



Preliminary Roost Assessment Survey

63 Heol Cae-Gurwen,
Gwaun Cae-Gurwen,
Ammanford,
SA18 1HG

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Executive Summary

- DKEcology were commissioned to undertake a Preliminary Bat Roost Assessment survey of 63 Heol Cae-Gurwen, Gwaun Cae-Gurwen, Ammanford, SA18 1HG. The existing building is to be refurbished and has had some structural work already carried out. Therefore, it was necessary to assess the potential of the building for supporting bats and to determine if any bats might be impacted by the continuation of the proposed works.
- The property is situated within the village of Gwaun Cae-Gurwen a linear settlement along the main road (A474) approx. 8km north of Pontardawe (Grid ref: SN 70296 11870). It is immediately surrounded by the well-lit A road to the east and housing with limited garden vegetation for approx. 150m in all directions. However well connected open countryside suitable for supporting most bat species lies within 156-433m of the property including mature hedges, water courses, woodland, scrub and pasture fields.
- There is 1 designated sites within 2km of the property but none within or immediately adjacent to the property boundary.
- The NBN records search returned no records of bat species within 2km of the site and no record of a roof nesting bird species within 500m of the site. Previous surveys in the area have recorded activity by 6 bat species within 300m of the site.
- The property consists of a rendered red brick building with an A framed roof built in the late 1800's. It has a 2 story extension to the rear and a single storey side extension. The majority of the building is in a very poor condition. The roof of the main building including the tiles and most of the roofing membrane was removed 2 years ago. The roof is currently partially covered in tarpaulin but is exposed to the weather in several locations. Most of the upper floor ceiling was also removed throughout the main building and the 2 storey extension approx. 2 years ago completely exposing any loft areas. A number of potential access points including free flight access were noted but only a small number of roosting opportunities were noted. The majority of the building was considered unsuitable for roosting bats due to the poor condition of the building and high external lighting levels.
- No evidence of bat activity was noted inside/outside of the building.
- The property has numerous external lights on and around the property, all of which are left on throughout the night for security purposes. Street lighting is also immediately adjacent to the east of the property.
- Section B of the building is assessed as having low potential for supporting bats. **A minimum of 1 bat activity survey of the property will need to be carried out during the breeding season (May to August incl), to verify if/how bats are using the building and to calculate the numbers, bat**

species and roost locations. Further surveys may be required depending on the results of the initial survey.

- Section A of the building is assessed as having negligible potential for supporting bats. The proposed refurbishment works are highly unlikely to result in the disturbance or destruction of any bats or bat roosts. **A European Protected Species license will not be required to carry out the proposed works.** However, the final arbitration is with Natural Resources Wales and the Welsh Government. It is recommended that any works in section A are carried out in a precautionary manner. It is recommended that any works in section A are carried out in a precautionary manner.
- Section C of the building is assessed as having no potential for supporting bats. The reconstruction of the single storey extension is highly unlikely to result in the disturbance or destruction of any bats or bat roosts. **A European Protected Species license will not be required to carry out the proposed works.** However, the final arbitration is with Natural Resources Wales and the Welsh Government.
- The development must take into account the legal status of nesting birds.
- At least 1 bat and 1 bird enhancement opportunity must be incorporated into the development. Ideally external lighting levels should be reduced if possible.

1.0 INTRODUCTION

- 1.1 DKEcology undertook a Preliminary Roost Assessment Survey of 63 Heol Cae-Gurwen, Gwaun Cae-Gurwen, Ammanford, SA18 1HG.
- 1.2 The survey was carried out on the 3rd October 2023. The objective of the survey was to establish the likelihood of the presence of bats in the property.
- 1.3 The property consists of a 2 storey brick building built in the late 1800's. It has an A framed roof with extensions to the rear and side. The property is in a poor state of repair and has been empty for a number of years. There are some concerns about the structural safety of the building. The roof of the main section of the building was removed 2 years ago. The owner wishes to refurbish the existing property.
- 1.4 This report confirms the findings of the above survey, completed in October 2023. For the purposes of the report the property was divided into 3 areas (see plan in Appendix 2).

2.0 PLANNING POLICY AND LEGISLATION

- 2.1 The following local and national planning policy relating to nature conservation and biodiversity are considered of relevance to the current proposal.
- 2.2 Certain species of animals and plants found in the wild in the UK are legally protected from being harmed or disturbed. These species, including all bat species are listed in the Wildlife and Countryside Act 1981 (as amended) or are named as European Protected Species (EPS) in the Conservation of Habitats and Species Regulations 2010.
- 2.3 There is also legislation that legally protects certain animals - for example, the Protection of Badgers Act (1992) protects badgers and their setts, and the Deer Act (1991) places restrictions on actions that can be taken against deer species.

Planning Policy Wales and Technical Advice Note 5

- 2.4 This document set out the land use planning policies of the Welsh Assembly Government, with Chapter 5 dealing with Conserving and Improving Natural Heritage and the Coast. The advice contained within Planning Policy Wales (PPW) is supplemented for some subjects by Technical Advice Notes (TAN's).
- 2.5 TAN 5 (Welsh Assembly Government, 2009) specifically provides advice about how the land use planning system should contribute to protecting and enhancing biodiversity and geological conservation. The TAN provides advice for local planning authorities on the key principles of positive planning for nature conservation; nature conservation and Local Development Plans; nature conservation in development management procedures; development affecting protected internationally and nationally designated sites and habitats; and development affecting protected and priority habitats and species.

- 2.6 Under Section 2.4 within the TAN 5, 'when deciding planning applications that may affect nature conservation local planning authorities should':
- Pay particular attention to the principles of sustainable development, including respect for environmental limits, applying the precautionary principle, using scientific knowledge to aid decision making and taking account of the full range of costs and benefits in a long-term perspective;
 - Contribute to the protection and improvement of the environment, so as to improve the quality of life and protect local and global ecosystems, seeking to avoid irreversible harmful effects on the natural environment;
 - Promote the conservation and enhancement of statutorily designated areas and undeveloped coast;
 - Ensure that appropriate weight is attached to designated sites of international, national, and local importance;
 - Protect wildlife and natural features in the wider environment, with appropriate weight attached to priority habitats and species in Biodiversity Action Plans;
 - Ensure that all material considerations are taken into account and decisions are informed by adequate information about the potential effects of development on nature conservation;
 - Ensure that the range and population of protected species is sustained;
 - Adopt a stepwise approach to avoid harm to nature conservation, minimise unavoidable harm by mitigation measures, offset residual harm by compensation measures and look for new opportunities to enhance nature conservation; where there may be significant harmful effects local planning authorities will need to be satisfied that any reasonable alternative sites that would result in less or no harm have been fully considered;

Wildlife & Countryside Act 1981

- 2.7 The Wildlife & Countryside Act 1981 (as amended) is the primary legislation for England and Wales for the protection of flora, fauna, and the countryside. Part I within the Act deals with the protection of wildlife.
- 2.8 The provisions relating to animals in the Act only apply to 'wild animals'; these are defined as those that are living wild or were living wild before being captured or killed. It does not apply to captive bred animals being held in captivity.
- 2.9 There are 'defences' provided by the legislation. These are cases where acts that would otherwise be prohibited by the legislation are permitted. Notably these allow things to happen that are reasonable, unpredictable, and unavoidable, such as running over a badger on the road.
- 2.10 Licensing: certain prohibited actions under the Wildlife and Countryside Act may be undertaken under licence by the proper authority. For example, scientific study that requires capturing

protected animals can be allowed by obtaining a license. Trade in the more widespread species is also permitted if licensed.

Conservation of Habitats and Species Regulations 2010 (as amended)

- 2.11 The Conservation of Habitats and Species Regulations 2010 ((amended in 2012) (which are the principal means by which the EC Habitats Directive is transposed in England and Wales)) update the legislation and consolidate all the many amendments which have been made to the Regulations since they were first made in 1994.
- 2.12 These regulations provide for the designation and protection of domestic and European Sites (e.g. Site of Special Scientific Interest [SSSI] and Special Area of Conservation [SAC]) the protection of European Protected Species (animals and plants listed in Annex IV Habitats Directive which are resident in the wild in Great Britain) and the adaptation of planning controls for the protection of such sites and species.
- 2.13 Under the regulations, public bodies (including the Local Planning Authority) have a duty in exercising their functions to have regard to the EC Habitats Directive.
- 2.14 Licensing: certain prohibited actions under the Regulations may be undertaken under licence by the proper authority. For example, where an EPS has been identified and the development risks intentionally, recklessly, or deliberately affecting an EPS, then a 'development licence' may be required.

3.0 METHODOLOGY

The survey was undertaken in accordance with current and appropriate guidelines for bat surveys stated in Bat Surveys for Professional Ecologists: Good practice guidelines, 4th edition, Collins, J (ed.) (2023) & The Bat Workers' Manual, 3rd edition. (Mitchell-Jones, A.J., & McLeish, A.P. (Ed.), 2004) by a licensed and experienced bat ecologist.

3.1 Desktop study

- 3.1.1 An LRC data search was not undertaken due to the small size, low predicted impact, and nature of the development. The overall impact on biodiversity is likely to be localised and of low significance and no significant vegetation will be affected. It is considered very unlikely that the development will have any impact outside the footprint of the works. The data search results would be considered unlikely to impact on the decision-making process and therefore an LRC search has not been undertaken. This approach is consistent with CIEEM Guidelines for Accessing, Using and Sharing Biodiversity Data (2020).
- 3.1.2 A data search was undertaken for records of bats within 2km and roof nesting birds within 0.5km of the site using the on-line National Biodiversity Network (NBN) Atlas.
- 3.1.3 A review of Local Biodiversity Action Plans was carried out to assess if additional ecological considerations were necessary at the planning stage for any of the species and habitats listed.
- 3.1.4 DEFRA's MAGIC website (DEFRA, 2018) was used to locate designated wildlife sites within 10km of the property. Any sites designated for reasons associated with bats were noted.
- 3.1.5 Aerial/satellite photographs were also consulted. These, as well as external and internal images of the property, are presented in Appendix 1.

3.2 Scoping survey

- 3.2.1 The property was internally and externally inspected for bats with the aid of high-powered lamps and close focussing binoculars on the 3rd October 2023 by Debbie Kearsley-Evans (NRW licence S087704/1), a licensed and experienced bat ecologist.
- 3.2.2 The potential of the site to support roosting bats was assessed, along with a search for signs of use by bats (for example droppings, moth wings, scratch marks, staining, etc.) or the actual presence of bats.
- 3.2.3 The bat roost potential of the building was assessed and categorised using the criteria shown in table 1:

Potential suitability	Description	
	Roosting habitats in structures	Potential flight-paths and foraging habitats
None	No habitat features on site likely to be used by any roosting bats at any time of the year (i.e. a complete absence of crevices/suitable shelter at all ground/underground levels).	No habitat features on site likely to be used by any commuting or foraging bats at any time of the year (i.e. no habitats that provide continuous lines of shade/protection for flight-lines, or generate/shelter insect populations available to foraging bats).
Negligible*	No obvious habitat features on site likely to be used by roosting bats; however, a small element of uncertainty remains as bats can use small and apparently unsuitable features on occasion.	No obvious habitat features on site likely to be used as flight-paths or by foraging bats; however, a small element of uncertainty remains in order to account for non-standard bat behaviour.
Low	A structure with one or more potential roost sites that could be used by individual bats opportunistically at any time of the year. However, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions ^b 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 and not a classic cool/stable hibernation site, but could be used by individual hibernating bats ^c).	Habitat that could be used by small numbers of bats as flight-paths such as a gappy hedgerow or unvegetated stream, but isolated, i.e. not very well connected to the surrounding landscape by other habitat. Suitable, but isolated habitat that could be used by small numbers of foraging bats such as a lone tree (not in a parkland situation) or a patch of scrub.
Moderate	A structure with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions ^b and surrounding habitat but unlikely to support a roost of high conservation status (with respect to roost type only, such as maternity and hibernation – the categorisation described in this table is made irrespective of species conservation status, which is established after presence is confirmed).	Continuous habitat connected to the wider landscape that could be used by bats for flight-paths such as lines of trees and scrub or linked back gardens. Habitat that is connected to the wider landscape that could be used by bats for foraging such as trees, scrub, grassland or water.
High	A structure with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions ^b and surrounding habitat. These structures have the potential to support high conservation status roosts, e.g. maternity or classic cool/stable hibernation site.	Continuous, high-quality habitat that is well connected to the wider landscape that is likely to be used regularly by bats for flight-paths such as river valleys, streams, hedgerows, lines of trees and woodland edge. High-quality habitat that is well connected to the wider landscape that is likely to be used regularly by foraging bats such as broadleaved woodland, tree-lined watercourses and grazed parkland. Site is close to and connected to known roosts.

Table 1: Assessing potential suitability of proposed development sites for bats (Modified table taken from Bat Survey Guidelines [2023])

3.3 Limitations

- 3.3.1 Bats are a difficult group to survey for and it is usually signs of their activity rather than their actual presence that indicates the existence of a bat roost. However, many species of bat in the UK are crevice dwelling, and signs of bats and the bats themselves can be difficult to find within a building.
- 3.3.2 A daytime scoping survey for bats is therefore primarily used to assess the potential of a building to support bats. This assessment is based subjectively on the surveyor's knowledge and experience as to whether bats are reasonably likely to be present. Each building or

structure is surveyed for features that could be exploited by each bat species and is assessed in association with its location within the context of both its immediate environs and the wider landscape.

- 3.3.3 All relevant internal/external areas of the property were examined adequately for signs of potential bat access points and signs of droppings and staining apart from the lower floor of section A which has been closed off due to health and safety concerns regarding its structural integrity. As a result of the restricted access parts of the interior of the roof line of the main building (section A) were not able to be observed.

4.0 RESULTS

4.1 Desktop study

- 4.1.1 This section reports on the findings of the desktop survey.

4.1.1 Habitat context

- 4.1.1.1 The property is situated within the village of Gwaun Cae-Gurwen a linear settlement along the main road (A474) approx. 8km north of Pontardawe (Grid ref: SN 70296 11870). It is immediately surrounded by the well-lit A road to the east and housing with limited garden vegetation for approx. 150m in all directions. However well connected open countryside suitable for supporting most bat species lies within 156-433m of the property including mature hedges, water courses, woodland, scrub and pasture fields. The river Garnant and Nant Hir lie approx. 262m west and 433m south east respectively.

4.1.2 Protected sites

- 4.1.2.1 There is 1 designated site within 2km of the property, Tairgwaith Site of Special Scientific Interest (SSSI) 1km south east, but none within or immediately adjacent to the property boundary.
- 4.1.2.2 There are 2 non-statutory sites within 1km of the property Sites of Interest for Nature Conservation (SINCS). The nearest 200m to the north east GCG Common which is a mosaic of wet and dry meadow. The River Garnant SINC lies approx. 270m west.

4.1.3 Species records

- 4.1.3.1 The NBN search returned no records of any bat species within 2km of the property.
- 4.1.3.2 The NBN search returned no records of a roof nesting bird species within 0.5km of the property.
- 4.1.3.3 Bat surveys carried out by DKEcology within the vicinity of the property have recorded activity/roosts by 6 species of bat including Soprano Pipistrelle (*Pipistrellus pygmaeus*),

Common Pipistrelle (*Pipistrellus pipistrellus*), Brown Long Eared (Plecotus auritus) Whiskered (Myotis mystacinus, Natterers (Myotis nattereri) and Daubentons (Myotis daubentoni).

4.1.4 History of bat use

4.1.4.1 There is no record of historical use of the building by bats.

4.2 Scoping survey

- 4.2.1 The property consists of a rendered red brick building with an A framed roof built in the late 1800's. It has a 2 story extension to the rear (section B) constructed of red brick walls with a cement tiled A framed roof. The single storey side extension (section C) is constructed of a mixture of red brick and cement blocks but most of the roof is no longer in place and the interior is exposed to the weather. The majority of the building is in a very poor condition. The roof of Section A including the tiles and most of the roofing membrane was removed 2 years ago. The roof is currently partially covered in tarpaulin but is exposed to the weather in several locations. Most of the upper floor ceiling was also removed throughout the section A and B approx. 2 years ago completely exposing any loft areas.
- 4.2.2 Section A for the most part has solid well pointed or rendered external walls with no obvious cracks or crevices noted that could be exploited by bats. The eaves were also solid throughout. A temporary OSB board partition wall has been erected along the west elevation of the building for security and safety purposes. However a small number of free flight access points were noted into the interior of the building via missing window panes on the east elevation, gaps above the temporary partition wall on the west elevation.
- 4.2.3 The lower floor of section A was not able to be accessed due to health and safety concerns regarding the structural integrity. The upper floor of the building (9m x 6.5m x 4.9m in height) consisted of 3 rooms with well pointed red brick walls or plastered red brick walls which were all well-lit by daylight from numerous windows. For the most part the ceiling or plaster on the ceiling was missing leaving the upper floor open to the exposed roof. Water ingress could be seen throughout the upper floor, all of the walls and floors were wet and damp/fungal growth was noted. The interior walls were solid with no obvious cracks/crevices that bats could exploit noted. A section of the adjoining north wall was seen to be missing and open to the roof of the neighbouring property.
- 4.2.4 Section B, all of the external walls were solid and well pointed with no obvious cracks/crevices noted apart from around the windows enabling access into the interior of the extension. Gaps were also noted behind the fascia boards on the north and south elevations. The roof is intact with no obvious gaps noted. No free flight access points were noted.
- 4.2.5 Inside section B the upper floor (7.3m x 3.6m x 3.8m in height) was well lit with daylight, dry and open up to the roof line. The roof was intact and lined with breathable roofing membrane. The floor was boarded throughout. The interior walls consisted of well pointed red brick and were solid with no crevices/gaps noted that were suitable for use by bats. Gaps above the east adjoining wall enables access into the adjoining section A. The lower floor
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(8m x 3.6m x 2.5m in height) was darker. All interior walls and ceiling were intact with no potential bat roost opportunities noted. The remains of a well pointed chimney stack were noted within the east wall.

- 4.2.6 Section C (approx. 7.3m x 3m x 2.5m in height), all external walls were solid. The felt lining of the roof and some of the boarding were missing and the roof was partially sealed with tarpaulin. Potential access points were noted where the tarpaulin was missing but no free flight access points were noted. Internally it was found to be wet, light and exposed to the elements. All of the interior walls were solid with no potential roost features noted.
- 4.2.7 No evidence of bat activity was noted throughout the building. The interior of the building was found to be very exposed and heavily disturbed.
- 4.2.8 Numerous external lights were noted on all but the east elevation of the property. However street lighting was noted along the road to the east and immediately adjacent to the south east of the building. All of the lights are left on during the night for security and so all elevations of the building are illuminated throughout the night and have been consistently for several years.
- 4.2.9 The property has no immediate/overhanging vegetation. There are a small number of isolated trees along the site boundary approx. 10m to the south. Open countryside lies approx. 156m to the west and 433m to the east although connectivity to these areas is poor.
- 4.2.10 No evidence of bird nesting activity was noted within the interior of the building, but some nesting material was noted within a vent on the north elevation of the extension. Numerous potential access points suitable for nesting birds were noted during the survey.
- 4.2.11 Appendix 1 shows photographs of the external and internal views of the property.

5.0 INTERPRETATION AND ASSESSMENT

- 5.1 The property has immediate suburban surroundings with limited mature vegetation and connectivity close to the property particularly to the east which would involve crossing a well-lit A road. External lighting levels surrounding the property are high throughout the night due to external security lighting and street lighting to the east. However open well connected countryside, suitable for supporting most bat species is within a reasonably short distance of the property, particularly to the west. Records from previous surveys carried out in the local area show that a number of different bat species are active within the areas to the west and east of the property. The immediate habitat is assessed as having low potential for supporting bats due to the low levels of isolated vegetation and high levels of external lighting but the habitat beyond the built up areas is assessed as moderate to high suitability for supporting bats.
- 5.2 The property is in very poor condition it has been empty for a number of years and following the removal of the roof of section A of the building 2 years ago and the deterioration of the

roof of section C most of the building has been effectively open to the elements for a considerable period of time. There is extensive internal damage due to water ingress particularly in the upper floors of section A and all of section C which were seen to be very wet throughout, had damp and fungal growth over walls and ceilings and were drafty and well-lit by daylight via numerous windows or via gaps in the roof. A number of potential access points into the building were noted including free flight access points into section A which potentially would enable both crevice and void dwelling bat species to enter the building. However once inside the building conditions are very poor and largely unsuitable for both day and night roosting bats. What remains of the loft area in section A is completely exposed and the majority of the loft floor has also deteriorated exposing the floor below. The inspection of the interior of both section A and C noted no suitable crevice roosting opportunities and no signs of bat activity.

- 5.3 Despite not being able to access the lower floor of section A due to health and safety concerns, given the numerous limitations to roosting bats present on site i.e. the very poor condition of the building particularly the interior, no obvious suitable roosting features, high levels of external lighting and limited immediate vegetation and connectivity the chances of bats using section A of the building in its current condition despite being within an acceptable distance of good foraging habitat is assessed as negligible potential. Therefore it is considered appropriate and proportionate that no further surveys of section A of the building are required. The proposed refurbishment of section A is highly unlikely to result in the disturbance or destruction of any bats or bat roosts and so a European Protected Species license will not be required to carry out the proposed works. However, the final arbitration is with Natural Resources Wales and the Welsh Government. An assessment of negligible potential does include an element of uncertainty as bats can sometimes use small or unsuitable features on occasion therefore it would be recommended that any works in section A be carried out in a precautionary manner (see recommendations in section 7 for further details).
- 5.4 Section C is assessed as having no potential for supporting bats as it is in very poor condition due to water ingress and clearly has no suitable bat roosting features. Therefore no further surveys of section C of the building are required. The proposed reconstruction of section C is highly unlikely to result in the disturbance or destruction of any bats or bat roosts and a European Protected Species license will not be required to carry out the proposed works. However, the final arbitration is with Natural Resources Wales and the Welsh Government.
- 5.5 Section B of the building still has an intact roof and as a result the condition of this section of the building is relatively good. Although no free flight access points were noted into this section, a number of crevice access points into the interior were noted around windows, and a small number of potential roost sites suitable for supporting individual bats opportunistically were noted behind fascia boards. The interior of section B was however found to be well lit by daylight, had limited crevice roosting opportunities and showed no signs of bat activity. The remains of an internal chimney was noted in section B but on detailed inspection of the interior of the chimney it was found to be well pointed with no internal crevice's and no signs of previous bat use were noted. Section B is therefore assessed as having low potential for

supporting bats as it does provide 1 or more features suitable for supporting individual bats opportunistically but it likely to be limited to predominantly crevice roosting species and to more light tolerant bat species.

- 5.6 If any bats are using section B then the proposed refurbishment works have the potential to impact bats/roosts. Therefore it would be recommended that a minimum of 1 bat activity survey of section B be carried out to verify bat presence or absence during the bat breeding season, which runs between May-August. Further surveys may be required depending on the results of the initial surveys. It would be advisable to verify which species and numbers are present, or absent, in order to proceed lawfully and with any appropriate cautions and mitigations being in place. No further works should be carried out on section B particularly works that will affect the roof, eaves and the areas surrounding the existing windows until the recommended survey has been completed.
- 5.7 No evidence of nesting bird activity was noted within the interior of the building although the lower floor of section A was not able to be inspected. Some evidence of bird nesting activity was noted within an external wall vent in section B. Given that the building has some free flight access points, birds could access the interior of the building and so it is possible that nesting birds may be present during the development. It is important that precautions are taken during the development to ensure that any nesting birds are not impacted (see recommendations in section 7).

6.0 CONCLUSIONS

- 6.1 Section B of the building is assessed as having low potential for supporting bats. **A minimum of 1 bat activity survey of the property will need to be carried out during the breeding season (May to August incl)**, to verify if/how bats are using the building and to calculate the numbers, bat species and roost locations. Further surveys may be required depending on the results of the initial survey.
- 6.2 Section A of the building is assessed as having negligible potential for supporting bats. The proposed refurbishment works are highly unlikely to result in the disturbance or destruction of any bats or bat roosts. **A European Protected Species license will not be required to carry out the proposed works.** However, the final arbitration is with Natural Resources Wales and the Welsh Government. It is recommended that any works in section A are carried out in a precautionary manner (see section 7).
- 6.3 Section C of the building is assessed as having no potential for supporting bats. The proposed reconstruction of section C is highly unlikely to result in the disturbance or destruction of any bats or bat roosts. **A European Protected Species license will not be required to carry out the proposed works.** However, the final arbitration is with Natural Resources Wales and the Welsh Government.

- 6.4 No evidence of a maternity roost or a large number of bats using the property was noted during the survey.
- 6.5 All bats and their roosts, irrespective of the number of bats, species and whether bats are present or not, receive protection from the Conservation of Habitats and Species Regulations 2010 and the Wildlife and Countryside Act 1981 (as amended).
- 6.6 Building work that is likely to impact any bats/roosts or the removal of any mature vegetation must not commence until the activity survey/s and report have been completed and a decision on the requirement of a protected species licence has been made.
- 6.7 The development must take into account the legal status of nesting birds.

7.0 RECOMMENDATIONS

- 7.1 As section A has been classified as having negligible potential for supporting bats there is a small element of uncertainty regarding the presence of bats. Therefore it is recommended that all works particularly the demolition of the adjoining north wall be carried out using the precautionary principle set out in 7.2. When carrying out the works it is advised to be mindful that bats by their very nature are mobile and will often move between different roosts sites staying for short periods throughout the active season.
- 7.2 Precautionary principle – all roof coverings and wall panels should be removed by hand being lifted rather than rolled and checked on their underside prior to stacking/disposal to ensure no bats are clinging to the underside. The demolition of the adjoining wall to the north should be carried out slowly and by hand. If a bat is encountered during works, it should be carefully covered and work in that area cease. Natural Resources Wales will be contacted for advice on how to proceed.. It would be beneficial if measures could be included to allow bats to roost at this site in the future. Renovating existing buildings or constructing new buildings provide opportunities to incorporate new bat roosts into the final structure in order to encourage bats to use the building. It is recommended that at least 1 ecological enhancements for bats should be incorporated into the development.
- 7.3 Most bat species prefer crevices and cracks in walls and timbers, and they need very little space for roosting. They can be accommodated by incorporating specially constructed bat bricks/bat roost boxes into/onto walls. A bat box such as a Schwegler 1WQ or suitable equivalent could be installed at the apex of the south west gable of section B, see fig 7.1. Care should be taken to ensure that access points are not installed above windows or doors or close to any external lighting positions.
- 7.4 As some evidence of historical bird nesting activity was noted and the building does enable birds to access the interior of the building it is possible that nesting birds may be present during the development.

7.5 All wild British birds (while nesting, building nests and sitting on eggs), their nests and eggs (with certain limited exceptions) are protected by law under Section 1 of the Wildlife and Countryside Act 1981 (as amended). Included in this protection are all nests (at whatever stage of construction or use) and all dependent young until such time as the nest is abandoned and the young have fledged and become independent.



Fig 7.1 Suggested locations for ecological enhancements

- 7.6 If any work that is likely to impact nesting birds is to be carried out within the bird nesting season (March to August inclusive) a check for nesting birds must be undertaken by a suitably qualified ecologist/Clerk of works in the 24-hour period prior to the works. If any active nests are found these will be protected, until nesting is complete, and the young have fledged, and this has been verified by a suitably qualified ecologist/Clerk of works.
- 7.7 As an enhancement it is recommended that at least 1 suitable bird nesting opportunity is incorporated into the development. The most suitable locations would be on the south east elevation of section A, or the north west elevation of section B see fig 7.1.
- 7.8 It is recommended that were possible external night time lighting levels should be reduced/modified in order to improve conditions within the area surrounding the property

particularly to the west for bats and other nocturnal wildlife. Some or all of the measures listed below can be adopted in order to reduce external lighting levels:-

- Lighting positioned no higher than 6 feet [1.8m] above the ground, have internal downward pointing LED's, to direct the light below the horizontal plane
- The lighting ideally will have a warm light spectrum (2700 Kelvin or lower) to reduce the blue light component and feature peak wavelengths higher than 550nm to avoid the component of light most disturbing to bats.
- Lighting is Passive Infrared (PIR) triggered and on a short timer (a maximum of 1 minute once the stimulus has passed) and be motion-sensitive only too large objects, like humans and cars.
- Ideally all luminaires should lack UV elements when manufactured. Metal halide, compact fluorescent sources should not be used.

7.9 No external lighting should be fixed to, or directed at, bat roost access points or gables or eaves.

8.0 REFERENCES

Bat Conservation Trust, 2010. Bats in Buildings. *Bats and the Built Environment Series: Volume 1*.

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

Department for Environment, Food and Rural Affairs (DEFRA) (2018). *MAGIC online interactive mapping service*. Accessed October 2023, at <http://www.magic.gov.uk/>

Mitchell-Jones, A. J. (2004). *Bat Mitigation Guidelines*. English Nature: Peterborough.

www.googlemaps.co.uk, accessed October 2023.

APPENDICES

APPENDIX 1: Photographs

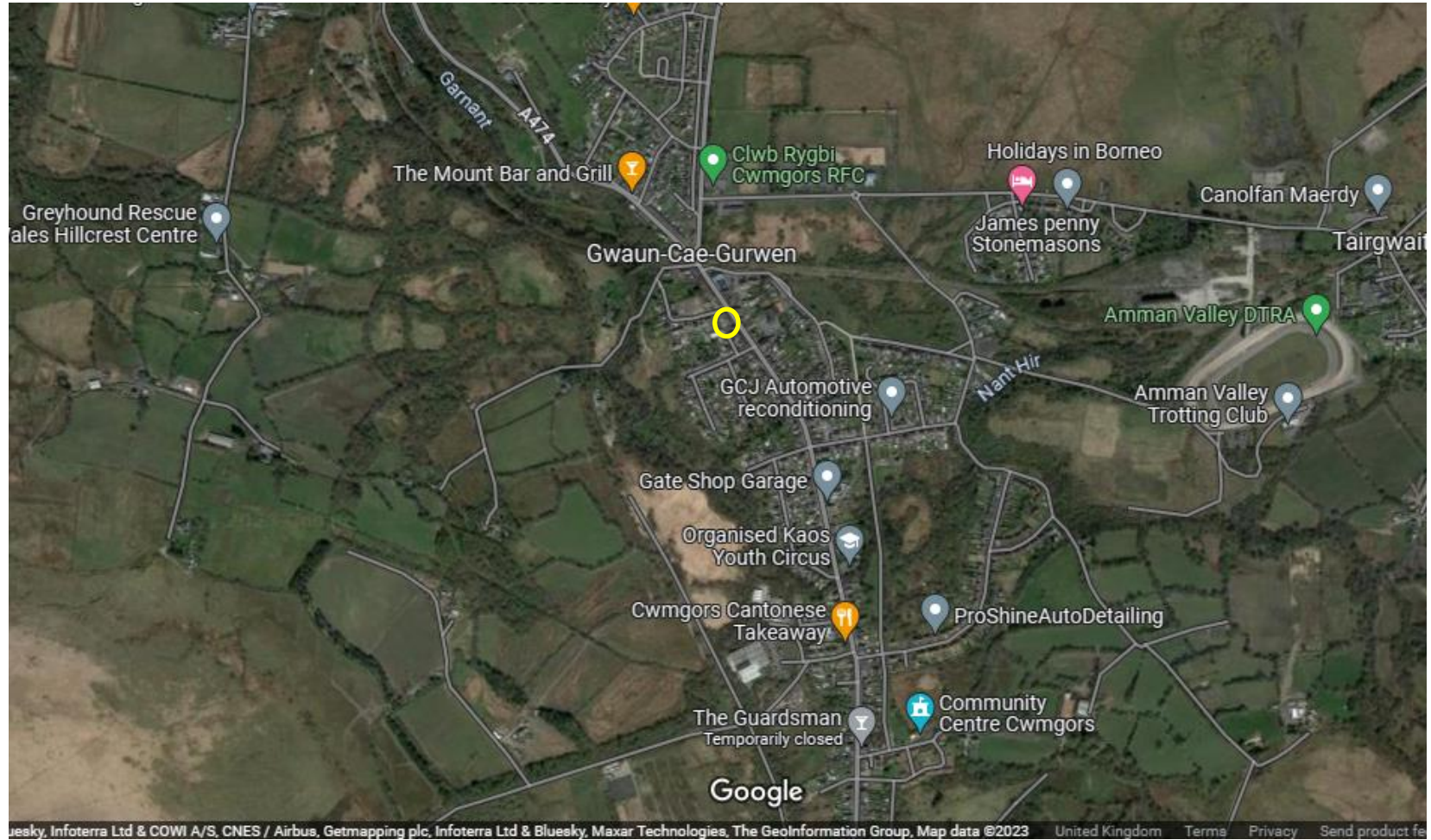


Fig 1 Satellite view of the property, placing it in landscape and habitat context (base image: Google Earth, 2023)



Fig 2 Satellite view of the property (base image: Google Earth, 2023)



South and east elevations of the property



South and west elevations of the property



North elevation of the property



Street side looking north



Driveway and property boundary to the south



View to the rear looking north

External views of the property



Section A street side



Roof timbers and tarpaulin over section A



Damp and fungal growth in section A



Section A to the rear side of the property



Upper floor Section B



Exposed loft and roof line in section B



Remains of chimney stack in section B



Lower floor section B



Section C

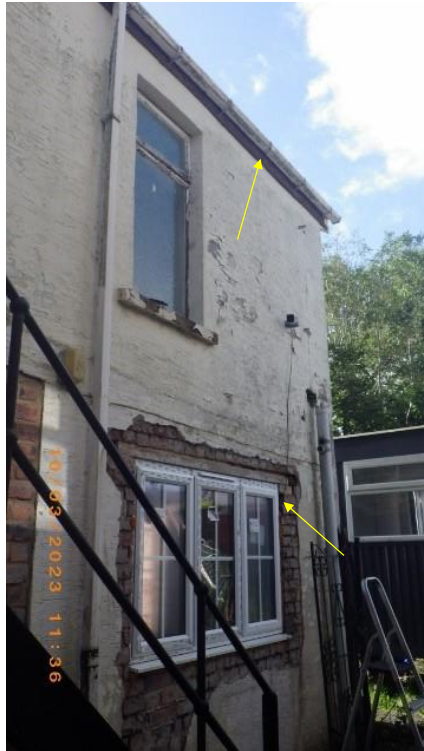
Internal views of the property



Gaps behind fascia boards and via loose/missing tarpaulin



Free flight gaps in wooden boarding, missing tarpaulin and crevices/holes around windows.



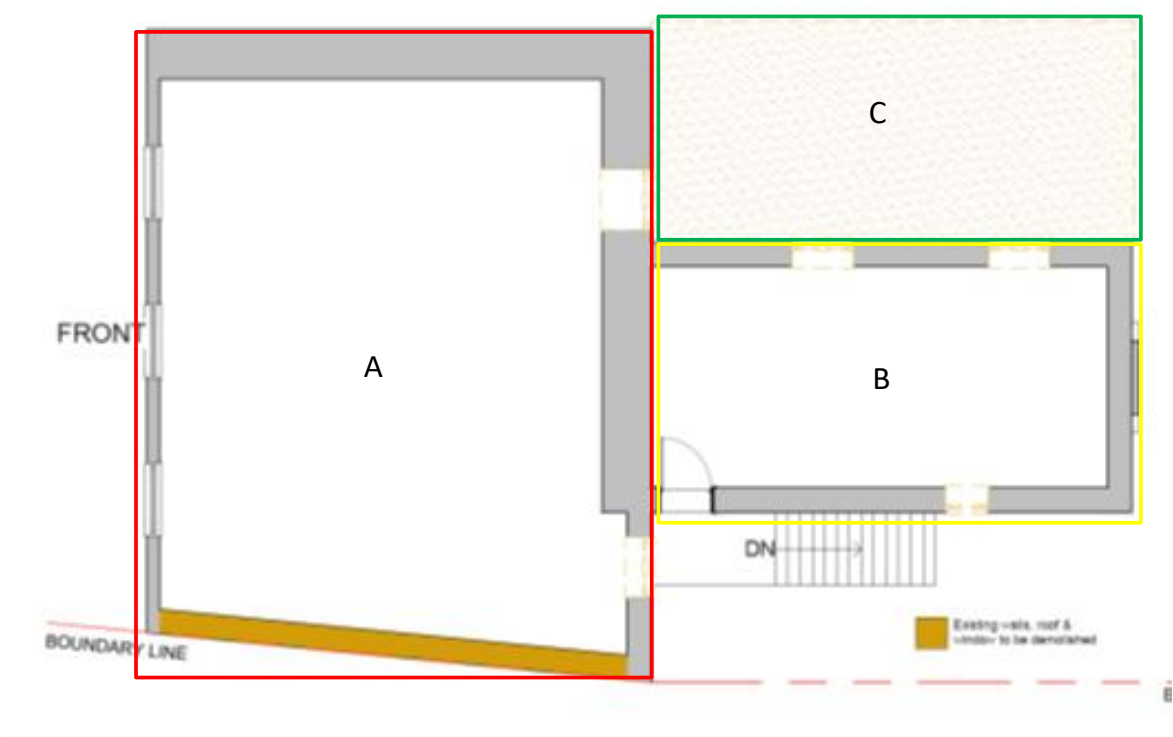
Gaps under fascias and around windows



Free flight gaps via broken windows/gaps above boarding and missing tarpaulin

Potential access and roosting opportunities

APPENDIX 2 : Plans



Plan showing the sections of the building



TILING SPECIFICATION

Install wall tiles with waterproof adhesive and grout. Type of tile to be agreed with Client

WINDOWS AND DOORS

Install windows and doors, Manufacturers details to comply with regulation L1B and Part N.1 1.1-1.6 (protection against impact).

VENTILATION SPECIFICATION

All mechanical ventilators are to be fitted with a 20 minute overrun after the light switch has been turned off and with a 10mm air gap to bottom of doors.

All habitable room windows are to provide ventilation equivalent to 1/20th of the floor area.

All Habitable Room Windows: Install night vent to give 8000mm square ventilation.

Kitchen window: Install night vent give 8000mm square ventilation.

Install double glazed windows and doors, with toughened safety glass to BS 6206 1981 when fitted below 800mm, measured above floor level and within 300mm of a door and to a height of 1500mm.

ROOF STRUCTURE

New Roof: Install 47 x 200mm softwood roof joists at 400mm centres, C24 grade.
Install Code 4 lead flashing dressed down over new roof a minimum of 125mm.

LATERAL AND VERTICAL RESTRAINT

1200x30x5mm mild steel galvanized restraining straps fixed to wall plate and rafters at 1800mm ctrs up to first floor level and at a max of 1200mm ctrs above first floor level screwed and plugged to blockwork.

1200x30x5mm M.S galvanized restraining straps for lateral restraint fixed across three ceiling/floor joists turned down and built in to wall, all the conform with B.S.C.P 112.

Lateral restraint to be fixed to each flank wall to comprise 38x5mm galvanized bat straps 3xM12 fixed to blockwork and extended over 3 joists with solid timber noggins above the strap; two strap to each wall

FOUNDATION

Sub-structure to be in 2 leafs of Engineering bricks upto DPC level. Block work below ground to be 7.0N /mm².

Install 'Furuk' profiles at junction of new and existing walls. Underside of foundation to obtain a minimum bearing pressure of 100 KN/m² to the satisfaction of the Local Authority Building Control Officer and the Structural Engineer.

The foundation concrete must be increased to a minimum of 300mm below the invert of the pipe and 300mm surround to the pipe, the pipe must be sleeved with a minimum of 50mm clearance to any face of the pipe work by either low density polystyrene or UPVC sleeve.

FOUNDATION LINTELS

Install 2no. Naylor Ground R6 lintels 100x145mm with minimum bearing of 150mm either side at foundation level where existing and new drainage pipes pass below new foundation work.

Install 50mm polystyrene between lintel and pipe casing

CONCRETE

All materials and workmanship to be in accordance with BS 8110 Part 1 & 2- The Structural Use of Concrete.

Concrete quality to be 35N /mm² at 28 days unless noted otherwise. Max nominal aggregate to be 20mm.

Above Ground:

Minimum cement content 300kg / m³. Maximum free water cement ratio 0.6.

Below Ground:

Minimum cement content 330kg / m³. Maximum free water cement ratio 0.5.

Cement:

Minimum cement content 330kg / m³. Maximum free water cement ratio 0.5.

CLIENT

PROJECT

63, Heol Cae Gurwen, Gwaun Cae Gurwen,
Ammanford, Neath Port Talbot SA18 1HG

DRAWING TITLE

EXISTING ELEVATIONS

DRAWING NO.

BC-03

DATE
10-22-22

REV.

FU

DRAWN SCALE
1 : 100 @A3

0m 2m 4m 6m 8m 10m
Meters @ 1:100 @ A3

REV DATE NOTES

THESE DRAWINGS WILL BE RECORDED WITH UPVAL DESIGN QUOTATION. DRAWINGS TO BE READ IN CONJUNCTION WITH RELEVANT DRAWINGS AND SPECIALLY PROVIDED INFORMATION FOR PLANNING AND BUILDING CONTROL APPROVALS ONLY. DRAWINGS SHOULD NOT BE RELIED UPON FOR THE PURPOSES OF OBTAINING FINANCIAL OR PLACING SUB-CONTRACT ORDERS, OR THE PLACEMENT OF ORDERS WITH THIRD PARTIES. THIRD PARTY SUPPLIERS TO TAKE THEIR OWN SITE MEASUREMENTS. INTERNAL LAYOUTS ARE TO BE CHECKED WITH PROJECT MANAGER ON SITE. THE PROJECT MANAGER WILL HAVE HIS OWN INITIAL ASSESSMENT OF DRAWINGS AND WILL NEED TO CONTACT US FOR ANY AMENDMENTS OR ALTERNATIVES TO DRAWINGS IF REQUIRED AFTER HIS OWN ON SITE INVESTIGATION PRIOR TO COMMENCEMENT OF ANY BUILDING WORK. DESIGN TEAM ACCEPT NO LIABILITY WHATSOEVER IF ANY DESIGN OR PROPOSED DESIGN NOT MADE BY THE PROJECT MANAGER BEFORE COMMENCEMENT OF BUILDING WORKS. THE PROJECT MANAGER TO ORDER ALL SITE WORKS AFTER SEEING THE APPROVAL OF BUILDING CONTROL OFFICER. IN THE EVENT THAT A CONSTRUCTION OTHER THAN UPVAL DESIGN IS APPROVED TO PROCEED THE UPVAL DESIGN ACCEPT NO LIABILITY WHATSOEVER FOR THE SPECIFICATION, CALCULATION OR OTHER STRUCTURAL OR NON-STRUCTURAL INFORMATION AT IT IS DATES PERTAINING TO THE PROPOSED WORKS LOCATION HEREWITH.


Upval Design
1 London Road Slough SL3 7RD
Tel: +44-3301332883
Email: info@upvaldb.co.uk
Web: www.upvaldb.co.uk

Drawings to be read in conjunction with all relevant contract documents, structural engineer's details and specification.

The contractor shall be responsible for all levels and dimensions. He is to take requisite levels and dimensions from site and verify those shown on drawing. Any discrepancy is to be brought to the attention of Uppal Design Ltd immediately.

The contractor is to comply with all statutory obligations and regulations relating to CDM, and Health and Safety.

Builder to confirm whether any existing drain located beneath or within 3m of proposed extension is a public sewer to comply with Approved Document Part H4 obtain confirmation from Thames Water Utilities / Environment Agency to allow the discharging of rainwater into a surface water drain.
Air permeability and pressure Testing Reports in accordance with the ATTMA publication 'Measuring Air permeability of Building Envelopes' (ATTMA 2008) are to be provided by builder.

Ventilation systems should be installed & commissioned in accordance with the guidance given in the 2010 edition of the Domestic Ventilation Compliance Guide. Sufficient information about ventilation system should be given to the building owner upon completion of the building work, so that the ventilation system can be operated to provide adequate air flow.

The proposed Heating & Hot water system's are to meet the requirement of The Domestic Heating Compliance Guide'.
Energy efficient light fittings will be provided and specified in accordance with Approved Document L1.
CO2 Emission rate Calculations and EPC's for the dwelling to show that the dwellings emission rate (DER) is no greater than the Target Emissions rate (TER) using SAP 2005
Full details of water efficiency (G2) and prevention of excessive temperatures (G5) are to be provided in accordance with approved Document G.

ELECTRICAL SPECIFICATION

All new electrical work is to be designed, installed, inspected and tested in accordance with BS 7671 (I.E.E. Wiring Regulations 17th Edition). The works are to be undertaken by an installer registered under a suitable electrical self-certification scheme, or alternatively by a suitably qualified person, with a certificate of competence produced by that person to Building Control on completion of the works.

Install electrical power and lighting circuits and their fittings. Type and positioning to be agreed with Client.

Light switches and power socket outlets are to be positioned between 450mm and 1200mm above finished floor level.

75% energy efficient lighting to be provided.

Fixed external lighting should have effective control and/or use efficient lamps; having lamp capacity not greater than 100 lamp-watts per light fitting alternatively lights should have lamps with a luminous efficacy greater than 45 lumens per circuit-watt. The lighting automatically switches off when there is enough daylight and they should be controllable manually as well.

HEATING SPECIFICATION

Install new radiators in positions or under floor heating to be agreed with Client.
Install (If required) central heating boiler with a SEDBUK rating of at least 86% and to be a condensing type.
Type and positioning to be agreed with Client.

Install HepvO Valve method for termination of discharge pipes in hot water storage unit accordance to BRG digest 308

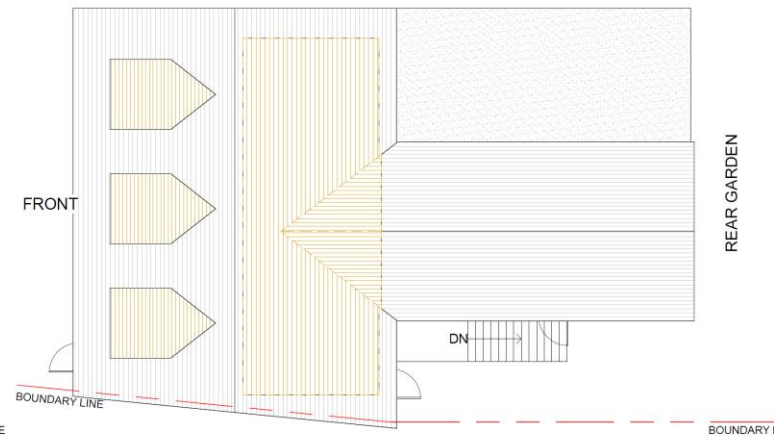
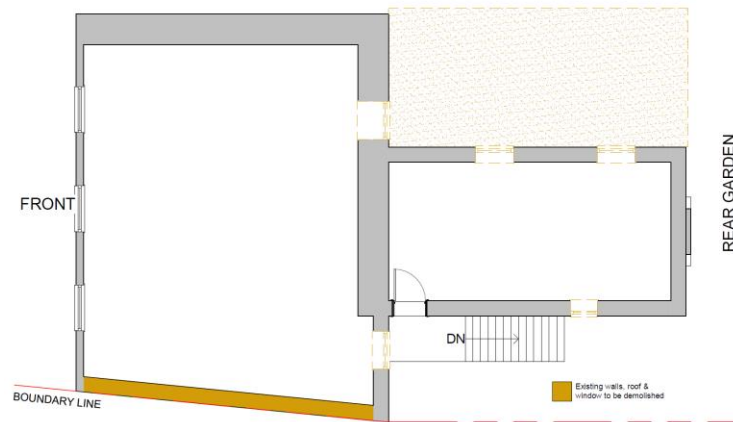
Thermostatic radiator valves to be installed to the new radiators.

CARPENTRY SPECIFICATION

All timber materials and workmanship to be in accordance with BS 5268: Part-2 Structural Use of Timber.
All concealed timbers to be treated with pre-injected wood preservative, plus all cut ends to be painted.

All timber is to be treated by vacuum pressure impregnation of organic or water borne preservative, to a dry salt retention in accordance with the manufacturers recommendations.

Type of treatment may be 'Tanalith', 'Celcure' or 'Protim'.
All timbers to be a minimum strength class 'C16' (unless noted otherwise) and to have a maximum moisture content of 18%
Double joists and rafters to be bolted together at 600mm centres with 12mm diameter bolts and 50 x 50 x 3mm washer plates.
All fixings in roof space (nails, screws, bolts and hangers) are to be galvanized unless noted otherwise.
Make good with appropriate plaster or filler; all walls and woodwork affected by works.
Prepare all surfaces for decoration, finishes to be agreed with Client.
Concrete slab ducting using 50 x 50mm softwood frame-work faced with 12.5mm foil backed plaster board skimmed and set, to be fitted with access panels for rodding of pipes and filled with 'Rockwool' insulation for soundproofing. Size and positioning to be agreed with Client.



BC-EXISTING FIRST FLOOR PLAN
1 : 100

BC-EXISTING ROOF TOP PLAN
1 : 100

REV	DATE	NOTES
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THE DRAWINGS WILL BE RECONSILIED WITH UPPL DESIGN QUOTATION DRAWINGS TO BE READ IN CONJUNCTION WITH RELEVANT DRAWINGS AND SPECS. FIGURED DIMENSIONS FOR PLACING AND BUILDING CONDITIONS. APPROXIMATELY ONLY. DRAWINGS SHOULD NOT BE RELIED UPON FOR THE PURPOSES OF ORDERING MATERIALS OR PLACING SUB-CONTRACT ORDERS, OR FOR THE PLACEMENT OF ORDERS WITH THIRD PARTIES. THIRD PARTY EMPLOYEES TO TAKE THEIR OWN SITE MEASUREMENTS. INTERNAL LOADS ARE TO BE FINALIZED WITH THE PROJECT MANAGER ON SITE. THE PROJECT MANAGER WILL MAKE HIS OWN INITIAL ASSESSMENT OF DRAWINGS AND WILL NEED TO CONTACT US FOR ANY AMENDMENTS OR ALTERATIONS TO DRAWINGS IF REQUIRED AFTER HIS OWN ON-SITE INVESTIGATION PRIOR TO COMMENCEMENT OF ANY BUILDING WORKS. DESIGN TEAM ACCEPTS NO LIABILITY WHATSOEVER IF ANY LATER DISCOVERED DESIGN NOT RAISED BY THE PROJECT MANAGER BEFORE COMMENCEMENT OF WORKS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING ALL NECESSARY AGENCIES THAT A CONTRACTOR OTHER THAN UPPL DESIGN IS APPOINTED TO EXECUTE THE WORKS. UPPL DESIGN ACCEPTS NO LIABILITY WHATSOEVER FOR THE SPECIFICATION, CALCULATION OR OTHER STRUCTURAL OR NON-STRUCTURAL INFORMATION AS IT IS EXISTING RELATING TO THE PROPOSED WORKS. CONTRACTOR HEREBY

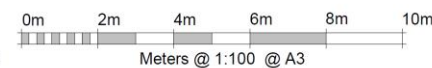
PROJECT
63, Heol Cae Gurwen, Gwaun Cae Gurwen
Ammanford, Neath Port Talbot SA18 1HG

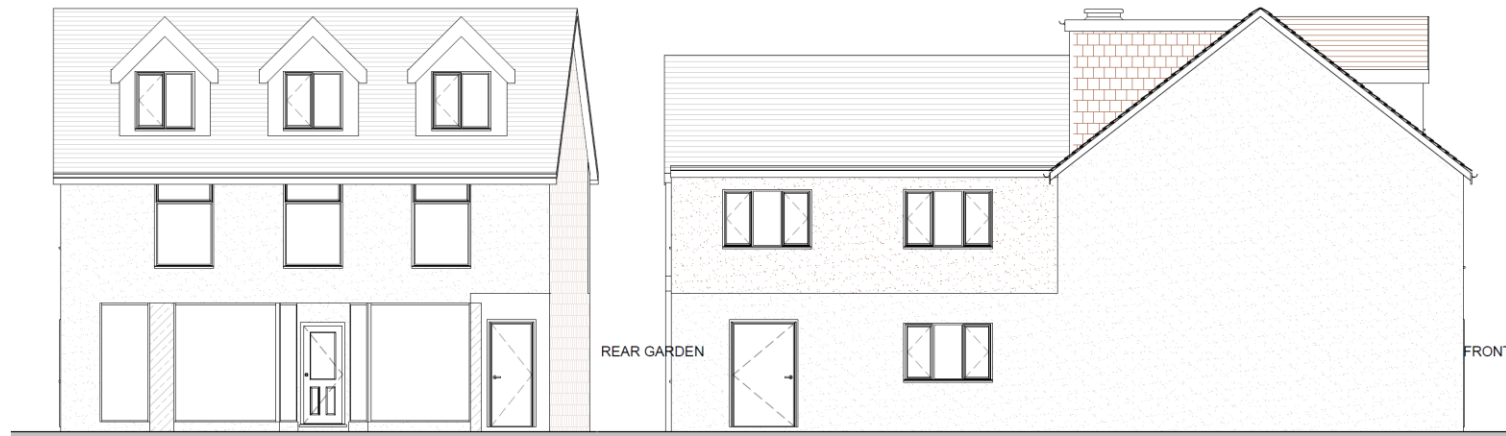
DRAWING NO. **BC-02** REV.

DATE **10-22-22** DRAWN **FU** SCALE **1 : 100@A3**

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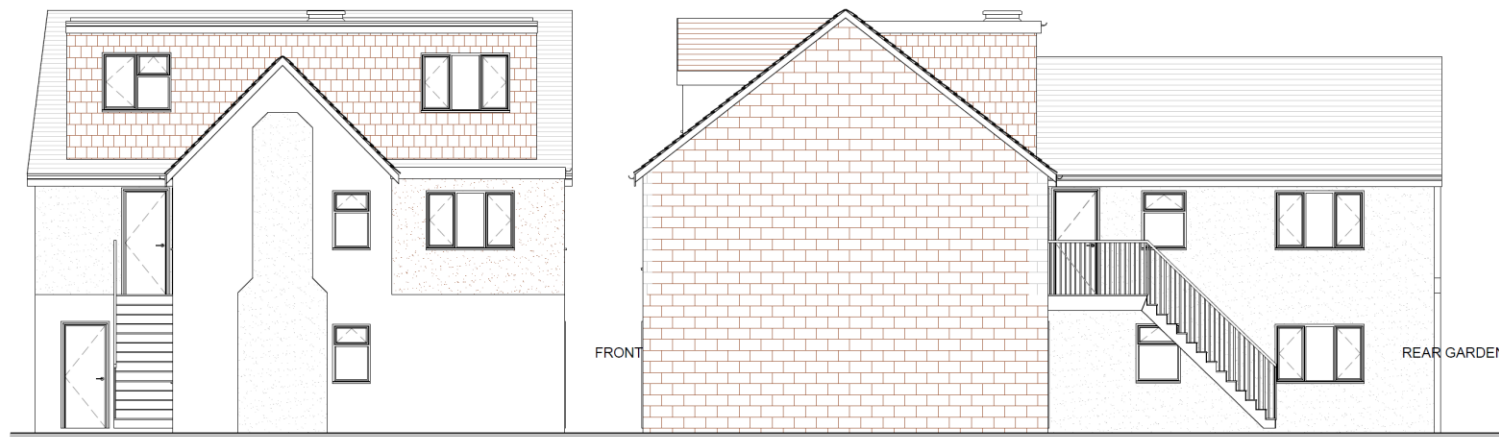
EXISTING PLANS





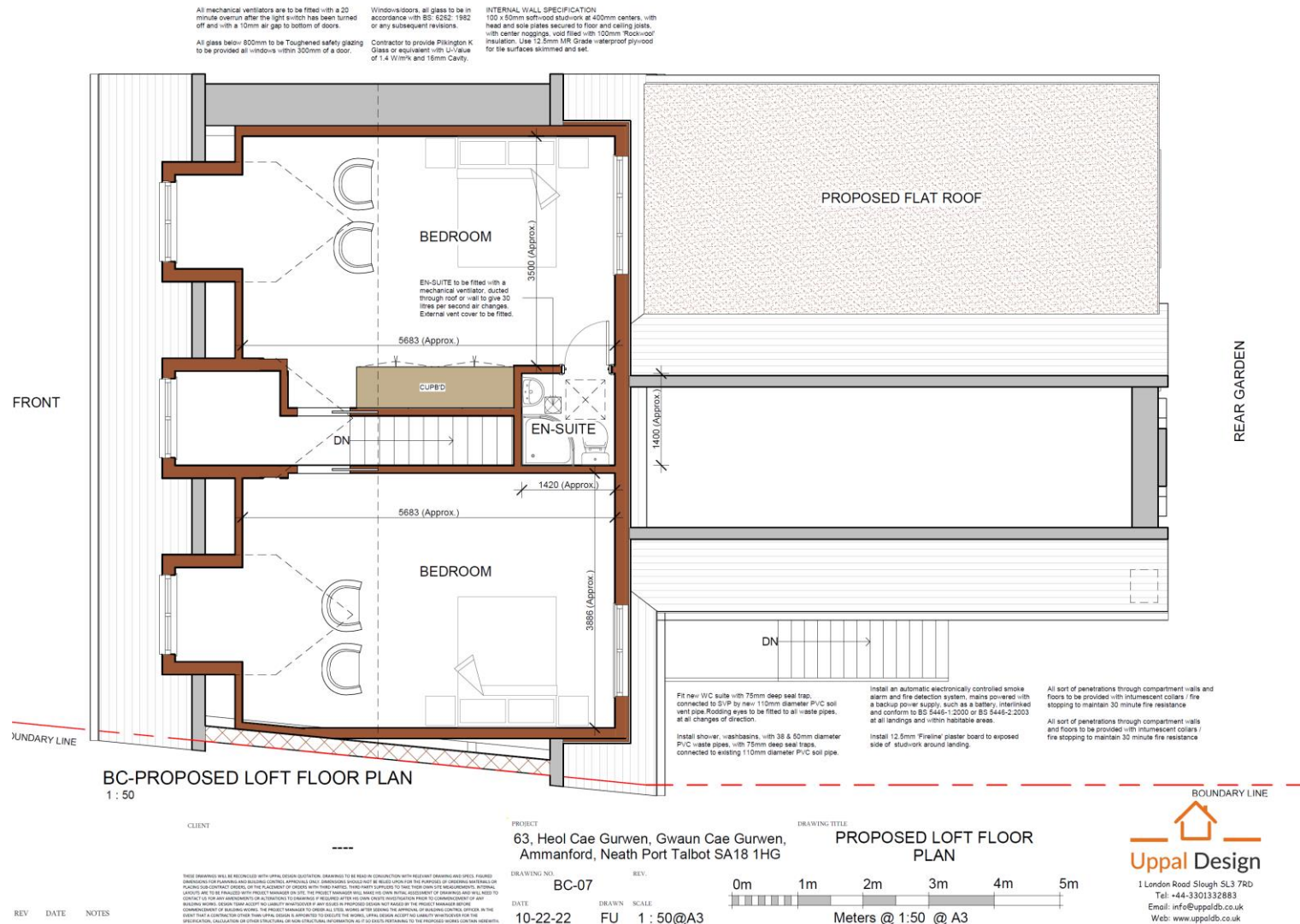
BC-PROPOSED FRONT ELEVATION
1 : 100

BC-PROPOSED NORTH SIDE ELEVATION
1 : 100



BC-PROPOSED REAR ELEVATION
1 : 100

BC-PROPOSED SOUTH SIDE ELEVATION
1 : 100



APPENDIX 3: Glossary

Transitional roosts

April-September/October. These sites are usually used by small groups of bats prior to taking up residence in, or after dispersal from, the maternity roost before and after hibernation. They are likely to be in or close to good feeding areas.

Maternity roosts

May–August. Predominantly warm sites where female bats congregate to give birth and rear their young and stay there until the young are weaned and independent [late July –August]. The sites are frequently traditional with the same individuals returning year after year. Enclosed roof spaces, wall cavities, soffit boxes, spaces under roofing materials and a variety of tree holes and crevices are all examples. These tend to disperse between August and September. Adult males are rarely found with the females.

Satellite Roost

May–August. Breeding females may have alternative roost sites in close proximity to the main nursery colony.

Mating Roosts

September–November. All bats in the UK are Polygamous i.e. males' mate with several females. A roost site that a male bat will occupy and attempt to attract females to for mating and will defend against other males. Sometimes these occur in groups known as 'leks' and include cavities in stonework, underground sites, trees, and buildings.

Hibernation roosts

October-March. Sheltered and undisturbed places with relatively high humidity and stable temperatures throughout the winter. For example: underground sites (caves, mines, adits etc.), deep cracks and crevices in built structures (houses, bridges etc.), hollows, cracks, and crevices in trees.

Night roosts

March-November. Places away from the day roosts where bats rest after feeding during the night. These roosts vary in their conservation significance. Night roosts may be used by a single animal or the whole colony. Particular species depend on night roosts in key foraging areas e.g. lesser horseshoe bats.

Day Roosts

March-November. Daytime roosts for bats to rest in. Males of most species spend the summer roosting alone or in small groups. Bats regularly use a number of day roosts switching from one to the other depending on food sources and weather but conversely, they can be resident for weeks.

Feeding Roost

May-November. These roosts can be occupied by a single animal or a few individuals throughout the active season. They vary in significance as they may be used by one or many bats to hang up and feed, shelter from the weather, or to rest temporarily. Feeding roosts are often used by *Plecotus* and *Rhinolophus* species.

Swarming Sites

August-November. Large numbers of bats from several different species swarm around caves and mines. The bats are often *Myotis* species and appear to be important for mating. Bats travel many kilometres to attend, and a good proportion will also hibernate at these sites.

APPENDIX 4: Additional Information

a) Emergency contact numbers for bat help and advice

Natural Resources Wales (NRW):	Tel: 0300 065 3000
Debbie Kearsley-Evans	Tel: 01792 410407 or 07901732255

b) Further reading for information about bats

The Bat Conservation Trust website (including the 'Roost' section):
http://www.bats.org.uk/pages/about_bats.html

The Bats of Britain website: <http://www.bio.bris.ac.uk>

Eurobats website: www.eurobats.org

c) Reference material

Mitchell-Jones, A. J. (2004). *Bat Mitigation Guidelines*. English Nature: Peterborough.
<http://www.english-nature.org.uk/pubs/publications/>

Mitchell-Jones, A. J. (2004). *Focus on Bats*. English Nature: Peterborough.
<http://www.english-nature.org.uk/pubs/publications/>

Russ, J. (2012). *British Bat Calls: a guide to Species Identification*. Pelagic Publishing: Exeter.

APPENDIX 5: Disclaimer

Copyright and Intellectual Property

- The copyright of ecology reports provided remain the property of the ecologist pending payment of the account in full.
- We provide species data sets to the local Biodiversity Information Centre on an annual basis which will include any records from your survey (species and general location.)

Accuracy of information

- Our ecologists are experienced and professional in their approach and work to published Professional Codes of Conduct (British Standard 42020:2013 “Biodiversity. Code of practice for planning and development” and CIEEM Guidelines for Ecological Report writing (2016) where appropriate. Ecologists are however working in the natural world which may be subject to rapid changes not under their control. The information they collect will be as accurate as possible based on the time of the year and the natural conditions they face but we, and they, cannot be held responsible for any changes which occur subsequently.
- The company warrants that the reports supplied will be based on information collected using reasonable care and skill. In some cases, data sets may be large, and, in such circumstances, ecologists will make professional judgements on their analysis and presentation of data.
- Most reports are valid for a maximum period of two years provided no significant changes have been made to the property or land use nearby.
- It is possible that further survey work is recommended which would be the subject of additional fees. In this event the company and the ecologists cannot accept any liability if the client proceeds without acting on this advice.
- Ecological reports provide information on the site as a whole and the company and the ecologists cannot be held responsible for the effects that the findings might have on any planning or developments proposed.

Confidentiality

- The reports provided will be for the client’s sole use and for the purposes declared in the initial contact and confirmed in our quotation.
- No other party may use, copy, or rely on the report or any of its contents or conclusions without written confirmation from the author.
- The company will maintain a copy of the reports, on behalf of the ecologist, in an electronic format. It will not be provided to any other person without the client’s consent.
- The survey data will be submitted to the South East Wales Biological Records Centre automatically unless otherwise requested

Limitation of Liability

- The company and its ecologist contractors shall not be held responsible for any claim arising out of any defect found in the service provided as a result of information provided which is subsequently found to be defective.

Contacts between the company, its ecologists and the client shall be governed by the laws of England and Wales.