



# **Preliminary Roost Assessment**

**27 West Farm Court  
Broompark  
Durham**

**John Leaver**

**FE-101-001-400-R-01-V1**

**April 2021**



**FALCO Ecology**

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## DOCUMENT CONTROL

### Confidentiality: **Not Confidential**

Site Name: 27 West Farm Court  
Report Name: Preliminary Roost Assessment  
Client: John Leaver  
Reference No: FE-101-001-400-R-01-V1

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## **1 Introduction**

### **1.1 Background**

- 1.1.1 FALCO Ecology Ltd. was commissioned by John Leaver (hereon referred to as the "Client") to undertake a Preliminary Roost Assessment (hereon referred to as the "survey") at 27 West Farm Court (hereon referred to as the "surveyed building") on the 6 April 2021.
- 1.1.2 The purpose of this report is to provide a pre-development record of the suitability of the surveyed building to support roosting bats and any evidence of bat roosts. The suitability of the surrounding habitats to support foraging bats is included within this report. Evidence of other protected species including breeding birds within/on the surveyed building is also included within this report.

### **1.2 Surveyed Building Description and Location**

- 1.2.1 The surveyed building was a detached three-bedroom residential property and was occupied by the Client at the point when the survey was undertaken.
- 1.2.2 The address of the surveyed building was 27 West Farm Court, Broompark, Durham, County Durham, DH7 7RN. The central Ordnance Survey grid reference for the surveyed building was NZ 24224 41776 and was ~105m above sea level. The location of the surveyed building is shown in Figure 1 (page 2).
- 1.2.3 The surrounding habitats of the surveyed building was dominated by mixed (arable & pasture) farmland, deciduous woodland and other residential properties within the estate. The surrounding area of the surveyed building with 500m, 1km and 2km buffers are shown in Figure 2 (page 2).
- 1.2.4 The surveyed building was within the administrative area of Durham County Council.

### **1.3 Development Proposals**

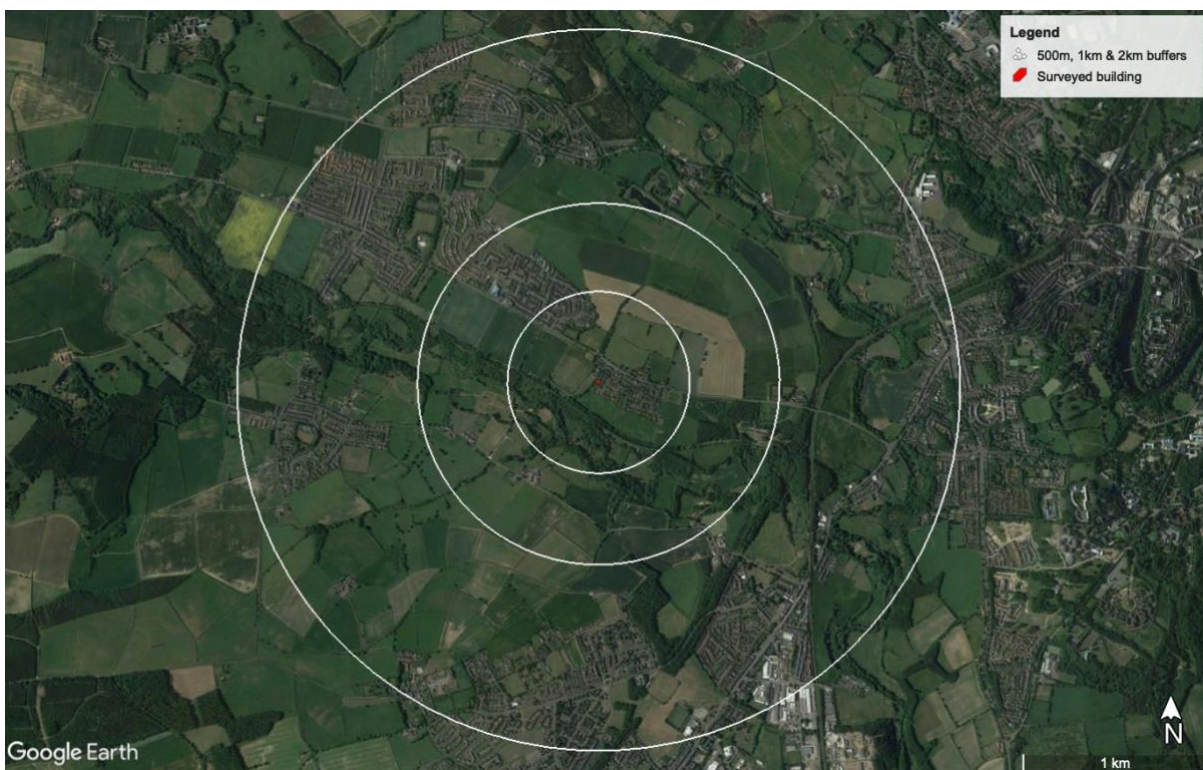
- 1.3.1 It is proposed to construct a two-storey extension on the side elevation (south aspect) of the surveyed building. The architectural drawings of the existing building and the proposed development are shown in Appendix 1.
- 1.3.2 The proposed development has the potential to disturb roosting bats or destroy bat roost locations if present within the southern end of the surveyed building.





**Figure 1: Surveyed building.**

© Google Earth. Imagery Date: 21/04/2018.



**Figure 2: Surrounding habitats.**

© Google Earth. Imagery Date: 21/04/2018.





## 1.4 Survey and Reporting Objectives

1.4.1 The survey comprised of a preliminary roost assessment. This were undertaken by FALCO Ecology and included the following objectives:

- Establish if the surveyed building is used by roosting bats;
- Record evidence of use by bats;
- Record locations of Potential Access Points ('PAPs');
- Record locations of Potential Roost Features ('PRFs');
- Provide recommendations for further bat surveys where required;
- Obligations for the Client to consider if confirmed bat roost(s) are located; and
- Observations of old bird nests within/on the surveyed building or PAPs for breeding birds were also recorded.

## 1.5 Legislation

1.5.1 UK Legislation (specifically related to England) relating to bats are fully documented in Appendix 3; however, in summary all bats and their roosts are protected under UK legislation. **This legislation makes it an offense to deliberately disturb, damage or destroy a bat roost. An unlimited fine and/or six months imprisonment may be given per offense.**

1.5.2 Active bird nests (nests under construction, nest with eggs or young) are fully protected from deliberate and reckless destruction under the Wildlife & Countryside Act 1981 (as amended). Furthermore, Schedule 1 species, such as barn owl *Tyto alba*, are protected from deliberate or reckless disturbance at the nest site or of dependant young.



## 2 Methodology

### 2.1 Desktop Study

#### Data Search

2.1.1 A data search from following web recourses was used:

- The Government’s Multi-Agency Geographic Information for the Countryside or ‘MAGIC’ website, which provides details of:
  - Statutory sites designated for their ecological interest;
  - Priority habitats including deciduous woodland that are likely to support roosting and foraging bats; and
  - Local European Protected Species Mitigation (EPSM) Licenses that had been granted.
- Google Earth Pro was utilised to assess the habitats surrounding the surveyed building for their suitability to support foraging, commuting and roosting bats;
- North East England Nature Partnership; and
- Durham Bat Group website<sup>1</sup>.

#### Consultation Data

2.1.2 Consultation data is not included as part of this report as no evidence of bat roosts was present within the roof void and no PRFs with evidence of roosting bats were located above or surrounding the proposed development location. Given the locality of the surveyed building and the surrounding habitats it is considered that a wide range of bat species listed in paragraph 3.1.6 would be present in the local area.

### 2.2 Preliminary Roost Assessment

2.2.1 The exterior of the surveyed building was surveyed from ground level using high powered binoculars (Swarovski EL 10x42) and a Ledlenser i18R torch to locate any PAPs. The interior inspection of the surveyed building included an inspection of the roof void with an Apple iPad Mini 2 and an Echo Meter Touch to record any potential bat calls. It was deemed that bats would not enter the ground and first-floor rooms unless through an open window. Therefore, the main living area of the surveyed building was extremely unlikely to support a bat roost and thus was not surveyed. Photos taken during the survey of the surveyed building are shown in Appendix 2.

2.2.2 The survey followed the guidance for assessing buildings as set out within the Bat Conservation Trust (BCT) Guidelines (Collins 2016) as shown in Table 1 (page 5). The survey was undertaken by Adrian George on the 7 April 2021 in suitable weather conditions.

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<sup>1</sup> Durham Bat Group covers the Durham County Council administrative area.



**Table 1: Guidelines for assessing potential roost features.**

Suitability	Description
Negligible	Negligible habitat features on site likely to be used by roosting bats.
Low	A structure with one or more potential roost sites that could be used by individuals bats opportunistically. However, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions and/or suitable surrounding habitats to be used on a regular basis or by large numbers of bats (i.e. unlikely to be suitable for maternity or hibernation).  A tree of sufficient size and age to contain PRFs but with none seen from the ground or features seen with only very limited roosting potential.
Moderate	A structure or tree 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 (with respect to roost type only – the assessments in this table are made irrespective of species conservation status, which is established after presence is confirmed).
High	A structure or tree with one or more potential roost sites that are obviously used by large numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions and surrounding habitat.
Confirmed	A bat or bats or evidence of roosting bats observed within the building/tree.

2.2.3 All UK bats have been found to be roosting in buildings; however, some bats prefer buildings more than others. Furthermore, many species prefer unique aspects of a roost feature within a building. Bats that utilise buildings for roosting can be separated into four categories and are described in Table 2 (BCT 2015).

**Table 2: Roost features in buildings that various bats prefer.**

Roost Type	Species
Crevice dwelling bats (These are often hidden from view)	Common pipistrelle <i>Pipistrellus pipistrellus</i> , soprano pipistrelle <i>Pipistrellus pygmaeus</i> , Nathusius' pipistrelle <i>Pipistrellus nathusii</i> , Brandt's bat <i>Myotis brandtii</i> and whiskered bat <i>Myotis mystacinus</i>
Roof-void dwelling bats (maybe seen on roof timbers)	Serotine <i>Eptesicus serotinus</i> , Leisler's bat <i>Nyctalus leisleri</i> , Daubenton's bat <i>Myotis daubentonii</i>
Bats that need flight space in certain types of roost	Natterer's bat <i>Myotis nattereri</i> and brown long-eared bat <i>Plecotus auritus</i>
Bats that need flight space and flying access into the roost	Greater Horseshoe <i>Rhinolophus ferrumequinum</i> and Lesser Horseshoe <i>Rhinolophus hipposideros</i>



## 2.3 Breeding Bird Assessment

- 2.3.1 An inspection of the surveyed building to identify any nest material from former bird nests was undertaken during the survey. Nest material varies depending upon individual species, for example a house sparrow *Passer domesticus* may use small twigs, grasses and leaves; however, a house martin *Delichon urbicum* construct a nest using mud. Furthermore, some species are crevice nesters (house sparrow) whilst other are open nesting on external walls (house martin).
- 2.3.2 Calling birds around PAPs was recorded during the survey, if present.

## 2.4 Surveyor's Experience

### Adrian George

- 2.4.1 Adrian is an experienced ecologist who has undertaken bat surveys on a range of developments including residential properties, small to large scale wind farms, solar farms, power lines and water pipelines. Bat surveys have been undertaken throughout England, Wales and Scotland. Adrian holds a Class 2 Natural England (CL18 2017-32910-CLS-CLS) and a Scottish Natural Heritage bat licence. Adrian is a full member of the Chartered Institute of Ecology & Environmental Management (CIEEM) and a member of the Northumberland Bat Group.

## 2.5 Limitations

- 2.5.1 MAGIC Maps provides a digital database of the issued European Protected Species Mitigation licences within England; however, no digital online records are available for Low Impact Class licenses. Therefore, it is plausible that further impacts on local bat roosts, either breeding or resting locations, have been approved by Natural England within the local area.
- 2.5.2 No limitations were experienced during the survey.
- 2.5.3 The details within this report will remain valid for a period of 12 months. Beyond this period, it is recommended that a new review of the ecological conditions of the surveyed building are undertaken.



## 3 Results

### 3.1 Desktop Study

#### Data Search

##### **Statutory Designated Sites**

- 3.1.1 The surveyed building was not situated within a statutory designated site and no statutory designated sites were present within 2km of the surveyed building.

##### **Priority Habitats**

- 3.1.2 The closest priority habitat of deciduous woodland was situated ~170m southwest from the surveyed building. Several deciduous woodland blocks were shown to have been present along the River Deerness and were within easy commuting distance of the surveyed building (MAGIC 2021). Furthermore, these woodland blocks created a vast area of optimal foraging and roosting habitats for bats.
- 3.1.3 It is considered that the surrounding habitats provide potential roosting (residential properties and trees) and foraging opportunities (deciduous woodland) for a wide range of bat species as outlined in paragraph 3.1.6.

##### **EPSM Licenses**

- 3.1.4 Three granted EPSM Licence for bats was returned within 2km of the surveyed building (MAGIC 2021). These included:
- The destruction of a resting place for common pipistrelle ~1.89km east northwest of the surveyed building;
  - The destruction of a resting place for common pipistrelle ~1.87km northwest of the surveyed building; and
  - The destruction of a resting place for common pipistrelle ~1.96km east northeast of the surveyed building.
- 3.1.5 It is not known how many Low Impact Class Licenses have been issued within the local area.

##### **Local & Regional Status of Species**

- 3.1.6 There were 17 bat species recorded in the UK, of which 11 had been recorded in County Durham. Only eight bat species had been recorded breeding within the county. Their abundance within the county is stated on the Durham Bat Group website (Durham Bat Group 2015) and was as follows:
- Brandt's bat – rare;
  - Whiskered bat – reasonably widespread but localised;
  - Natterer's bat – rare;
  - Daubenton's bat – very widespread;
  - Noctule – widespread;
  - Leisler's – rare with three records;



- Serotine – very rare, two unconfirmed reports;
- Brown long-eared bat – reasonably widespread but localised;
- Common pipistrelle – common and widespread;
- Soprano pipistrelle – common; and
- Nathusius pipistrelle – rare with no maternity roosts known.

3.1.7 All the above species, with the exception of Leisler's and Serotine, are listed as a Durham Priority Species (NEENP 2020).

## 3.2 Preliminary Roost Assessment

### Key Findings

- The surveyed building had negligible suitability to support roosting bats.

### External Inspection

- 3.2.1 The roof was a gable type with a dormer window with a peaked roof and valley. The surveyed building had Marley Lincoln clay interlocking pantiles which appeared to be tight fitting. The ends of the pantiles had brushes to exclude birds and bats from entering the void between the roof tiles and the underlay. The main house had clay ridge tiles with mortar which had no obvious gaps, whereas the garage had a dry ridge system.
- 3.2.2 A wooden soffit box with continuous strip vents was present along all the eaves of the roof. A narrow gap which was ~5-6mm wide was present between the soffit box and the exterior wall and was located above a motion-sensor security light.
- 3.2.3 The walls were masonry brick with a breeze block inner wall. The exterior wall on the first floor was rendered. No gaps were recorded within the brick mortar.
- 3.2.4 The windows and doors were unplasticized polyvinyl chloride (UPVC) framed and double/triple glazed. All windows and doors were sealed to the exterior wall. Masonry brick windowsills and lintels were present on the surveyed building.
- 3.2.5 A brick based UPVC framed conservatories were present on the side and rear elevations and were tight and sealed.

### Internal Inspection

- 3.2.6 The internal inspection included an inspection of the roof void. No evidence of roosting bats, including droppings were recorded within the roof void. Furthermore, no claw marks or staining were recorded on the roof trusses during the survey. No ridge beam was present.
- 3.2.7 A bitumen roofing underlay/felt was present during the survey and there were cuts and gaps in the bitumen underlay where external light could be observed. However, these gaps were covered in cobwebs and were dusty which likely indicates that these are not used as access points by roosting bats. External light was visible from within the roof void around the eaves.





- 3.2.8 Two layers of loft insulation was present during the survey and the underlayer was checked for bat droppings along the section directly below the roof apex. Two internal white doors were laid down over part of the central roof void.
- 3.2.9 A water tank was also present in the roof void.
- 3.2.10 It is considered that bats could not gain access into the living area of the surveyed building, except through open windows and therefore these areas were not inspected for roosting bats or evidence of roosting bats.

### **3.3 Breeding Bird Assessment**

- 3.3.1 No historic bird nest material was recorded on the surveyed building or within the roof void during the survey. It is plausible that breeding birds could gain access into the soffit boxes on the northeast corner of the front elevation only. A male Starling was calling from this location although it was not showing nesting behaviour.



## 4 Assessment

### 4.1 Evaluation

#### Bats

- 4.1.1 No evidence of roosting bats was recorded on the exterior or within the roof void of the surveyed building during the survey. The roof tiles, windows, doors and the vast majority of the wooden soffit box was tight and sealed. No gaps were recorded in the exterior wall mortar. Whilst a PAP was identified on the rear elevation, it was located above a motion-sensor. Furthermore, it was a very narrow gap ~5-6mm which is unlikely to be used and only by pipistrelles. Therefore, it is considered that it is extremely unlikely that bats would use the PAP.
- 4.1.2 It is considered that the surveyed building had **negligible** suitability to support roosting bats. Furthermore, it is considered that the surveyed building had **negligible** suitability to support hibernating bats.

#### Breeding Birds

- 4.1.3 No active bird nests were recorded on the surveyed building during the survey; however, birds may have been able to bypass the brushes at the end of the roof tiles and therefore potentially could gain access into the soffit box in the northeast corner of the front elevation. Even if an active nest were located at this point, it would not be destroyed as part of the proposed development which at the opposite end of the surveyed building.
- 4.1.4 The surveyed building had **negligible** suitability to support breeding Schedule 1 species.

### 4.2 Impact

#### Bats

- 4.2.1 It is considered that the proposed development will have a **negligible** impact on roosting bats. Furthermore, the impact on the local bat populations is considered as **negligible** during and after construction phase.

#### Breeding Birds

- 4.2.2 No PAPs or old nests were located in the vicinity of the proposed development. It is unlikely that any future active nests or nests that are being built would be located on the south aspect of the surveyed building and therefore the impact on breeding birds is considered to be **negligible**.



## 5 Recommendations

### 5.1 Ecological Net Gain Recommendations

5.1.1 In order to fulfil the latest National Planning Policy Framework which includes Biodiversity Net Gain into proposed developments, it is recommended that an in-built bat box be installed as part of the proposed development. Examples of an integrated bat box is shown in Figure 3 below (but not exclusively this design). The recommended locations of the integrated bat box is shown in Figure 4 (page 12). No security lighting or up-lighting should be located near or directed at the integrated bat box.



**Figure 3: Integrated bat box example<sup>2</sup>.**

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<sup>2</sup> Pictures sourced from <https://www.nhbs.com/> and <http://www.birdbrickhouses.co.uk/>



PROPOSED REAR ELEVATION

**Figure 4: Proposed location of the integrated bat box.**



## 6 References

Collins, J. (ed.). 2016. Bat Surveys for Professional Ecologists: Good Practice Guidelines (3<sup>rd</sup> edn). London: The Bat Conservation Trust.

Durham Bat Group. 2015. Durham Bats. [Online]. [Accessed 17 July 2020] Available from <http://www.durhambats.co.uk>

Magic Maps. 2020. Magic Maps. [Online]. [Accessed 8 April 2021]. Available from <https://magic.defra.gov.uk/MagicMap.aspx>

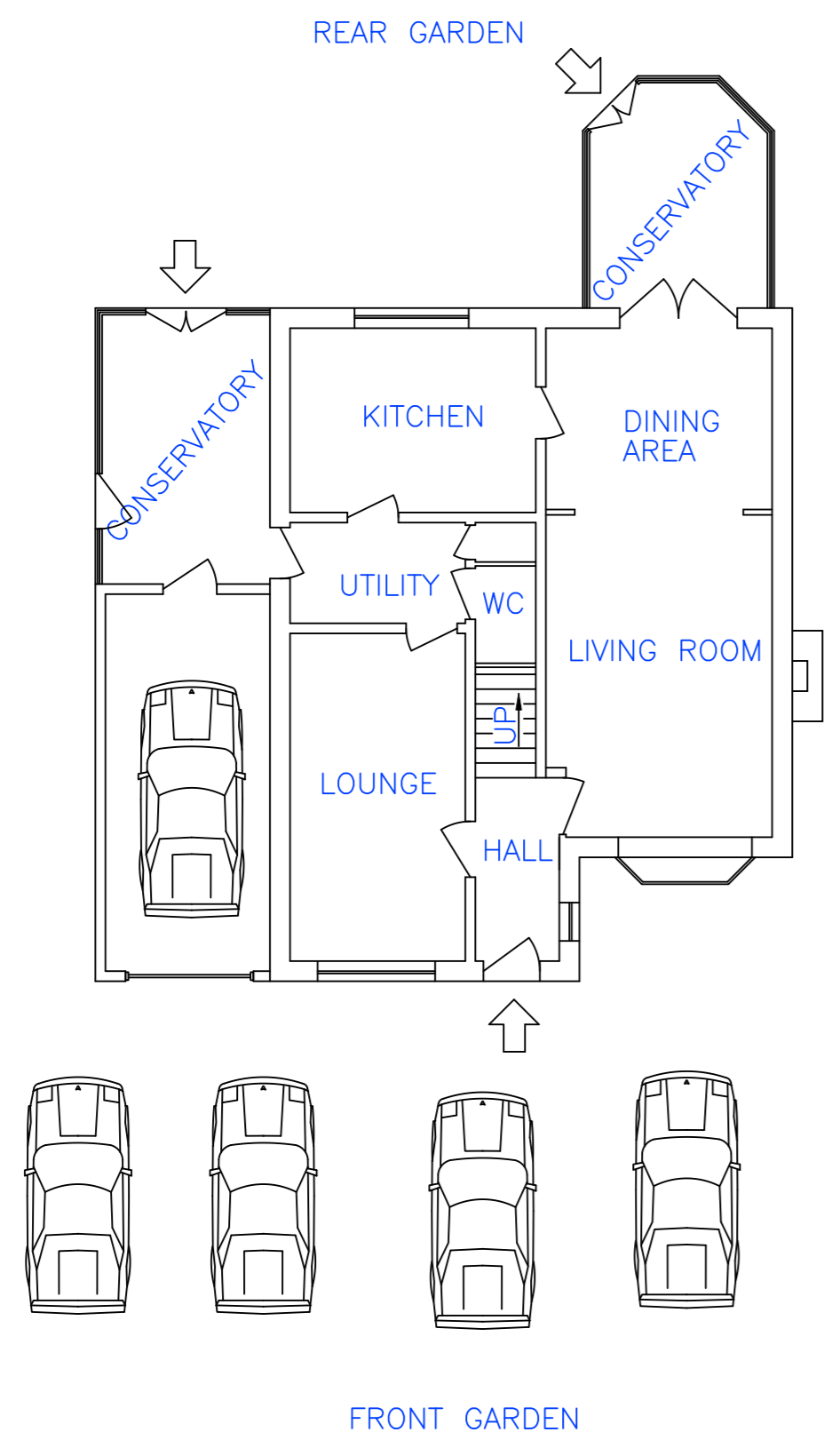
North East England Nature Partnership. 2020. Bats Action Plan. [Online]. [Accessed 25 October 2020]. Available from <https://neenp.org.uk/natural-environment/durham-priority-species/847-2/>

The Bat Conservation Trust. 2015. Bats in Buildings. [Online]. [Accessed 14 July 2020]. Available from [https://cdn.bats.org.uk/pdf/Bats\\_and\\_Buildings.pdf?mtime=20181101151310](https://cdn.bats.org.uk/pdf/Bats_and_Buildings.pdf?mtime=20181101151310)

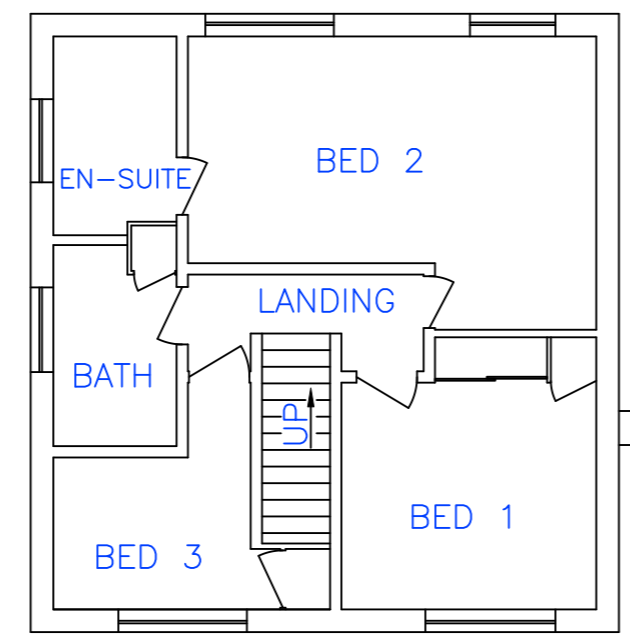


## **Appendix 1 – Architectural Drawings**





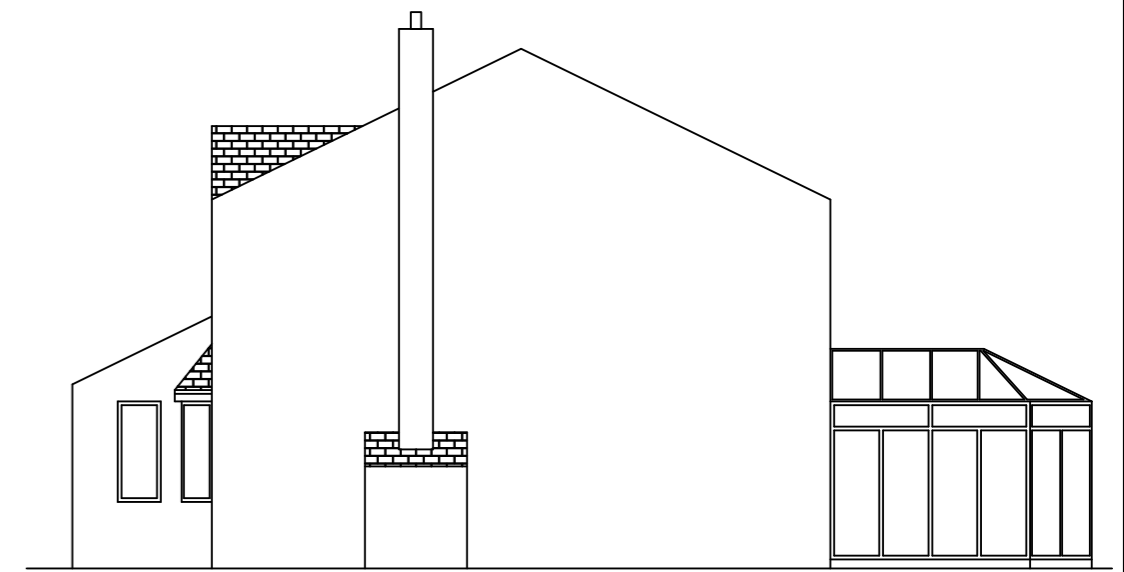
EXISTING GROUND FLOOR



EXISTING FIRST FLOOR



EXISTING FRONT ELEVATION



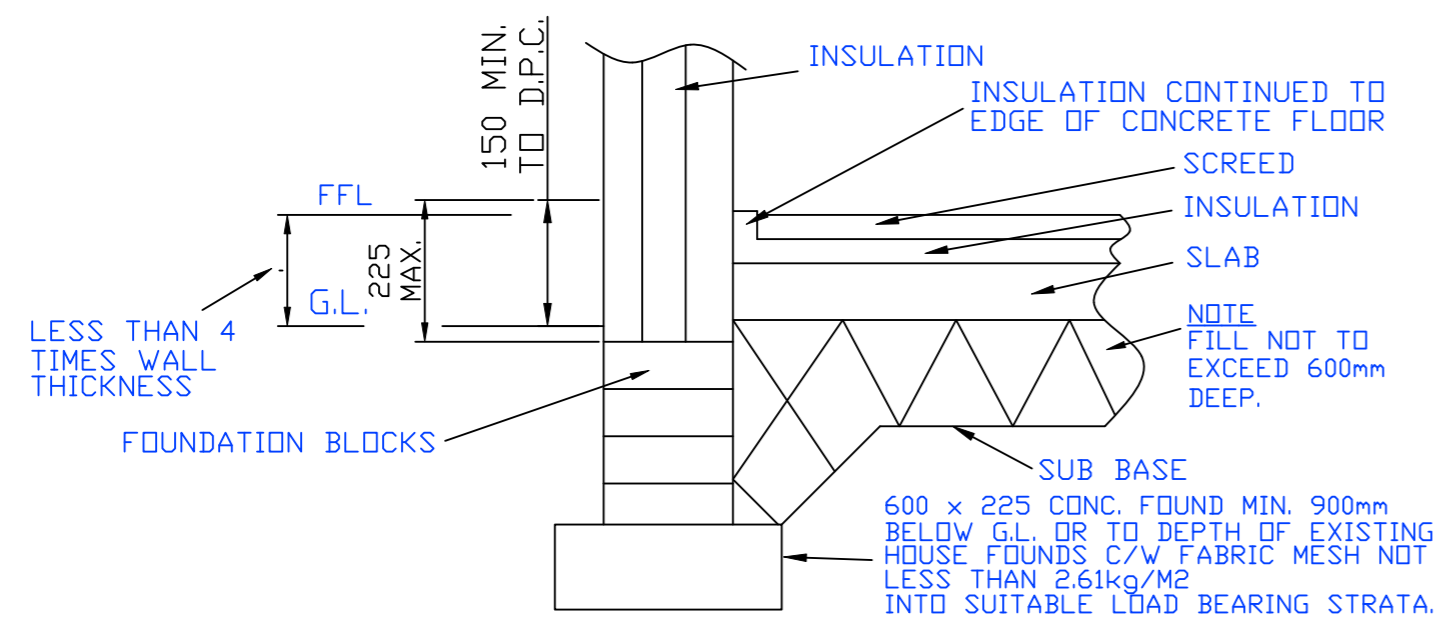
EXISTING GABLE ELEVATION



EXISTING REAR ELEVATION



EXISTING GABLE ELEVATION



TYPICAL SECTION THROUGH PROPOSED FOUNDATION (SCALE 1:20)

NOTES

- 1/ ALL WINDOWS TO BE DOUBLE GLAZED WITH 'K' GLASS AND TO HAVE VENTILATION IN FRAMES HAVING A TOTAL AREA OF NOT LESS THAN 8000mm PER ROOM. ALL NEW WINDOWS TO BE 1.6 W/m<sup>2</sup>K OR BETTER AND HAVE A 16mm ARGON FILLED AIR GAP. SAFETY GLASS TO BE FITTED TO DOORS AND ALL WINDOWS WITH CILL HEIGHT OF 800mm FROM FLOOR LEVEL OR LESS. ALL WINDOWS WILL OPEN IN EXCESS OF 30 AND WILL PROVIDE 1/20th OF THE FLOOR AREA IN VENTILATING OPENING.
- 2/ ALL NEW TIMBER TO BE SUITABLY PRESSURE TREATED i.e. VAC-VAC OR SIMILAR APPROVED.
- 3/ NO WORK TO BE CARRIED OUT BEYOND THE BOUNDARY LINE WITHOUT THE OWNERS CONSENT.
- 4/ ALL DIMENSIONS TO BE CHECKED ON SITE BY THE CONTRACTOR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REINSTATING THE SITE UPON COMPLETION AND MAKING GOOD TO ALL AFFECTED AREAS OF WORK.
- 5/ TO EXTENSION AND AREAS OF ALTERATION PROVIDE AND FIX NEW S.W. SKIRTING BOARDS TO MATCH EXISTING.
- 6/ VENT TILES TO BE INSTALLED WHERE RIDGE / EAVES VENTILATION CANNOT BE ACHIEVED i.e. ROOF WINDOWS.
- 7/ ALL BRICK PIERS TO HAVE A MINIMUM RETURN OF 665mm.
- 8/ ALL NEW DRAINAGE TO BE 100mm DIA. HEPSEVE PIPES WITH FLEXIBLE JOINTS LAID IN GRANULAR FILL (1 IN 40) TO L.A. SATISFACTION. ENCASE ANY EXISTING OR PROPOSED DRAINS BELOW EXTENSION IN 150mm MIN. CONCRETE ALL ROUND. IF NECESSARY, FOUNDATIONS WILL BE STEPPED BELOW THE DRAINS AND DRAINS WILL THEN BE BRIDGED BY CONCRETE LINTOLS. ALL NEW GULLIES TO BE RODDABLE.

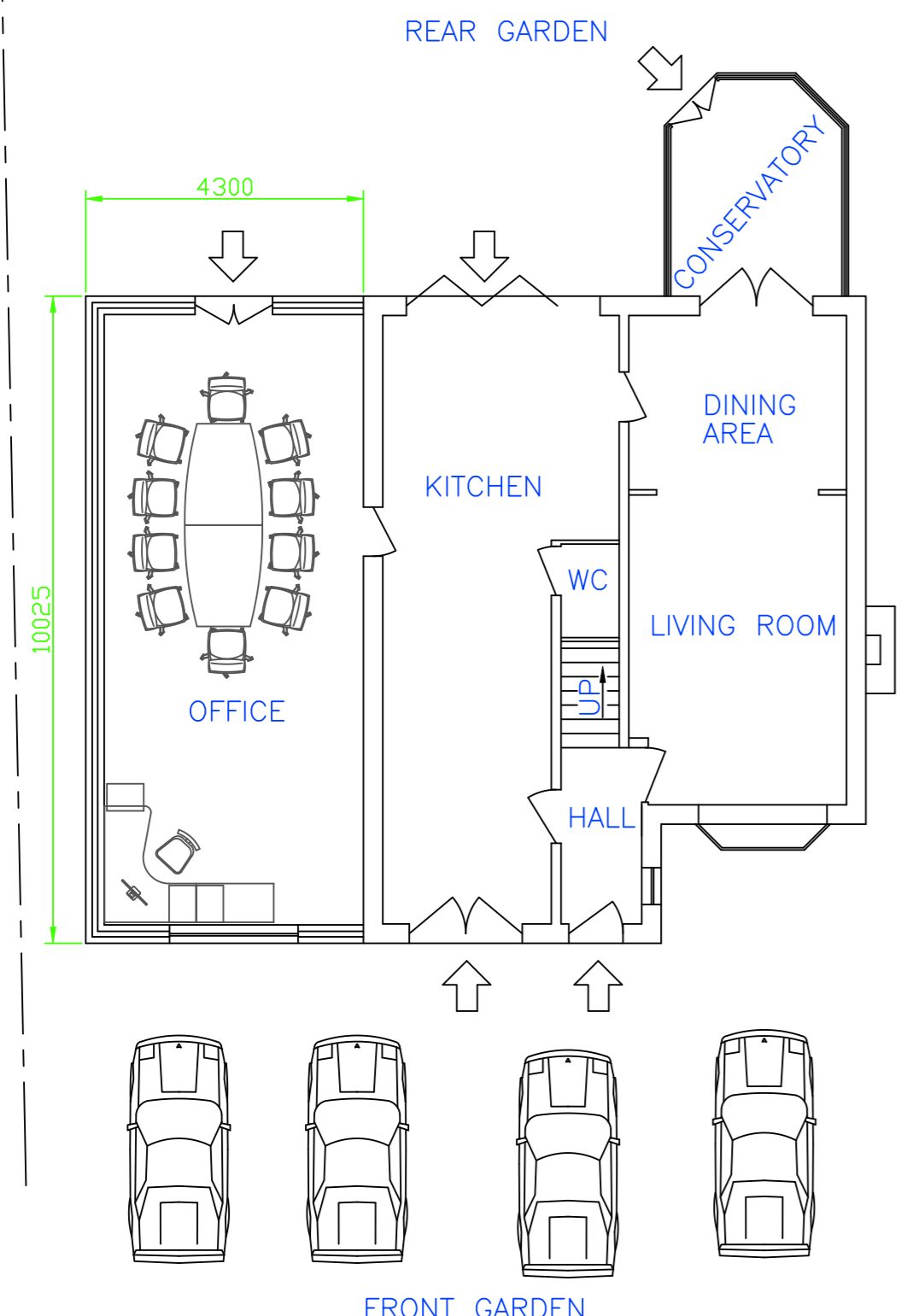
- 9/ USE THERMABATE OR SIMILAR APPROVED INSULATED CAVITY CLOSERS TO WINDOWS JAMBS AND CILL POSITIONS WITH A HALF HOUR FIRE RATING.
- 10/ ALL NEW RADIATORS TO BE FITTED WITH THERMOSTATIC VALVES AND NEW HEATING SYSTEM IS TO BE IN ACCORDANCE WITH THE 'DOMESTIC HEATING COMPLIANCE GUIDE'.
- 11/ PLEASE NOTE THAT THERE ARE NO TREES IN THE LOCALITY OF THE WORKS.
- 12/ ALL EXISTING LINTELS TAKING ADDITIONAL LOAD TO BE EXPOSED AND UPGRADED IF DEEMED NECESSARY.
- 13/ EXISTING CAVITY TO BE MADE CONTINUOUS WITH NEW i.e. EXISTING OUTER LEAF CUT AND CAVITY INSULATION CARRIED THROUGH PAST OUTER LEAF.
- 14/ ALL EXISTING FOUNDATIONS TAKING ADDITIONAL LOAD TO BE EXPOSED AND UPGRADED IF DEEMED NECESSARY.
- 15/ DOOR'S WITH MORE THAN 60% OF THEIR INTERNAL FACE GLAZED SHOULD BE BAND E OR BETTER, OR HAVE A 'U' VALUE OF 1.8w/m<sup>2</sup>/K OR LESS.

GENERAL

HARD WIRED AND INTERLINKED SMOKE DETECTORS TO BE INSTALLED TO THE TOP AND BOTTOM LANDING AREAS OF THE STAIRS ALSO TO LOUNGE. HOT WATER TAPS TO BE FITTED TO THE LEFT HAND SIDE OF APPLIANCES. PROPRIETY 'L' SHAPED WALL TIES TO BE USED TO JOIN EXISTING BRICKWORK TO NEW. SAFETY GLASS TO BE FITTED TO ALL NEW WINDOWS WITHIN 800mm OF F.F.L. AND TO ALL NEW DOORS (300mm EITHER SIDE) WITHIN 1500mm OF F.F.L.


J. D. DESIGN  
 14 ETHERLEY LANE,  
 BISHOP AUCKLAND,  
 CO. DURHAM,  
 DL14 7QR  
 TEL. 01388 661990  
 MOBILE 0781 6666090  
 E/MAIL jddesigns@hotmail.com

SCALE 1 : 100 (U.N.O.)  
 EXISTING PLAN AND ELEVATIONS  
 PROPOSED ALTERATIONS  
 27 WEST FARM COURT  
 BROOMPARK  
 DURHAM  
 CO. DURHAM  
 DH77 RN  
 FOR MR. & MRS. LEAVER



PROPOSED GROUND FLOOR

**SPECIFICATION**

**FLOOR**

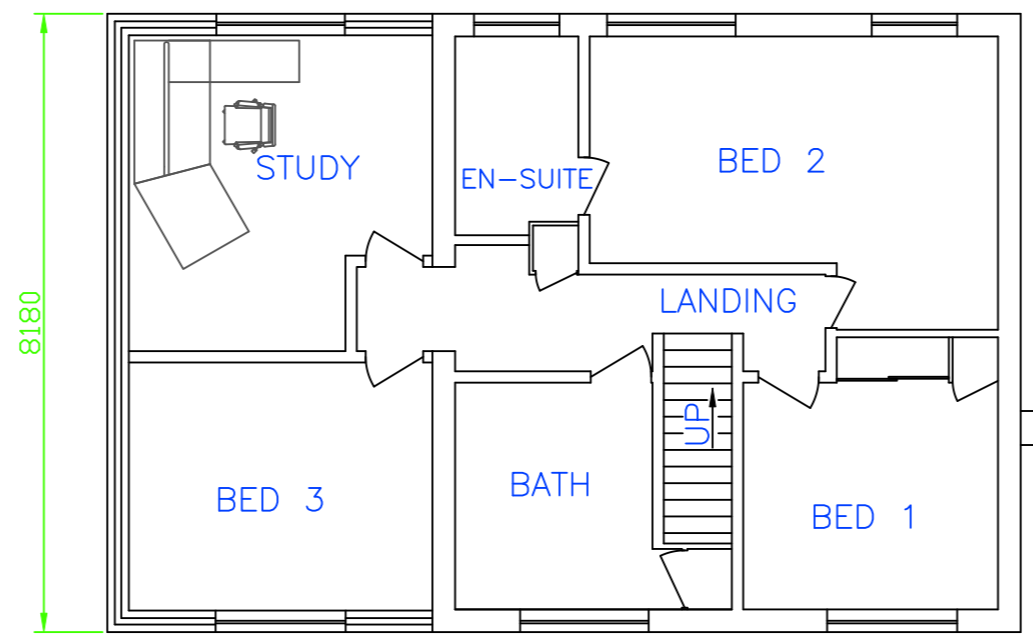
65mm THK CONCRETE SCREED ON SEPARATING LAYER 120mm THK ROCKFLOOR INSULATION OVER 1200 SUPER VISQUEEN ON 150mm THK CONCRETE SLAB OVER 500 GAUGE VISQUEEN ON 50mm BLINDING OVER 150mm THK THICK COMPACTED STONE SUB BASE ON FIRM CLAY.  
NOTE: DPCS TO BE MADE CONTINUOUS WITH DPMS.  
U VALUE OF FLOOR TO BE 0.22W/m<sup>2</sup>K.

**WALLS**

UPPER STOREY FRONT ELEVATION TO HAVE A 100mm THK LOAD BEARING BLOCK EXTERNAL LEAF RENDERED AND PAINTED WHITE TO MATCH EXISTING.  
REMAINDER OF EXTERNAL WALLS TO BE 102mm BRICKWORK, 90mm CAVITY (40mm THK KINGSPAN THERMAWALL TW50). INTERNAL WALLS TO BE LOADBEARING 100mm THERMALITE TURBO BLOCKS OR SIMILAR.  
U VALUE OF WALLS 0.28W/m<sup>2</sup>K.  
13mm LIGHT PLASTER TO INTERNAL WALLS.  
ALL OPENINGS TO HAVE CATNIC TYPE LINTELS OR SIMILAR OVER. VERTICAL D.P.C.'S TO BE INSTALLED AT JUNCTION BETWEEN NEW AND EXISTING WALLS. STAINLESS STEEL DDI40 GRADE WALL TIES IN CAVITY AT 5 PER M<sup>2</sup> AT A MAXIMUM OF 300mm CRS VERTICALLY WITHIN 225mm OF OPENINGS. SPACED AT 750mm HORIZONTALLY AND 450mm VERTICALLY. PROPRIETY 'L' SHAPED WALL TIES TO BE USED TO JOIN EXISTING BRICKWORK TO NEW.  
FIRE RESISTING CAVITY BARRIERS ARE TO BE INSTALLED AT THE TOP OF WALL / ROOF LEVEL TO PREVENT FIRE SPREAD AS APPROVED DOCUMENT B.

**FIRST FLOOR**

19mm WEYROC FLOORING GRADE T & G BOARDING (MOISTURE RESISTANT CHIPBOARD TO WET AREAS) ON 220 x 63 SOFTWOOD FLOOR JOISTS AT 400mm CRS WITH ONE ROW OF JOIST STRUTTING AT MID SPAN, MILD STEEL STRAPS FIXED TO NOGGINGS AT 2000mm CRS AT RIGHT ANGLES TO THE JOISTS AND BUILT INTO INNER LEAF AT GABLE POSITION. 12.5mm PLASTERBOARD AND SKIM CEILING.



PROPOSED FIRST FLOOR

**ROOF**

MARLEY TILES OR SIMILAR TO SUIT A 26° (APPROX) SLOPE FIXED TO MAKERS INSTRUCTIONS ON 50 x 25 S.W. BATTENS ON ROOFING BREATHABLE MEMBRANE ON FACTORY DESIGNED AND BUILT JOISTS AT 410 CRS. 100mm THK FIBRE GLASS INSULATION BETWEEN ROOF JOISTS. 170mm THK FIBRE GLASS INSULATION LAID OVER ROOF JOISTS. U VALUE OF ROOF 0.16W/m<sup>2</sup>K. AT 410 CRS. 100 x 25 LONGITUDINAL, DIAGONAL AND CROSS BRACING TO ROOF JOISTS ALL IN ACCORDANCE WITH BS 5268 PART 3. GALVANISED STEEL GABLE STRAPS OVER A MINIMUM OF 3 NO. REQUIRED AT 2M CRS AT CEILING, TIE AND RAFTER LEVEL. GALVANISED MILD STEEL VERTICAL RESTRAINING STRAPS REQUIRED OVER WALL PLATE AT A MAXIMUM OF 1.8M CRS. RAFTERS TO BE BIRDSMOUTHED OVER WALL PLATE. VENTILATED SOFFIT TO EAVES EQUIVALENT TO A 25mm CONTINUOUS RUN.  
ROOF STRUCTURE TO BE TRUSSED RAFTERS.

**GENERAL**

ALL CEILINGS TO BE ONE LAYER OF 12.5mm PLASTER BOARD WITH SKIM.

PROPRIETY 'L' SHAPED WALL TIES TO BE USED TO JOIN EXISTING BRICKWORK TO NEW. SAFETY GLASS TO BE FITTED TO ALL NEW WINDOWS WITHIN 800mm OF F.F.L. AND TO ALL NEW DOORS (300mm EITHER SIDE) WITHIN 1500mm OF F.F.L.

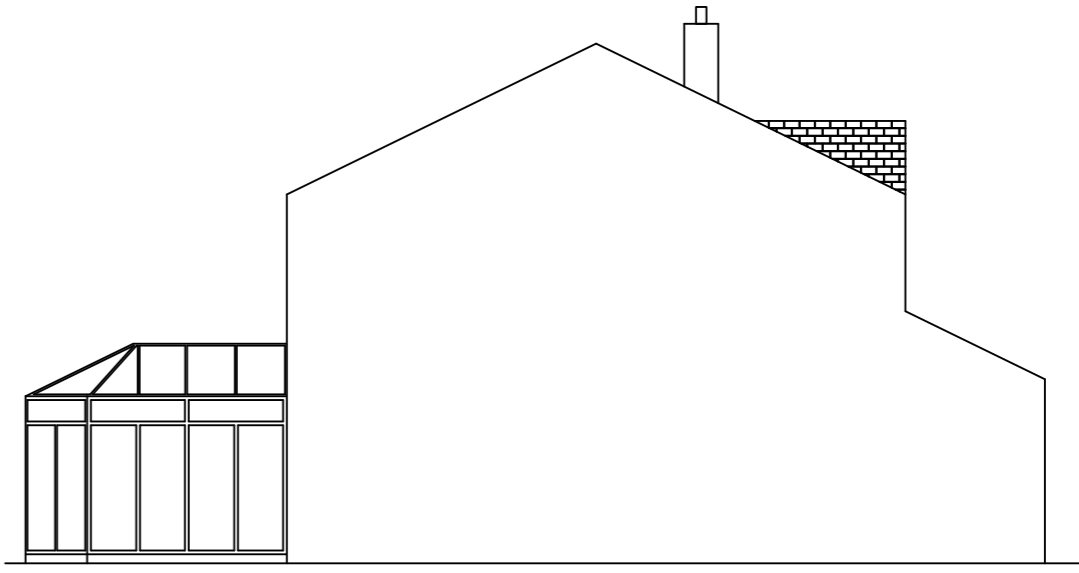
HARD WIRED AND INTERLINKED SMOKE DETECTORS TO BE INSTALLED TO THE TOP AND BOTTOM LANDING AREAS OF THE STAIRS ALSO TO LOUNGE AND UTILITY ROOM. HOT WATER TAPS TO BE FITTED TO THE LEFT HAND SIDE OF APPLIANCES.

PROPRIETY 'L' SHAPED WALL TIES TO BE USED TO JOIN EXISTING BRICKWORK TO NEW. SAFETY GLASS TO BE FITTED TO ALL NEW WINDOWS WITHIN 800mm OF F.F.L. AND TO ALL NEW DOORS (300mm EITHER SIDE) WITHIN 1500mm OF F.F.L.



PROPOSED FRONT ELEVATION

800 x 700 CLEAR OPENING SIZE WINDOW WITH NON LOCKING FASTENER. CILL HEIGHT TO BE NOT MORE THAN 1100mm FROM FLOOR. TO PROVIDE ESCAPE AND RAPID VENTILATION.  
LEAD FLASHING CHASED INTO BRICKWORK. CAVITY TRAY TO BE INSTALLED WITH TWO COAT SILICONE WASH APPLIED TO EXTERNAL MASONRY.

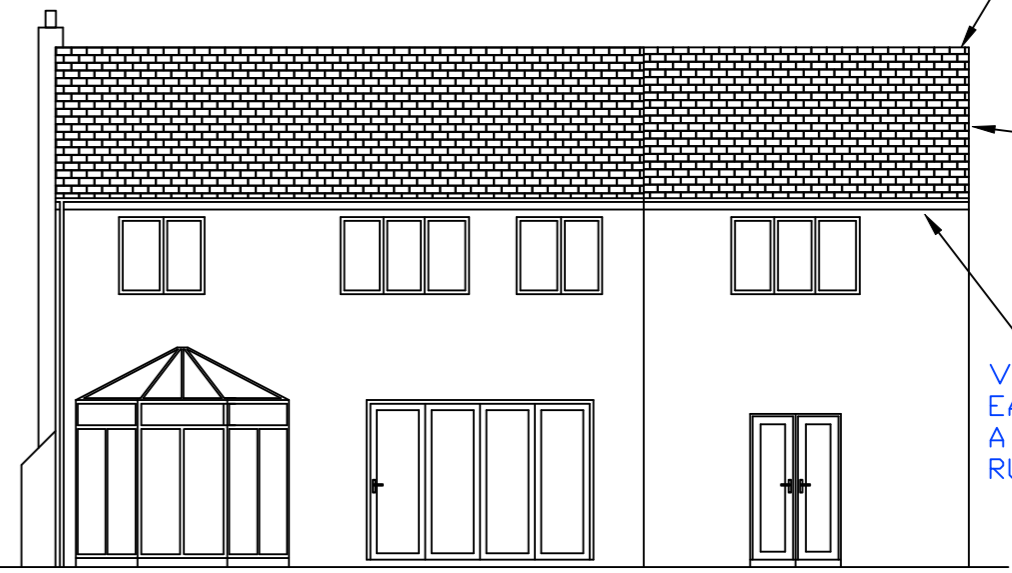


PROPOSED GABLE ELEVATION

VENTILATION REQUIRED TO RIDGE EQUIVALENT TO A 5mm CONTINUOUS RUN.

VENT TILES TO ROOF

VENTILATED SOFFIT TO EAVES EQUIVALENT TO A 25mm CONTINUOUS RUN.



PROPOSED REAR ELEVATION

**RAINWATER GOODS**

DSMA 112mm ROUNDLINE WITH 68mm DOWNPIPES. NEW SURFACEWATER GULLIES TO BE CONNECTED TO EXISTING. GULLIES TO BE CONNECTED TO EXISTING. ROOF RAIN WATER TO DRAIN AWAY TO SUITABLE SOAKAWAYS IF FEASIBLE DISCHARGING A MINIMUM OF 5M FROM DWELLING. PERDSITY TEST TO BE CARRIED OUT TO DETERMINE SIZE AND FEASIBILITY OF SOAKAWAY. IF NOT FEASIBLE THEN PERMISSION TO BE SOUGHT FROM LOCAL COUNCIL TO DISCHARGE INTO MAIN DRAIN.

**ELECTRICAL**

ALL NEW ELECTRICAL WORK IS TO MEET THE REQUIREMENTS OF PART P (ELECTRICAL SAFETY) AND IS TO BE DESIGNED, INSTALLED, INSPECTED AND TESTED IN ACCORDANCE WITH BS 7671:2001 OR AN EQUIVALENT STANDARD. THESE INSTALLATION WORKS ARE TO BE UNDERTAKEN BY A PERSON REGISTERED WITH AN ELECTRICAL SELF CERTIFICATION SCHEME, OR ALTERNATIVELY BY A SUITABLY QUALIFIED PERSON, WITH A CERTIFICATE OF COMPLIANCE PRODUCED BY THAT PERSON TO BUILDING CONTROL UPON COMPLETION OF THE WORKS. NEW ROOMS TO BE FITTED WITH LOW ENERGY LIGHT FITTINGS CAPABLE OF ONLY ACCEPTING LAMPS WITH AN EFFICIENCY OF NOT LESS THAN 40 LUMENS PER CIRCUIT WATT. A MINIMUM OF 75% OF LIGHT FITTINGS TO BE 'EELF' TYPE


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SCALE 1 : 100 (U.N.O.)

PROPOSED PLAN AND ELEVATIONS

PROPOSED ALTERATIONS  
27 WEST FARM COURT  
BROOMPARK  
DURHAM  
CO. DURHAM  
DH77 RN  
FOR MR. & MRS. LEAVER






## **Appendix 2 – Surveyed Building Photos**



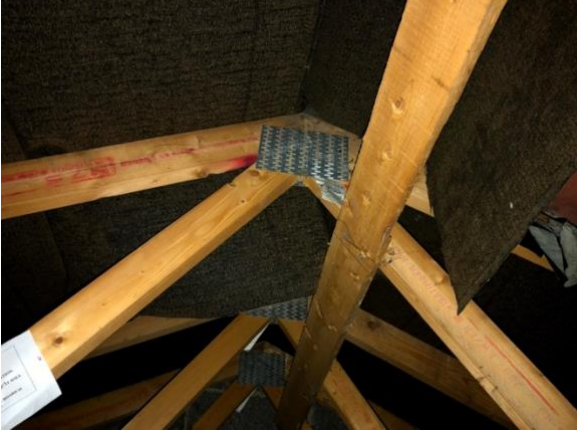


Ref.	Description	Photo
1	Front elevation	
2	Front elevation	
3	Rear elevation	






Ref.	Description	Photo
4	Side conservatory	
5	Rear elevation  PAP <ul style="list-style-type: none"><li>A very narrow gap (~5-6mm) was present between the exterior wall and wooden soffit box, where the security light wire went into the roof.</li></ul>	
6	Roof void	



Ref.	Description	Photo
7	Roof void	
8	Roof void	
9	Dis-used hot water tank	





Ref.	Description	Photo
10	Roof void – cut bitumen roofing underlay.	



## **Appendix 3 – Environmental Legislation & Convention Relating to Bats**



## Introduction

The UK has ratified a number of Conventions and implemented legislation pertaining to the protection of bats, either independently or as member state of the European Union. These are defined and summarised below.

Lists of threatened, endangered and extinct species are also provided, together with a summary explanation of each.

### Bern Convention (1982)

The Convention on the Conservation of European Wildlife and Natural Habitats (the Bern Convention) was adopted in Bern, Switzerland in 1979, and was ratified in 1982. Its aims are to protect wild plants and animals and their habitats listed in Appendices 1 and 2 of the Convention and regulate the exploitation of species listed in Appendix 3. The regulation imposes legal obligations on participating countries to protect more than 1000 animals.

To meet its obligations imposed by the Convention, the European Community adopted the EC Birds Directive (1979) and the EC Habitats Directive (1992 – see below). Since the Lisbon Treaty, in force since 1st December 2009, European legislation has been adopted by the European Union.

### The UK Post-2010 Biodiversity Framework

The UK Post-2010 Biodiversity Framework was published in July 2012 and supersedes the Biodiversity Action Plan which lists and prioritises habitats and species and sets national targets to be achieved. The UK Post-2010 Biodiversity Framework includes all the species formally listed under the old UKBAP. The Environmental Departments of all four governments in the UK work together through the Four Countries Biodiversity Group.

The former UKBAP identified 391 'Priority' Species Action Plans (SAPs) and 162 Local Biodiversity Action Plans. Local Biodiversity Action Plans (LBAP) identify habitat and species conservation priorities at a local level (typically at the County level) and are usually drawn up by a consortium of local Government organisations and conservation charities.

UKBAP Bat priority species include Barbastrelle Bat, Bechstein's Bat, Soprano Pipistrelle, Noctule, Brown Long-eared Bat, Greater Horseshoe Bat and Lesser Horseshoe Bat.

### Bonn Convention

The Convention on the Conservation of Migratory Species of Wild Animals or 'Bonn Convention' was adopted in Bonn, Germany in 1979 and came into force in 1985. Participating states agree to work together to preserve migratory species and their habitats by providing strict protection to species listed in Appendix I of the Convention. It also establishes agreements for the conservation and management of migratory species listed in Appendix II.

In the UK, the requirements of the convention are implemented via the Wildlife & Countryside Act 1981 (as amended), Wildlife (Northern Ireland) Order 1985, Nature Conservation and Amenity Lands (Northern Ireland) Order 1985 and the Countryside and Rights of Way Act 2000 (CRoW)

The UK has currently ratified four legally binding Agreements under the Convention, one of which is the Agreement on the Conservation of Populations of European Bats (EUROBATS).

### National Planning Policy Framework (2018)

Following the publication of the first revision of the National Planning Policy Framework (NPPF) in March 2012, Planning Policy Statement 9 (PPS9): Biodiversity and Geological Conservation (2005) has been withdrawn. However, ODPM 06/2005: Biodiversity and Geological



Conservation – Statutory Obligations and their impact within the Planning System (the guidance document that accompanied PPS9) has not been withdrawn and, where more detailed guidance is required than is given within the NPPF, local planning authorities will continue to rely on ODPM 06/2005. The NPPF has been revised and was published in July 2018 and an update with clarifications was released in February 2019

The purpose of the NPPF is to contribute to the achievement of sustainable development which includes an environmental objectives - *an environmental objective – to contribute to protecting and enhancing our natural, built and historic environment; including making effective use of land, helping to improve biodiversity, using natural resources prudently, minimising waste and pollution, and mitigating and adapting to climate change, including moving to a low carbon economy.*

This guidance requires local planning authorities (planning policies and planning decisions) to take account of the conservation of protected species when determining planning applications and makes the presence of a protected species a material consideration when assessing a development proposal that, if carried out, would be likely to result in harm to the species or its habitat. Furthermore, the NPPF 2018 includes the requirement for developments to *improve biodiversity* including ecological *net gain*. In the case of European Protected Species such as bats, planning policy emphasises that strict statutory provisions apply (including the Conservation of Habitats and Species (Amendment) Regulations 2012), to which a planning authority must have due regard.

Where developments requiring planning permission are likely to impact upon protected species it is necessary that protected species surveys are undertaken and submitted to meet the requirements of paragraph 98 of ODPM Circular 06/2005 which states that:

*'The presence of a protected species is a material consideration when a planning authority is considering a development proposal that, if carried out, would be likely to result in harm to the species or its habitat.'*

### Species of Principal Importance in England

Section 41 (S41) of this Act requires the Secretary of State to publish a list (in consultation with Natural England) of habitats and species which are of principal importance for the conservation of biodiversity in England. The S41 list is used to guide decision-makers such as public bodies including local and regional authorities, in implementing their duty under Section 40 of the Natural Environment and rural Communities (NERC) Act 2006, to have regard to the conservation of biodiversity in England, when carrying out their normal (e.g. planning) functions.

The S41 list includes Barbastrelle Bat, Bechstein's Bat, Soprano Pipistrelle, Noctule, Brown Long-eared Bat, Greater Horseshoe Bat and Lesser Horseshoe Bat.

### The Conservation of Habitats and Species (Amendment) (EU exit) Regulations 2019

The Conservation of Habitats and Species (Amendment) (EU exit) Regulations 2019 came into force on 1<sup>st</sup> February 2020 and ensures that the species and habitat protection and standards derived from EU law will continue to apply during the Brexit transitional period. No alterations have been made within the amendment from the Conservation of Habitats and Species Regulations 2017 consolidate the Conservation of Habitats and Species Regulations 2010 with subsequent amendments. The Regulations transpose Council Directive 92/43/EEC, on the conservation of natural habitats and of wild fauna and flora (EC Habitats Directive), into national law. They also transpose elements of the EU Wild Birds Directive in England and Wales.



Regulations place a duty on the Secretary of State to propose a list of sites which are important for either habitats or species (listed in Annexes I or II of the Habitats Directive respectively) to the European Commission. These sites, if ratified by the European Commission, are then designated as Special Protection Areas (SPAs) within six years. The 2012 amendments include that public bodies help preserve, maintain and re-establish habitats for wild birds.

The Regulations also make it an offence to deliberately capture, kill, disturb or trade in the animals listed in Schedule 2, which include all horseshoe bats *Rhinolophidae sp.* and all common bats *Vespertilionidae sp.*

### Wildlife and Countryside Act 1981 (as amended)

This is the principal mechanism for the legislative protection of wildlife in the UK. This legislation is the chief means by which the 'Bern Convention' and the Birds Directive are implemented in the UK. Since it was first introduced, the Act has been amended several times.

The WCA makes it 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 roosting place (even if bats are not occupying the roost at the time);
- intentionally or recklessly obstruct access to a bat roost; and
- possess or advertise/exchange/sell a bat (alive or dead) or any part of a bat.