Arlecdon Farm, Arlecdon

Preliminary Roost Assessment for Bats, Barn Owl Assessment and Bats Dusk Emergence Surveys

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EXECUTIVE SUMMARY

This report relates to a Preliminary Bat Roost Assessment and Dusk Emergence (Presence / Likely Absence) Surveys and Barn Owl Assessment carried out on two barns proposed for conversion works at Arlecdon Farm, Arlecdon, Frizington.

No obvious evidence of previous bat activity was noted within the surveyed buildings B1 and B2 during the Preliminary Roost Assessment. Individual old bat droppings were found in the loft of the farmhouse adjacent to barn B1, suggesting that this loft was previously used by bats. The buildings B1 and B2 were assessed as providing moderate suitability for roosting bats.

The dusk emergence surveys carried out on site identified two low status day roosts within the surveyed building used by individual common pipistrelle bats.

Precautionary Working Methodology has been provided in Section 4.4. As the identified roosts will not be directly affected by the conversion works, it is considered that a European Protected Species Mitigation Licence (EPSML) from Natural England will not be required for the proposed works on the building as long as the on-site activities follow the Precautionary Working Methodology provided in this report.

Contractors must be made aware of the location of the identified roosts and the potential presence of bats. If bats are seen or suspected while work is in progress, work must pause immediately, and a licenced bat ecologist contacted for further advice.

Enhancement measures for bats are detailed in Section 4.5.

Evidence of barn owl activity was identified within building B1 and evidence of current roosting activity was identified in both buildings B1 and B2. Evidence of jackdaw and swallow nesting activity was also identified within both surveyed barns. To avoid committing an offence under the Wildlife and Countryside Act 1981 (as amended), conversion works should commence outside of the main bird breeding season (typically March to August/September, inclusive). If works are scheduled during this period, a nesting bird check must be carried out 24 to 48 hours prior to the start of works. If any active nests are found, they must not be disturbed until the young have fully fledged.

Mitigation measures in relation to barn owls are provided in Section 4.6 of this report. Recommendations for the inclusion of nesting provisions for other breeding birds are provided in Section 4.7 of this report.

1.0 INTRODUCTION

1.1 Background

Lakeland Ecology was commissioned to undertake a Preliminary Bat Roost Assessment (PRA) and Dusk Emergence Surveys for bats as well as a Barn Owl Assessment at Arlecdon Farm, Arlecdon, Frizington. This report was prepared by Patryk Gruba BSc (Hons) MCIEEM.

1.2 Site Location

The site is situated at Arlecdon Farm, Arlecdon, Frizington, CA26 3UW, and is centered at OSGB Reference NY 04703 19351 – see Figure 1. The site consists of a farmhouse, an adjacent stone barn, and three traditional barns arranged in a courtyard to the northeast of the farmhouse. The buildings considered in this assessment include the stone barn adjacent to the farmhouse (B1) and a traditional stone barn located to the northeast of the farmhouse (B2) – see Figure 2.

The site is located on the northern outskirts of the village of Arlecdon in West Cumbria. The village of Frizington is 2.5km to the southeast and the town of Whitehaven is 6km to the east.

The surrounding landscape primarily comprises of extensive grazed agricultural pastures bordered by stone walls, hedgerows, scattered trees, scrub, small watercourses and small blocks of woodland, as well as scattered residential and agricultural buildings associated with the village of Arlecdon. Asby Banks and Hole Gill broadleaved woodland is located 1.2km east and Tutehill Wood coniferous plantation is 1.8km northwest from site.

The site is situated in an exposed location, and to the west and north, it is bordered by gently sloping, open agricultural pastures with few habitat connectivity features. A small stream with associated trees is adjacent to the south of the site.

Overall, while the habitat within the wider landscape is considered to be of moderate value to local bat populations, the grounds immediately surrounding the site are considered to be of sub-optimal foraging value due to the exposed location.

1.3 Proposal

It is proposed to convert the traditional barn B1 on-site. The existing door and window openings will be used to install new windows and doors, and some new window openings will also be created or re-opened. The roof will be re-slated, and new skylights will be added

along the northwest and southeast roof pitches of the converted barn. The lower room of the barn will be converted into a garage, with a new masonry-arched garage door frame created.

Barn B2 will also be converted. The southeast gable will be taken down and rebuilt as a masonry-faced cavity wall. The existing door and window openings will be used to install new windows and doors, with additional openings created or re-opened where necessary. The roof will be re-slated, and new skylights will be added along the northwest and southeast roof pitches. Exposed masonry walls will be repaired and re-pointed. Lean-to structures along the northwest elevation, as well as a small brick extension adjacent to the northeast of the barn, will be removed.

See Appendix I for the proposed plan and elevations.

1.4 Survey Objectives

The main objective of the survey was to provide results of a Preliminary Bat Roost Assessment and Bat Dusk Emergence Surveys for buildings B1 as B2 as specified in Figure 2. The secondary objective was to highlight any evidence and / or potential for nesting birds and barn owl *Tyto alba* within the surveyed buildings.

This report aims to:

- Outline the legislative protection afforded to bats;
- Summarise the findings of the preliminary roost assessments survey i.e. bat evidence and roosting potential within the surveyed building;
- Summarise the findings of the presence / likely absence (dusk emergence) surveys for bats;
- Highlight any evidence and / or potential for nesting birds and barn owl;
- Provide an assessment of the potential ecological constraints to proposed works; and
- Outline avoidance measures and / or mitigation strategy for the scheme where appropriate.

A summary of the relevant legislation is provided in Appendix II.

2.0 METHODOLOGY

2.1 Desk Study

A search for relevant information was made on MAGIC (www.magic.gov.uk) - DEFRA's interactive, web-based database. This search identified information on any European Protected Species Mitigation Licence (EPSML) applications relating to bats that have been granted within a 2km radius from site.

The desk study also included a review of any previous ecological reports or other information available for the site.

A species data search was not commissioned and was considered not necessary to inform the report evaluation, as the current survey is considered to be sufficient to provide an assessment based on the field evidence.

2.2 Bat Roost Assessment

The Preliminary Bat Roost Assessment survey was completed by Patryk Gruba MCIEEM – Natural England (NE) Level 2 Bat Survey Licence ref: 2015-11080-CLS-CLS and Barn Owl Survey Licence ref: 2024-11918-CL29-OWL on the 22nd January 2024. The survey methodology followed the Bat Conservation Trust's (BCT) Bat Surveys for Professional Ecologists: Good Practice Guidelines (Collins, 2023).

The exteriors of the buildings were systematically inspected during daylight and any features suitable for bats were noted, such as weatherboarding, hanging tiles, soffit boxes, gaps in stonework, cracks, crevices, slipped or broken tiles and gaps around ridge tiles and lead flashing. Roof coverings were viewed from the ground using close-focusing binoculars (Viking ED 8x42). Any potential bat access points were identified and inspected for signs of bats using a high-powered torch (Ledlenser P17) and an endoscope (Teslong NTS 300), where accessible. Signs of bats include droppings, feeding remains (in association with droppings), wear marks on potential egress points, oily staining on stone / brick / timber, the smell of bats, audible signs of bats or presence of live bats or bat corpses.

The interiors to the buildings were accessed and the internal spaces, where safely accessible, were accessed and inspected. Beams, joists, surfaces, floors, stored contents and internal walls and wall tops were inspected where accessible.

The exterior walls, windows, doors, floors, lintels and other flat surfaces were examined for droppings that may have adhered to them.

The grounds surrounding the buildings were examined for droppings that may have collected beneath roost sites. Areas that were inaccessible, but which had potential for bats were noted.

During the Preliminary Roost Assessment, the surveyed buildings were also categorised for their bat roosting potential. The following categories based on the BCT Guidelines have been used:

- Negligible suitability – a building or structure providing negligible features for roosting bats.
- Low suitability - a building or structure with one or more potential roost sites that could be used by individual bats opportunistically. However, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions and/or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats (i.e. unlikely to be suitable for maternity or hibernation).
- Moderate suitability – a building or structure with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions and surrounding habitat but unlikely to support a roost of high conservation status.
- High suitability - A building or structure with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis & potentially for longer periods of time due to their size, shelter, protection, conditions and surrounding habitat.

2.3 Nesting Birds and Barn Owl

The surveyed building was visually inspected for any current or past evidence of nesting bird and barn owl activity. The barn owl survey methodology followed the Barn Owl Conservation Handbook (Barn Owl Trust, 2012).

2.4 Bat Dusk Emergence Surveys

The survey methodology followed the Bat Conservation Trust's (BCT) Bat Surveys for Professional Ecologists: Good Practice Guidelines (Collins, 2023).

Two dusk emergence surveys were completed on site in May and June 2025 in order to cover all relevant elevations / aspects of the surveyed barns. The dusk emergence surveys commenced 15 minutes before sunset and continued for 1.5 hours after sunset.

The dusk emergence surveys were undertaken by Patryk Gruba (PG) MCIEEM - Natural England (NE) Class 2 bat licence (ref: 2015-11080), Cathy Gruba (CG) - NE Class 2 bat licence (ref: 2018-34229), Lesley Grey (LG), Jude Harley (JH) and Christopher Grey (CHR).

The date, survey times, weather conditions and personnel involved in each of the surveys are provided in Table 1 below.

The surveyors were equipped with Echo Meter Touch 2 (full spectrum) bat detectors. The sound analysis software used to analyse bat calls included AnalookW 4.7z, Kaleidoscope Lite 5.5.0 and Anabat Insight 2.0.7.

Night vision aids (NVAs), including thermal and infrared cameras, were used to complement the field surveyors during each dusk emergence survey. The NVAs comprised: 1 No. Guide TK612 thermal camera, 3 No. Canon XA20 camcorders, and 2 No. Panasonic HC-VX980 4K Camcorders and 3 No. Nightfox Whisker HD night vision binoculars. The thermal cameras were paired with Nightfox XC5 850NM and Nightfox Arc infrared floodlights. Chorus static bat detectors were also paired with NVAs where applicable.

All unmanned night vision aids (NVAs) were periodically checked throughout the survey to adjust infrared illumination and ensure proper recording functionality.

The footage from the infra-red and thermal cameras was analysed afterwards, where applicable. Still shots from the infra-red cameras, taken at the darkest point of the survey, are shown in Appendix III.

Location of the surveyors and NVAs are shown in Figure 4.

Table 1: Dates, times, weather conditions and personnel for the surveys

Survey	Date	Buildings	Sunset	Start	Finish	Start Temp (°C)	End Temp (°C)	Rain	Wind (Beaufort scale)	Cloud (% cover)	Surveyors
1	07.05.25	B1 & B2	20:59	20:44	22:30	12	9	None	3 to 2	30%	PG, CG, LG and JH
2	05.06.25	B1 & B2	21:42	21:27	23:12	13	10	None	1	50%	PG, CG, LG and CHG

2.5 Limitations

The dusk emergence surveys were conducted in May and June; this is within the optimal / recommended survey period for dusk emergence bat detector surveys to identify maternity / day / transient bat roosts (Collins, 2023). The survey effort deployed on site was proportionate to the building's suitability for roosting bats and deemed sufficient to characterise the identified low-status bat roosts. The information gathered during the surveys was considered satisfactory for informing the impact assessment and designing mitigation measures.

It is considered that the absence of bat evidence at suitable roosting locations does not equate to evidence of absence. Evidence of roosting is often inconspicuous (particularly in the case of day or transient roosts used by a low number of bats) and use can differ throughout the season. In cases where crevice dwelling bat species might be present, evidence may be located within the stonework cavities or between roof tiles and bitumen felt roof lining. It is often the case that it is not possible to fully inspected such features without significant damage or destruction of a potential roost location.

A species data search was not commissioned, and it was considered not necessary to inform the report evaluation. The current survey effort as well as review of the information included in the previous bat survey report for the site (OpenSpace, 2015) was deemed sufficient to provide a comprehensive assessment on the presence or likely absence of roosting bats, based on the field evidence and results of the multiple survey visits conducted on site. Therefore, the lack of a species data search is not considered a limitation for this assessment.

In line with CIEEM Guidance (CIEEM, 2019) the details of this report will remain valid for a period of 12 months from the date of the survey after which the validity of this document should be reviewed to establish if any updates are required.

3.0 RESULTS

3.1 Desk Study

A search on Natural England MAGIC portal showed no Statutory Designated Sites with bats as qualifying interest within 2km radius from the site.

A single granted EPSM Licence for bats were identified within 2km radius from the site. The licence (2020-49913-EPS-MIT) covered damage to a common pipistrelle resting place at the building located 0.6km southeast from site.

A ‘Preliminary Daytime Roost Inspection and Emergence/Re-entry Surveys for Bats’ report was compiled by OpenSpace in 2015. The previous survey work (OpenSpace, 2015) covered building B2 as well as other barns within the courtyard but did not include the farmhouse and adjacent barn (building B1).

The report identified a transitional roost used by a single common pipistrelle *Pipistrellus pipistrellus*, located within a crevice in the stonework along the top section of the eastern elevation of building B2 (see Plate 1 below). Another transitional common pipistrelle roost was also identified within a separate barn on-site, which is not part of the current planning application.

In addition to common pipistrelle, brown long-eared bats *Plecotus auritus* and Myotis species *Myotis* sp. were recorded foraging on-site during dusk emergence and dawn re-entry surveys.

The previous report (OpenSpace, 2015) also identified evidence of roosting barn owls within building B2.

Plate 1 – Showing historical common pipistrelle stone crevice roost within building B2, identified during the previous bat survey conducted in 2015

3.2 Preliminary Bat Roost Assessment

During the Preliminary Bat Roost Assessment, no obvious evidence of bats was identified in the surveyed buildings B1 and B2.

A small number of individual bat droppings were noted within the loft of the residential farmhouse, adjacent northeast of the surveyed barn B1, with four droppings counted during the survey.

See Figure 2 for the Site Plan with Evidence.

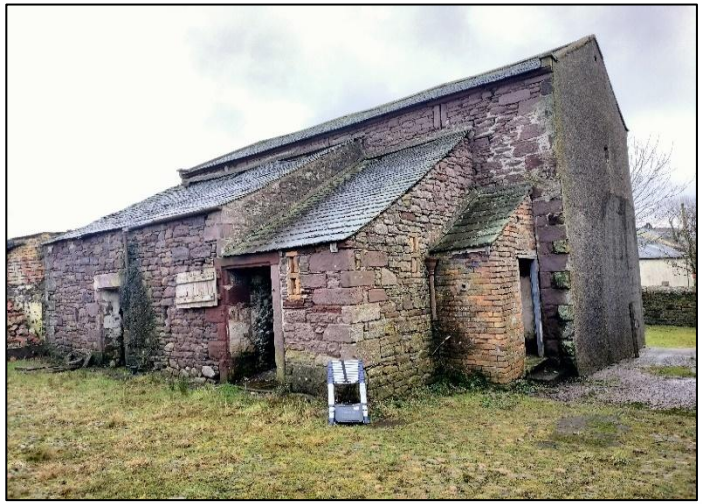
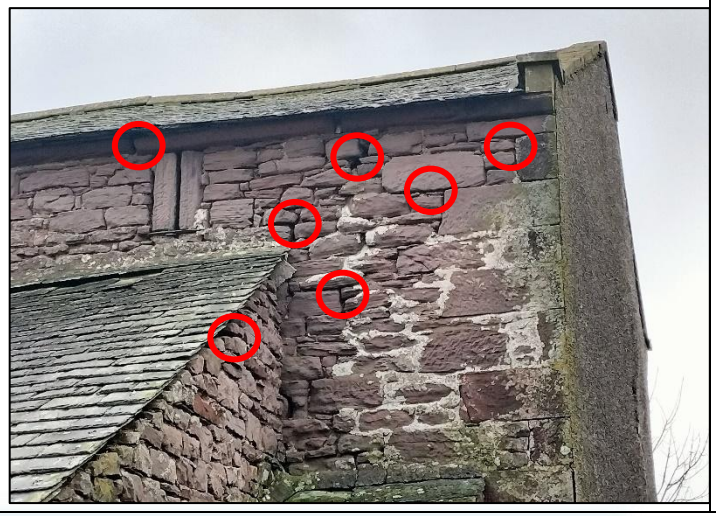
Results of the Preliminary Bat Roost Assessment including buildings' description and potential roosting features have been provided in Table 1 below.

Table 1 – Barns description and potential roosting features

Building	Description	Potential Roosting Features	Bat Roost Suitability
B1	The building is a two-storey former agricultural sandstone barn adjacent southeast to the farmhouse. The external elevations of the barn are rendered.  	Few gaps in the wall / render near the top of the southwest gable  Gaps at the wall tops 	Moderate

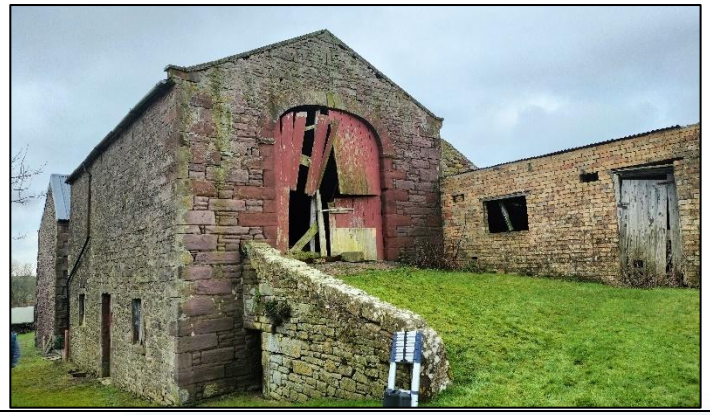
Building	Description	Potential Roosting Features	Bat Roost Suitability
	The barn has a traditional timber roof finished with slate tiles. Beneath the slates, there are remnants of lime parging, but no internal lining is present.  	Gaps under ridges – potential on top of the ridge beam. Internal roof timbers – void dwelling species.  	Moderate

Building	Description	Potential Roosting Features	Bat Roost Suitability
	Internally, the barn comprises a tall, open room within the main upper section and the lower room used for storage  	Internal stonework was relatively well pointed with few gaps present. Gaps were also noted along the internal gable wall as well as internal partition wall of the main upper room.  	Moderate

Building	Description	Potential Roosting Features	Bat Roost Suitability
B2	The building is a two-storey former agricultural sandstone barn.  	Multiple gaps within external stonework (examples shown below). Gaps at the wall tops  	Moderate

Building	Description	Potential Roosting Features	Bat Roost Suitability
	The barn has a traditional timber roof finished with slate tiles. Beneath the slates, there are remnants of lime parging, but no internal lining is present.  	Gaps under ridges – potential on top of the ridge beam.  	Moderate

Building	Description	Potential Roosting Features	Bat Roost Suitability
	Internally, the barn comprises a tall, open room within the main upper section and the lower room.  	Gaps within internal stonework; gaps where timber purlins join stone gable walls (exampes shown below).  	Moderate

Building	Description	Potential Roosting Features	Bat Roost Suitability
	Adjacent northeast of the barn, there are stone and brick-built lean-to structures finished with slate roofs. Adjacent north of the barn, there is a small brick-built building with a flat metal roof.  	 Gaps in the lintels 	Moderate

3.3 Bat Dusk Emergence Surveys

3.3.1 First Dusk Emergence Survey – 7th May 2025

During the first dusk emergence survey, no bats were recorded emerging from the surveyed buildings B1 and B2.

High levels of common pipistrelle commuting and foraging activity were observed on-site during the survey, with the highest activity concentrated in the yard between the surveyed barns. Between one and two bats were observed on-site at any given time.

Individual myotis species calls were recorded north of the site at 22:21, 22:22 and 22:27 and southwest of the site at 22:27 and 22:32.

Second Dusk Emergence Survey – 5th June 2025

During the second dusk emergence survey, a single common pipistrelle bat was recorded entering the gap in the apex of the northeast gable wall of barn B2 at 21:40. The same bat re-emerged at 21:47. A second common pipistrelle bat was also observed emerging from the gap under the coping stone along the northeast gable wall of barn B2 at 21:48. Refer to Plate 2 and Figure 4 for the detailed locations of the identified soprano pipistrelle roosts.

Plate 2- showing common pipistrelle day roosts within the northeast gable of barn B2

Similar to the first dusk emergence survey, high levels of common pipistrelle commuting and foraging activity were observed on-site during the survey, with the majority of activity recorded within the yard between the buildings. Individual soprano pipistrelle passes were recorded along the vegetation south of the site at 22:15, 22:36, 23:06, and 23:18.

Passes of myotis species were recorded south of the site at 22:27, north of the site at 22:32, 22:56, and 23:03, and east of the site at 22:57.

A brown long-eared bat was also observed commuting towards the site from the south and briefly flying into the upper room of barn B2 through the northern entrance.

3.4 Barn Owl Survey

Signs of barn owl activity were recorded throughout both barns (building B1 and B2) during the site visit conducted in January 2025 - see Figure 2 for the plan with evidence. No barn owls were observed present within the surveyed barns during the survey during the January site visit.

Building B1

An accumulation of 40 pellets comprising a mixture of fresh (less than one month old) and older pellets was noted on the upper floor next to the internal northeast partition wall (see Plate 3). A cavity with streaks of whitewash on the stonework underneath was observed on top of the northeast partition wall (see Plate 4). The cavity was not subject to a detailed inspection due to the restricted access high up within the barn. Whitewash was also recorded on other beams within the barn.

Scattered pellets of mixed ages (approximately 30 in total), as well as adult flight and body feathers, were noted throughout the barn floor (see Plate 5). An accumulation of 10 older barn owl pellets (6 to 12 months old) was also recorded on the floor in the northern corner of the barn (see Plate 6). See Figure 2 for the site plan with evidence.

According to an anecdotal account from Mr. Parsons, an adult barn owl has been frequently observed using Barn B1 throughout the year, with another (smaller) bird also observed within the barn during spring 2025.

Plate 3 – Accumulation of 40 mixed aged pellets on the floor next to the northeast partition wall

Plate 4 – A cavity on top of the northeast partition wall, with streaks of whitewash on the stonework underneath

Plate 5 – Barn owl pellets, feathers and faeces scattered through the barn

Plate 6 – Accumulation of older barn owl pellets in the northern corner of the barn

Building B2

Scattered fresh (less than one month old) and older pellets were noted throughout the barn's upper floor, with approximately 40 pellets counted during the survey. This included an accumulation of 20 pellets underneath one of the barn's joists (see Plate 7), which was also marked with whitewash.

Approximately 20 mixed-aged pellets were also noted on the upper floor of the northwest lean-to of barn B2 (see Plate 8). See Figure 2 for the site plan with evidence.

Plate 7 – Accumulation of 20 mixed aged pellets on the upper floor underneath the joist

Plate 8 – Accumulation of 20 mixed aged pellets on the upper floor within the lean-to of the barn

Additional observations made during the May and June dusk survey.

No barn owls were observed using either of the surveyed barns during the dusk survey on 7th May 2025.

During the dusk survey conducted on 5th June 2025, a single barn owl was observed commuting from the south towards the site and flying into the interior upper room of barn B2 through the northeast door opening. The bird was briefly observed roosting on the roof timbers within the barn before leaving the building through the same opening.

No fresh barn owl evidence was observed within building B1 during either dusk emergence survey. Several scattered fresh pellets were observed within building B2.

3.5 Other Nesting birds

Previous signs of jackdaw *Corvus monedula* and swallow *Hirundo rustica* nesting activity were noted within the interiors to both surveyed barns (building B1 and B2) during the Preliminary Roost Assessment Survey.

During the dusk emergence surveys, an active jackdaw nest was observed within the gable wall of building B1. Swallows were also regularly observed flying into building B2, indicating likely nesting activity.

4.0 EVALUATION & RECOMMENDATIONS

4.1 Bats– Preliminary Roost Assessment

Bats and their roosts are protected under the Habitat Regulations and the Wildlife & Countryside Act 1981 (see Appendix II for detailed legislation).

No obvious bat roosting evidence was identified within the surveyed buildings B1 and B2. However, there was historical evidence of a transitional roost used by a single common pipistrelle, located within a crevice in the stonework along the top section of the eastern elevation of building B2 (OpenSpace, 2015). – see Plate 1 and Figure 4.

Evidence of previous bat activity, in the form of a small number of scattered bat droppings, was observed within the loft of the residential dwelling adjacent northeast to the barn B1. The droppings were dark brown, did not appear to be freshly deposited (considered to be at least one year old), and were relatively small, likely indicating use by a pipistrelle or small myotis species. This suggests that the loft of the adjacent residential dwelling was used in the past by an individual bat or a small number of bats.

The surveyed buildings B1 and B2 on site were assessed as offering moderate suitability for roosting bats during the bat active season, primarily due to the presence of potential roosting features within the external / internal walls and wall tops. However, these features were deemed more suitable for a small number of crevice dwelling bats or day roosting, with limited suitability for breeding bats.

The roosting features identified within both barns (such as crevices within the stonework) might also be used by individual bats during the hibernation period. However, these features are not considered suitable for prolonged use during the longer cold spells and would not be able to accommodate more than one or a few bats individually, as they would not typically provide the necessary protection from weather or the favorable temperature and humidity conditions required during the winter period. Therefore, these features could provide suitability for ‘non-standard’ winter roosts, typically opportunistically used by individual or small groups of bats during milder winter periods, but the building is considered unlikely to be suitable as a classic cool / stable hibernation site.

In line with the BCT Survey Guidelines (Collins, 2023), two dusk emergence (presence / likely absence) surveys were undertaken on building B1 and building B2 during bats’ active season.

4.2 Bat Dusk Emergence Surveys

Active common pipistrelle bat roosts were identified within the building B2 on site during the dusk emergence surveys:

- **Roost R1 is located within the gap in the apex of the northeast gable wall of building B2.** A single common pipistrelle was observed using this roost during the survey on 05/06/25. (see Plate 2 and Figure 4). This roost is considered to be a day roost used by an individual / low number of bats.
- **Roost R2 is located within the gap under the coping stone along the northeast gable wall of building B2.** A single common pipistrelle was observed using this roost during the survey on 05/06/25. (see Plate 2 and Figure 4). This roost is considered to be a day roost used by an individual / low number of bats.

Roosts used by individual bats / small numbers of common species (not maternity or hibernation sites) are relatively low in significance and according to the Bat Mitigation Guidelines (Reason, P.F. and Wray, S., 2023), their importance in relation to a geographic frame of reference is identified to be of “site level”.

4.3 Potential Impacts

As the identified day roosts R1 and R2, used by an individual common pipistrelle, are located within the external stone crevices of building B2, it is considered that these roosts can be retained during and after the works, and the proposed conversion can proceed outside of the Natural England EPS Mitigation Licence. While no current use was identified during the two dusk emergence surveys conducted in 2025, it is recommended that the external crevice in the western corner of building B2, which was used as a day roost by a single common pipistrelle in 2015 (RH), should also be retained.

Although the proposed conversion works are unlikely to damage, alter or modify the identified bat roosts, there is still a risk of disturbance to individual bats using the gaps in the external stonework within the surveyed building and adjacent properties. Therefore, the precautionary working methodology provided in this report must be adhered to in order to avoid significant disturbance to bats and to prevent committing an offence under the relevant wildlife legislation.

4.4 Precautionary Working Methods

The following methodology and timing for works must be followed to ensure that no bats are harmed and that the identified roosts are not damaged, destroyed or obstructed:

- **The roosts R1, R2 and RH must be retained, and no pointing or any structural works must be conducted to the gaps within building B2 where the roosts were identified.**
- The access to the identified roosts must not be obscured by scaffolding, building materials or any other temporary structures / features used during the conversion works.
- Any works located within a 2m radius from the identified roosts should proceed with care; use of power tools that can create excessive noise or vibration should be reduced wherever possible within the section of the stone wall directly adjacent to the identified roosts (within 2m radius).
- The external walls of the building continue to provide roosting suitability for bats once the conversion works have been completed. External crevices requiring pointing can be retained by placing a pipe or tube (25mm diameter) in the gap and pointing around this (remove the tube immediately after the mortar has set). See Appendix IV for the additional guidance on the retention of the gaps in the external stonework.
- Contractors must be made aware of the identified roosts and the potential for bats to be present. Contractors must be provided with this methodology.
- External works must avoid the period around dusk/dawn, and no artificial light should be directed at the roof area or identified roosts.

If bats are seen or suspected while work is in progress, work must pause immediately, and a licenced bat ecologist contacted for further advice.

Given that the bat roosts support an individual / small number of a common species and are classified as having a low conservation significance, no restrictions of timing of works apply other than a recommendation to avoid the coldest months.

The conversion works to both buildings should avoid commencing in the peak bat hibernation season (November – February). Although the risk of hibernating bats using the buildings is

considered low, this precautionary recommendation is made due to the extreme vulnerability of hibernating bats to disturbance.

4.5 Enhancement Measures for Bats.

The potential roosting provisions for bats on site can be enhanced by providing bat boxes. These could be in the form of external bat boxes such as the Vivara Pro WoodStone Bat Box, Low Profile WoodStone Bat Box, or 2F Schwegler Bat Box. It is recommended that two bat boxes be placed on the trees within the site grounds or external elevations of converted buildings.

4.6 Barn Owl

All breeding wild birds, their nests and eggs are protected by the Wildlife and Countryside Act 1981 (see Appendix II for detailed legislation). Barn owls are also listed under Schedule 1 of the Wildlife and Countryside Act 1981, which awards additional protection from disturbance during the breeding season.

Evidence of recent and frequent barn owl roosting activity was identified within both surveyed barns (Buildings B1 and B2) during the site visit conducted in January 2025. Additionally, historical evidence indicates that the buildings on site have been used by barn owls for at least 10 years (OpenSpace, 2015).

Furthermore, building B1 has suitability for breeding barn owls, and both site evidence and anecdotal observations by the site owner suggest that the cavity at the top of the internal northwest partition wall within barn B1 might have been used by breeding barn owls in the past.

Building B2 was considered to provide sub-optimal nesting conditions for this species due to the lack of elevated, enclosed lofts or deep cavities preferred by barn owls. The upper floor of the lean-to in Barn B2 might provide potential nesting suitability; however, it was considered to be somewhat open, and no obvious previous nesting evidence was identified in this location.

No obvious evidence of current breeding activity was identified on site during the dusk emergence surveys conducted in May and June 2025. There was no fresh barn owl evidence within building B1, but building B2 was observed to be in use by a single roosting barn owl during the June survey.

Mitigation Strategy for Barn Owls

The following mitigation scheme must be implemented to reduce the risk of impact on the local barn owl population. In accordance with current guidance (Barn Owl Trust, 2015), these measures are required to offer satisfactory mitigation for the loss of a potential historical nest located within building B1 and roosting space within building B2.

- Alternative nest provision in the form of a barn owl box to be erected on site before works commence. This will offer nest / roost provision during works and reduce disturbance impact. This should be installed on site as soon as possible (at least 30 days prior to commencement of any potentially disturbing works on site). The nest box should be ideally placed within the interior of the long barn (which is not proposed for works under this scheme), with access for barn owls restored through the barn owl hole. Alternatively, the barn owl box should be positioned on a mature tree or pole in a sheltered, disturbance free location within close proximity to the barns. The nest box design has been provided in Appendix V.
- To ensure that nesting barn owls are not disturbed by the works and no offence is incidentally committed there must be a survey of the barns conducted pre-works to confirm 'current use'. The survey must be conducted by a suitably qualified person, no more than 3 days before the start of the conversion works.
- The conversion works must not commence between 1st March and 31st August or at any time while barn owls are nesting and until temporary alternative nesting provision has been made.
- To provide long-term compensation for the loss of the roost, a new and permanent nest feature should be provided on site. The proposed plans indicate that built-in barn owl nest boxes with the access through the existing owl holes will pe provided along the southwest gable of building B1 and southwest gable of building B2 (one box per converted barn). Examples of built-in barn owl box designs have been provided in Appendix V.

Contractors must be made aware of the presence of barn owls when works commence. The alternative nest provision should be protected from any disturbance during the works.

See Figure 3 for the location of the proposed barn owl mitigation measures.

4.7 Nesting Birds

All breeding wild birds, their nests and eggs are protected by the Wildlife and Countryside Act 1981 (see Appendix II for detailed legislation).

Evidence of bird nesting activity was identified within the surveyed buildings. As such best practice would be for the works to avoid the nesting bird season (typically considered to be between March and September inclusive) or to undertake nesting bird checks between 24 to 48 hours before the works to the building is scheduled.

As the current bird nesting provisions present within the interior of the barns B1 and B2 are likely to be lost post conversion works, it is recommended that nest boxes should be installed on the converted barns or within other barns on site. These should be in form of swallow cups (such as WoodStone Swallow Nest Bowl), swift nest boxes or external sparrow terrace boxes.

5.0 REFERENCES

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Collins, J. (ed.) (2023) Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th ed.). The Bat Conservation Trust, London.

OpenSpace (2015) Preliminary Daytime Roost Inspection and Emergence/Re-entry Surveys for Bats at Arlecdon Farm, Arlecdon, Cumbria

Reason, P.F. and Wray, S. (2023). *UK Bat Mitigation Guidelines: a guide to impact assessment, mitigation and compensation for developments affecting bats*. Chartered Institute of Ecology and Environmental Management, Ampfield

FIGURES

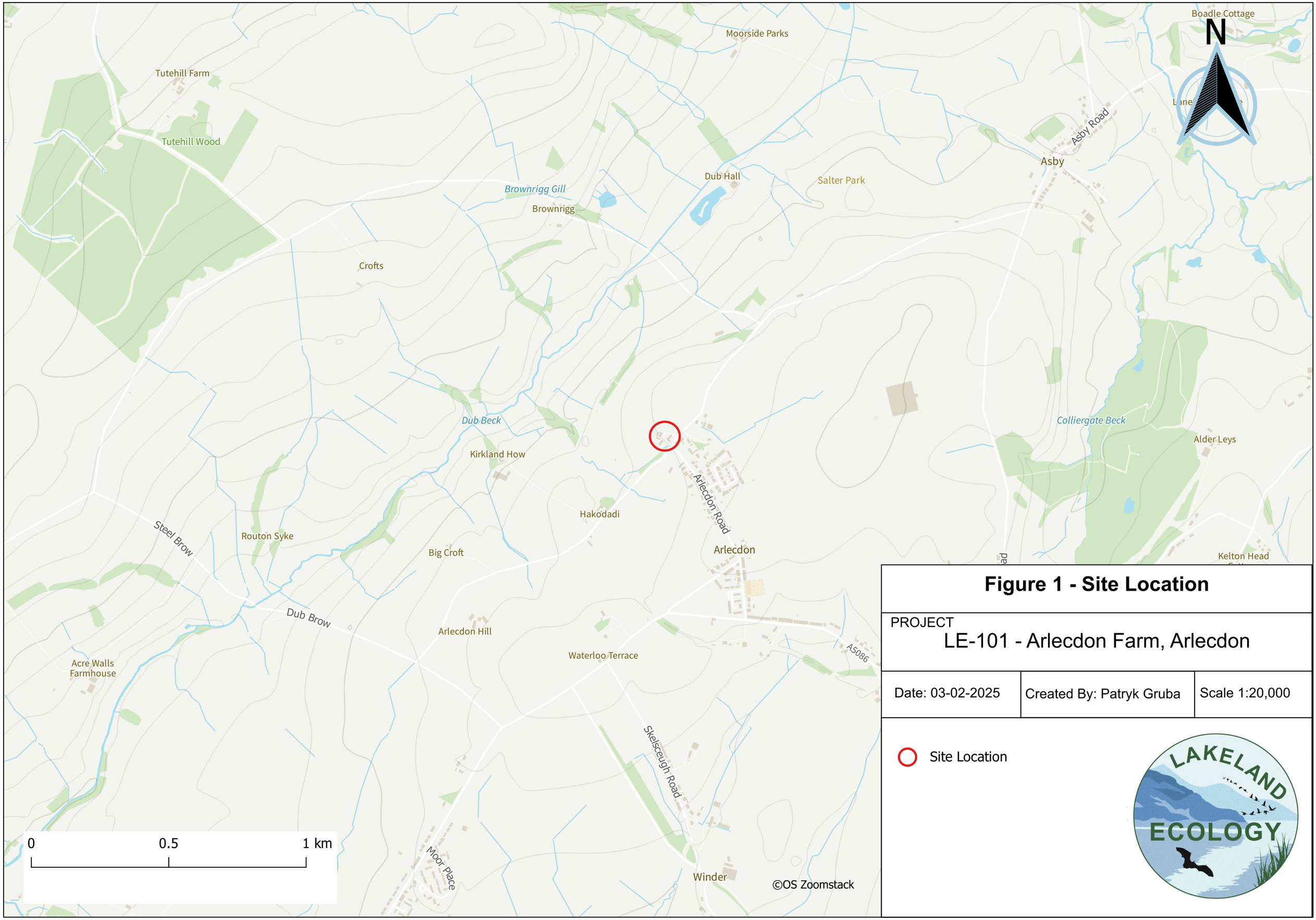


Figure 1 - Site Location

PROJECT

LE-101 - Arlecdon Farm, Arlecdon

Date: 03-02-2025	Created By: Patryk Gruba	Scale 1:20,000

Site Location

LAKELAND ECOLOGY

N

B2

B1

Potential for barn owl nest located within the cavity at the top of the internal partition wall. No barn owl was noted using barn B1 during the dusk surveys conducted in May and June 2025.

0 5 10 15 20 m

©Bing Maps

Figure 2 - Site Plan with PRA Results

PROJECT

LE-101 - Arlecdon Farm, Arlecdon

Date: 11-06-2025	Created By: Patryk Gruba	Scale 1:400

- Adjacent farmhouse
- Surveyed buildings
- Bat droppings
- Barn owl pellets

LAKELAND ECOLOGY

Figure 3 - Barn Owl Mitigation Measures

PROJECT

LE-101 - Arlecdon Farm, Arlecdon

Date: 11-06-2025	Created By: Patryk Gruba	Scale 1:500

Historical common pipistrelle day roost identified in 2015. Not in use during 2025 surveys.

A barn owl was observed roosting within Building B2 during the dusk emergence survey conducted in June 2025.

0 5 10 15 20 25 m

©Bing Maps

Figure 4 - Dusk Emergence Surveys Resutls

PROJECT

LE-101 - Arlecdon Farm, Arlecdon

Date: 11-06-2025	Created By: Patryk Gruba	Scale 1:500

- Surveyed buildings
- Adjacent farmhouse
- Bat roost location

Position of the NVAs

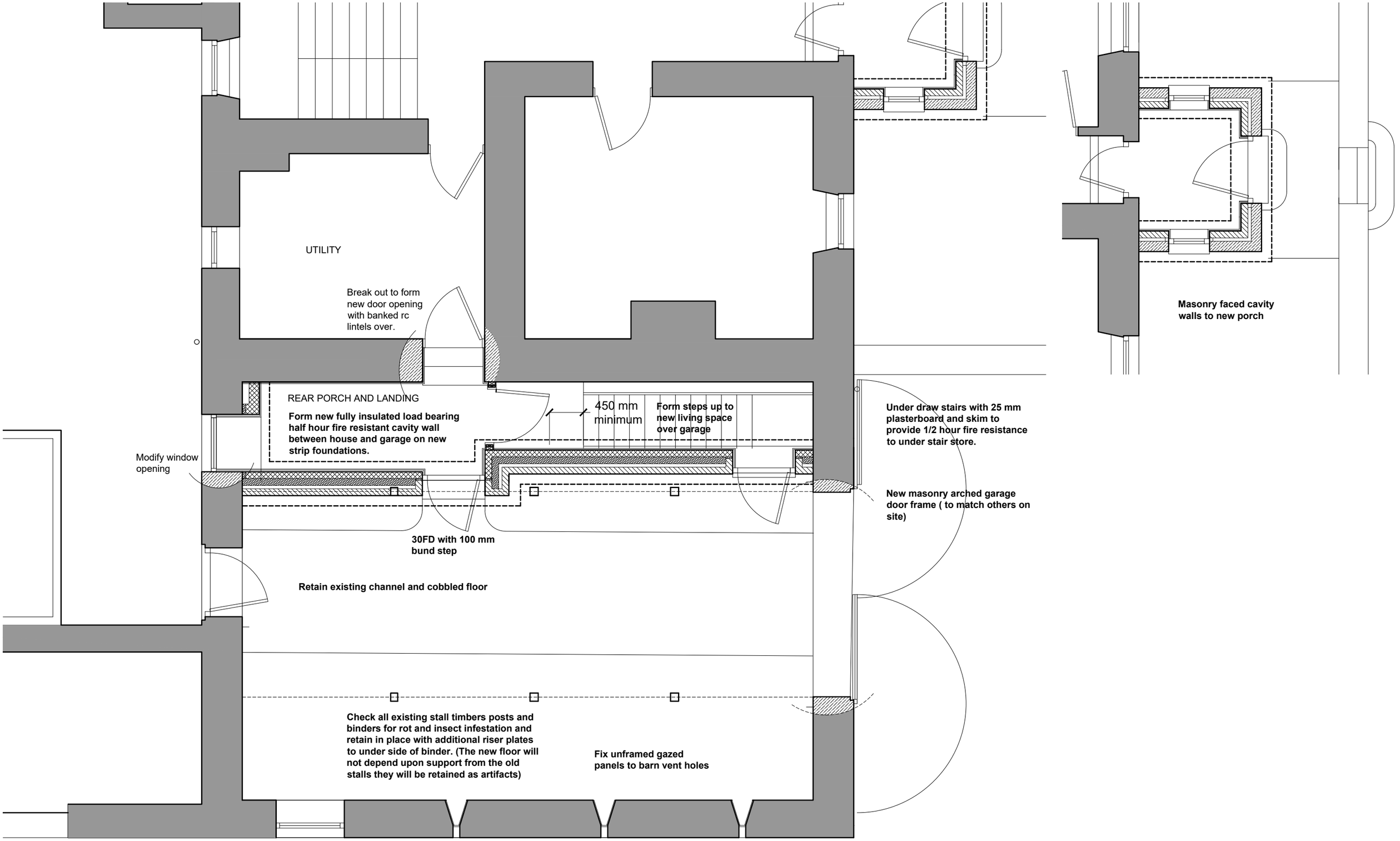
- 07/05/2025
- 05/06/2025

Position of the surveyors

- 2025-05-07
- 2025-06-05

LAKELAND ECOLOGY

APPENDIX I – PROPOSED ELEVATIONS



PROPOSED GROUND FLOOR

SCALE BAR 1/200 ORIGINAL DRAWING SIZE A3	0.0	2.0	4.0	6.0	8.0	10.0	12.0	14.0	16.0	18.0	20.0 metres		80.0 metres	70.0	60.0	50.0	40.0	30.0	20.0	10.0	0.0	SCALE BAR 1/500
SCALE BAR 1/100	0.0	1.0	2.0	3.0	4.0	5.0	6.0	7.0	8.0	9.0	10.0 metres		400.0 metres	350.0	300.0	250.0	200.0	150.0	100.0	50.0	0.0	SCALE BAR 1/2500
SCALE BAR 1/50	0.0		1.0		2.0		3.0		4.0		5.0 metres											

ARLECDON FARM HOUSE ARLECDON FARM ARLECDON CUMBERLAND CA26 3UW for Barry and Jackie Parsons	ALTERATIONS AND EXTENSION	PROPOSED ALTERATIONS AND EXTENSIONS GROUND FLOOR PLAN	Scale: Date: DWG No.	1/50 @ A3 AUG 2024 08/0411/06	REV DATE

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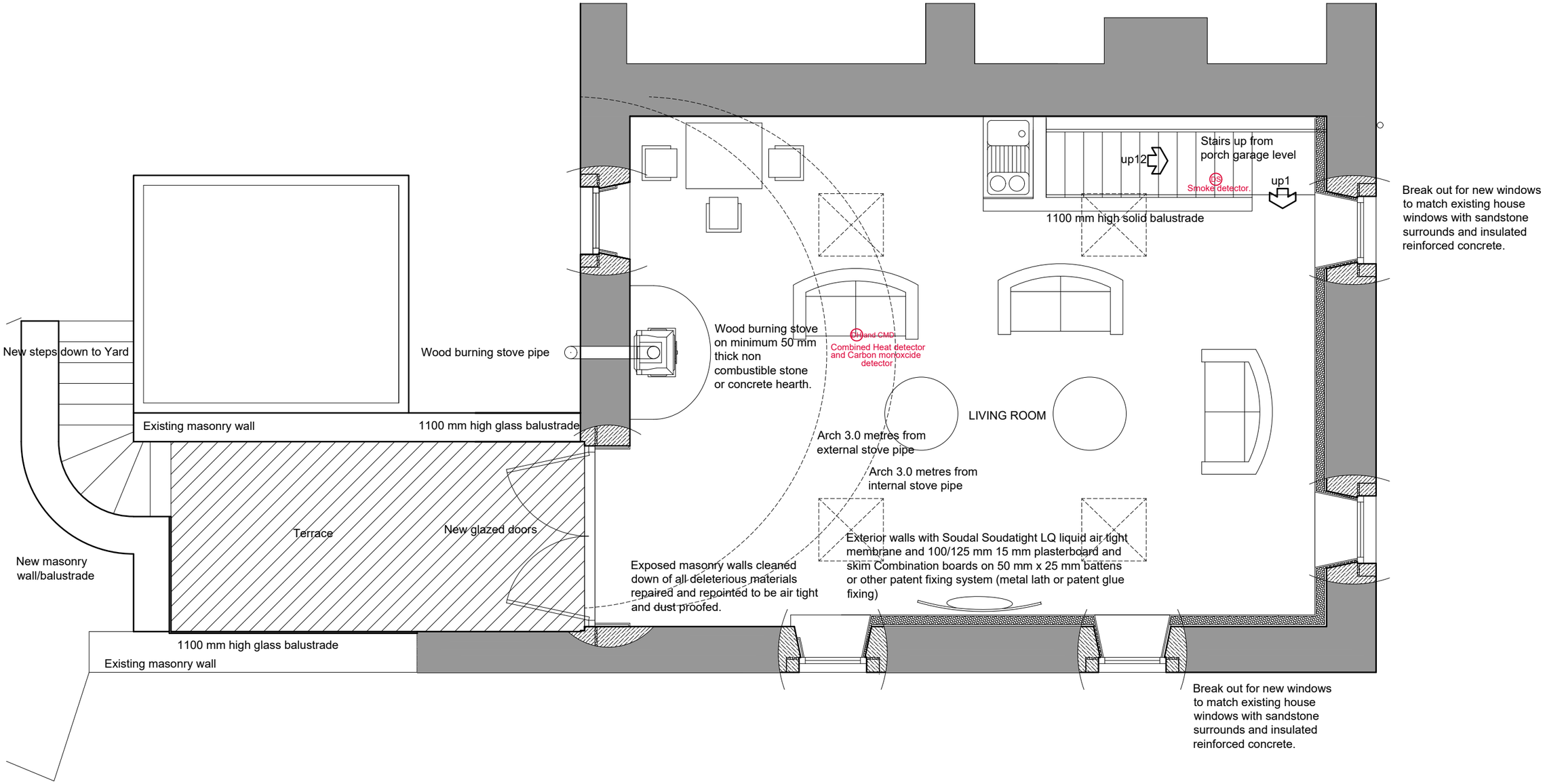

PROPOSED FIRST FLOOR

SCALE BAR 1/200 ORIGINAL DRAWING SIZE A3	0.0	2.0	4.0	6.0	8.0	10.0	12.0	14.0	16.0	18.0	20.0 metres		80.0 metres	70.0	60.0	50.0	40.0	30.0	20.0	10.0	0.0	SCALE BAR 1/500
SCALE BAR 1/100	0.0	1.0	2.0	3.0	4.0	5.0	6.0	7.0	8.0	9.0	10.0 metres		400.0 metres	350.0	300.0	250.0	200.0	150.0	100.0	50.0	0.0	SCALE BAR 1/2500
SCALE BAR 1/50	0.0		1.0		2.0		3.0		4.0		5.0 metres											

ARLECDON FARM HOUSE ARLECDON FARM ARLECDON CUMBERLAND CA26 3UW for Barry and Jackie Parsons	ALTERATIONS AND EXTENSION	PROPOSED ALTERATIONS AND EXTENSIONS FIRST FLOOR PLAN	Scale: Date: DWG No.	1/50 @ A3 AUG 2024 08/0411/07	REV DATE

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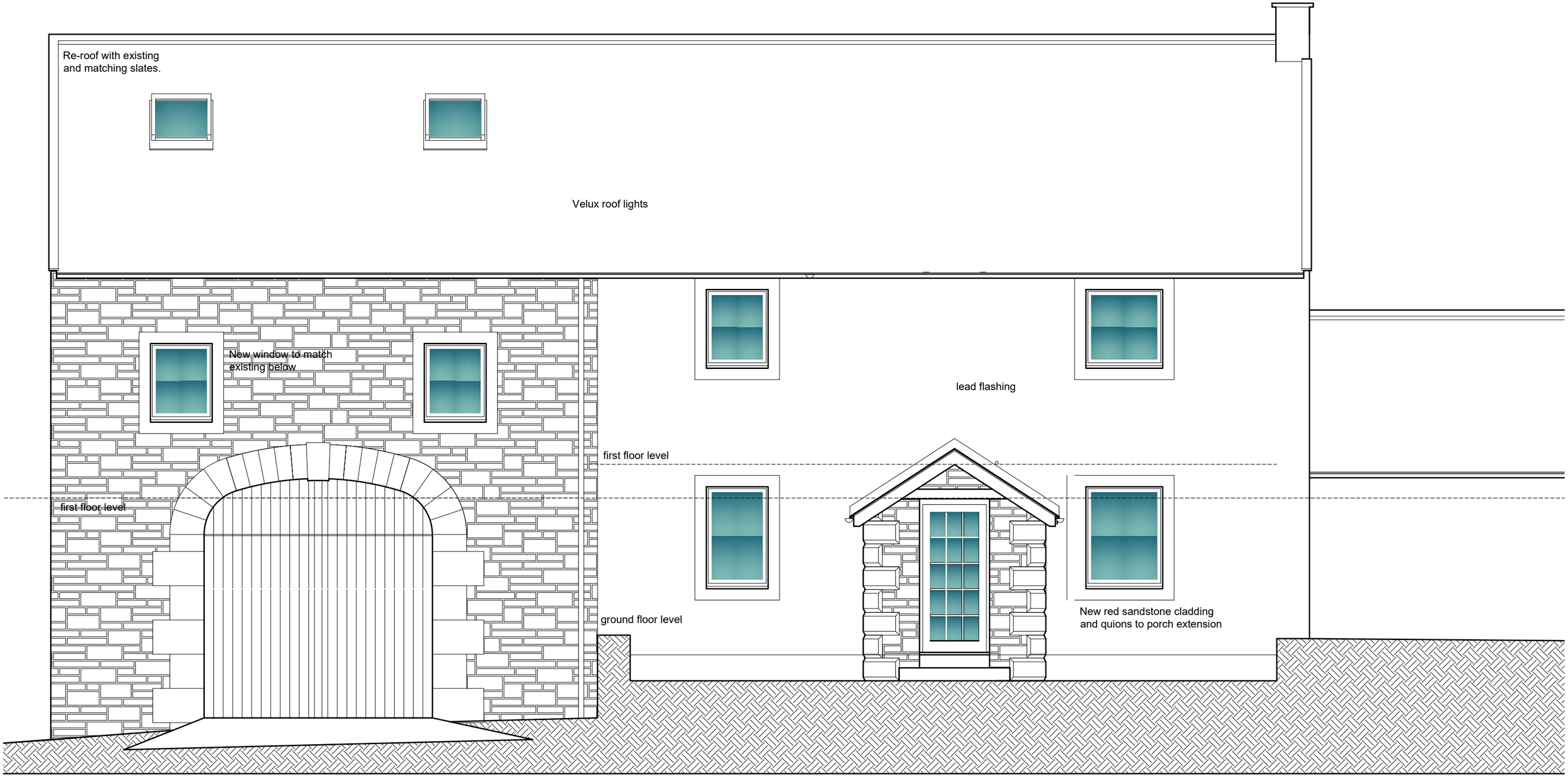

PROPOSED FRONT ELEVATION

SCALE BAR 1/200 ORIGINAL DRAWING SIZE A3	0.0	2.0	4.0	6.0	8.0	10.0	12.0	14.0	16.0	18.0	20.0 metres		80.0 metres	70.0	60.0	50.0	40.0	30.0	20.0	10.0	0.0 SCALE BAR 1/500
SCALE BAR 1/100	0.0	1.0	2.0	3.0	4.0	5.0	6.0	7.0	8.0	9.0	10.0 metres		400.0 metres	350.0	300.0	250.0	200.0	150.0	100.0	50.0	0.0 SCALE BAR 1/2500
SCALE BAR 1/50	0.0		1.0		2.0		3.0		4.0		5.0 metres										

ARLECDON FARM HOUSE ARLECDON FARM ARLECDON CUMBERLAND CA26 3UW for Barry and Jackie Parsons	ALTERATIONS AND EXTENSION	PROPOSED ALTERATIONS AND EXTENSIONS FRONT ELEVATION	Scale: Date: DWG No.	1/50 @ A3 AUG 2024 08/0411/08	REV DATE

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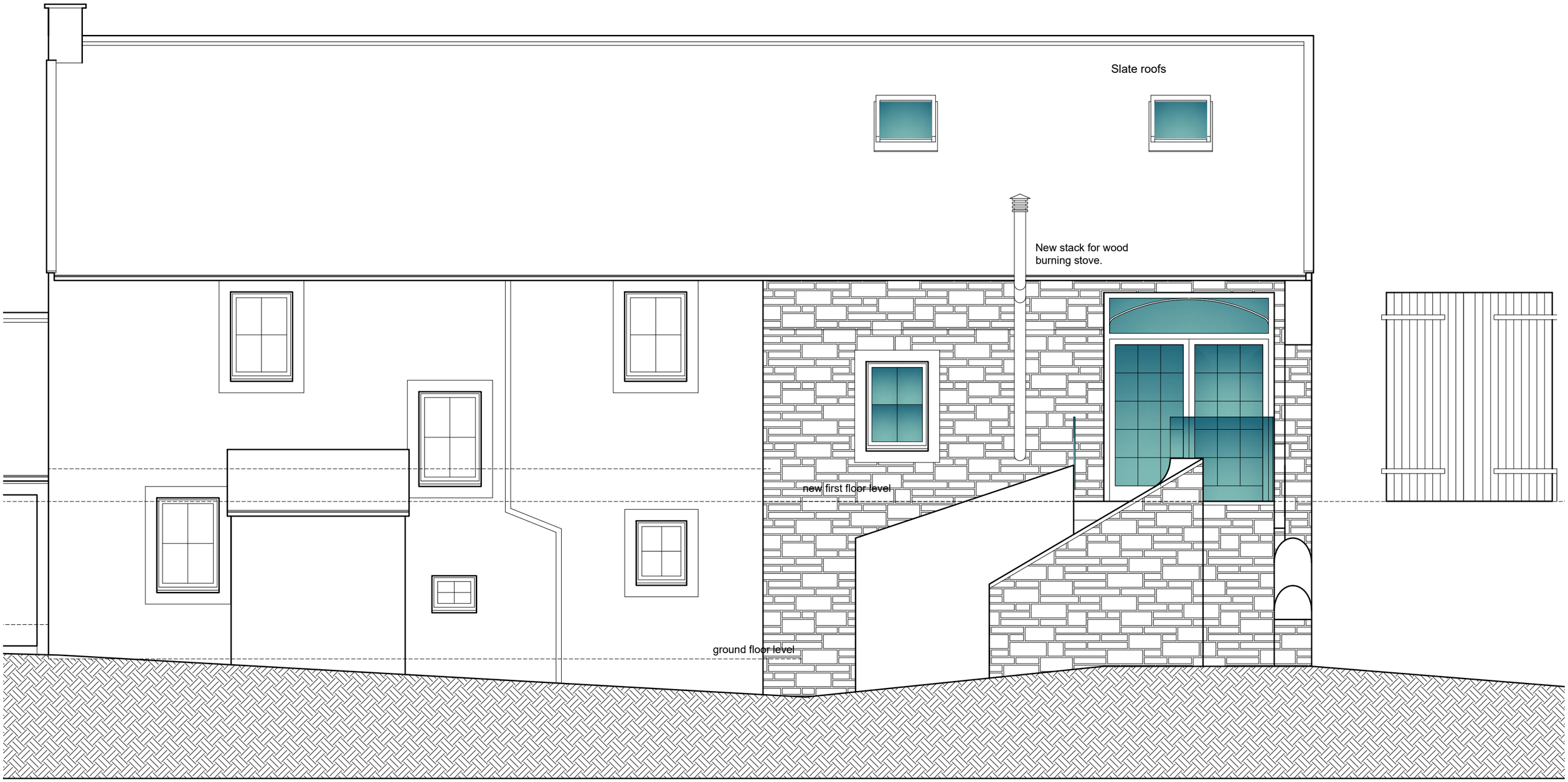

PROPOSED REAR ELEVATION

SCALE BAR 1/200 ORIGINAL DRAWING SIZE A3	0.0	2.0	4.0	6.0	8.0	10.0	12.0	14.0	16.0	18.0	20.0 metres		80.0 metres	70.0	60.0	50.0	40.0	30.0	20.0	10.0	0.0	SCALE BAR 1/500
SCALE BAR 1/100	0.0	1.0	2.0	3.0	4.0	5.0	6.0	7.0	8.0	9.0	10.0 metres		400.0 metres	350.0	300.0	250.0	200.0	150.0	100.0	50.0	0.0	SCALE BAR 1/2500
SCALE BAR 1/50	0.0		1.0		2.0		3.0		4.0		5.0 metres											

ARLECDON FARM HOUSE ARLECDON FARM ARLECDON CUMBERLAND CA26 3UW for Barry and Jackie Parsons	ALTERATIONS AND EXTENSION	PROPOSED REAR ELEVATION	Scale: Date: DWG No.	1/50 @ A3 AUG 2024 08/0411/09	REV DATE

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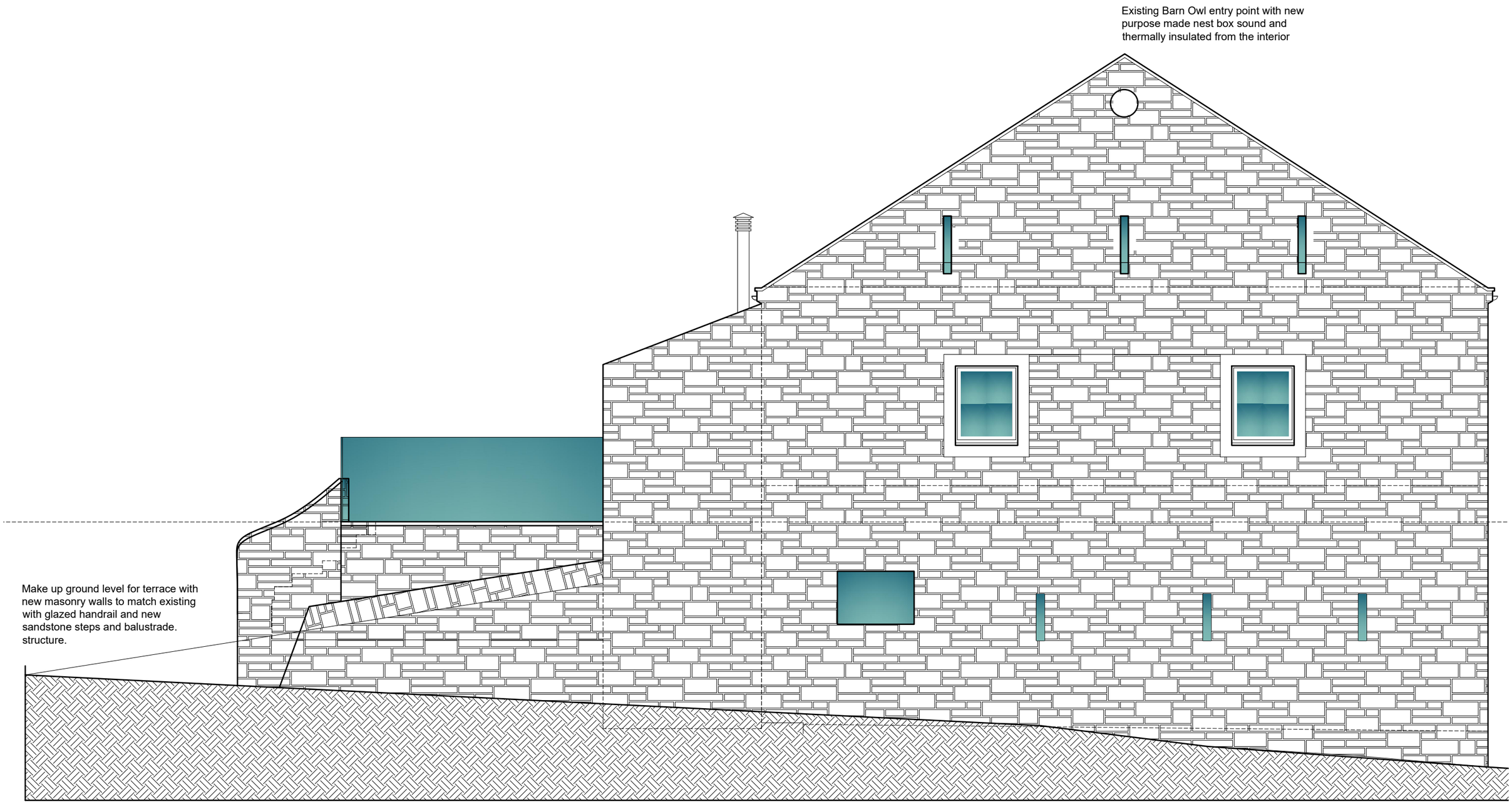

PROPOSED END ELEVATION

SCALE BAR 1/200 ORIGINAL DRAWING SIZE A3	0.0	0.2	.04	0.6	0.8	1.0	1.2	1.4	1.6	1.8	2.0 metres		80.0 metres	70.0	60.0	50.0	40.0	30.0	20.0	10.0	0.0	SCALE BAR 1/500
SCALE BAR 1/100	0.0	1.0	2.0	3.0	4.0	5.0	6.0	7.0	8.0	9.0	10.0 metres		400.0 metres	350.0	300.0	250.0	200.0	150.0	100.0	50.0	0.0	SCALE BAR 1/2500
SCALE BAR 1/50	0.0		1.0		2.0		3.0		4.0		5.0 metres											

ARLECDON FARM HOUSE ARLECDON FARM ARLECDON CUMBERLAND CA26 3UW for Barry and Jackie Parsons	ALTERATIONS AND EXTENSION	PROPOSED END ELEVATION	Scale: Date: DWG No.	1/50 @ A3 AUG 2024 08/0411/10	REV DATE

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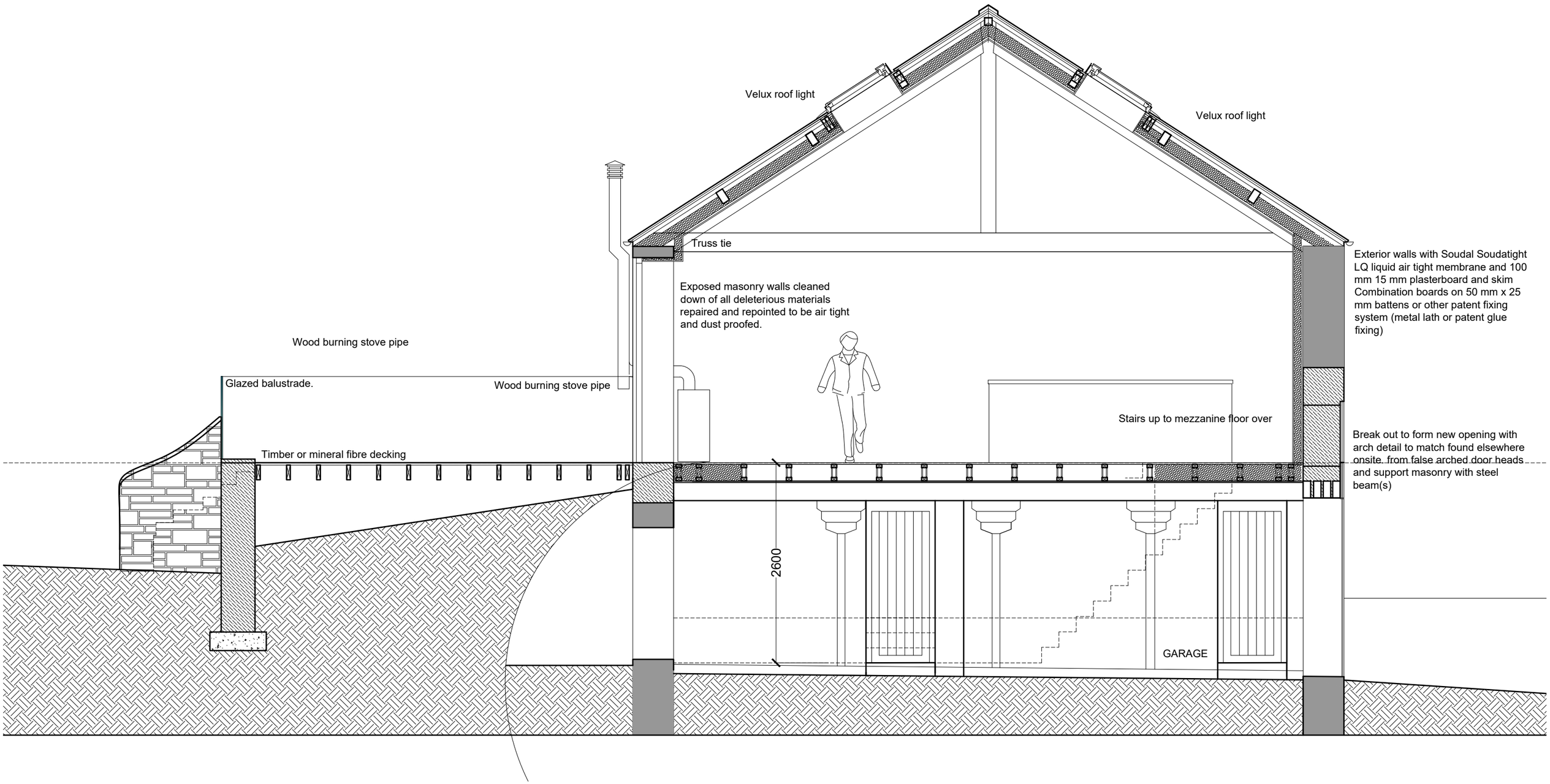

PROPOSED SECTION

SCALE BAR 1/200 ORIGINAL DRAWING SIZE A3	0.0	0.2	.04	0.6	0.8	1.0	1.2	1.4	1.6	1.8	2.0 metres		80.0 metres	70.0	60.0	50.0	40.0	30.0	20.0	10.0	0.0	SCALE BAR 1/500
SCALE BAR 1/100	0.0	1.0	2.0	3.0	4.0	5.0	6.0	7.0	8.0	9.0	10.0 metres		400.0 metres	350.0	300.0	250.0	200.0	150.0	100.0	50.0	0.0	SCALE BAR 1/2500
SCALE BAR 1/50	0.0		1.0		2.0		3.0		4.0		5.0 metres											

ARLECDON FARM HOUSE ARLECDON FARM ARLECDON CUMBERLAND CA26 3UW for Barry and Jackie Parsons	ALTERATIONS AND EXTENSION	PROPOSED SECTIONAL ELEVATION	Scale: Date: DWG No.	1/50 @ A3 AUG 2024 08/0411/11	REV DATE

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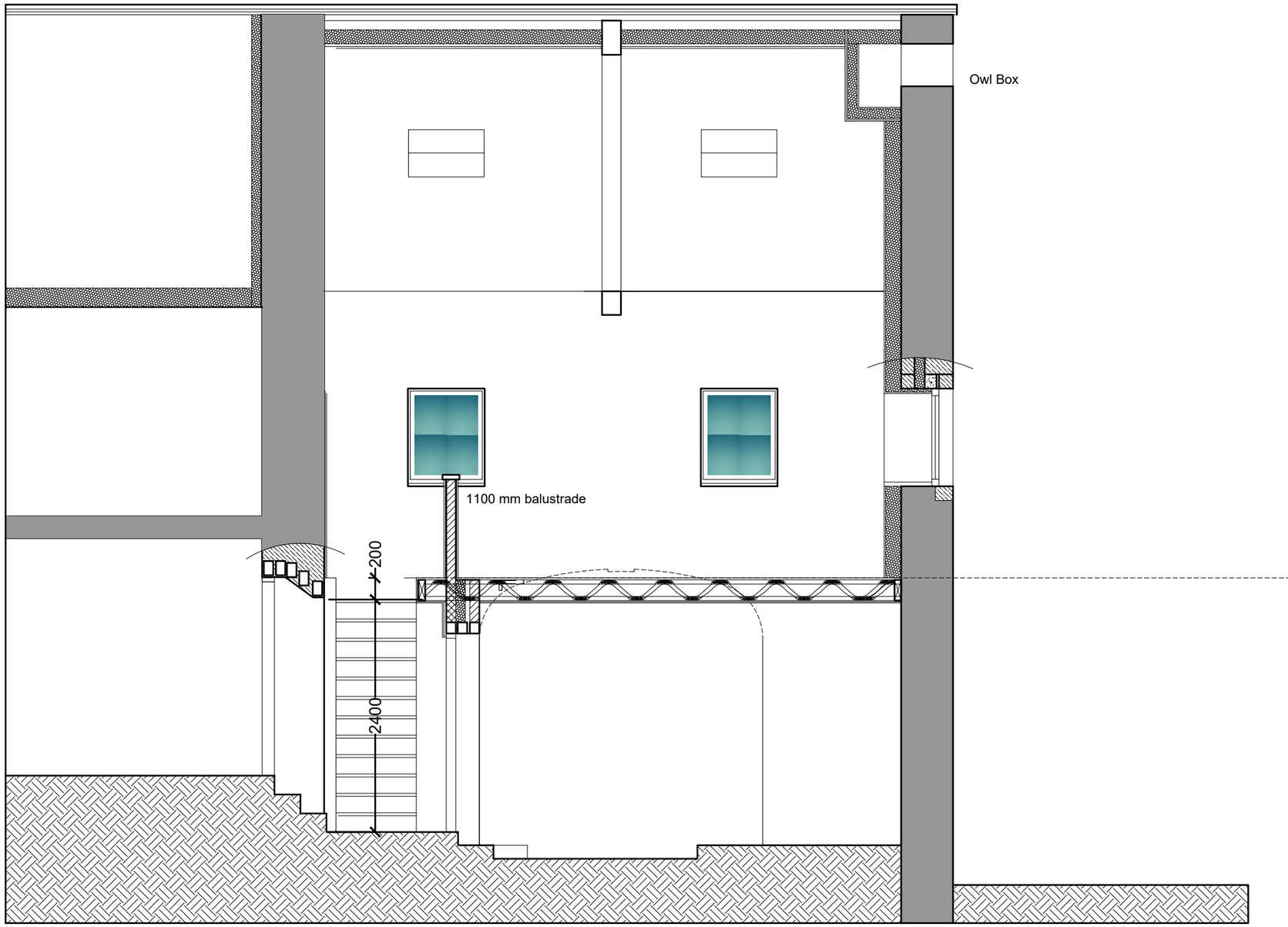

PROPOSED SECTION

SCALE BAR 1/200 ORIGINAL DRAWING SIZE A3	0.0	0.2	.04	0.6	0.8	1.0	1.2	1.4	1.6	1.8	2.0 metres		80.0 metres	70.0	60.0	50.0	40.0	30.0	20.0	10.0	0.0 SCALE BAR 1/500
SCALE BAR 1/100	0.0	1.0	2.0	3.0	4.0	5.0	6.0	7.0	8.0	9.0	10.0 metres		400.0 metres	350.0	300.0	250.0	200.0	150.0	100.0	50.0	0.0 SCALE BAR 1/2500
SCALE BAR 1/50	0.0		1.0		2.0		3.0		4.0		5.0 metres										

ARLECDON FARM HOUSE ARLECDON FARM ARLECDON CUMBERLAND CA26 3UW for Barry and Jackie Parsons	ALTERATIONS AND EXTENSION	PROPOSED SECTIONAL ELEVATION	Scale: Date: DWG No.	1/50 @ A3 AUG 2024 08/0411/12	REV DATE

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SCALE BAR 1/200 ORIGINAL DRAWING SIZE A3	0.0	2.0	4.0	6.0	8.0	10.0	12.0	14.0	16.0	18.0	20.0 metres		80.0 metres	70.0	60.0	50.0	40.0	30.0	20.0	10.0	0.0	SCALE BAR 1/500
SCALE BAR 1/100	0.0	1.0	2.0	3.0	4.0	5.0	6.0	7.0	8.0	9.0	10.0 metres		800.0 metres	700.0	300.0	500.0	400.0	300.0	200.0	100.0	0.0	SCALE BAR 1/1250
SCALE BAR 1/50	0.0		10.0		20.0		30.0		40.0		50.0 metres											

ARLECDON FARM HOUSE ARLECDON FARM ARLECDON CUMBERLAND CA26 3UW for Barry and Jackie Parsons	ALTERATIONS AND EXTENSION	PROPOSED BLOCK PLAN PLAN	Scale: Date: DWG No.	1/500 @ A3 AUG 2024 08/0411/12	REV DATE

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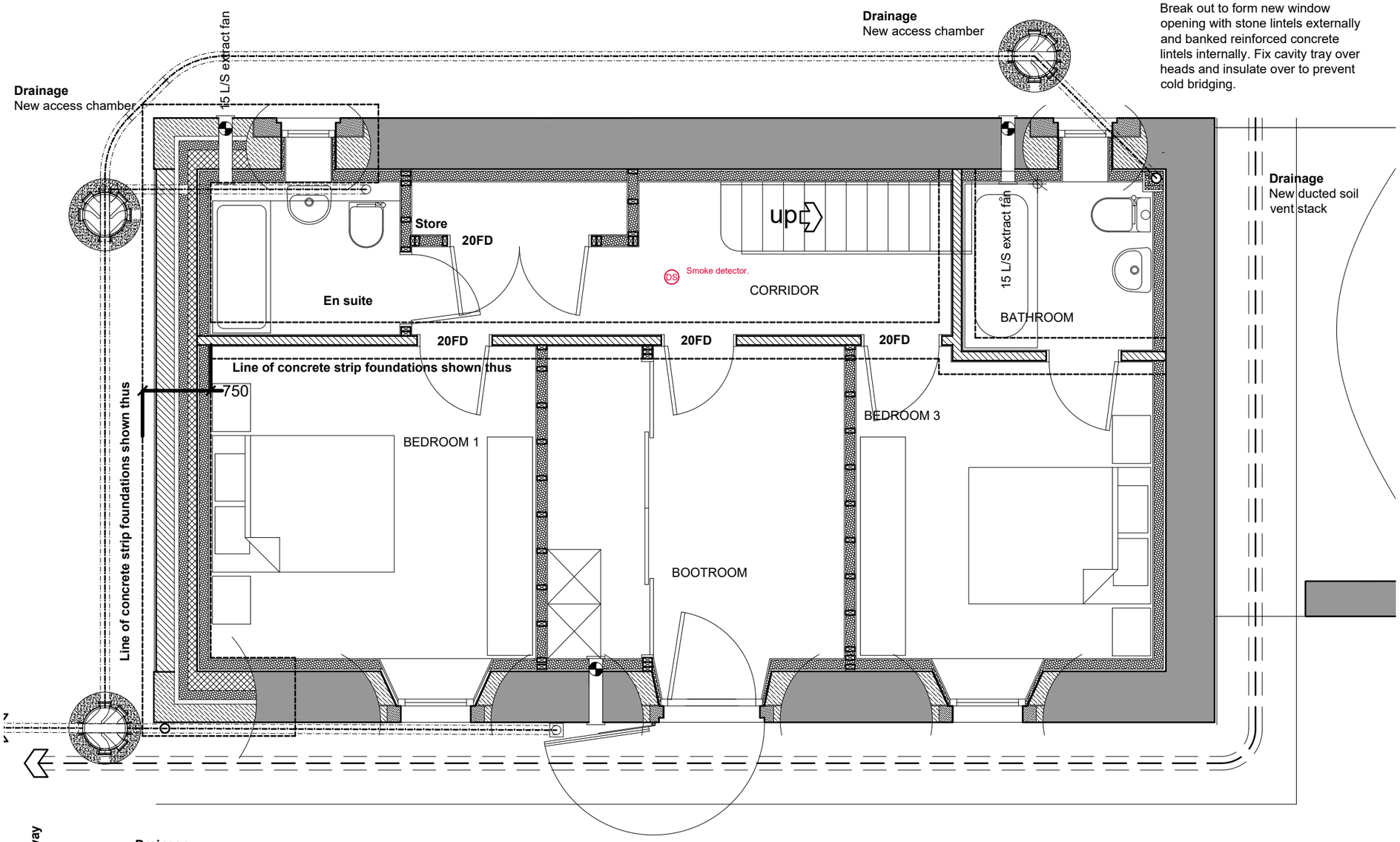

Drainage
Modify existing foul drain stand pipe to connect Kitchen sink waste.

Unstable gable end
Carefully take down unsuitable gable end Rebuild in masonry faced cavity wall off concrete strip foundations taken down to minimum depth the base of the existing bar wall base. Tie new walls into existing returns. Allow for any additional bracing etc. as specified by the Consultant Structural Engineer.

Window and doors
Fix new windows to existing openings. Form fully insulated jamb returns and vertical damp proof courses. Replace all timber lintels with reinforced concrete lintels and insulate to prevent cold bridging at head of windows

New central loadbearing wall.
100 mm thick 7.3 N/mm² solid concrete block walls built off 225 mm thick x 450 mm wide concrete strip foundations taken down to virgin ground not less than 150 mm below ground level to the top of he foundations. Fit horizontal damp proof course coordinated with floor damp proof course to provide continuous protection. One coat plaster of dry line partitions with12.5 mm plasterboard skimmed.

None structural stud partitions.
100 mm x 50 mm C16 timber stud partitions with 12.5 mm plasterboards each side with skim finish to provide half hour fire resistance for the whole partition. Insulate between the studs with 100 mm thick semi rigid acoustic insulation sheet cut to fit neatly with no air gaps.

New ground floor to extensions. Ground Floor U Value 0.18 W/M²K
Allow for flooring finish thickness on 100 mm concrete floor slab on 500 gauge Visqueen vapour barrier on 100 mm Celotex GA4000 floor insulation slabs on 1200 gauge damp proof membrane. All on 50 mm sharp sand blinding on minimum 150 mm thick sand blinded hard-core sub-base laid and consolidated in 150 mm layers no thicker than 600 mm. deep. Visqueen Damp Proof Membrane is to overlap D.P.C. in inner leaf of external walls to form a permanent damp proof barrier. All damp proof courses, and vapour barriers are to be overlapped and taped as recommended in the manufacturer's specification for the location and purpose. Upturn 25 mm thick insulation adjacent to exterior wall

Excavate adjacent to existing walls where floor is below ground level and fully tanks walls from base to minimum retained ground level. Apply vertical liquid damp proof membrane to exterior of walls from base to minimum depth of retained ground above floor level. Fix "egg crate" plastic sheet protection to vertical damp proof membrane and backfill trench with granular backfill with 225 mm topsoil over on Terram geotextile membrane. Water proof render internal walls throughout to smooth flat finish to allow for dry lining walling system. All walls are to be treated in a manner to ensure the building would pass a pressure test to achieve 5.5 M³ / (h.M²) at 50PA or better. Dry line with 112.5 mm 100 mm insulation 12.5 mm plasterboard with skim finish on patent expanding foam bonding dabs as recommended by the board manufacturers.

FOUNDATIONS
Foundations
Excavations for foundations
FOUNDATIONS MAY BE RECONSIDERED WITH BUILDING CONTROL DEPENDANT ON SITE SPECIFIC GROUND CONDITIONS.
Foundation trenches to be excavated to suit dimensions indicated and taken down to virgin ground for inspection by Local Authority Building Control officer.
Depth may vary according to site conditions and site contours but top of concrete must be min. 450 mm. below the finished ground level. Strip foundations to be generally 750 mm. wide x 225 mm. min. deep to external cavity walls and 450 mm. x 225 mm. min. for 100 mm. load bearing internal walls or with min. 150 mm. toe where wall thickness may vary. Form all steps in level of foundations in vertical increments of 225 mm. to suit block coursing, and with min 300 mm horizontal overlaps.
Concrete
Concrete to be premixed C25 as described in tables 1 and 2 of B.S. 5328 maximum size aggregate to be 20 mm. All concrete shall be distributed and placed in position as quickly as practicable by a method which precludes contamination, segregation or loss of materials, compaction shall be complete before the initial set commences. Partial set concrete shall not be reworked or used. All concreting shall be continuous to completion or to an approved construction joint.
During the first seven days the concrete shall be protected by whatever means to prevent over rapid drying. Steps in the foundations are to overlap by twice the height of the step or by 300 mm. whichever is the greater and should not be of greater height than the thickness of the foundation. In general steps should be in increments of 225 mm. to suit block covering. Tie new foundation horizontally to base of existing walls to prevent uneven settlement
C**avity walls below ground.**
450/500 mm. thick cavity walls consisting 300/250mm. thick solid concrete block with 50 mm wide cavity back filled with concrete to ground level max 225 mm below damp proof course and 100 mm. solid concrete block inner leaf. Cavity wall ties to be Furfix stainless steel or similar specifically designed for 50 mm. cavities at 750 mm. horizontal centres and 450m vertical centres, offset 375 mm. horizontally to form a diamond pattern. Fix additional wall ties every course at all corners and jambs. Between ground level and floor level, fix bituthene Hyload DPCs continuous across the cavity to both inner and outer leaves of walls. Lay masonry outer facing from one course below finished ground level dpc level in outer leaf to form plinth.

Drainage.Connections and Discharges.
There are existing drainage connections for foul and surface water. These are to be surveyed recorded and investigated for suitable reuse with the approval of Building Control.

General Drainage Specification:
All new drains will be designed to comply with BS EN 752 . New soil and surface water drainage:
Hepworth Supersleeve or similar spun clay 100/150/225 mm. diameter pipes with u.p.v.c. flexible sealed collars laid in clean square cut trenches at a gradient of not less than 1: 60 fall. Carefully back fill trenches with layered back fill strictly in accordance with the manufacturer's instructions. All fittings including manholes, inspection chambers, and back inlet gullies etc. to be from the same range and supplier. Set all pre formed gullies and chambers on 150 mm. concrete bases and surround with 150 mm. sleeves. Fit gullies with plastic or galvanized grills. Fit manholes and inspection chambers with steel rims and covers, as supplied by the manufacturer set in mortar surrounds. Set manhole covers onto pre formed r.c. covers where manholes internal size is greater than 450 mm. x 600 mm. which is the minimum acceptable internal dimension for a 900 mm. deep manhole. Where drains are less than 1500 mm deep in traffic areas surround pipes in 150 mm concrete sleeve with Flexcell joints at each pipe joint or as otherwise recommended by the pipe manufacturers. New drains under concrete floor are to be surrounded in concrete sleeve with expansion joints as described above.
All drain lines are diagrammatic and the final layout should be agreed on site with the Building Control Department.

Building Regulations Only. Named products.
Where products are named in the specification the developer can substitute similar products provided the specification of the products meets or exceeds the selected product specification.

PROPOSED GROUND FLOOR

SCALE BAR 1/200 ORIGINAL DRAWING SIZE A3	0.0	2.0	4.0	6.0	8.0	10.0	12.0	14.0	16.0	18.0	20.0 metres		80.0 metres	70.0	60.0	50.0	40.0	30.0	20.0	10.0	0.0	SCALE BAR 1/500
SCALE BAR 1/100	0.0	1.0	2.0	3.0	4.0	5.0	6.0	7.0	8.0	9.0	10.0 metres		400.0 metres	350.0	300.0	250.0	200.0	150.0	100.0	50.0	0.0	SCALE BAR 1/2500
SCALE BAR 1/50	0.0		1.0		2.0		3.0		4.0		5.0 metres											

ARLECDON FARM BARN 1 ARLECDON FARM ARLECDON CUMBERLAND CA26 3UW for Barry and Jackie Parsons	CONVERSION TO DWELLING	PROPOSED ALTERATIONS GROUND FLOOR PLAN	Scale: Date: DWG No.	1/50 @ A3 OCT 2024 24/0412/06	REV DATE

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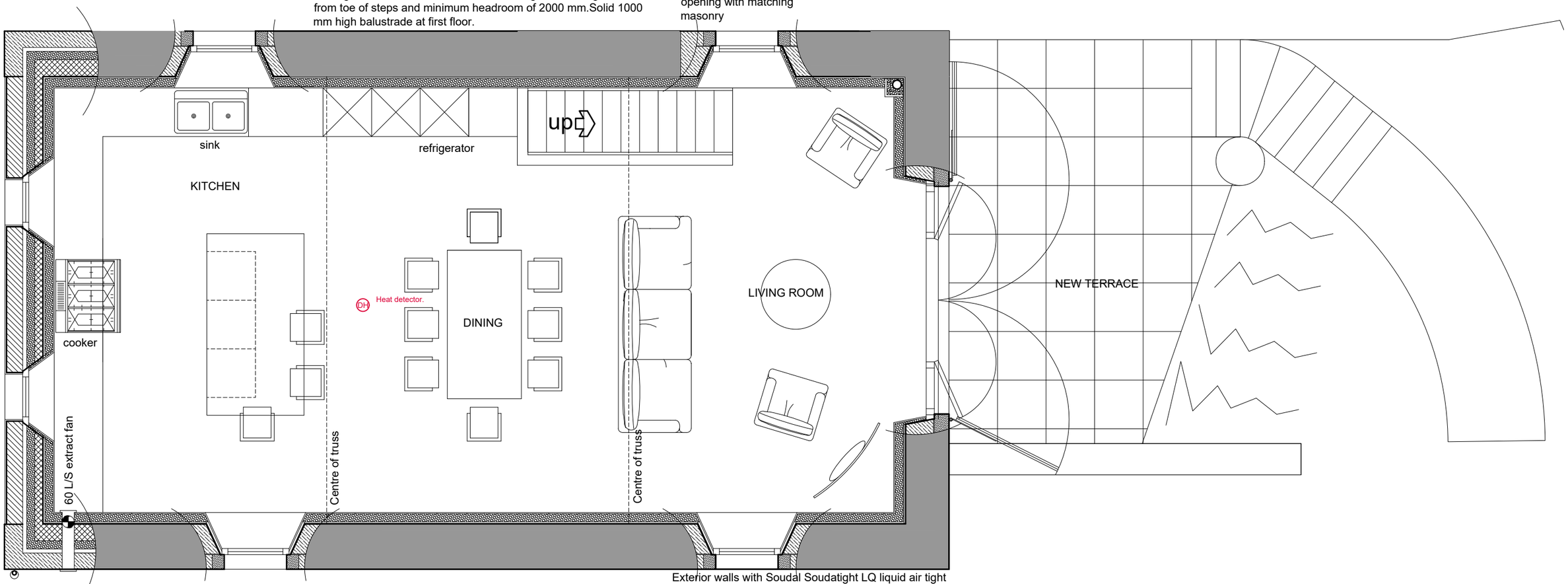
Stairs.Ground to First Floor.
Total rise 2600mm in 13 equal 200 mm risers and 12 no. equal treads 230 mm angle of rise from the horizontal of not more than 42°. Stairs to be 826 over strings with minimum 900 mm square landings. Stairs to have handrail 900 mm high above angle of rise from toe of steps and minimum headroom of 2000 mm.Solid 1000 mm high balustrade at first floor.

Block up existing opening with matching masonry



Cavity wall above dpc U Value 0.18 W/M²K

450/500 mm. thick cavity walls consisting rendered $\frac{200}{150}$ mm matching masonry 100 mm solid concrete block 50 mm clear cavity and 100 mm. thick Armstrong Airtec 7.2 Kn/mm² concrete block inner leaf. All walls are to be built in a manner to ensure the building would pass a pressure test to achieve 5.5 M³ / (h.M²) at 50PA or better. Fix insulated cavity closers at all jambs and cills to doors and windows and fix tray under cills and lintels to heads of openings.
Cavity wall ties to be Furfix or similar stainless steel specifically designed for 50 mm. cavities at 750 mm. horizontal centres and 450m vertical centres, offset 375 mm. horizontally to form a diamond pattern or as otherwise recommended by the wall insulation manufacturer. Fix additional wall ties every course at all corners and jambs. Seal heads of cavities with inert fire proof material 6mm thick Masonite or similar bedded in mortar and fixed between toes of spars.
Integrate new walls toothed into existing masonry walls. where required fix additional bracing as advised and specified by the Consultant Structural Engineer.

Exterior walls with Soudal Soudatight LQ liquid air tight membrane and 100 mm 15 mm plasterboard and skim Combination boards on 50 mm x 25 mm battens or other patent fixing system (metal lath or patent glue fixing)

Exposed masonry walls cleaned down of all deleterious materials repaired and repointed to be air tight and dust proofed.

PROPOSED FIRST FLOOR

SCALE BAR 1/200 ORIGINAL DRAWING SIZE A3	0.0	2.0	4.0	6.0	8.0	10.0	12.0	14.0	16.0	18.0	20.0 metres		80.0 metres	70.0	60.0	50.0	40.0	30.0	20.0	10.0	0.0	SCALE BAR 1/500
SCALE BAR 1/100	0.0	1.0	2.0	3.0	4.0	5.0	6.0	7.0	8.0	9.0	10.0 metres		400.0 metres	350.0	300.0	250.0	200.0	150.0	100.0	50.0	0.0	SCALE BAR 1/2500
SCALE BAR 1/50	0.0		1.0		2.0		3.0		4.0		5.0 metres											

ARLECDON FARM BARN 1 ARLECDON FARM ARLECDON CUMBERLAND CA26 3UW for Barry and Jackie Parsons	CONVERSION TO DWELLING	PROPOSED ALTERATIONS FIRST FLOOR PLAN	Scale: Date: DWG No.	1/50 @ A3 OCT 2024 24/0412/07	REV DATE

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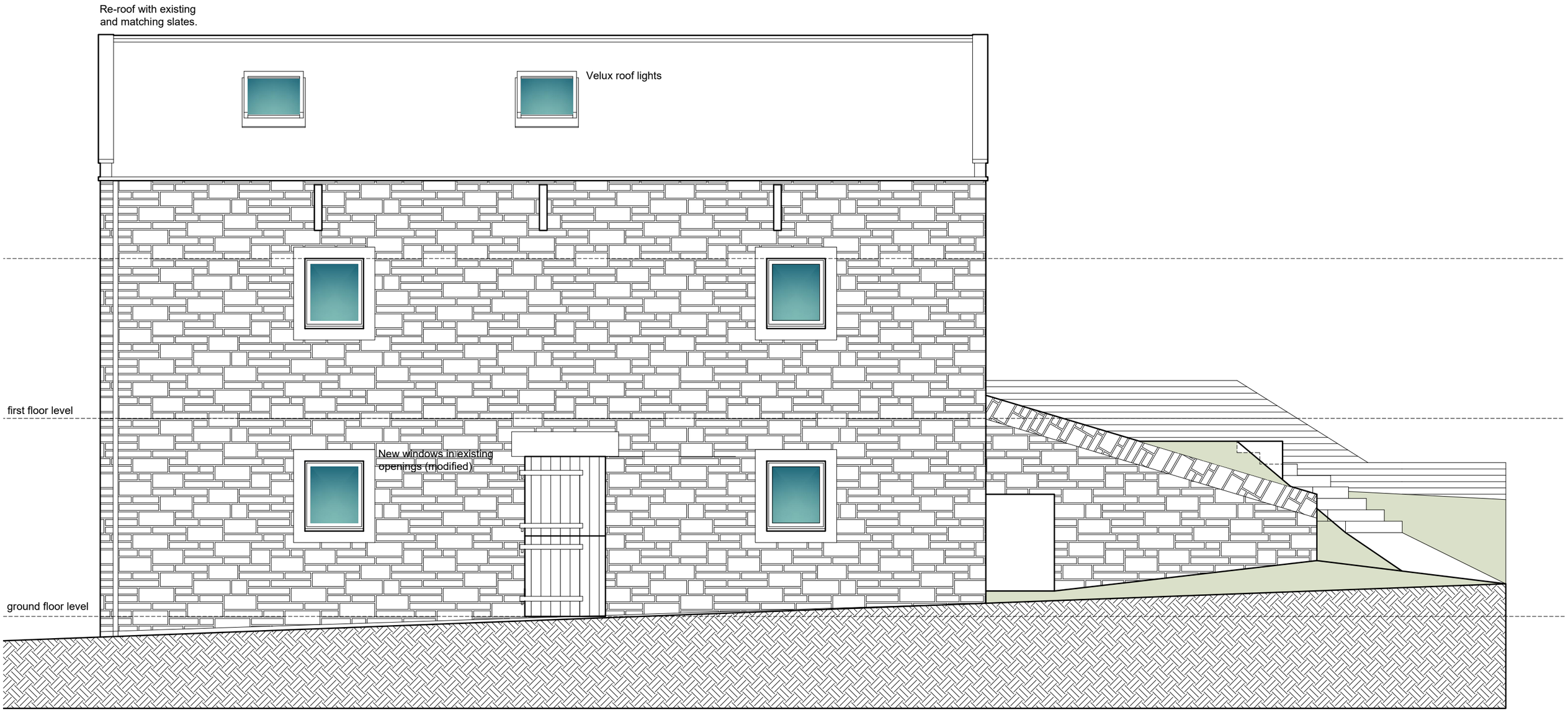

PROPOSED FRONT ELEVATION

SCALE BAR 1/200 ORIGINAL DRAWING SIZE A3	0.0	2.0	4.0	6.0	8.0	10.0	12.0	14.0	16.0	18.0	20.0 metres		80.0 metres	70.0	60.0	50.0	40.0	30.0	20.0	10.0	0.0	SCALE BAR 1/500
SCALE BAR 1/100	0.0	1.0	2.0	3.0	4.0	5.0	6.0	7.0	8.0	9.0	10.0 metres		400.0 metres	350.0	300.0	250.0	200.0	150.0	100.0	50.0	0.0	SCALE BAR 1/2500
SCALE BAR 1/50	0.0		1.0		2.0		3.0		4.0		5.0 metres											

ARLECDON FARM BARN 1 ARLECDON FARM ARLECDON CUMBERLAND CA26 3UW for Barry and Jackie Parsons	CONVERSION TO DWELLING	PROPOSED ALTERATIONS FRONT ELEVATION	Scale: Date: DWG No.	1/50 @ A3 OCT 2024 24/0412/08	REV DATE

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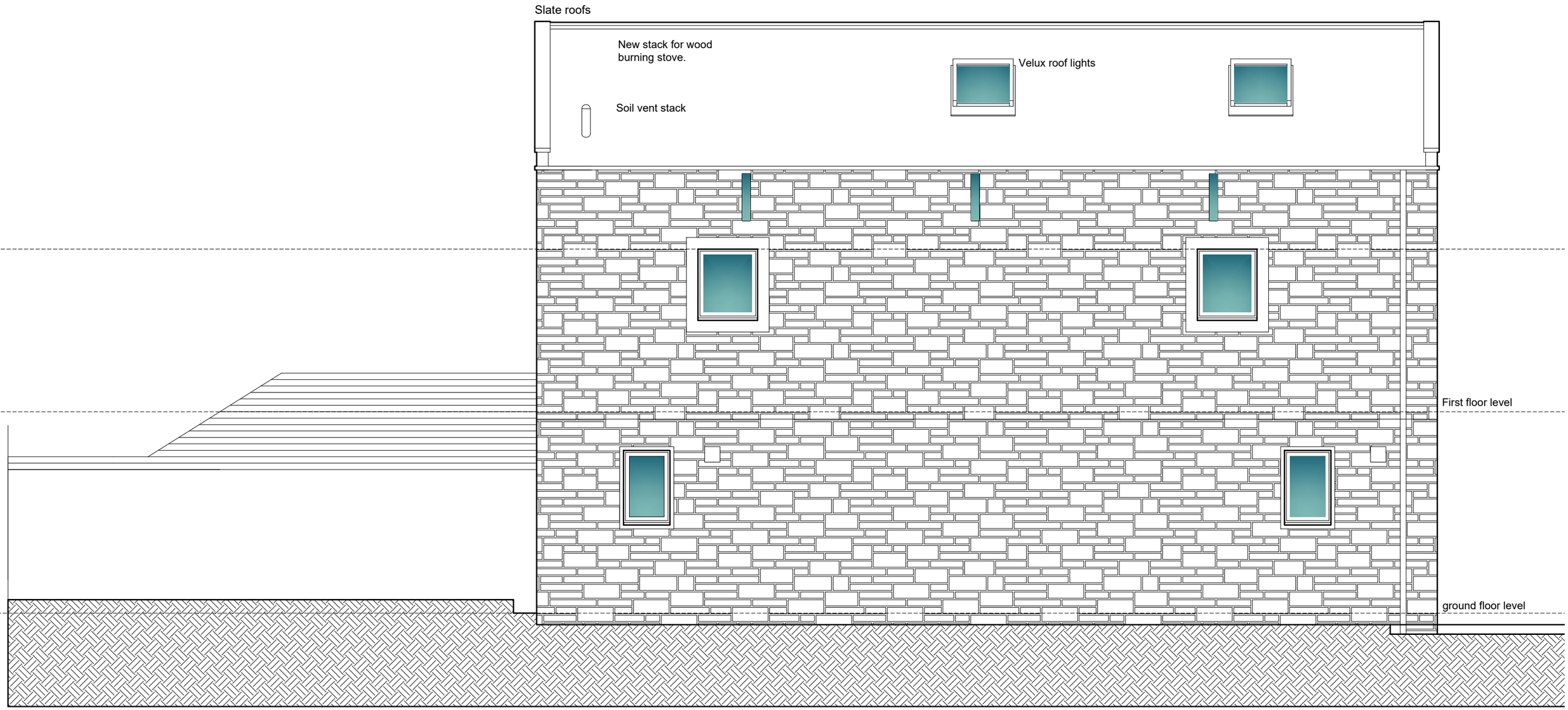

PROPOSED REAR ELEVATION

SCALE BAR 1/200 ORIGINAL DRAWING SIZE A3	0.0	2.0	4.0	6.0	8.0	10.0	12.0	14.0	16.0	18.0	20.0 metres		80.0 metres	70.0	60.0	50.0	40.0	30.0	20.0	10.0	0.0	SCALE BAR 1/500
SCALE BAR 1/100	0.0	1.0	2.0	3.0	4.0	5.0	6.0	7.0	8.0	9.0	10.0 metres		400.0 metres	350.0	300.0	250.0	200.0	150.0	100.0	50.0	0.0	SCALE BAR 1/2500
SCALE BAR 1/50	0.0		1.0		2.0		3.0		4.0		5.0 metres											

ARLECDON FARM BARN 1 ARLECDON FARM ARLECDON CUMBERLAND CA26 3UW for Barry and Jackie Parsons	CONVERSION TO DWELLING	PROPOSED REAR ELEVATION	Scale: Date: DWG No.	1/50 @ A3 OCT 2024 24/0412/09	REV DATE

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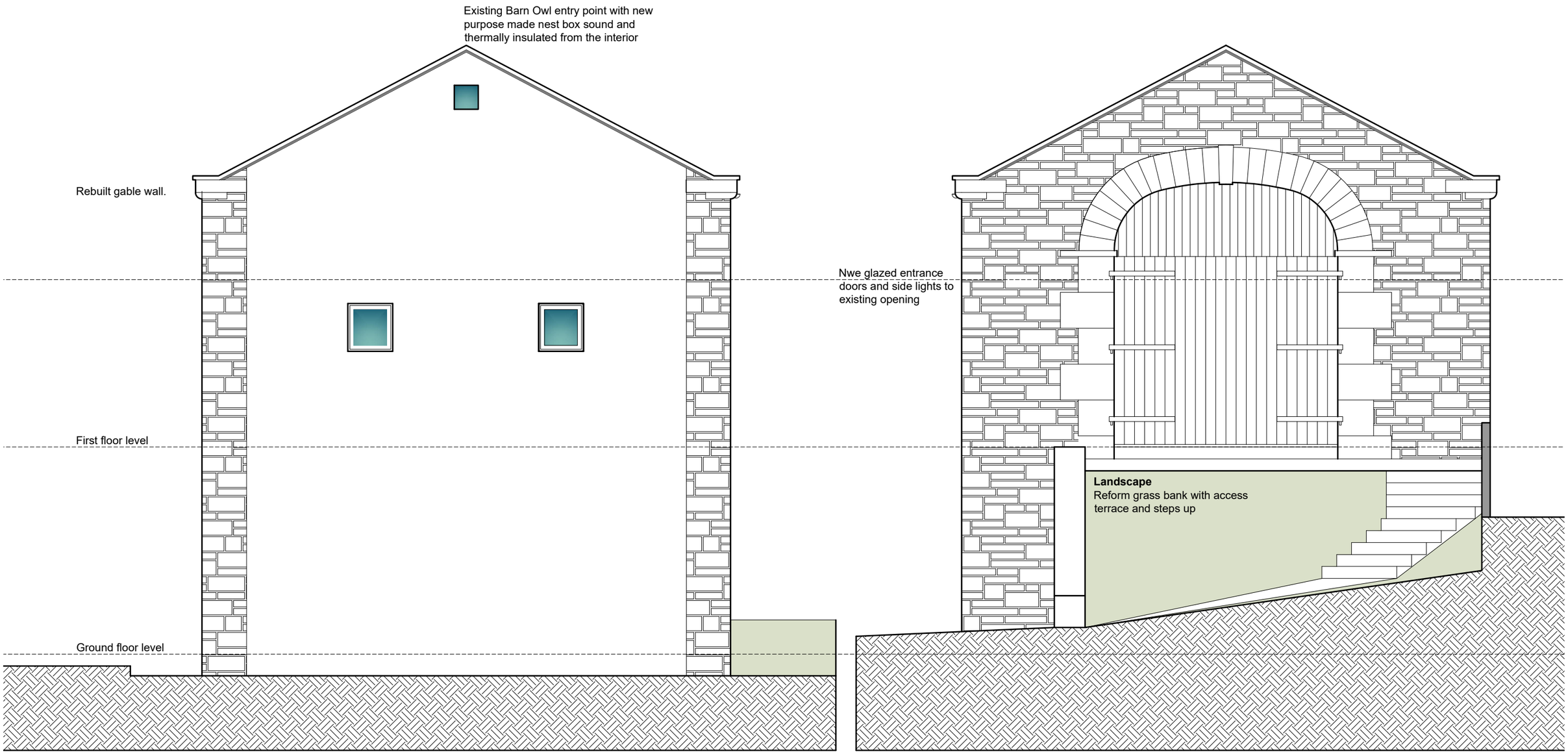

PROPOSED END ELEVATION

SCALE BAR 1/200 ORIGINAL DRAWING SIZE A3	0.0	0.2	.04	0.6	0.8	1.0	1.2	1.4	1.6	1.8	2.0 metres		80.0 metres	70.0	60.0	50.0	40.0	30.0	20.0	10.0	0.0	SCALE BAR 1/500
SCALE BAR 1/100	0.0	1.0	2.0	3.0	4.0	5.0	6.0	7.0	8.0	9.0	10.0 metres		400.0 metres	350.0	300.0	250.0	200.0	150.0	100.0	50.0	0.0	SCALE BAR 1/2500
SCALE BAR 1/50	0.0		1.0		2.0		3.0		4.0		5.0 metres											

ARLECDON FARM BARN 1 ARLECDON FARM ARLECDON CUMBERLAND CA26 3UW for Barry and Jackie Parsons	CONVERSION TO DWELLING	PROPOSED END ELEVATIONS	Scale: Date: DWG No.	1/50 @ A3 AUG 2024 08/0412/10	REV DATE

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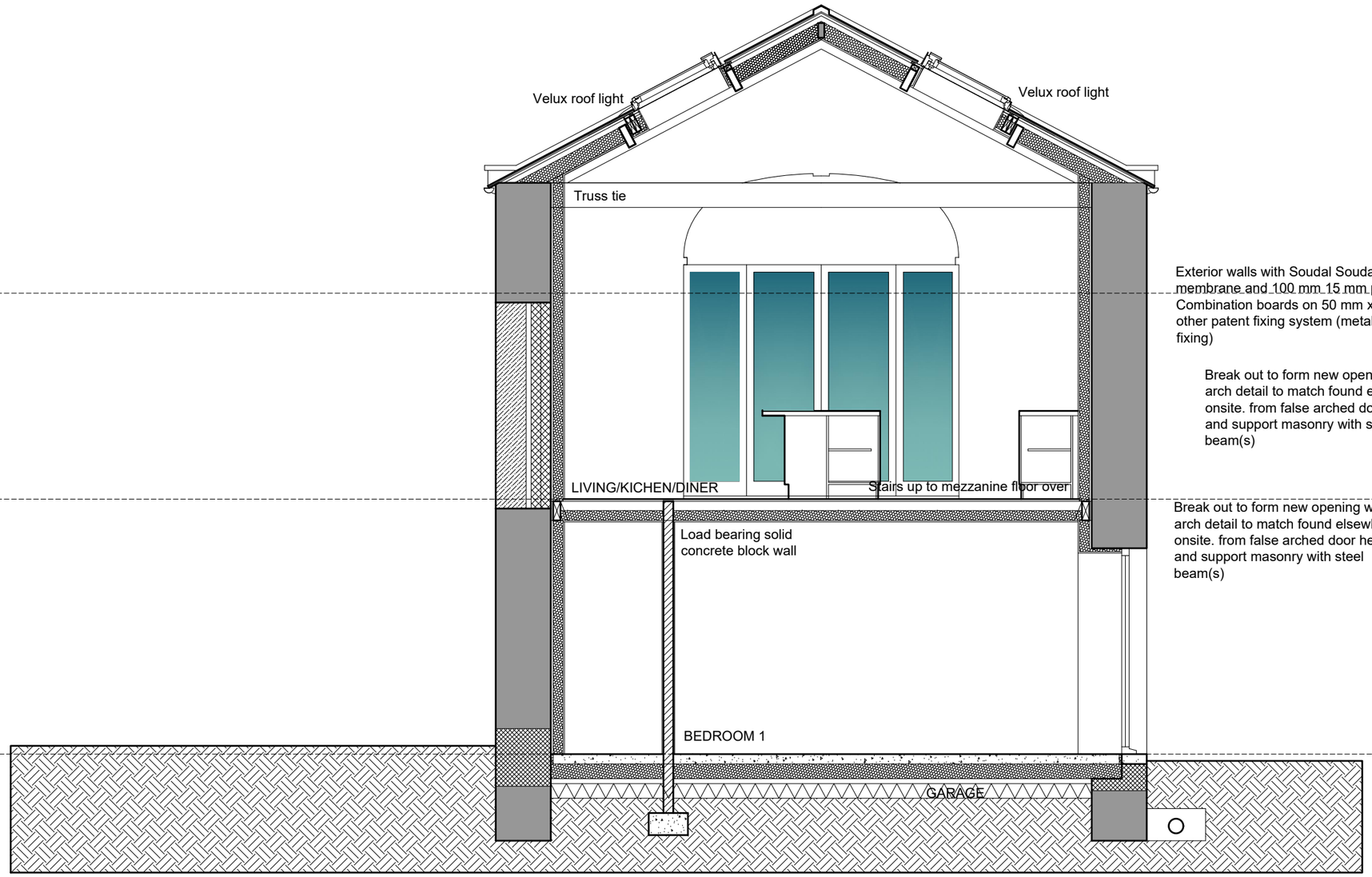

Exterior walls with Soudal Soudatight LQ liquid air tight membrane and 100 mm 15 mm plasterboard and skim Combination boards on 50 mm x 25 mm battens or other patent fixing system (metal lath or patent glue fixing)

Break out to form new opening with arch detail to match found elsewhere onsite. from false arched door heads and support masonry with steel beam(s)

Break out to form new opening with arch detail to match found elsewhere onsite. from false arched door heads and support masonry with steel beam(s)

PROPOSED SECTION

SCALE BAR 1/100	0.0	1.0	2.0	3.0	4.0	5.0	6.0	7.0	8.0	9.0	10.0 metres
SCALE BAR 1/50	0.0		1.0		2.0		3.0		4.0		5.0 metres

ARLECDON FARM BARN 1 ARLECDON FARM ARLECDON CUMBERLAND CA26 3UW for Barry and Jackie Parsons	CONVERSION TO DWELLING	PROPOSED SECTIONAL ELEVATION	Scale: Date: DWG No.	1/50 @ A3 OCT 2024 24/0412/11	REV DATE

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SCALE BAR 1/200 ORIGINAL DRAWING SIZE A3	0.0	2.0	4.0	6.0	8.0	10.0	12.0	14.0	16.0	18.0	20.0 metres		80.0 metres	70.0	60.0	50.0	40.0	30.0	20.0	10.0	0.0	SCALE BAR 1/500
SCALE BAR 1/100	0.0	1.0	2.0	3.0	4.0	5.0	6.0	7.0	8.0	9.0	10.0 metres		800.0 metres	700.0	300.0	500.0	400.0	300.0	200.0	100.0	0.0	SCALE BAR 1/1250
SCALE BAR 1/50	0.0		10.0		20.0		30.0		40.0		50.0 metres											

ARLECDON FARM BARN 1 ARLECDON FARM ARLECDON CUMBERLAND CA26 3UW for Barry and Jackie Parsons	CONVERSION TO DWELLING	PROPOSED BLOCK PLAN PLAN	Scale: Date: DWG No.	1/500 @ A3 OCT 2024 24/0412/12	REV DATE

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APPENDIX II – RELEVANT LEGISLATION

All British bat species are given special protection within England by their inclusion on Schedule 2 of the Conservation of Habitats and Species Regulations 2017 (as amended) and Schedule 5 of the Wildlife and Countryside Act 1981 (as amended).

- As a result, it is an offence to:
- Deliberately capture, injure or kill a bat;
- Intentionally or recklessly disturb a bat in its roost or deliberately disturb a group of bats;
- Damage or destroy a bat's roosting place (even if bats are not occupying a roost at the time);
- Possess or advertise, sell or exchange a bat (dead or alive) or any part of a bat; and
- Intentionally or recklessly obstruct access to a bat roost.

With specific reference to the offence of disturbance, Regulation 41(1) of the Conservation of Habitats and Species Regulations 2017 (as amended) states that a person commits an offence if they:

"…deliberately disturb wild animals of any such species [i.e. a European Protected Species] in such a way as to be likely significantly to affect:

(i) the ability of any significant group of animals of that species to survive, breed, or rear or nurture their young; or

(ii) the local distribution or abundance of that species".

Where development will result in damage to, or obstruct access to, any bat roost (whether occupied or not) or risks harming or significantly disturbing bats, a European Protected Species Mitigation Licence (EPSML) is required from Natural England to allow the development to proceed.

Bats are also afforded more general protection in England (and Wales) within the Natural Environment and Rural Communities Act (NERC) 2006. This imposes a duty on all public bodies, including local authorities and statutory bodies, in exercising their functions, *"…to have due regard, so far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity" [Section 40 (1)]. It notes that "conserving biodiversity includes restoring or enhancing a population or habitat" [Section 40 (3)].*

All nesting birds, their nests (whilst being built or in use), eggs and dependent young, are protected from disturbance by the Wildlife and Countryside Act 1981. Barn owls are also listed under Schedule 1 of the Wildlife and Countryside Act, which awards additional protection from disturbance during the breeding season.

APPENDIX III – STILL SHOTS FROM THE INFRA-RED AND THERMAL CAMERAS

07/05/25 – VP1	
07/05/25 – VP2	

07/05/25 – VP3	
07/05/25 – VP4	
07/05/25 – VP5	

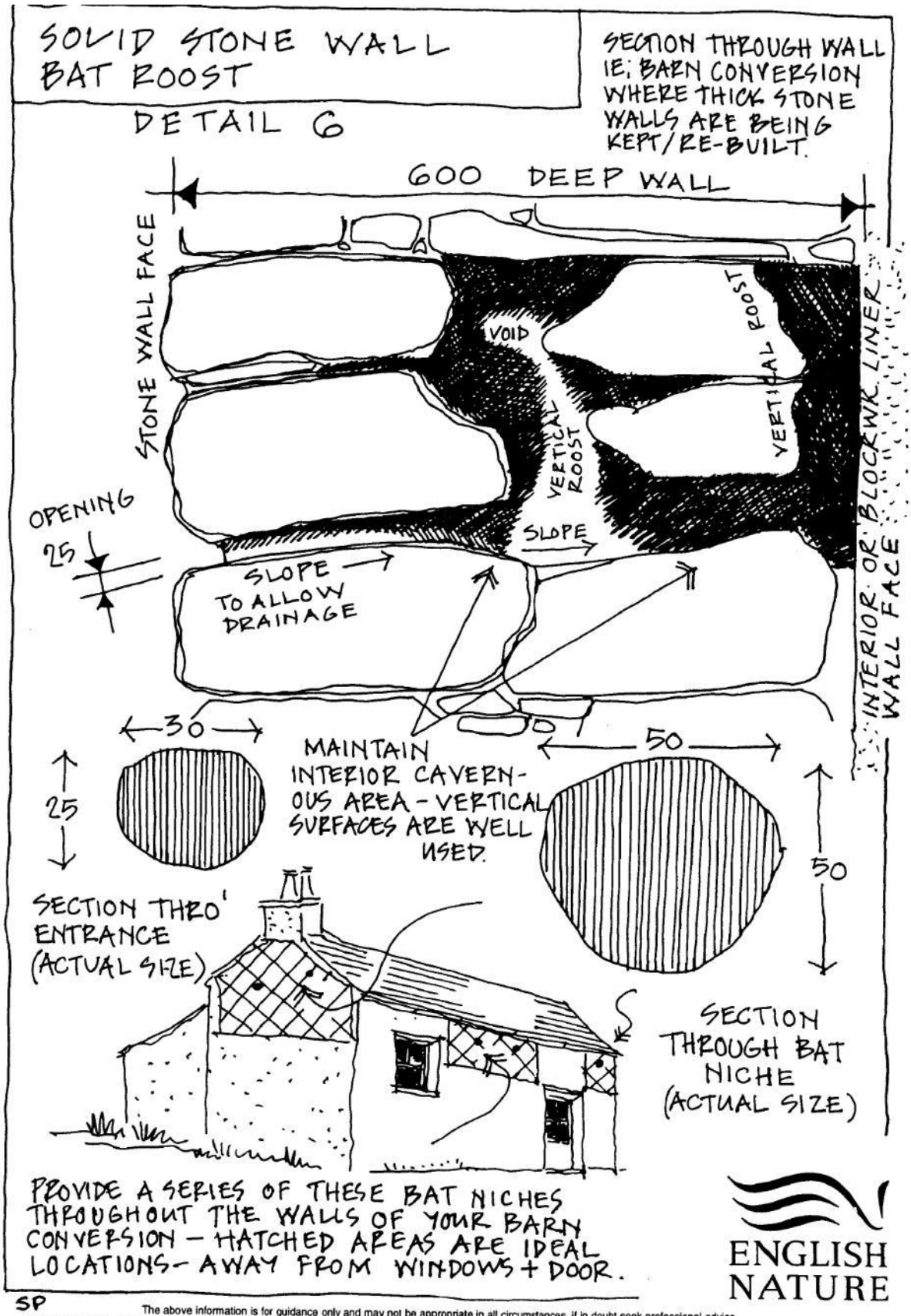
07/05/25 – VP6	
07/05/25 – VP7	
07/05/25 – VP8	

05/06/25 – VP1	
05/06/25 – VP2	

05/06/25 – VP3	
05/06/25 – VP4	
05/06/25 – VP5	

05/06/25 – VP6	
05/06/25 – VP7	
05/06/25 – VP8	

APPENDIX IV – BAT ROOSTING AND ACCESS PROVISIONS

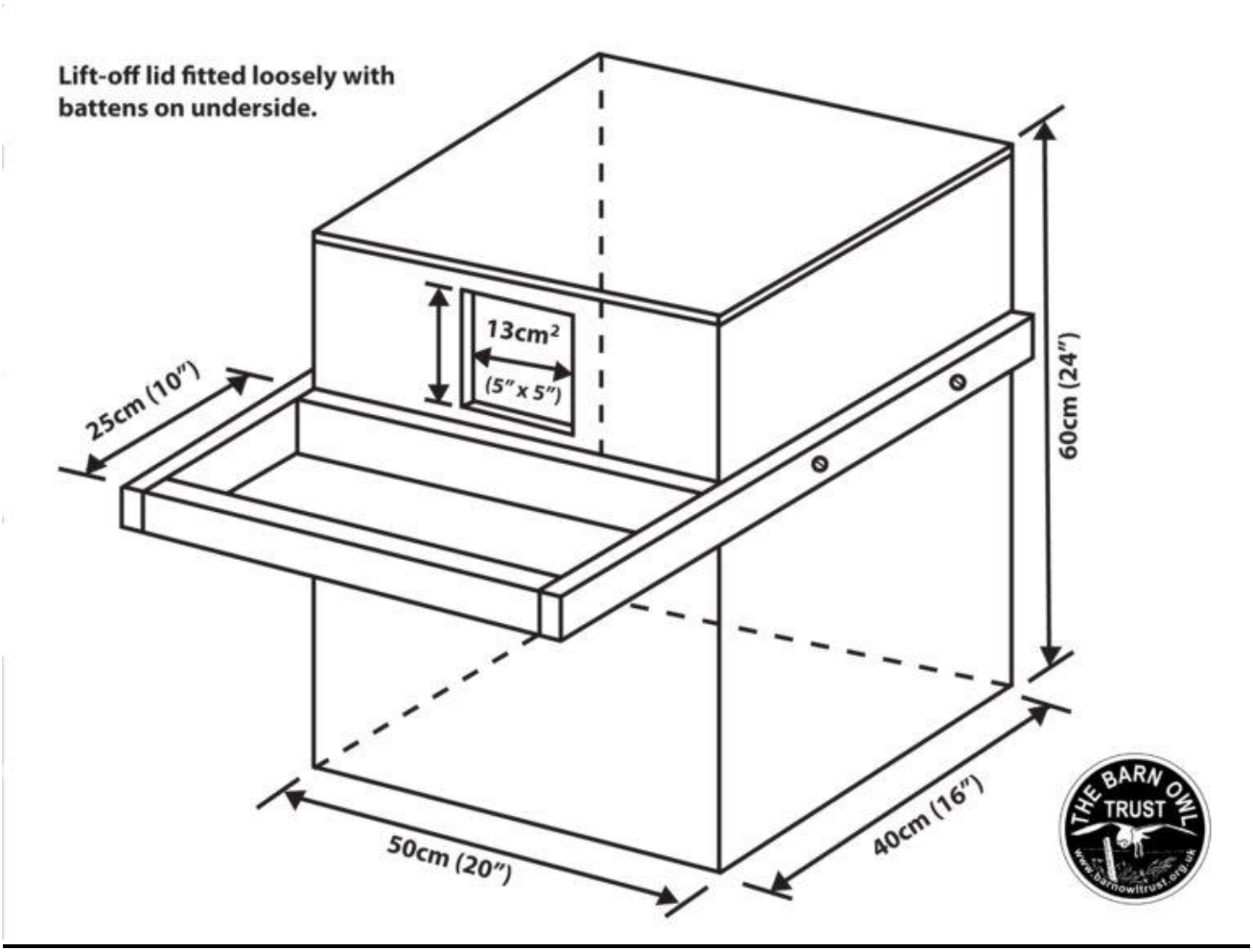


SP

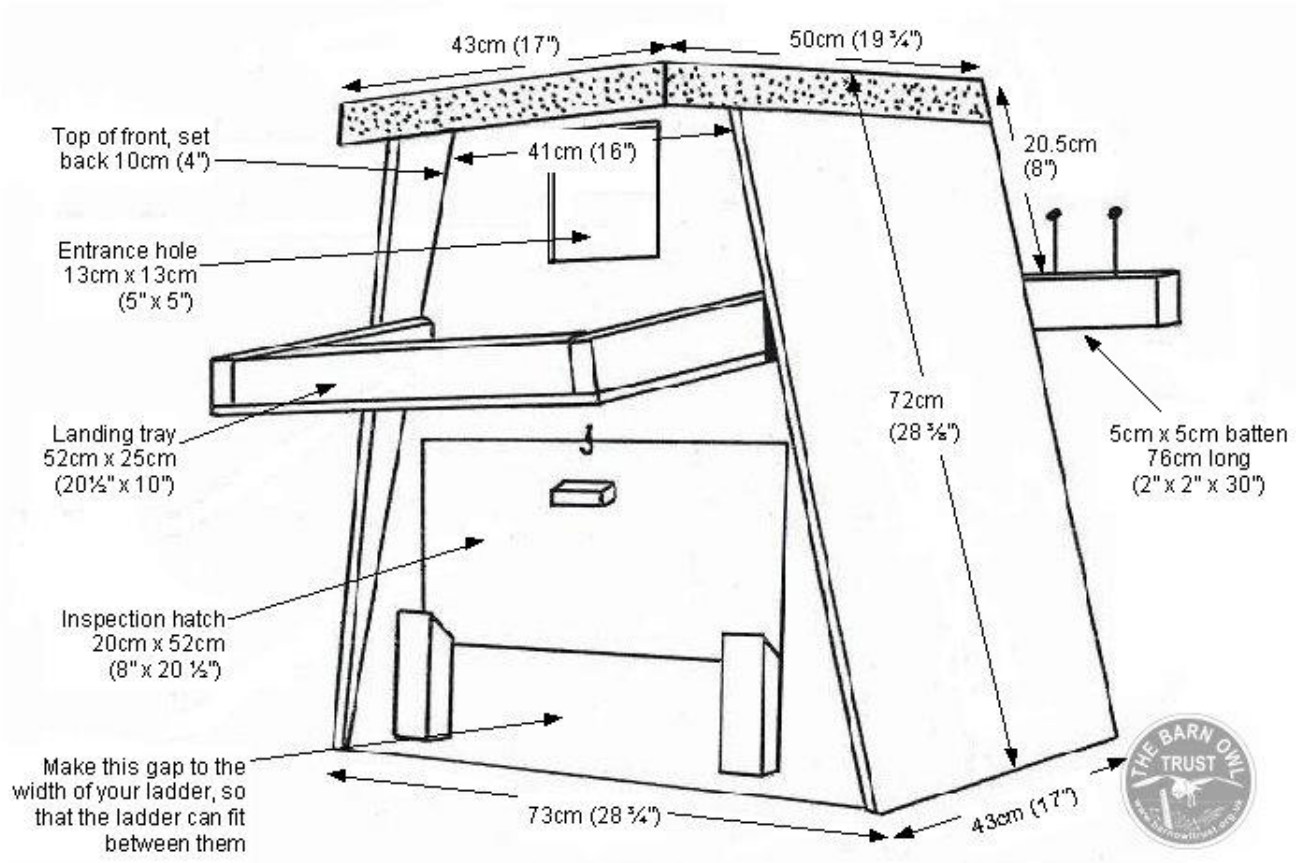
English Nature Cumbria Team, Juniper House, Murley Moss, Oxenholme Road, Kendal LA9 7RL. Tel: 01539 792800 Fax: 01539 792830 Email: cumbria@english-nature.org.uk

APPENDIX V - BARN OWL NEST PROVISIONS

Indoor barn owl nestbox

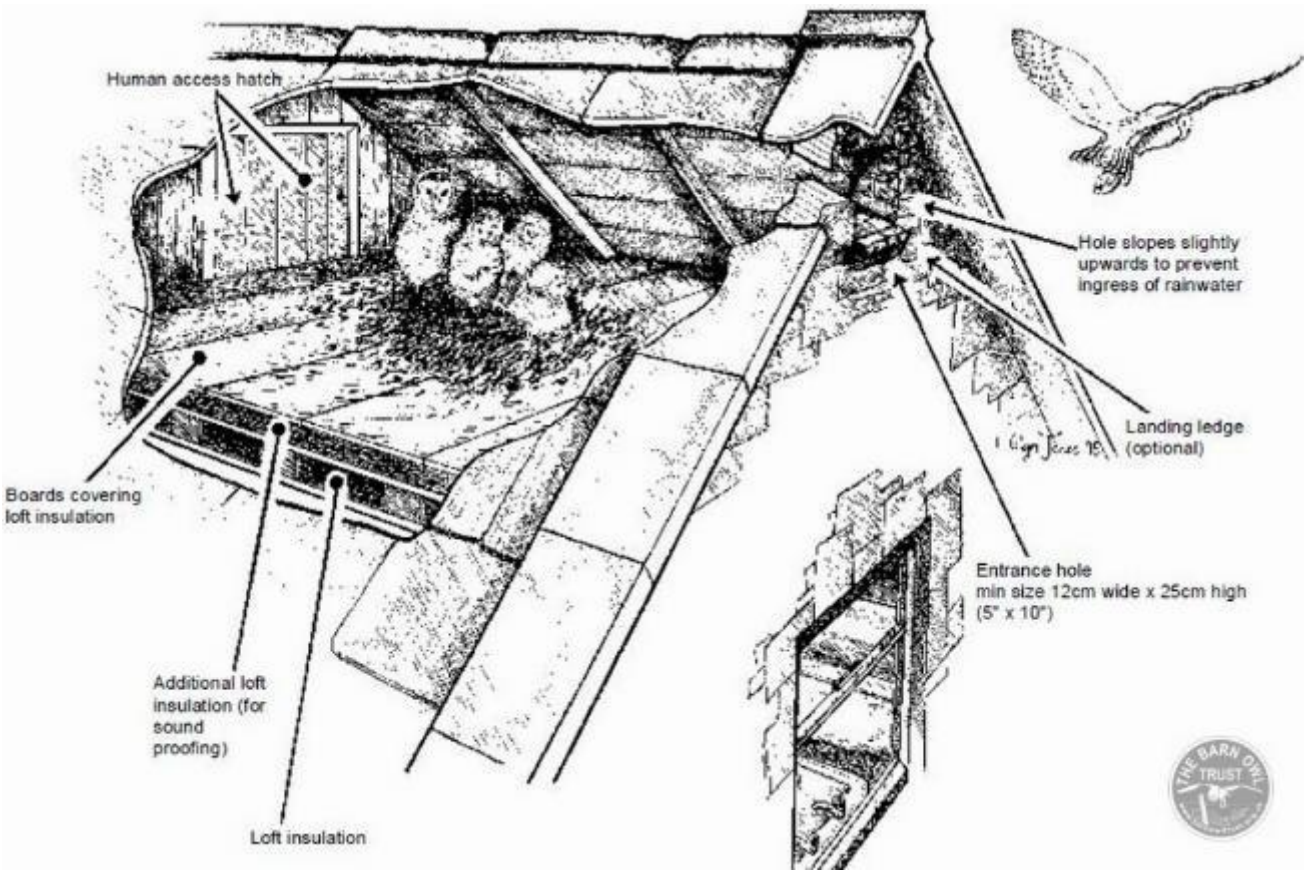


More information available from: https://www.barnowltrust.org.uk/barn-owl-nestbox/barn-owl-nestboxes/



More information available from: https://www.barnowltrust.org.uk/barn-owl-nestbox/owl-boxes-for-trees/

Barn Owl nest space within a building



More information available from: https://www.barnowltrust.org.uk/barn-owl-nestbox/barn-owl-nestboxes-building-projects/