

Preliminary Ecological Appraisal and Roost Assessment

Survey site:

Greenworld Cansiron Lane Ashurst Wood West Sussex RH19 3SD

Client:

Mike and Laeony Constantinou

Survey date:

12th February 2025

Project:

This report is prepared to inform a planning application with Mid Sussex District Council. The proposal is described as “Proposed renovation of existing 1960’s bungalow including upgrade of insulation, new extension over existing store room and carport and renovation / conversion of LG garden room into office/ guest room”

PEA survey methodology and legislation can be found in the Arbtech Supplement: [PEA Methodology and Legislation - 2024.](#)

PRA survey methodology and legislation can be found in the Arbtech Supplement: [PRA Methodology and Legislation - 2024.](#)

The survey results and recommendations contained within this report are valid for 18 months. An updated site visit may be required if the report is to be used any longer than 18 months after completion

The site survey was undertaken by Chantae Bleakman-Wells BSc (Hons) MSC, (Accredited Agent on Natural England Bat Licence Number: 2018-33540-CLS-CLS) on 12/02/2025					
Date of survey	Temperature (°C)	Humidity (%)	Cloud Cover (%)	Wind (km/h)	Rain
12/02/2025	5	78	100	4	None

Ecological Survey Factor	Detailed using desk study and site survey. Any specific limitations noted within relevant section. This table may include further work you will need to commission (if any) to obtain planning permission or comply with legislation for other consent.
Conclusion, Impact or Recommendations	
Habitats and plants (see habitat map in appendix 1, location plan in appendix 2, photos in appendix 3 and proposal plan in appendix 4).	
Botanical species are described with reference to the DAFOR scale (D = Dominant; A = Abundant, F = Frequent, O = Occasional, R = Rare).	
Summary of Survey Findings	The site is located in West Sussex, at National Grid Reference TQ 42716 36569 and has an area of approximately 0.2Ha, comprising a building with a gravel driveway, associated hard-standing pathways and a vegetated garden with grass lawn, introduced shrubs and lines of trees bordering the site. The site is surrounded by arable fields and pockets of woodland, with residential houses to the west. River Medway is approximately 2.5km south-west of the site. <u>Buildings (u15b)</u> There is one building within the site. This is described further in the bat section of this report. <u>Developed land, sealed surface (u1b)</u> The building is surrounded by concrete pathways.

	<u>Vegetated garden (u1, secondary code 828 and 32)</u> The site mostly comprises vegetated garden, with a grass lawn (Dominant perennial rye grass, with abundant Yorkshire fog grass, frequent common daisy, creeping buttercup and occasional ground ivy, curled doc, mint and thistle) and patches of introduced shrubs (including buddleia, daffodils, tustan, elephant's ear, primrose and dog rose). There are approximately five small scattered trees in the south-east of the site. The grassland had no evidence of physical damage, had a varied sward height, <5% bare ground and no invasive species, but less than 6 species per m². <u>Ornamental hedgerow (h2b)</u> The east of the site is bordered by a conifer hedgerow which is regularly managed. <u>Line of trees (secondary code 33)</u> The majority of the site is bordered by a line of trees (species include hazel, beech, yew, cherry laurel, Portuguese laurel, oak, and European holly). Less than 10% of the total canopy cover had gaps, 70% of the trees are native, the trees had ecological niches, there is undisturbed vegetation 6m on either side for the majority of the line of trees (the exception being the area of gravel driveway at the north-east of the site) and 95% of the trees are in healthy condition. Local notable habitats The following notable habitats are present within 2km of the site: Woodpasture and Parkland BAP Priority Habitat (the closest of which is approximately 1.9km south), Ancient Woodland (the closest of which is approximately 100m south), Traditional Orchards (the closest of which is approximately 200m east) and Lowland Meadow (the closest of which is approximately 960m east)
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<i>Foreseen Impacts</i>	No direct impacts to any habitats of biodiversity value are anticipated due to the small scale of the works and the lack of biodiverse habitats within the site. All direct impacts are anticipated to be restricted to the existing building, artificial, unvegetated, unsealed surface and vegetated garden only. Indirect impacts such as pollution may occur to the nearby woodland.
<i>Recommendations</i>	Retained hedgerows and lines of tree should be protected in line with the measures outlined in the British Standard "Trees in Relation to Design, Demolition and Construction to Construction - Recommendations" (BS 5837) (2012). Best practice to minimise the risk of pollution to the nearby notable habitats during the construction works.
Locality and Designated Sites	
<i>Summary of Survey Findings</i>	On-site designations The site falls within the High Weald National Landscape. Statutory designated sites (within 2km) <u>Ashdown Forest (Special Protection Area, Special Area of Conservation and Site of Special Scientific Interest)</u> is approximately 2km south of the site. Ashdown Forest is one of the largest single continuous blocks of heath, semi-natural woodland and valley bog in south-east England, and it supports several uncommon plants, a rich invertebrate fauna, and important populations of heath and woodland birds. The aquatic habitats support a diverse fauna, including a range of water beetles (Coleoptera) a rare midge <i>Dixella filiformis</i>, a diversity of dragonfly and damselfly species (Odonata) and the locally uncommon snail <i>Vertigo substriata</i>. Some of the ponds also have large amphibian populations, including the great-crested newt <i>Triturus cristatus</i>. <u>Mills Rocks Site of Special Scientific Interest</u> is approximately 1.3km west of the site. The rock outcrops support a number of rare plants and particularly notable is reed fescue grass <i>Festuca altissima</i> which has only one other southern English locality and occurs sparsely elsewhere in Britain. The hay-scented buckler fern <i>Dryopteris aemula</i> also grows on the rocks and the rich

	bryophyte flora (mosses and liverworts) includes <i>Odontoschisma denudatum</i>, <i>Cephalozia connivens</i> and <i>Calypogeia neesiana</i> var <i>meylanii</i>. The presence of non-statutory designation sites cannot be ascertained without biological records data.
<i>Foreseen Impacts</i>	No direct impacts are anticipated on statutory designated sites given the small scale of the works and the distance of the site from statutory designated sites. The presence of non-statutory sites cannot be ascertained without biological records data, however given the small scale of the works, direct impacts are not anticipated to occur outside of the site boundary.
<i>Recommendations</i>	Best practice to minimise the risk of pollution to the nearby non-statutory designated sites (which may be present within the local area) must be followed during demolition and construction.
Invasive / Non-native species	
<i>Summary of Survey Findings</i>	No problematic invasive or non-native species recorded on site.
<i>Foreseen Impacts</i>	No impacts anticipated.
<i>Recommendations</i>	No further surveys but remain vigilant.
Invertebrates	
<i>Summary of Survey Findings</i>	The grassland and lines of trees within the site provides suitable habitat for common invertebrates. The site contains no habitat to support notable assemblages of invertebrates.
<i>Foreseen Impacts</i>	No impacts anticipated.
<i>Recommendations</i>	No further surveys.

Bats									
Summary of Survey Findings	EPSLs A search of the magic.gov.uk database for granted EPSLs within a 2km radius of the site has been completed. Displaced bats from licensed sites <2km away from the survey site will find alternative habitat either within the mitigation measures implemented as part of the licence or will relocate to other known roosts sites in close proximity to the licensed site. There is one granted EPSL within a 2km radius of site as detailed below: <table><tr><th>EPSL reference</th><th>Bat species affected</th><th>Distance from site</th><th>Impacts allowed by licence</th></tr><tr><td>2020-44776-EPS-MIT</td><td>Brown long-eared, Common pipistrelle, Soprano pipistrelle</td><td>1.4km south-east</td><td>Destruction of a resting place</td></tr></table> Roosting habitat The building is a single-storey, ground level ‘L’ shaped building on the east elevation and a single and basement story on the west elevation. The building has a pitched roof, with timber cladding on the east gable, south gable and north gable. The roof is clad with curved, interlocking concrete roof tiles with gaps at the curve on the first row of tiles. The doors, windows and soffits are all tight fitted with no gaps suitable for bats. There is a flat roof which protrudes from the west roof elevation, with a brick wall and external stairs from the basement to ground floor storey. There is an extension on the southern most part of the west elevation, which has a flat roof and no suitable bat roosting features. The north elevation comprises a flat roof, open sheltered area which connects to a small, pitched roof open, sheltered area. The pitched roof part of the open area has torn felt lining with suitable areas for roosting bats. Bat droppings were observed on the exterior wall on the northern elevation, on the gable underneath the pitched roof open area.	EPSL reference	Bat species affected	Distance from site	Impacts allowed by licence	2020-44776-EPS-MIT	Brown long-eared, Common pipistrelle, Soprano pipistrelle	1.4km south-east	Destruction of a resting place
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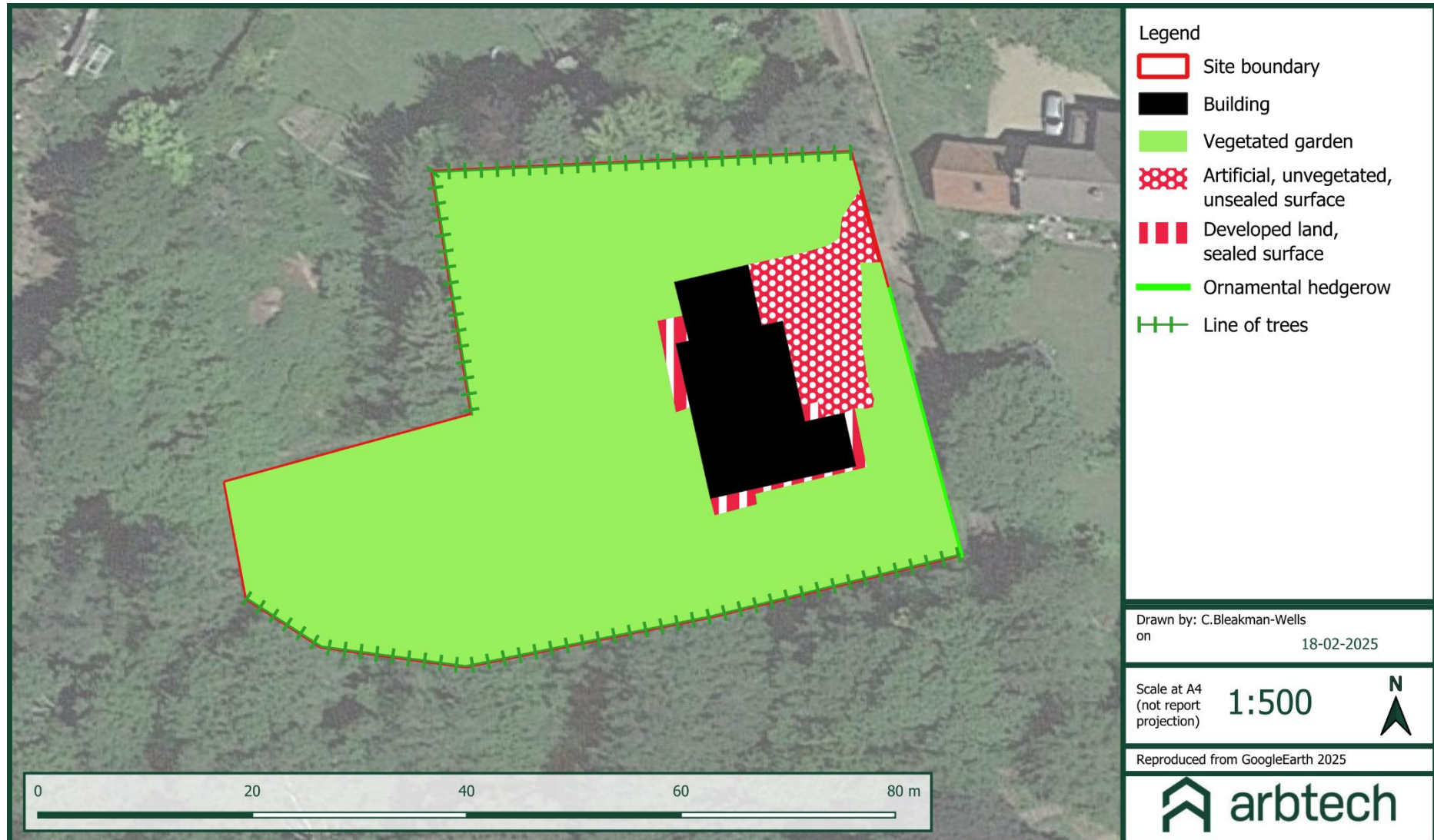
	The interior loft space measured approximately 2.3m height x 13.5m length x 5.5m width, with an internal temperature of 3°C and 82% humidity. The loft space had timber rafters, with bitumen felt lining with infrequent tears. The floor is clad with boards, and bat droppings were present at both north and south gable ends (approximately 200, mixed aged droppings). The droppings were on the gable wall as well as scattered on the floor by the gable wall. See Appendix 4 for photographs of the building and bat evidence. The building is assessed as high value to roosting bats due to the number of suitable roosting features and good quality surrounding habitat and a confirmed roost due to the presence of bat droppings.
<i>Foreseen Impacts</i>	The proposed development (extension on the existing building) may result in the destruction of bat roosts, which may lead to injury or death of bats.
<i>Recommendations</i>	Three bat emergence surveys are required during the active bat season (optimal May to August, suboptimal September) to characterise the roosts present. At least two of the surveys should be completed during the optimal survey period mid-May to August inclusive. Infra-red cameras must be used as an aid. Surveys should be a minimum of three weeks apart. Five surveyors are required to provide full coverage of the building. An EPSL application to Natural England may be required (if any bat roosts will be destroyed). The EPSL application requires that 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.

Birds	
<i>Summary of Survey Findings</i>	No evidence of breeding birds was observed during the survey; however, the building roof and surrounding trees offer suitable habitat for breeding birds.
<i>Foreseen Impacts</i>	The proposed development may result in the disturbance of birds' nests on the building (if present).
<i>Recommendations</i>	The construction 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 immediately, by a qualified ecologist, 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 (for example within the single tree within the site) during construction works. At least a 3-5m buffer should be created between any machinery and active nests until the young have fledged.
Reptiles	
<i>Summary of Survey Findings</i>	The grassland and lines of trees within the vegetated garden are suitable for foraging and commuting reptiles. The building and surrounding hard-standing and gravel driveway are unsuitable for reptiles.
<i>Foreseen Impacts</i>	The works will be concentrated on the building, hard-standing and artificial, unvegetated, unsealed surface. Transient reptiles from the surrounding suitable habitat may be injured by heavy machinery.
<i>Recommendations</i>	As the works will be taking place on unsuitable habitat, full reptile population surveys are deemed disproportionate to the risks. However, as transient reptiles may be present for short periods of time, the following precautionary working methods must be followed in order to reduce risk to reptiles to an acceptably low level: • Any debris will be stored on pallets or removed from the site to prevent reptiles from utilising these areas. • Any excavations will be covered overnight, or a ramp will be installed to enable any trapped animals to escape.

	- Any chemicals or pollutants used or created by the development should be stored and disposed of correctly according to COSHH regulations. - If any reptiles are observed within the working area, they must be left to move of their own volition. If they are in immediate danger and unable to move of their own volition, they may be carefully removed by hand and placed in an undisturbed, vegetated area within the site boundary, away from the works. Do not handle adders without appropriate PPE.
Amphibians	
<i>Summary of Survey Findings</i>	There is one granted EPSLs for great crested newts (2017-29340-EPS-MIT) within 2km of the site, which is approximately 1.3km south of the site. The grassland and lines of trees within the site provide suitable commuting habitat for amphibians. There is no suitable aquatic habitat within the site for amphibians. Great crested newts exist in metapopulations and are known to utilise ponds and their connecting terrestrial habitat during their life cycle; great crested newts are typically found within terrestrial habitats up to 500m from breeding ponds (Langton et al. 2001). A review of aerial imagery indicates the presence of two ponds and two ditches within 500m of the site.
<i>Foreseen Impacts</i>	The works will be concentrated on the building, hard-standing and artificial, unvegetated, unsealed surface. Transient amphibians from the surrounding suitable habitat may be injured by heavy machinery.

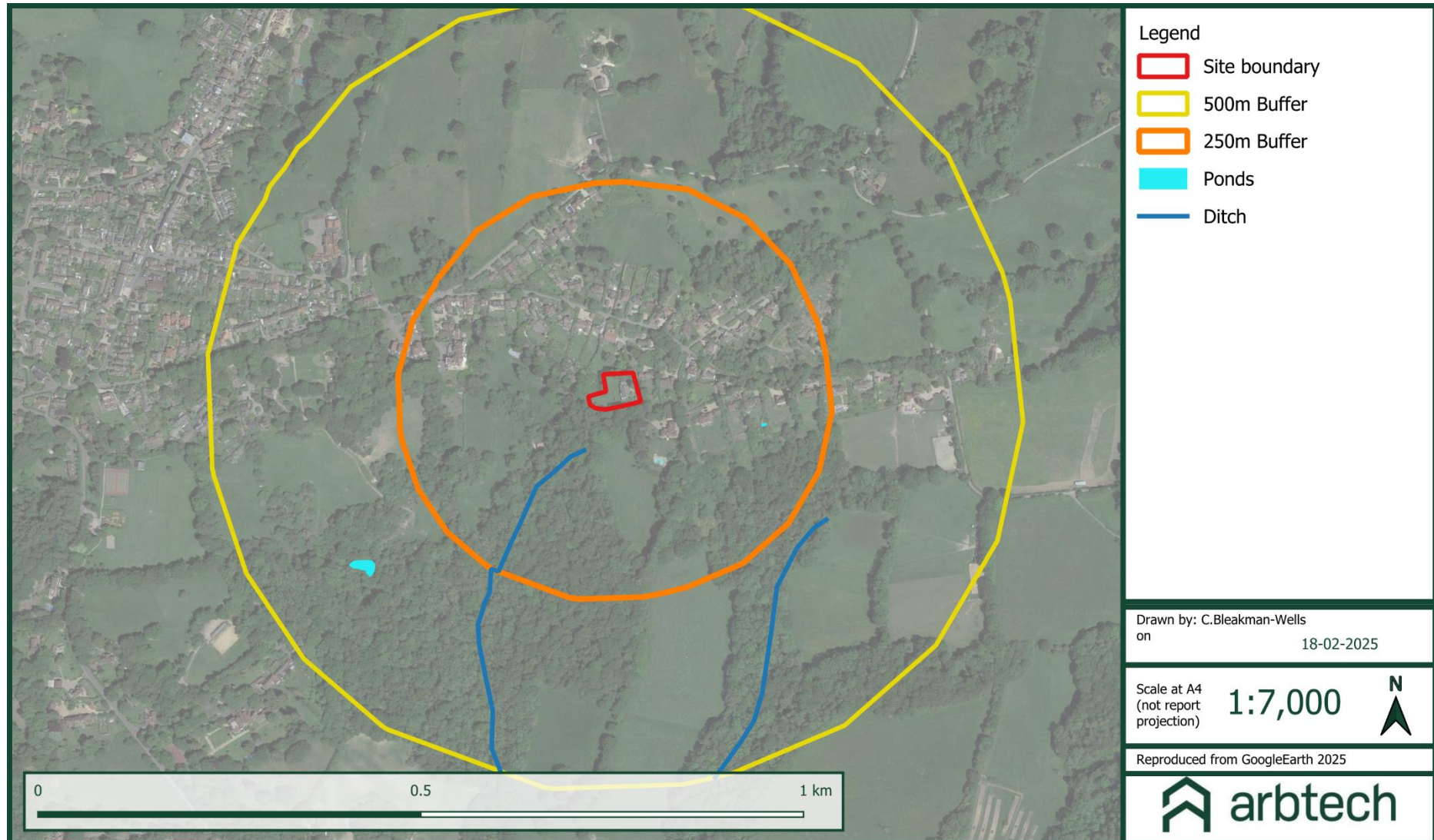
<i>Recommendations</i>	As the works will be taking place on unsuitable habitat, eDNA and/or great crested newtpopulation surveys are deemed disproportionate to the risks. However, as transient amphibians may be present for short periods of time, the following precautionary working methods must be followed in order to reduce risk to great crested newts to an acceptably low level: • Any debris will be stored on pallets or removed from the site to prevent reptiles from utilising these areas. • Any excavations will be covered overnight, or a ramp will be installed to enable any trapped animals to escape. • Prior to, and for the duration of the works, the grassland within the site will be managed and maintained to a sward height <7cm to reduce the suitability of the surrounding area for amphibians • In the unlikely event that great crested newts are observed within the site, all works must stop with immediate effect and advice must be sought from a suitably qualified ecologist. • If any common amphibians are found on site, they should be left to disperse of their own accord. If in immediate danger and will not move of their own volition, they may be gently removed and placed in an area of vegetation away from disturbance.
Badger	
<i>Summary of Survey Findings</i>	There were no badger setts or evidence of badgers within the site. The site offers suitable foraging habitat for badgers.
<i>Foreseen Impacts</i>	Transient badgers may be injured by heavy machinery.
<i>Recommendations</i>	
Riparian animals	
<i>Summary of Survey Findings</i>	There are no watercourses on or connected to the site.
<i>Foreseen Impacts</i>	No impacts anticipated.
<i>Recommendations</i>	None.

Hazel dormouse	
<i>Summary of Survey Findings</i>	There are two granted EPSL for dormice (2017-28498-EPS-MIT, 2017-28498-EPS-MIT-1) within 2km of the site, which are both 1.3km south of the site. The lines of trees bordering the site connect to pockets of woodland, and as such, provide suitable commuting habitat for hazel dormice.
<i>Foreseen Impacts</i>	The lines of trees will be retained and not impacted. Therefore, the risk to hazel dormice is acceptably low.
<i>Recommendations</i>	In the unlikely event that hazel dormice are observed within the site, all works must stop with immediate effect and advice must be sought from a suitably qualified ecologist.
Other e.g. hedgehog	
<i>Summary of Survey Findings</i>	The grassland within the site is suitable for foraging hedgehogs.
<i>Foreseen Impacts</i>	Hedgehogs may be injured or killed by heavy machinery during the demolition and construction works.
<i>Recommendations</i>	A precautionary working method will be implemented during construction, including the following measures: • Any excavations will be covered overnight, or a ramp will be installed to enable any trapped animals to escape. • Any chemicals or pollutants used or created by the development should be stored and disposed of correctly according to COSHH regulations • If any hedgehogs are found in the working area these should be allowed to disperse of their own accord or, if at immediate risk, should be moved by hand to a sheltered, vegetated area away from disturbance.

Appendix 1a: Habitat Map

Appendix 1b: Preliminary Roost Assessment

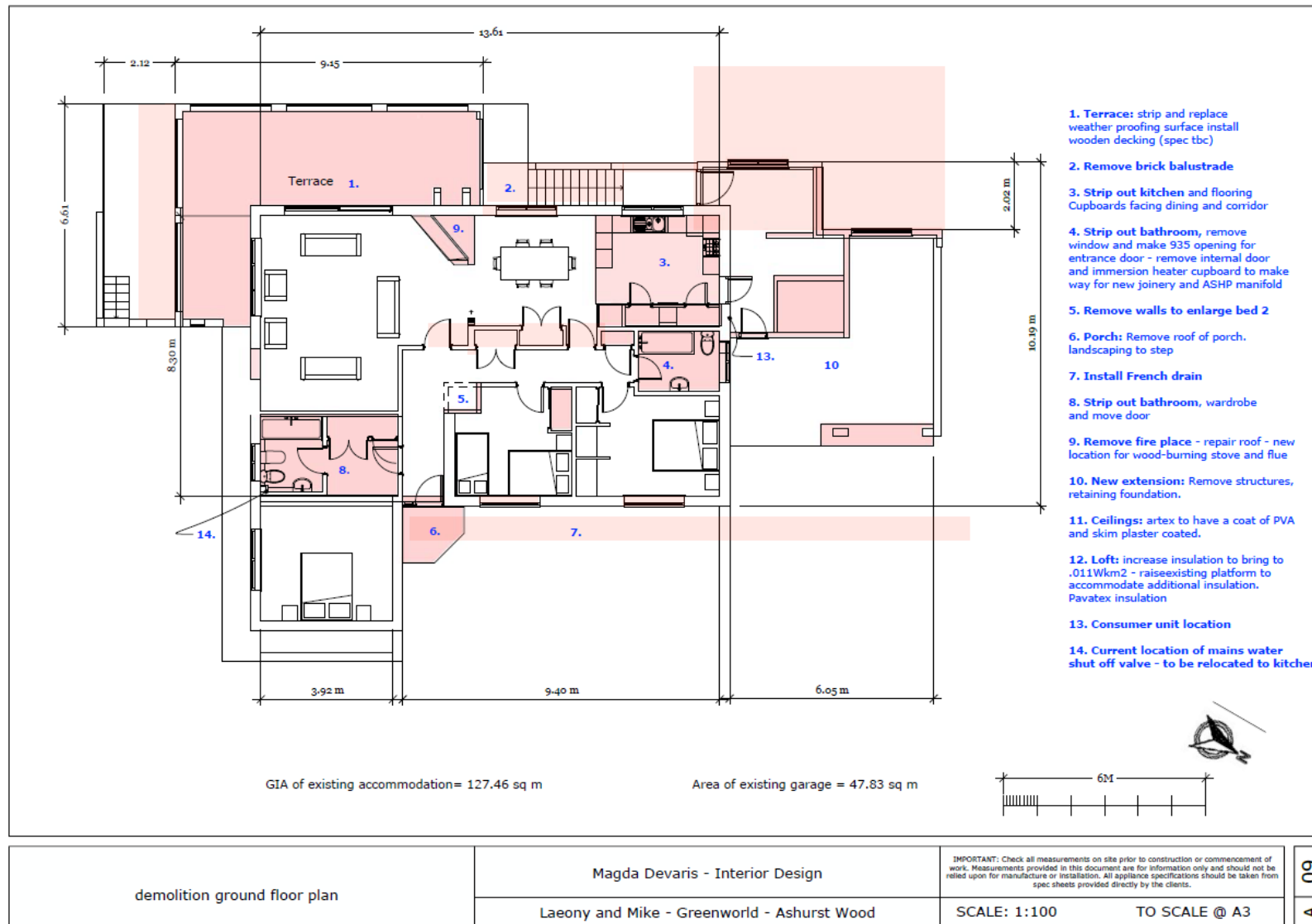
Appendix 1c: Pond Map

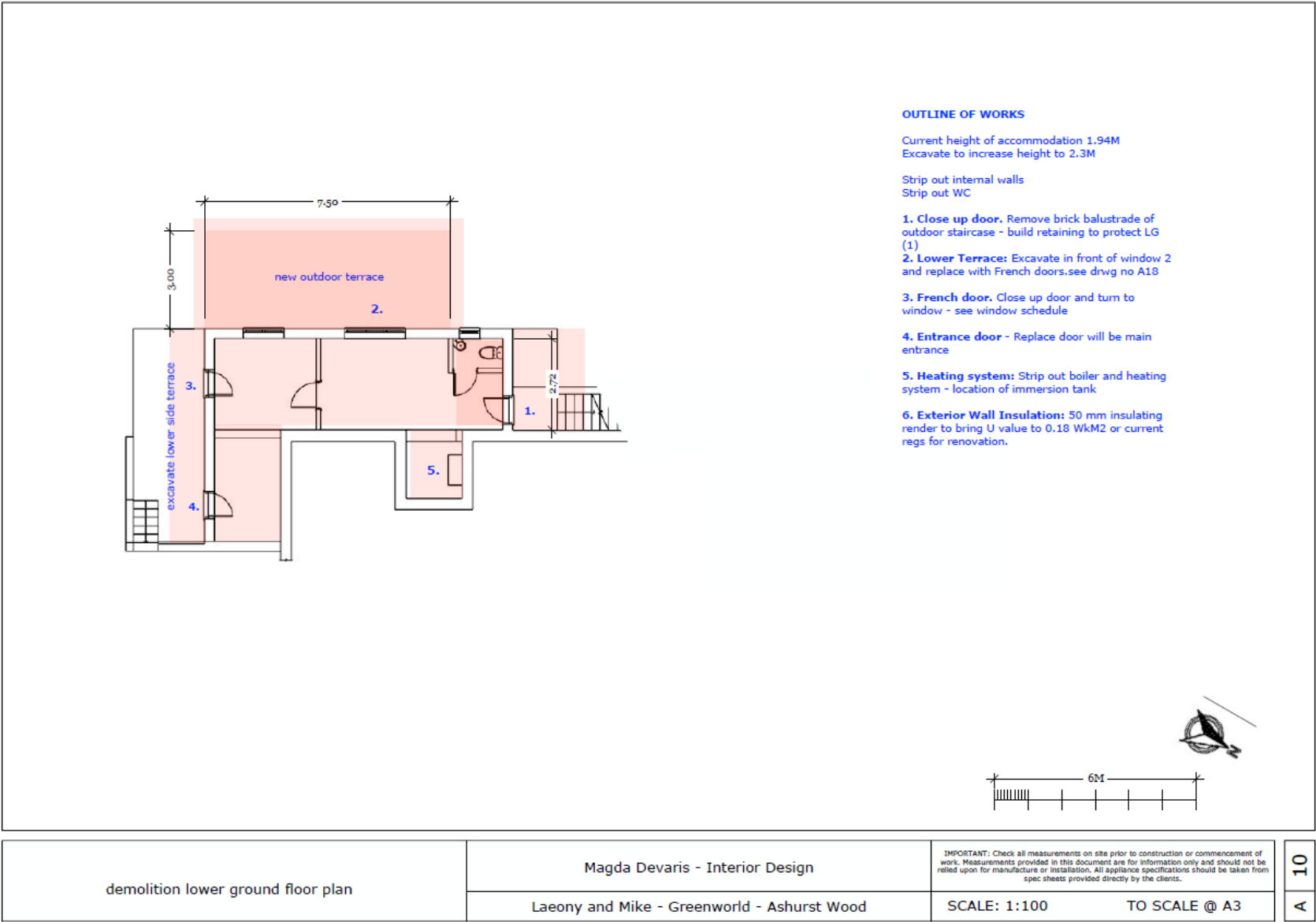


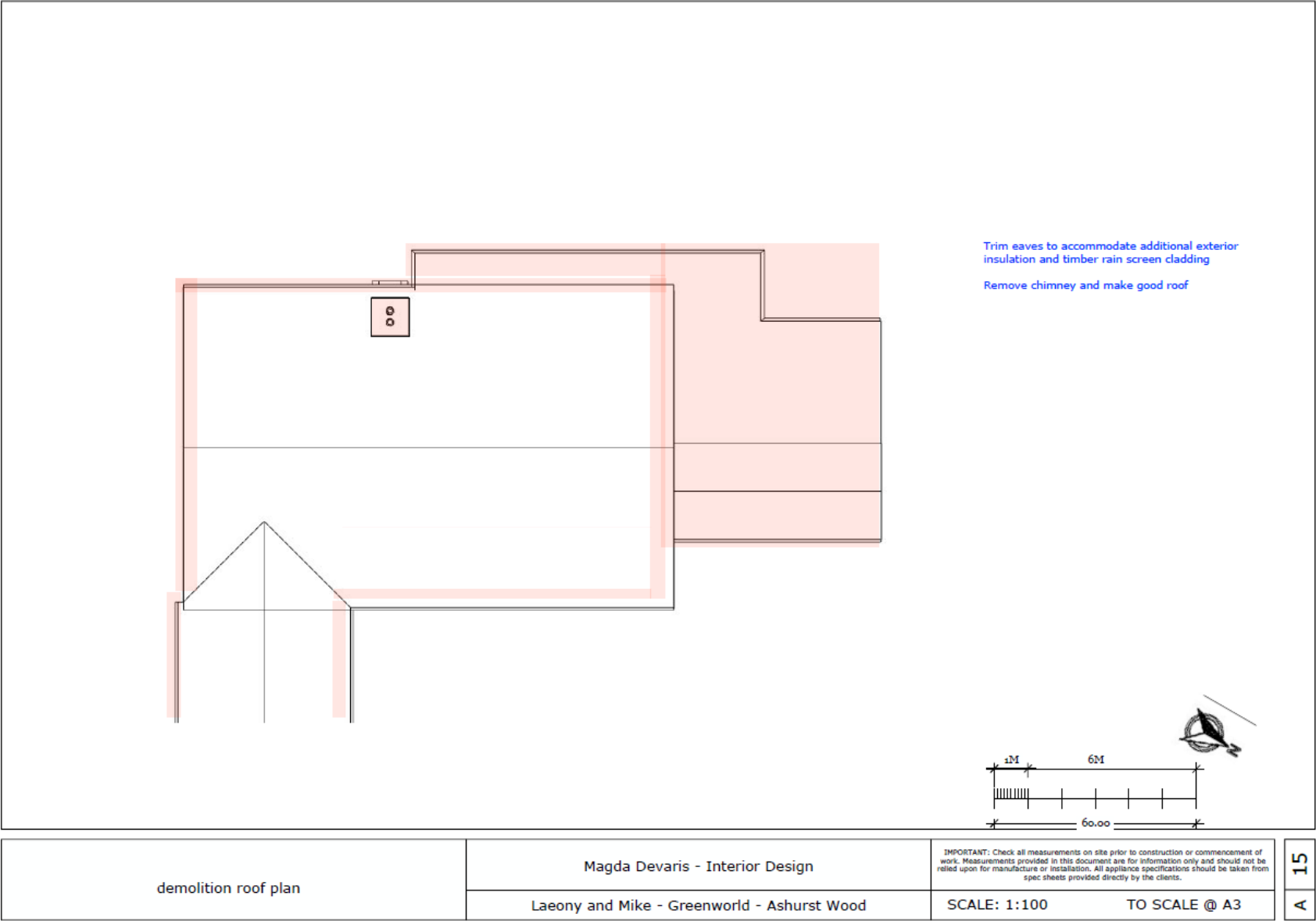
Appendix 2: Location map

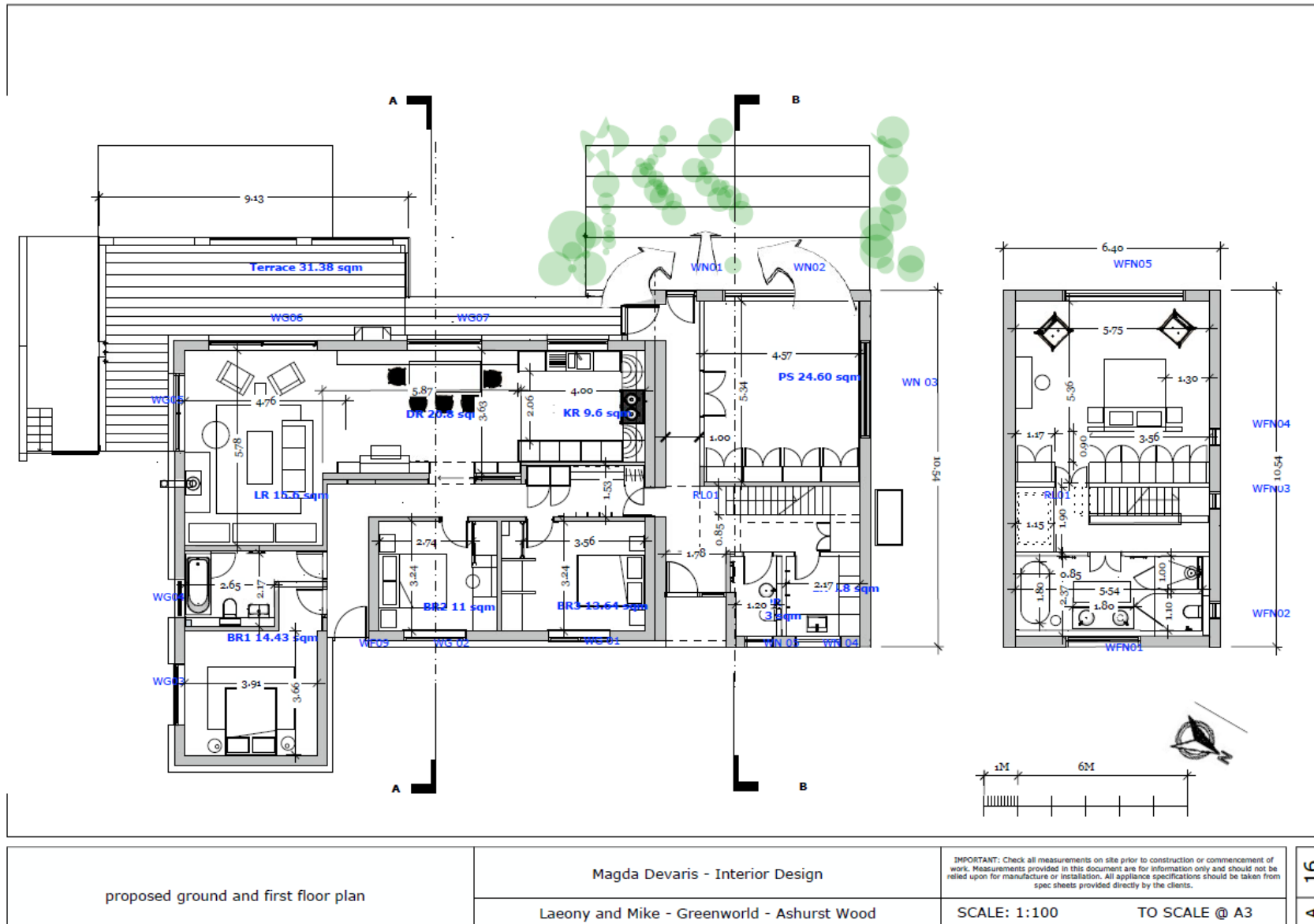


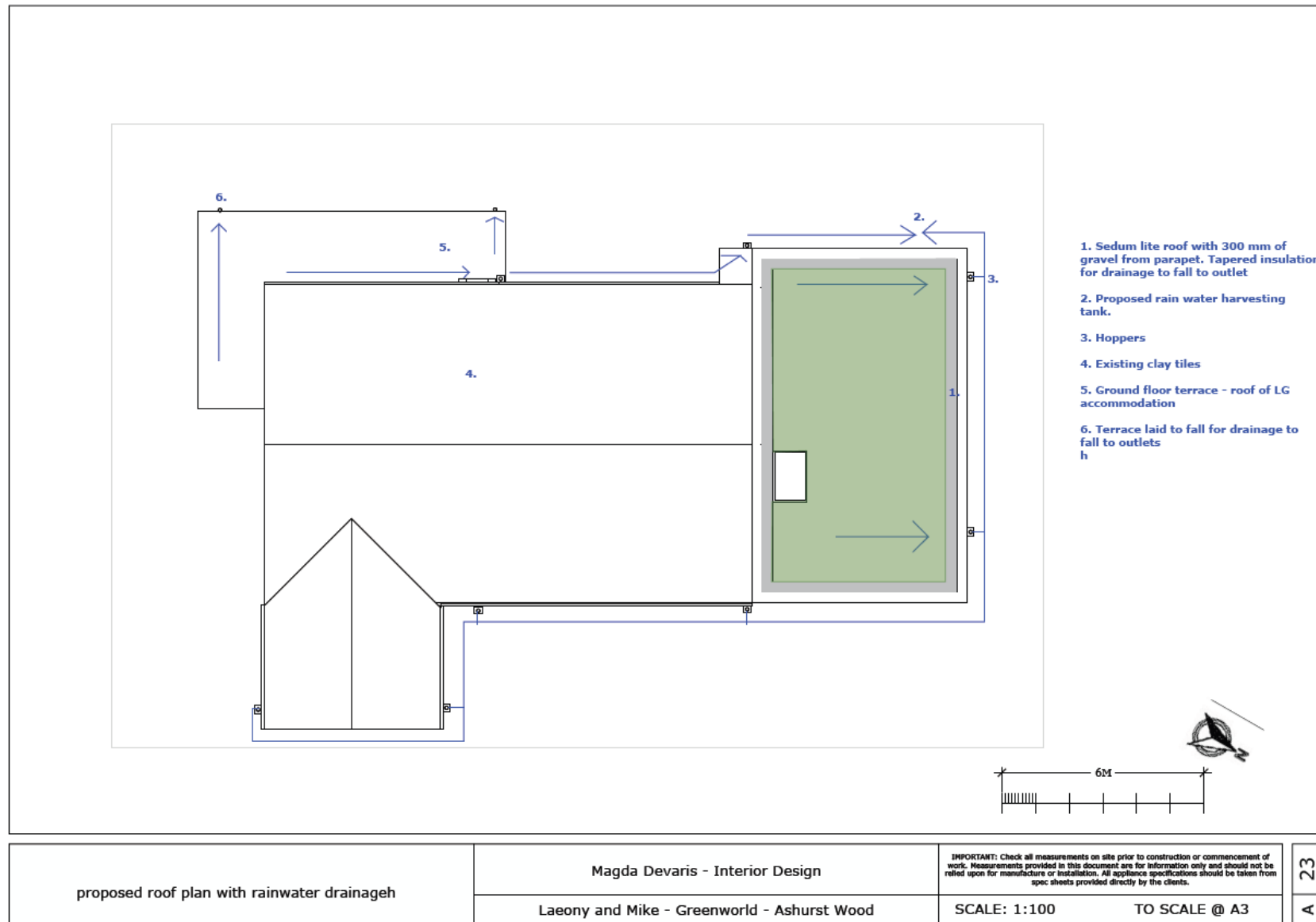
Appendix 3: Proposed plan











Appendix 4: Photographs

Description	Photographs
Preliminary Roost Assessment	
Overview of building exterior	





Suitable roosting features





Building interior





Description	Photographs	
Preliminary Ecological Appraisal		
Vegetated garden – grass lawn		
Lines of trees		





Ornamental hedgerow



Artificial, unvegetated,
unsealed surface



Developed land, sealed
surface



Limitations and Copyright

Limitations

Biological record data has not been used to inform this report. However, all impacts are limited to the existing building and immediate grass lawn area. Given the small scale of the works and the low biodiversity value of the onsite habitats (frequently managed modified grassland, hard-standing and building), the addition of biological record data is not anticipated to alter the recommendations within this report.

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Version control			
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Draft	0.1	Chantae Bleakman-Wells BSc (Hons), MSc - Consultant Ecologist	18/02/2025
Final	1.0	Chantae Bleakman-Wells BSc (Hons), MSc - Consultant Ecologist	20/02/2025