David Leach Ecology Ltd.

Environmental Consultants

Land to the rear of

7 North Close

Havant

Hampshire

Phase 1 Ecological Survey

Date: September 2015

Report compiled by D. V. Leach. M.C.I.E.E.M

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Executive summary

- This survey was commissioned to check the site for protected species and habitats to support a planning application to build a new residential dwelling on the site, formally part of the rear garden of 7 North Close, Havant.
- The habitat within the plot is mainly regularly mown amenity grass.
- A phase 1 survey was undertaken in June 2015 which found no signs of protected species on site but there is potential for nesting birds and bats at the perimeters of the site.
- The proposed development is unlikely to have a significant negative effect on the local population of protected species.
- A number of measures will be taken to enhance the site by installing bat and bird boxes around the site.

1.0 Introduction.

1.1 Background

Client:	C/O m2 architecture
Property Surveyed:	Land to the south of 7 North Close Havant Hampshire, PO9 2TE
Grid reference:	SU 72103 05824
Dates of Survey:	19th June 2015.
Lead Surveyor:	David Leach BSc. (Hon), CBiol., M.S.B., M.C I.E.E.M. (Natural England WML CL18 registered bat worker).

1.2 Aims of the Survey.

It is planned to build a new residential dwelling on the site, formally part of the garden of 7 North Close, Havant. A survey was commissioned to check for protected species or potential for protected species that would be affected by the proposed works and produce a mitigation/enhancement plan as required.

1.3 Site Description.

The site is located in an urban area 1km on the east side of Havant, Hampshire. The site comprises of a large plot which is surrounded by residential dwellings and gardens on three sides. The busy A27 dual carriageway is screened by a small wooded area at the south of the plot. On the south side of the A27 there are meadows and cultivated fields and beyond these areas is Emsworth Harbour.

2.0 Methodology

2.1 Desk Study

The Magic.gov web site was accessed to determine whether there were any nature reserves or protected areas local to the site that would be affected by the proposed works.

Ordnance Survey 1:25,000 scale maps were accessed to identify ponds within 500m of the site with potential to support great crested newts.

If signs or potential for protected species was found then a data search may be undertaken to look for records of protected species in the area around the site.

2.2 Site Survey

This consisted of a walkover survey of the application site and land within 50m of the application site boundaries where possible. The survey employed techniques based on standard Phase I Habitat Survey methods (JNCC, 2006). Habitat types on and adjacent to the site were identified according to standard habitat definitions.

Any habitats identified as having potentially high botanical value will be subject to further botanical surveys, if deemed necessary.

The Phase I Habitat survey methodology was 'extended' in accordance with EIA guidelines (EIA, 1995) to include an assessment of the potential for habitats on or immediately adjacent to the site to support legally protected or conservation-notable species. The location and nature of any signs of the presence of protected species (such as droppings, footprints, burrows, etc.) were documented and mapped accordingly.

Indicative methods for protected species are outlined below following recognized guidelines: Chartered Institute of Ecology and Environmental Management (CIEEM), Amphibian and Reptile Conservation (ARC), Bat Conservation Trust (BCT) and Joint Nature Conservation Committee (JNCC).

The survey was carried out by David Leach an experienced ecological surveyor who is a Natural England WML CL18 registered bat worker, a full member of the Chartered Institute of Ecology and Environmental Management and a Chartered Biologist.
David Leach is a Registered Consultant under the new Low Impact Bat Class Licence.

Bats.

The external and internal areas of any building or structure on site were inspected following guidelines set out in the BCT Bat Survey Guidelines 2nd ed. (Hundt. L. 2012) and the JNCC Bat Workers' Manual (Mitchell-Jones A. J). The presence of bats or signs of bats and possible entry points into building was looked for.

External signs of bats or potential use by bats were looked for. These included:-

- Bat droppings on walls, floors, window cills and in covered areas such as porches.
- Gaps in the woodwork of the eaves, soffits, fascias etc. and behind barge boards.
- Gaps in the brickwork and between door and window frames.
- Gaps around lead flashing and loose, slipped or missing hanging and roof tiles.
- Urine stains or grease marks around any gaps mentioned above.

All accessible areas of any internal space were carefully inspected for bats (live or dead) or signs of bats such as droppings, urine stains, signs of feeding such as moth wings, etc. Cobwebs which indicate no or infrequent use by bats were also looked for. Equipment available included 3.8m telescopic ladder, Leica 8x42 binoculars, digital camera, head torch and Clulite CB2 high powered torches, See snake inspection camera.

The bat roosting potential of buildings was assessed according to the scale negligible, low, moderate or high:

> *Negligible*: This category describes buildings of a simple structure where all structural features can easily be surveyed with a visual inspection or investigated with an endoscope. For example a simple wooden garden shed, a corrugated iron barn or precast concrete modular garage may fit this category.
>
> *Low*: This category is used to describe simple structure buildings that have very few potential bat roosting features but all areas cannot be surveyed visually or investigated with an endoscope.
>
> *Moderate*: This category is used to describe buildings that have some potential to support roosting bats, but is considered to be less than ideal in some way. Some but not all modern industrial and agricultural buildings may fit this category if they are of a simple structure with single layer walls and unlined roof areas.
>
> *High*: This category is used to describe buildings with multiple internal and external structural features suitable for roosting bats. Most brick built dwelling houses and timber or stone barns will be covered by this category. Features that may be used by bats are e.g. loft spaces and other smaller roof voids, gaps between overlapping clay tiles, gaps in-between the tiles or slates and the roofing felt, cavities under ridge tiles, under soffits

fascia and barge boards, by the brickwork of chimney stacks, under lead flashing, inside cavities of flat roofs, under wall hanging tiles, behind wooden cladding or other wooden structures, inside cavity walls or other smaller wall cavities, in gaps and cracks of stone walls and inside wooden beam mortise and tenon joints.

Confirmed: This category is used where evidence of bats such as live or dead bats or bat droppings are present, or where there are records of a bat roost in the building within the last 5 years.

Extant trees were inspected for potential roosting areas that could support bats. Particular attention was paid to the following:

Trees

- Mature trees with ivy covering and/or crevices and peeling bark

Evidence searched for to indicate usage of bats included:

- Droppings
- Urine staining
- Worn entrances or claw marks around potential access points
- Insect feeding remains
- Oil staining left from bat fur
- Live/dead bats

Birds.

Any habitat features, for example, scrub, trees and hedgerows which could potentially be used by nesting birds, were surveyed and any nesting activity was noted. The habitat was also assessed regarding its potential for bird activity.

Reptiles.

Habitat features that could be suitable as hibernacula, foraging or basking areas were noted. Extant refugia were lifted and examined for evidence of reptiles, including sloughs (shed skins).

Badgers.

Any area that could be used for foraging or could potentially contain a Badger sett was surveyed and any signs noted including:

- Evidence of active or disused setts
- Evidence of potential badger diggings
- Latrines / dung pits
- Evidence of badger foraging (‘snuffle holes’)
- Footprints
- Badger hairs

Great Crested Newts.

Ponds within the vicinity of the site were noted and the potential of the land to act as a commuting route, shelter or foraging resource for great crested newts (*Triturus cristatus*) was assessed.

Invertebrates.

The suitability of the habitats on site was assessed for invertebrates. Features that were noted down include the following:

- Habitat features that could support invertebrates
- Invertebrate feeding remains
- Live/dead invertebrate species

Otters and Water Voles.

Any riparian habitat present on-site or immediately adjacent to the site was searched for signs of otters and water voles. Signs included:

- Otter spraints or sign heaps
- Water vole latrines and feeding stations
- Evidence of potential holts or burrows
- Footprints

Dormice.

The suitability of the habitat was assessed for dormice. Any small mammal feeding signs were checked and assessed, including:

- Examination of hazel nuts
- Evidence of nest building

3 Results.

3.1 Desk Study

- The proposed development is small in scale (a single house and garage) and will have no significant effect on any local designated sites.
- Ordnance Survey maps revealed no ponds within 500m of the application site.
- A local biological records center data search is not required in this instance as the results would not affect the outcome and mitigation.

3.2 Site Survey

Weather for initial survey: Sunny and dry at time of survey 08:30
The external temperature was 17°C.

- The site is accessed along a wide gravel drive leading to a bridge over Lymbourne stream which forms the east boundary of the site. The stream flows from a wide shallow area to the north of the plot which is fed by springs approximately 175m to the north.
- The large plot was predominantly close mown lawn surrounded by a tall laurel and holly hedge to the west, a small laurel hedge to the north, the stream to the east and a wooded area to the south. There were a few small shrubs in beds within the lawn area. The wooded area consisted of a number of large, mature and semi mature, broadleaved and conifer trees.

Protected Species.

Bats.

- There were no buildings or structures on site. There were a numbers of mature trees at the south perimeter which have potential roosting features such as loose bark, splits, cracks, woodpecker holes etc. The general area has a mix of habitats and provided good foraging, roosting and commuting habitats.

Birds

- Bordering trees and shrubs offer potential nesting habitat for a range of woodland and garden bird species.

Reptiles.

- Bordering ruderals and scrub at the application site south boundary offer limited potential foraging and refuge for widespread reptile species due to heavy shading. Remaining areas of the garden are well maintained and provide sub optimal habitat for reptiles.

Badgers

- There was suitable foraging habitat on site but no sign of badger activity was found.

Great crested newts

- The habitat on site does not provide good foraging habitat for great crested newts and there were no suitable ponds were found nearby. It is thought very unlikely any will be found on site.

Otters and water voles

- The stream running at the east of the site has limited potential for water voles or otters due to the west bank in large parts being constructed from concrete, being heavily shaded and lacking suitable vegetation to provide a good food source and cover.

Dormice

- The site offers limited very potential for dormouse (*Muscardinus avellanarius*) due to the lack of suitable understorey and potential food resources. No large stands of hazel (*Corylus avellana*), or honeysuckle (*Lonicera sp*.) were present within the site boundaries. There is no connectivity between the site and larger areas of woodland.

4.0 Assessment.

- The site is not situated within, adjacent to, or within 500m of any site of statutory conservation designation that will be affected by the proposed development.
- The proposed works will be confined to areas of close mown lawn and no large mature trees will be removed as part of the development. There is good access to the site and the building will be 8m form the stream which will not be significantly affected by the proposed works.
- There were no active bat roosts within the proposed construction zone but the area provided good foraging and commuting habitat with potential bat roosting features in some trees at the perimeter of the site.
- There were trees and large shrubs at the perimeter of the site with the potential to support nesting birds.
- There were no badger setts and no signs of badger activity on site.
- There is no suitable habitat for dormice or other protected species within the site boundaries.
- The proposed works are unlikely to have a significant effect on any protected species.

5.0 Recommendations.

Bats.

- Any trees identified for removal at a later date should be inspected for potential roosting features. If trees with potential roosting features will be lost, following recognized guidelines for trees with low potential for bats, a minimum of one dusk and one dawn activity survey should be carried out at an appropriate time of the year (April 1st – September 31st) to determine if a bat roost is present.

Birds

- Birds' nests, when occupied or being built, receive legal protection under the Wildlife and Countryside Act 1981 (as amended). It is highly advisable to undertake clearance of potential bird nesting habitat (such as hedges, scrub, trees, suitable outbuildings etc.) outside the bird nesting season, which is generally seen as extending from March to the end of August, although may extend longer depending on local conditions. If there is absolutely no alternative to doing the work in during this period then a thorough, careful and quiet examination of the affected area must be carried out by a qualified ecologist before clearance starts. If occupied nests are present then work must stop in that area, a suitable (approximately 5m) stand-off maintained, and clearance can only recommence once the nest becomes unoccupied of its own accord.

Reptiles

- The grass on site should continue to be maintained below 50mm to keep the habitat sub-optimal for reptiles.
- Building materials should be stored on pallets or hard standing away from long grass to prevent reptiles using them as refugia or a basking area.

Trees/hedges

- A root protection zone should be set up around the trees and hedges at the perimeter of the site.

Contamination

- The contactors appointed to undertake the proposed works should produce a method statement to show safeguards are in place to prevent silt, oil, fuels and other contaminants from entering the stream system.

Enhancement

In accordance with Section 40 of the Natural Environment and Rural Communities Act 2006 and paragraph 118 of the National Planning Policy Framework a number of measures should be implemented to enhance the biodiversity.

These will include as a minimum

- installing a bat box/tube on each gable wall (appendix D),
- putting up a house martin terrace under the eaves of the house (appendix D),
- putting up a sparrow terrace under the eaves of the garage.
- planting of native or wildlife friendly species around the site,
- ensuring low levels of any nearby external lighting to prevent disturbance to foraging or commuting bats.

6.0 Limitations of the survey.

A survey of this type only provides a snapshot of what was found at the time of the survey and it is sometimes necessary to carry out a number of surveys to show the presence or absence of protected species such as crevice dwelling bats.

In the unlikely event that a bat (or other protected species) is found during construction then work must stop and David Leach Ecology Ltd. or Natural England should be contacted for advice on how to proceed.

The survey can be considered valid for two years from the date of the survey unless there are changes to the condition of the property.

7.0 Appendices

A) Legislation.

Under the Wildlife and Countryside Act 1981 (as amended) and the Countryside and Rights of Way (CroW) Act 2000, all bats have legal protection. In addition any structure which shows signs of use by bats either currently or in the past, for shelter or protection, is classed as a bat roost and both the roost and any bats using it are protected by law which makes it an offence to:

- Intentionally or recklessly kill or injure or take any bat.
- Intentionally or recklessly damage or destroy any bat roost and to obstruct access to that roost.
- Intentionally or recklessly to disturb any bat using a structure as a roost.

Protection is also afforded to bats under the Conservation (Natural Habitats & c.) Regulations 1994 (the Habitats Regulations) Amended 2007

Annex IV lists all bats

Regulation 39 makes it an offence to:

- Deliberately kill or capture a bat.
- Deliberately disturb a bat.
- Damage or destroy a resting place or breeding site of any bat.

If any proposed development would result in the otherwise illegal acts above, a licence must be obtained from Natural England prior to any work being carried out. A licence will only be granted if there is no satisfactory alternative and the authorised action will not be detrimental to the maintenance of the population of the species concerned.

The Wildlife and Countryside Act 1981 (as amended) also protects all reptiles from killing, injury and sale.

The Wildlife and Countryside Act 1981 (as amended) makes it an offence to damage or destroy the nests of birds of breeding birds (with the exception of certain pest species). The bird nesting season is generally defined as being between mid-February and August inclusive although nesting outside of the period is not unusual if conditions are favorable.

B) References

- **ARG UK 2010**. *ARG UK Advice Note 5: Great Crested Newt Habitat Suitability Index*. Amphibian and Reptile Groups of the United Kingdom.

- **English Nature 2001**. *Great Crested Newt Mitigation Guidelines*. Natural England, Peterborough.

- **English Nature 2004.** *Bat Mitigation Guidelines.*

- **Hundt L, 2012** BCT Bat Survey Guidelines 2nd ed. Bat Conservation Trust, London, United Kingdom.

- **IEEM 1995**. Institute of Environmental Assessment: Guidelines for Baseline Ecological Assessment. E & FN Spon, London.

- **IEEM 2006**. Guidelines for Ecological Impact Assessment in the United Kingdom (version 7 July 2006), Institute of Ecology and Environmental Management [online]. Available: http://www.ieem.org.uk/ecia/index.html [accessed February 2011]

- **JNCC 2004**. *Common Standards Monitoring Guidance for Mammals*. Joint Nature Conservation Committee, Peterborough.

- **JNCC 2007**. *Handbook for Phase 1 habitat survey: A technique for environmental audit*. Joint Nature Conservation Committee, Peterborough.

- **Mitchell-Jones A. J. & McLeish, 2004**. *Bat Workers' Manual*. Joint Nature Conservation Committee, Peterborough.

- **Natural England and Countryside Council for Wales, 2007***. Disturbance and protected species: understanding and applying the law in England and Wales. – A view from Natural England and the Countryside Council for Wales.* United Kingdom

- **Oldham R.S., Keeble J., Swan M.J.S. & Jeffcote M., 2000.** Evaluating the suitability of habitat for the Great Crested Newt (*Triturus cristatus*). Herpetological Journal 10(4), 143-155.

- **Strachan, R., 1998**. Water Vole Conservation Handbook. University of Oxford, Oxford.

- **Stebbings R.E., 1986**. *Which bat is it?* The Mammal Society and The Vincent Wildlife Trust, London.

C). Photographs

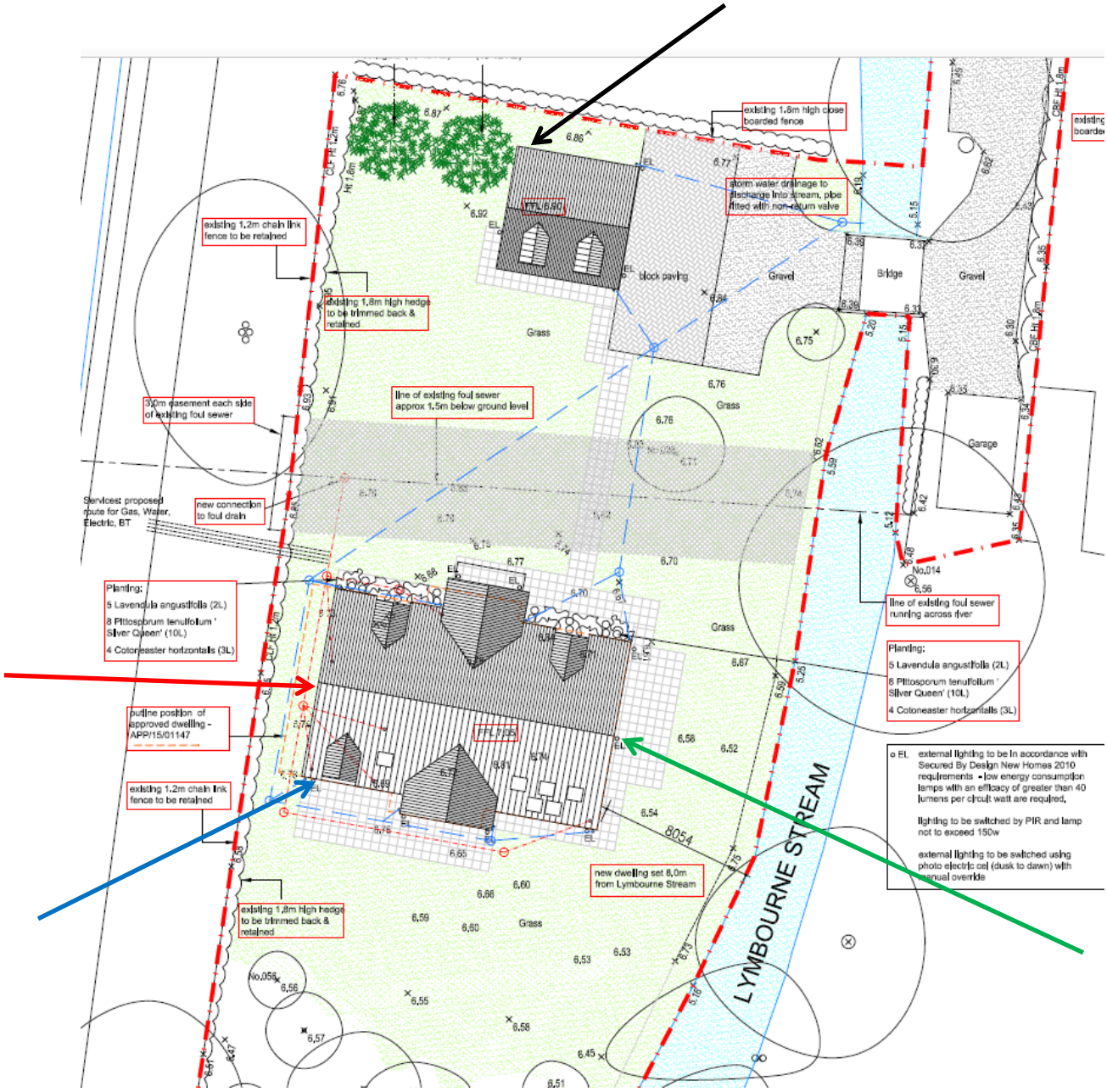
Plate 1) View across the bridge to the site.

Plate 2) West boundary of the site viewed from the south of the plot

Plate 3) View of the plot from the south west corner looking back to the bridge.

Plate 4) View of the plot from the bridge to the area where the house will be built.

D) Proposed site plan with enhancement features.



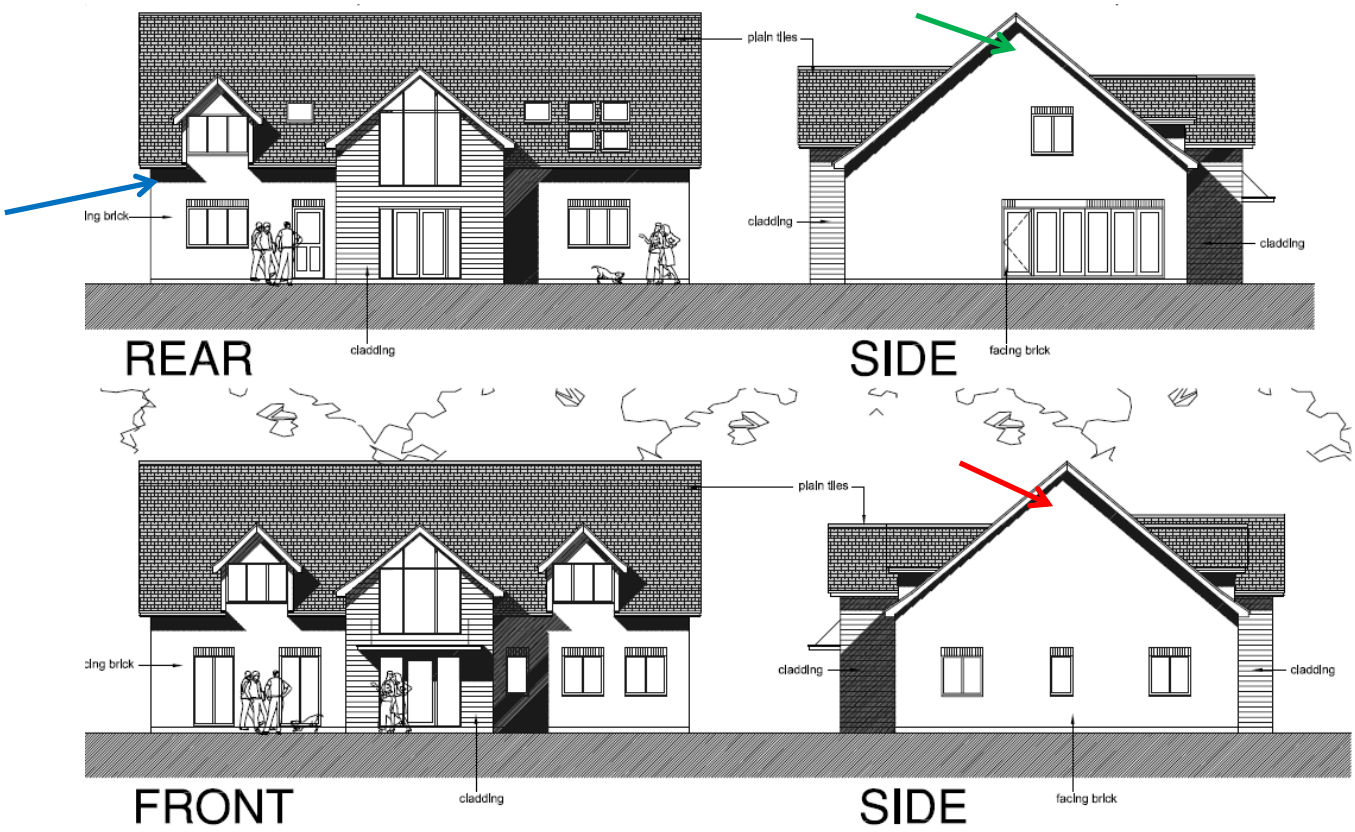
Forticrete Bat box

Schweglar 1F bat tube

Schweglar House Martin Terrace

Schweglar 1SP sparrow terrace to be fitted under the eaves of the garage building.

E) Proposed elevations with enhancement features.



Forticrete Bat box

Schweglar 1F bat tube

Schweglar House Martin Terrace

Schweglar 1SP sparrow terrace to be fitted under the eaves of the garage building.

F) Enhancement measures.

Bird house for under eaves of the building

Sparrow Terrace

Nest Boxes | Bird Boxes | Schwegler Boxes for Buildings | Sparrow Terrace

Schwegler 1SP Sparrow Terrace

Code: SPT

Sparrows are gregarious and prefer to nest close to each other, so this triple-nest box provides room for three families under one roof. It's made from long-lasting, breathable WoodcretePLUS to provide the optimum environment for sparrows to nest and rear their chicks.

This box does not require any maintenance. Designed for fixing to walls. Not suitable for fences or sheds due to the heavy weight of the box.

Share |

Available in choice of stone colour (pictured) or brown.

Please select:

002085D Schwegler 1SP Sparrow Terrace - Stone Colour - £68.49 inc VAT

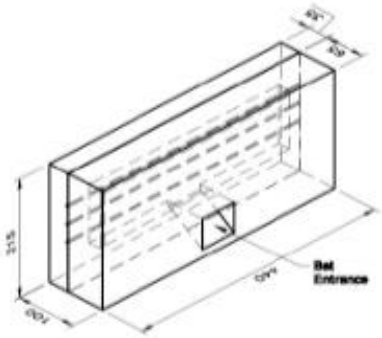
No. 11 Schwegler House Martin Terrace

BAT BOXES TO INSTALL INTO / ON TO BUILDINGS & BUILT STRUCTURES

Forticrete

Product Information – **Bat Box**

- The Forticrete Bat Box has been developed to be used in new build construction or renovation work where there is a requirement to provide a habitat for Pipistrelle bats.
- The box is made of a conventional cast stone front face but is backed with high grade plywood which is sawn and roughened internally to provide a haven for bats.
- The Bat Box is maintenance free due to the bottom entrance.
- The Bat Box illustrated is available from Forticrete's 'Stone in Stock' range although bespoke boxes can be designed and made for any application.



For more information please contact Forticrete at:
caststone@forticrete.com

Telephone: **01909 775000**
Fax: **01909 773549**

You can also visit our website at
www.forticrete.com

Forticrete stone
Confidence you can build on

Schwegler 1FR Bat Tube

This long box can be installed within brick masonry, beneath plasterwork or wood panelling, or incorporated into concrete structures such as factory buildings or bridges. Inside it contains a woodcrete surface, a roughened wood board, and a metal mesh, providing a choice of roosting areas depending on the weather conditions and the bats' habits. This box is maintenance-free as the entrance slit is at the bottom, allowing for self cleaning. No painting required, but if painting is necessary a natural breathable paint should be used

Woodcrete (75% wood sawdust, concrete and clay mixture)

Width 20cm, Height 47.5cm, Depth 12.5cm

Entrance width 15cm, Entrance depth 2cm

Ibstock - Enclosed Bat Box B

- Designed specifically for the pipistrelle bat
- Available in all brick types
- Discrete home for bats
- Various sizes
- Several roosting zones are created inside the box
- Bats are contained within the bat box itself
- Maintenance free with entrance at the base
- Ideal for new build & conservation work

215mm x 215mm or 215mm x 290mm
F2 S2 Fully frost resistant

Ibstock - Bat Box with Engraved Motif C

- Attractive motive
- Available in all brick types
- Discrete home for bats
- Various sizes
- Several roosting zones are created inside the box
- Bats are contained within the bat box itself
- Maintenance free with entrance at the base
- Ideal for new build & conservation work

215mm x 215mm or 215mm x 290mm
F2 S2 Fully frost resistant

Bat boxes should be located at a height of at least 3-4m in a sunny position with uncluttered access for the bats.

David Leach BSc (Hons) CBiol. MRSB MCIEEM. David is a professional ecologist with over thirty five years' research and fieldwork experience in many aspects of ecology and for the past nine years in environmental consultancy work.

David is an experienced bat surveyor with competency in activity surveys, bat roost assessments, daytime surveys for bat field signs, assessments of trees as potential bat roosts and the production of reports providing advice on best practice, mitigation and compensation works relating to bats as may be required. He holds a Natural England licence to disturb bats for the purposes of science and education or conservation and is also **a Registered Consultant for the Bat Low Impact Class Licence**. Registered Consultants are now able to apply to register individual sites to undertake licensable activities under this licence. David has been involved in obtaining Protected Species Licences to permit development works affecting bats and also badgers.

David also has experience in surveying for birds, reptiles, great crested newts, barn owls and badgers and also carries out extended Phase 1 habitat surveys, BREEAM and Code for Sustainable Homes assessments.

David Leach BSc. (Hons), C.Biol., M.R.S.B., M.C.I.E.E.M.

Disclaimer.

All reasonable effort has been made to provide accurate information at the time of the survey. However weather conditions and the timing of surveys can affect the results. Some species or signs of that species will only be visible at certain times of the year e.g. the nesting season for birds is usually between March and September. The absence of certain species or signs of use at the time of a survey does not mean that they are not present at other times of the year and does not imply that a species might not use the site at some time in the future.

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