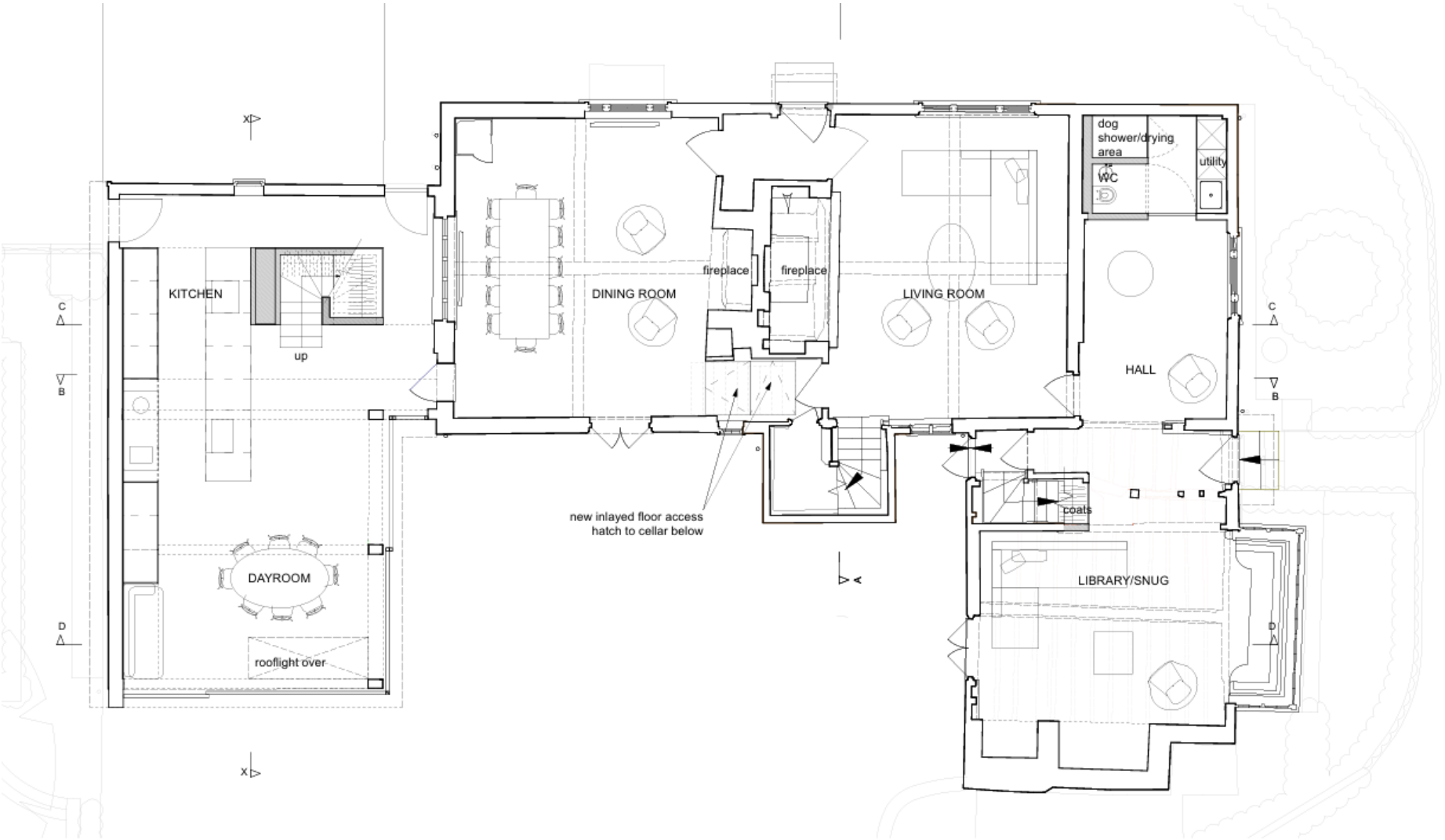
Appendix 3: Proposed Plans

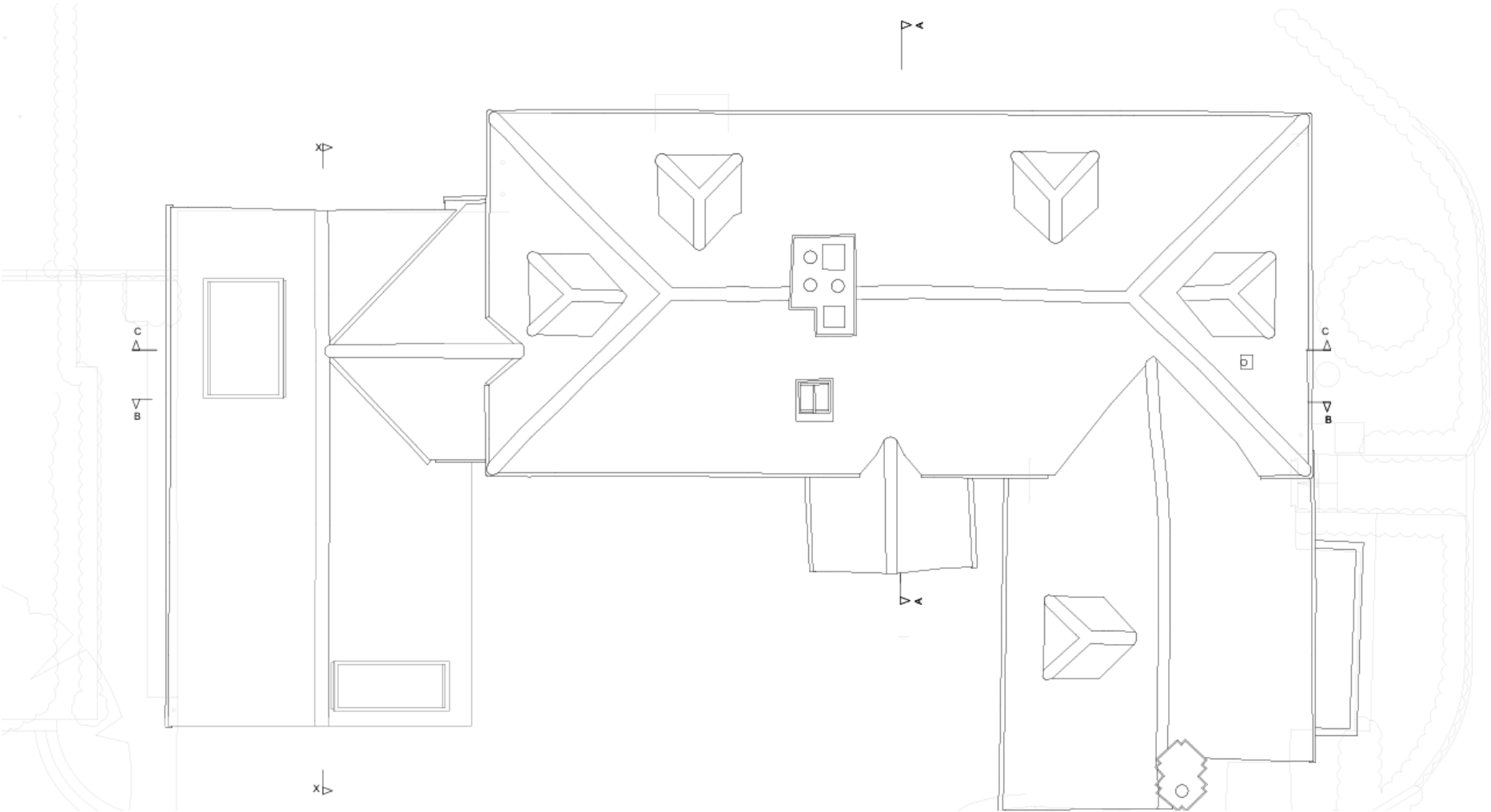


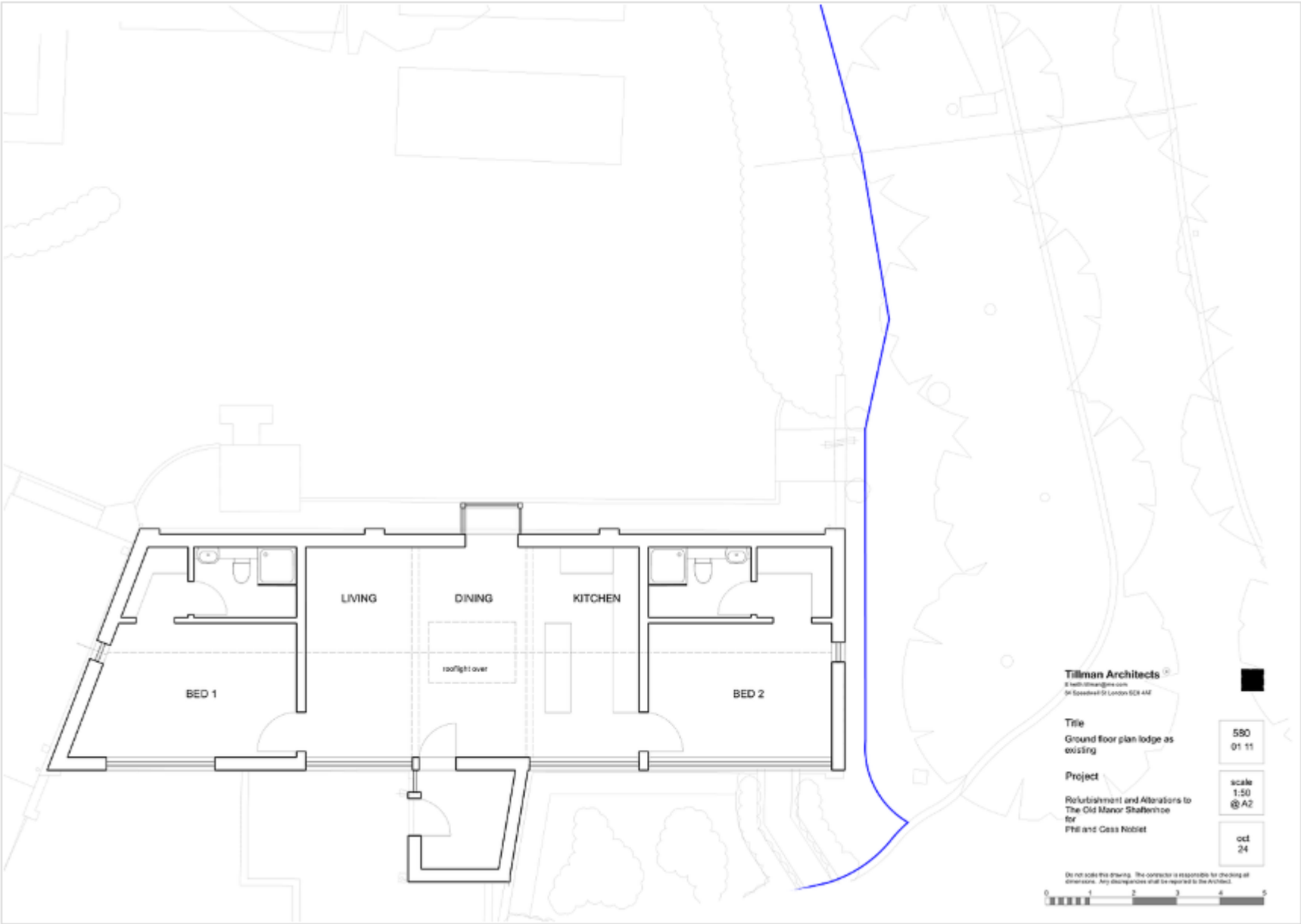


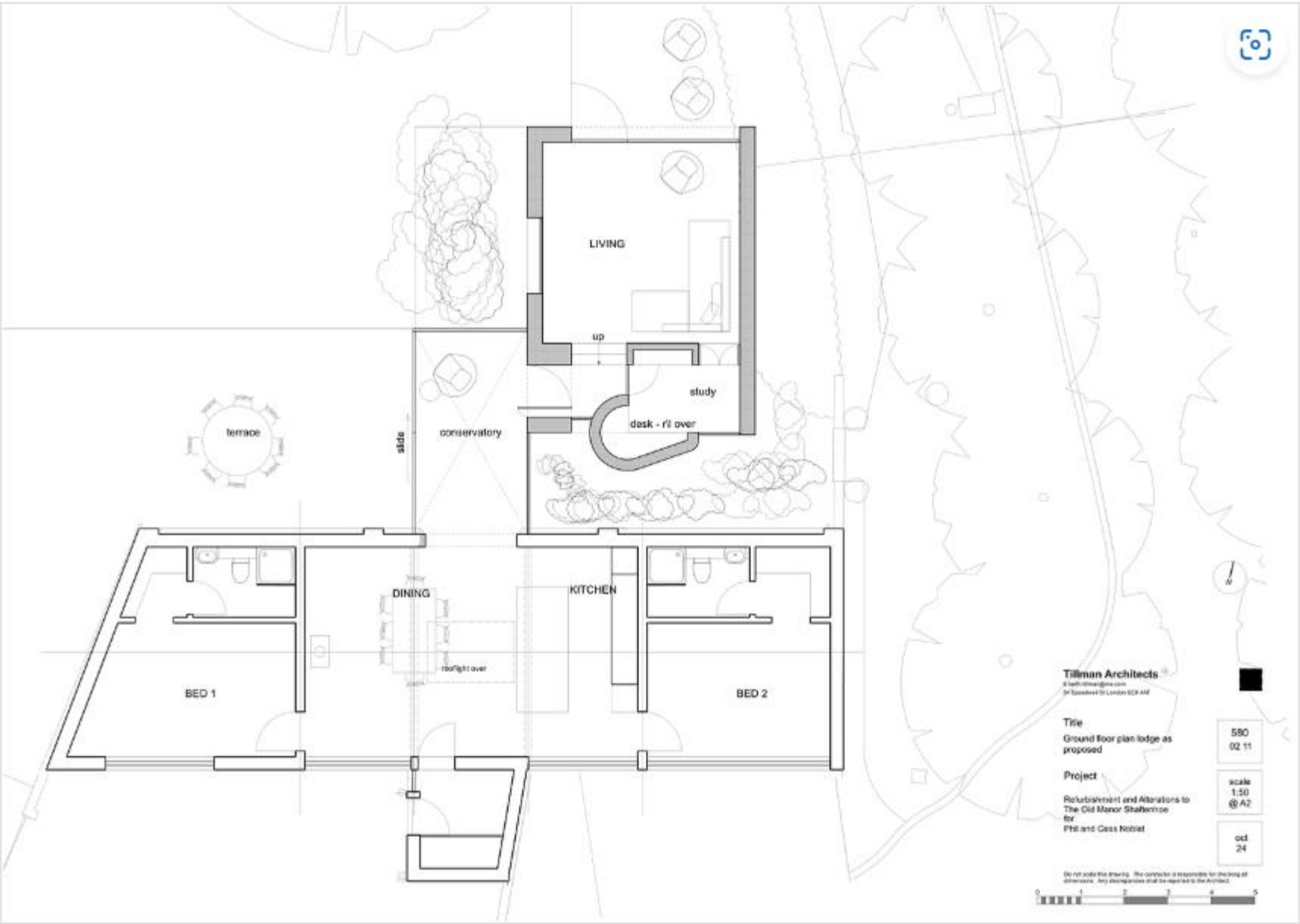














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Status	Issue	Name	Date
Draft	0.1	Carly Preen BSc (Hons), MSc, Graduate Ecologist	09/04/2025
Review	0.2	Charlie Drapala BSc (Hons) AMRSB, Natural England CL18 Bat Licence, Consultant Ecologist	25/04/2025
Final	1.0	Carly Preen BSc (Hons), MSc, Graduate Ecologist	25/04/2025