

ECOLOGICAL APPRAISAL AND PHASE 1
BAT SURVEY
THE CURLEW
PETERSFIELD ROAD
HAVANT
HAMPSHIRE
PO9 2HU

MARCH 2017

ON BEHALF OF FORTITUDO LTD

Phil Smith
Conservation
Consultant

45 Normanhurst Avenue
Queens Park
Bournemouth
BH8 9NN

Phone: 01202 527747
Mobile: 07973 107897
Email: philsbats@hotmail.com

Version 1 (final)

Written by Becci Smith of Phil Smith Conservation Consultants

Summary

- Phil Smith Conservation Consultants were contacted by Fortitudo Ltd to undertake a phase 1 bat survey and ecological appraisal of buildings and land south at The Curlew, Petersfield Road, Havant, Hampshire, PO9 2HU (grid reference: SU 7187 0713) to advise on the presence/absence of bats within the public house and any other ecological constraints present which may affect the development of the site. This report was requested to support a planning application to demolish the existing pub and to erect a block of flats.
- A phase 1 habitat and phase 1 bat survey was undertaken by Phil Smith Conservation Consultants on the 9th March 2017.
- The phase 1 bat survey revealed the public house held negligible potential to support roosting bats and so no further survey or works are recommended.
- The site is located within the 5.6km buffer zone of the Solent Special Protection Areas. To mitigate the increase visitor pressure on the SPA a fee of £172 per increased dwelling will be paid under the Interim Solent Recreation Mitigation Strategy.
- A willow tree is present within the site which holds moderate potential to support roosting bats. As the tree will not be removed as part of the development (within the current plans), no further works are required. If the tree is to be removed additional surveys will be required.
- Scattered trees and dense ivy laid along the western wall were present within the site and hold the potential to support nesting birds. Should works be undertaken between 1st March and 31st August a suitably experienced ecologist will supervise the vegetation clearance.
- Ecological enhancements have been made in line with the National Planning Policy Framework which include sowing of wild flower seed mixes, erection of bird boxes and planting of native trees and shrubs.

1. Introduction

Phil Smith Conservation Consultants were contacted by Fortitudo Ltd to undertake a phase 1 bat survey and ecological appraisal of buildings and land south at The Curlew, Petersfield Road, Havant, Hampshire, PO9 2HU (grid reference: SU 7187 0713) to advise on the presence/absence of bats within the public house and any other ecological constraints present which may affect the development of the site. This report was requested to support a planning application to demolish the existing pub and to erect a block of flats. The survey was undertaken on the 9th March 2017. A site plan has been provided as Appendix 1 and proposals have been provided as Appendix 2.

Bats, dormice, otter, great crested newts, smooth snakes and sand lizards are protected by law under Annex IV of the EC Habitats and Species Directive which is transposed into UK law via the Conservation of Habitats and Species Regulations 2010.

It is an offence to deliberately disturb these animals in such a way as to be likely to significantly affect the ability of any significant group of protected animal to survive, breed or rear or nurture their young or the local population or abundance of bats and the legislation makes killing, capturing or injuring any individual of named species an offence in Schedule 2 of the Regulations.

In addition, these species plus others including adders, slow worms, grass snakes, common lizard and water vole are also protected under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended). Barn owls are protected under Schedule 1 of the Act.

This makes it illegal to kill or injure the named species, obstruct access to bat roosts or great crested newt shelter, intentionally or recklessly disturb any bat whilst it is occupying a roost. Under Schedule 1 it is also an offence to disturb, kill, injure or take, damage or destroy nests or eggs while birds are breeding. Under Schedule 9 it is an offence to spread invasive species such as Japanese knotweed, giant hogweed and Himalayan balsam.

Enhancements to biodiversity will be required to comply with the Government's policy for minimising impacts on biodiversity and providing net gains in biodiversity where possible, contributing to halt the overall decline in biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressure. The governments National Planning Policy Framework provide further details of the requirements of a biodiversity net gain.

Additional legislation has helped advise the client on their legal responsibilities to the natural environment and the protected species. These include but are not limited to:

Natural Environment and Rural Communities Act 2006;

The Protection of Badgers Act 1992;

Wild Mammals (Protection) Act 1996;

Hedgerow Regulations 1997;

Countryside and Rights of Way Act 2000.

An ecological appraisal comprises a walkover of the site whereby mapping of the habitats, identifying any evidence of protected species and identifying the presence of invasive species is undertaken to inform the land owner and planning authority of any ecological constraints associated with the site.

It is the land owners' responsibility to ensure all aspects of this report are complied with in line with the obtained planning permission.

2. Methodology

Data search

Internationally, nationally and locally protected sites including RAMSAR, SPA, SAC, SSSI, national and local nature reserves were identified within 5km of the site through the use of the Multi-Agency Geographical Information for the Countryside (MAGIC) website. Hampshire Bat Group (HBG) was also contacted to give an accurate measure of bat species within a 2km radius of the site.

Phase 1 habitat survey

The ecological appraisal followed the methodology of the JNCC (2010) standard phase 1 habitat survey (A technique for environmental audit). This included the mapping of the habitats within the site boundary, colour coordinated with the handbook made alongside a species list and targeted notes relevant to protected species. The plant species were identified in order of dominance to identify the ecological value while also looking for invasive or protected plants. Experienced ecologists Becci Smith and Phil Smith undertook the survey on the 9th March 2017.

Phase 1 bat survey

Buildings

Class 2 licensed bat ecologists, namely Becci Smith and Phil Smith undertook the assessment of the buildings.

A direct search of the external features of the property was undertaken using close focusing binoculars. A direct search looking for evidence of bats was undertaken of the flat surfaces around the external property including the window sills, the walls and on the garden furniture and parked vehicles.

Bats roost in a variety of locations within buildings and can access buildings in many ways including under barge boards, in soffits, under tiles (hung and roof tiles), at the ridge line, between double lintels, at gaps around the window frames, under lead flashing, at dormer windows, at gaps in the brickwork, through open windows/doors, to name a few. The presence of these roosting locations and access points were assessed during the survey. Following this survey the building was assessed as either holding negligible, low, moderate or high potential to support roosting bats corresponding directly to the number of access

points, likely roosting provisions, type and design of the building and the immediate surroundings.

Within the roof void, evidence of bats was also searched for including the presence of staining (body staining and urine), droppings, feeding remains and bats themselves. These were searched for thoroughly and any samples of droppings collected and sent to EcoWarwicker for analysis.

The survey methodology was undertaken with the Bat Conservation Trusts Good Practice Guidelines (Collins, 2016) in mind.

Trees

Class 2 licensed bat ecologists, namely Becci Smith and Phil Smith undertook the assessment of the trees.

A direct search of the external features of the tree was undertaken using close focusing binoculars. The tree was assessed from the ground level and features suitable for supporting roosting bats were noted. Any evidence of bats on the external features of the tree were recorded and an assessment of the trees potential to support roosting bats was made on the sliding scale of negligible, low, medium or high. The assessment directly corresponds with the number of access points, likely roosting provisions and the immediate surrounding area.

Badger survey

A direct search was undertaken during the ecological appraisal looking for signs of badgers and of their setts. Any setts encountered were classed as main, annexe, subsidiary or outlier dependent upon the number of holes and extend of their use. Any other evidence including faeces or latrines, pathways, scratching posts at the base of trees, snuffle holes, day nests, hair or footprint were also searched for.

Reptiles

The presence of reptiles is very difficult to survey for when not using refugia to attract reptiles for basking and heat retention. As such the presence of reptiles was not surveyed for and the habitat was assessed for its likelihood to support reptiles. Reptiles require both

protective cover and areas to allow basking which could combine long, unmanaged grassland and scrub with an area of hardstanding. In addition hibernation sites are required where reptiles move underground, such examples would be log piles, rubble or brash piles.

Survey limitations

Prior to the survey a number of conifer trees had been removed. The conifer trees had been piled on existing grassland which obscured the grassland species on the site. The survey was undertaken in the winter months when many plants are not present. Phase 1 bat surveys on trees are subject to ground views only and any evidence of bats usually deteriorates at a faster rate due to the elements.

3. Results

Data search

Internationally, nationally and locally protected sites

MAGIC was used to identify the protected sites within 5km of the site.

Site name	Distance from site	Designation	Size (ha)	Site description
Solent Maritime	1,990m south	SAC	11243.81	Designated for Annex I habitats estuaries, <i>Spartina</i> swards (<i>Spartinion maritimae</i>) and Atlantic salt meadows (<i>Glauco-Puccinellietalia maritimae</i>).
Chichester and Langstone Harbours	1,990m south	RAMSAR	5810.96	Ramsar criterion 1 includes the designation for two large estuarine basins linked by the channel which divides Hayling Island from the main Hampshire coastline. The site includes intertidal mudflats, saltmarsh, sand and shingle pits and sand dunes.
Chichester and Langstone Harbours	1,990m south	SPA	5810.96	The site supports 4.2% of the British breeding population of little tern and 1.1% of the British breeding population of Sandwich tern, on passage 17.1% of the British population of little egret and 4.9% of the European population of Ringed plover, 3.2% of the British wintering population of bar-tailed godwit and 20% of the British wintering population of little egret. The site also supports 4.9% of the European on passage population of Ringed plover and 1.4% European wintering population of black-tailed godwit, 5.7% European wintering population

				of dark-bellied, 3.2% European wintering population of dunlin, 2.5% European wintering population of grey plover, 1.2 European wintering population of redshank and 1.7% European wintering population of Ringed plover.
Chichester Harbour	1,990m south	SSSI	3732.54	At low tide the site covers extensive mud and sandflats for feeding the large population of wildfowl and waders, unimproved permanent pastures behind the sea wall also provide foraging for Brent Geese, of which this site supports 5% of the world population. The site also supports reedbeds, sand dunes, shingle, spits and islands, semi-natural broadleaved woodland, hedgerows and ponds.
Warblington Meadow	2,080m south east	SSSI	3.87	Unimproved grazing marsh with both freshwater base-rich marshes to old reclaimed saltmarsh with 158 recorded flora species. The site also supports a stream lined with oak, alder and willow species.
Langstone Harbour	2,250m south west	SSSI	2085.68	A tidal basin which resembles a land-locked lake at high tide and mud flats at low tide. One of the largest areas of saltmarsh on the south coast which supports extensive invertebrates which provides food sources for the overwintering populations of waders and wildfowl.
Hayling Billy	2,875m south	LNR	42.02	Coastal path along the bed of an old railway. Important for waders and wildfowl.
West Hayling	2,875m south	LNR	76.23	Intertidal mudflats with important levels of marine

				invertebrates and important levels of seabirds.
Brook Meadow (Emsworth)	3,285m east	LNR	132.47	Grassland, woodland and two streams with water voles present.
Farlington Marshes	3,330m west	LNR	119.68	Flower-rich grazing marsh with internationally important bird populations.
Eames Farm	4,000m south east	LNR	3.94	Coastal grazing marsh with important plants and birds.
Solent and Isle of Wight Lagoons	4,740m south west	SAC	38.06	Designated for Annex I habitat, coastal lagoons, with high densities of <i>N. Vectensis</i> .
Hazelton Common	4,760m north west	LNR	17.45	Grassland with mature trees, pond with great crested newts. Supports stonechats and is important for its invertebrates.

The new design will increase the number of housing units within the site which will increase the recreational impact upon the Solent Special Protection Areas. A financial contribution in the form of a section 106 agreement will be undertaken in accordance with the Interim Solent Recreation Mitigation Strategy at a cost of £172 per increased unit.

Protected species of interest

HBIC was used to identify the protected species within 2km of the site.

Species	Number of records	Most recent record	Closest record
Soprano pipistrelle	110	2016	225m south
Noctule bat	51	2016	231m north west
Serotine bat	73	2016	231m north west
Common pipistrelle	149	2016	231m north west
Pipistrelle bat sp.	64	2015	275m south west
Nathusius pipistrelle bat	3	2016	520m north west
Whiskered/brandt's bat	1	2001	800m north west
Myotis sp.	28	2016	800m west
Brown long-eared bat	7	2013	980m south west
Natterer's bat	3	2009	1380m south
Leisler's bat	8	2013	1500m north east
Daubenton's bat	4	2016	1840m south

Long-eared bat	3	2012	2060m north east
Bechstein's bat	1	2009	2300m north east

Phase 1 habitat survey

The phase 1 habitat survey was undertaken by Becci Smith and Phil Smith on the 9th March 2017. A phase 1 habitat map has been presented in Appendix 4. The site comprises a public house, an associated car park and road, amenity grassland, tall ruderal and scattered trees with a number of felled conifer trees. These habitats have been described below with a number of abundant species included.

Amenity grassland

The amenity grassland is utilised as a beer garden to the pub and is present as boundaries to the car park. The amenity grassland is well maintained and mown. Species include locally dominant perennial rye-grass and annual meadow-grass, locally abundant rough meadow-grass, locally frequent to occasional white clover and creeping buttercup and locally occasional Spanish bluebell.

Tall ruderal

The tall ruderal is present on the east of the site along the rear road access to the site and within the small parking area behind the Curlew pub. The area running along the rear road previously supported a number of conifer trees, these have been felled and are now piled densely on top of the tall ruderal. Species present include dominant bramble, abundant common nettle, locally frequent Yorkshire-fog and ribwort plantain and locally occasional red-dead nettle.

Hardstanding

The hardstanding is present in the form of a car park and road areas allowing access through the centre of the site. The hardstanding has been slightly colonised around the hardstanding borders and around the building. Species present include locally frequent annual meadow-grass, locally frequent to occasional wavy biter-cress and common mouse-ear, occasional dandelion and groundsel.

Scattered trees

Trees are present within the beer garden and are maintained for ornamental purposes and include occasional ornamental flowering cherry, rare weeping willow and hawthorn.

External building descriptions

The Curlew pub is present in the centre of the site. The building was surveyed by Becci Smith and Phil Smith of Phil Smith Conservation Consultants which comprised both internal and external assessments of the building on the 9th March 2017. Photographs have been provided in Appendix 3 while the following was noted:

The Curlew pub

- The two storey pub was constructed from brick.
- The window and door frames were constructed from wood and uPVC.
- Wooden eaves were present.
- A single chimney was present.
- A metal vent was present on the ridge of the roof.
- The roof was pitched and 'L' shaped, it was constructed from metal.
- A number of single storey extensions were present on the east, west and southern elevations.
- The single storey extensions were constructed from brick and had flat bituminous felt present.
- The section of the roof running from south west to north east measured approximately 7 metres in width, 11 metres in length and 1.25m in height at the apex. The section of the roof running from north west to south east measured approximately 8 metres in length, 5 metres in width and 0.75m in height at the apex.
- Fibreglass insulation was present.
- A water tank was present.
- A wooden ridge beam and wooden 'truss' style beams were present.
- Mouse droppings were present.

Phase 1 bat survey

An internal search of the buildings was undertaken and no evidence of bats was recorded.

Assessment of the building for roosting potential and access points

The building was assessed as holding negligible potential due to the lack of access points. Roosting provisions are present within the building however without access no bats could roost here. No further surveys or recommendations have been made.

Bats in tree phase 1 survey

A single weeping willow was present in the south of the beer garden. A single fist sized hole was present within a flush cut on the southern side, a split was present on the underside of a limb on the northern elevation which measured approximately 12 inches long and a 50p sized hole was present within a flush cut on the northern side of the tree.

The weeping willow (as marked on the phase 1 habitat map in Appendix 4) has been assessed as holding moderate potential to support roosting bats. Should any works be required to the weeping willow further surveys will be required, however the tree will remain as part of the proposed development and so no further works have been recommended.

Badger

No evidence of badgers was recorded within the site.

Nesting birds

The southern wall provides a high boundary to the site which has become densely covered with ivy. The weeping willow tree had a number of holes, one of which was fist sized. Nesting birds could be present within this collection of nesting habitat.

Reptiles

An area of tall ruderal was present on the site which was densely covered with recently felled conifer trees. The areas of tall ruderal habitat observed by the ecologist had a sparse under layer, with predominantly common nettle and bramble on top. The tall ruderal was assessed as holding very little likelihood of supporting reptiles especially as the ruderal is isolated from suitable reptile habitat by roads and well managed grassland. The site as a whole has been assessed as unlikely to support reptiles and so no further recommendations have been made.

4. Conclusions and recommendations

Summary

The site is located within the 5.6km buffer zone of the Chichester and Langstone Harbours SPA.

The phase 1 bat survey revealed all of the buildings within the site held negligible potential to support roosting bats. However a weeping willow tree in the south of the site has been assessed as holding moderate potential to support roosting bats.

Habitat suitable for nesting birds has been identified within the site.

Appropriate ecological enhancements have been identified and listed below.

Chichester and Langstone Harbours SPA

The new design is within 2km of the Chichester and Langstone Harbours SPA. Increases in dwellings will result in an increase of visitor pressure which has negative impacts upon the protected habitats, flora and fauna. A financial contribution in the form of a section 106 agreement will be undertaken in accordance with the Interim Solent Recreation Mitigation Strategy at a cost of £172 per increased unit.

Bats in trees

A single weeping willow has been assessed as holding moderate potential to support roosting bats. The tree is being retained as part of the plans and so no further recommendations have been made. Should the plans change and the tree require any works then further bat surveys will be required.

Nesting birds

The weeping willow tree and the wall covered with dense ivy could support nesting birds.

- The weeping willow will only have work undertaken in line with the bat advice above.
- The dense ivy will be removed in the winter months when bird nesting has been completed. Between 1st September and 28th February is when nesting birds are not active.

- Should the removal of the dense ivy take place between the 1st March and 31st August then vegetation clearance will be undertaken by a suitably experienced ecologist. Where nesting birds are encountered where nesting is active, vegetation clearance must be postponed until the nestlings have fledged.

Ecological enhancements

Ecological enhancements have been made in line with the National Planning Policy Framework and are deemed to be appropriate to the individual site. The following enhancements will be incorporated into the new housing development:

- Provision of nest boxes for bird species such as great, blue or coal tits and house sparrows on the walls of the building or on nearby trees. A total of four Schwegler 1B bird boxes can be purchased from websites such as www.nhbs.com and www.wildcareshop.com, and their provision on site would replace that which was to be lost.
- Use of native shrubs and trees for landscaping schemes provides foraging habitat for a range of bird species and invertebrate species. Areas within the newly designed gardens will be planted with native species in particular fruit and nectar bearing trees, flowers and shrubs. The current cheery, oak and willow will be retained. Suggested species for planting include cherry, crab apple, apple, spindle, hazel and dog rose.
- Areas of the grasslands within the site will be oversown with wild flower seed mixes to ensure species diversity. This will provide nectar sources for invertebrates and ensure native species are retained within the site. Native seed mixes are available from www.wildseed.co.uk and the EM1 general purpose meadow mixture which includes a number of lawn species which do well with mowing, the mix includes 4 species of grasses and 9 species of flower.

References

Collins, J (ed) (2016). Bat Surveys for Professionals Ecologists: Good Practice Guidelines (3rd Edition). The Bat Conservation Trust, London.

Department for Communities and Local Government (2005). Circular 06/2005: Biodiversity and Geological Conservation – Statutory Obligations and their Impact within the Planning System.

Department for Communities and Local Government (2012). National Planning Policy Framework

Froglife (1999). Reptile surveys. An introduction to planning, conducting and interpreting surveys for snake and lizard conservation. (Advice Sheet 10).

Hampshire Bat Group (2017), Bat data report.

Joint Nature Conservation Committee (2010). Handbook for Phase I Habitat Survey. JNCC

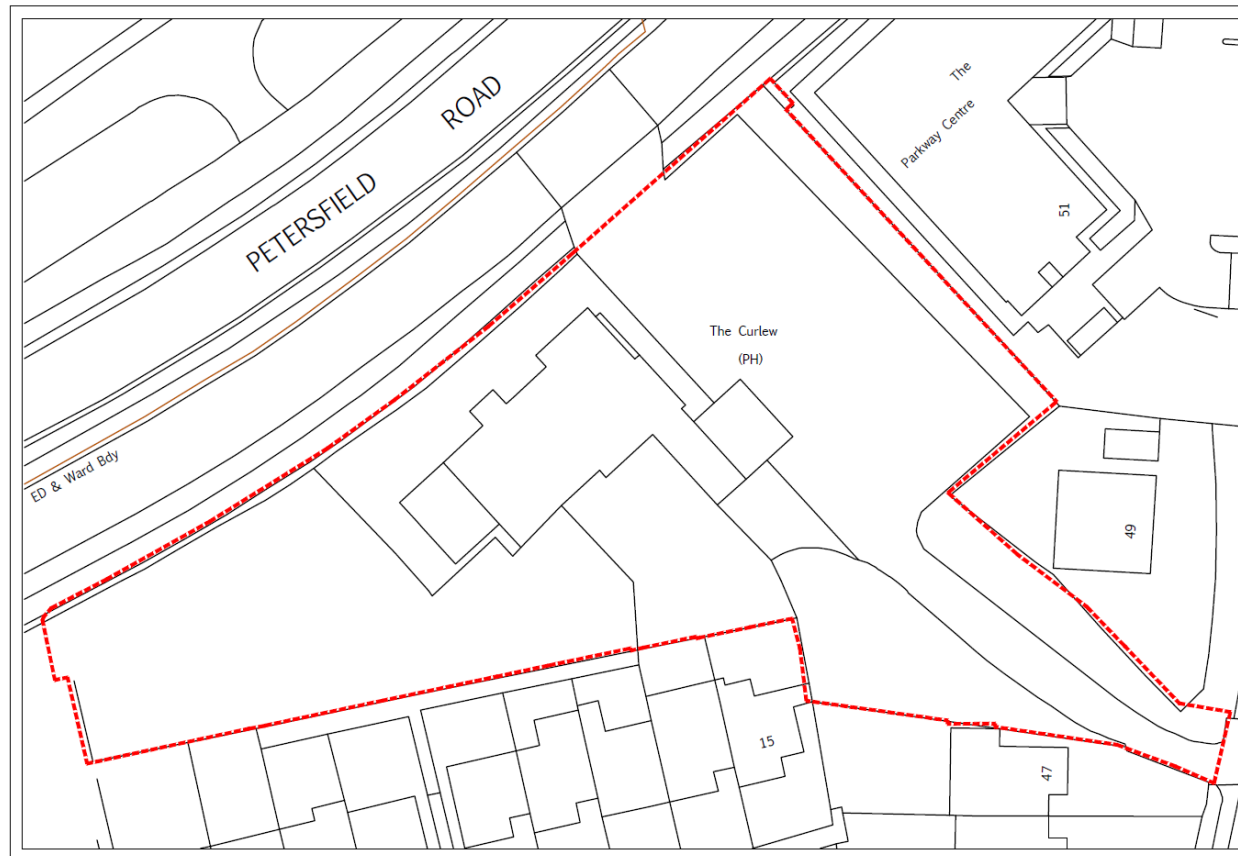
Miller, H. (ed.) (2016) Bat Care Guidelines (2nd edn). The Bat Conservation Trust, London.

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

Mitchell-Jones A.J. & McLeish A.P. (2004). The Bat Workers' Manual (3rd Edition) Joint Nature Conservation Committee

Solent Recreation Mitigation Partnership (2014). Interim Solent Recreation Mitigation Strategy. Solent Recreation Mitigation Strategy available at <http://www.push.gov.uk/env-srmp-interim-mitigation-strategy.pdf>

Appendix 1 Existing site plan



BLOCK PLAN: BASED ON ORDNANCE SURVEY EXTRACT
O.S LICENSE NO. 100007080
SCALE 1:500

Appendix 2 Proposed plans



Appendix 3 Photographs of the site



Photograph 1: Eastern elevation



Photograph 2: Western elevation



Photograph 3: Southern elevation



Photograph 4: Hardstanding



Photograph 5: Southern wall with dense ivy



Photograph 6: Amenity grassland

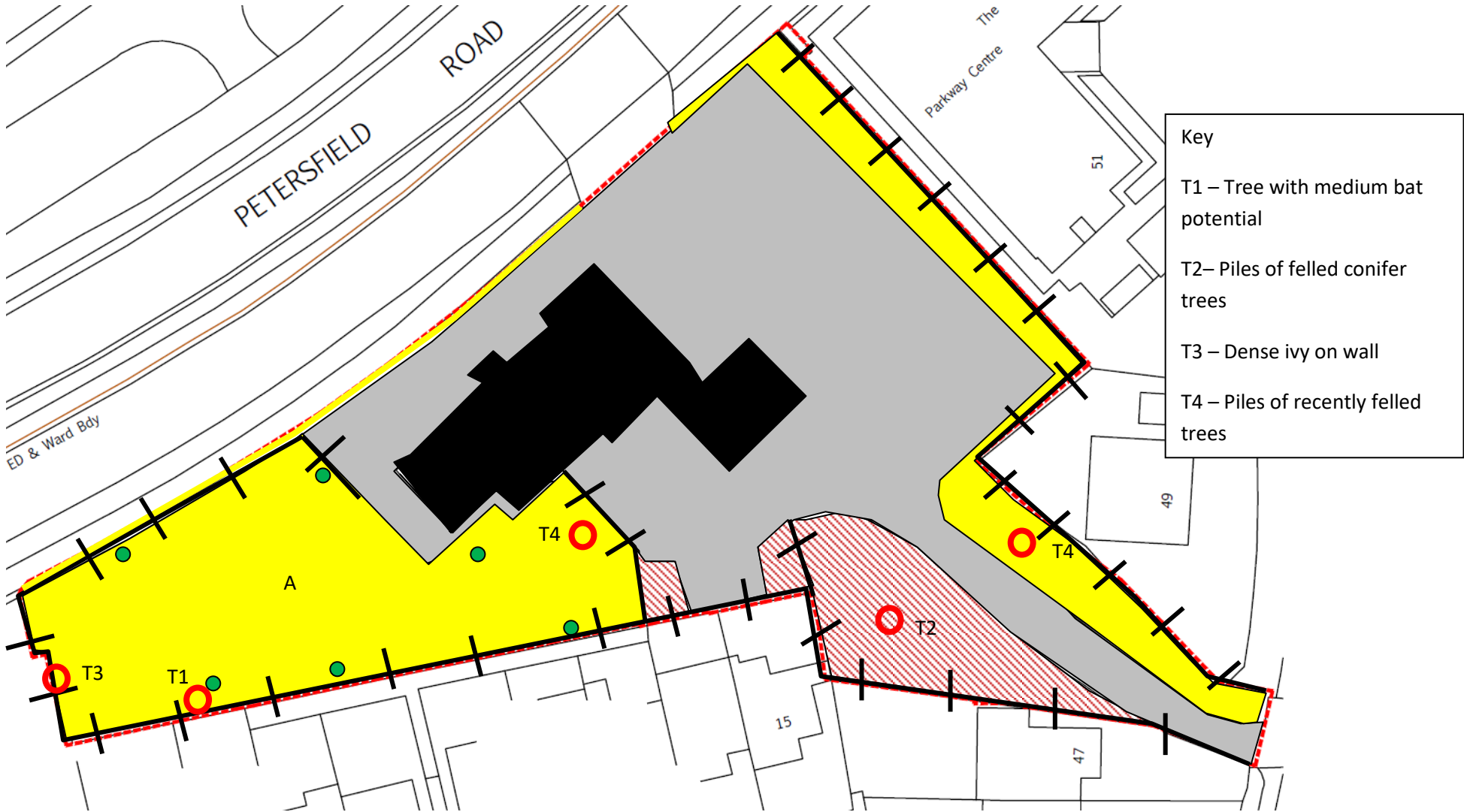


Photograph 7: Pile of felled conifer trees



Photograph 8: Weeping willow with bat potential

Appendix 4: Phase 1 habitat map



Phase 1 habitat map guide

Habitat type	Habitat map symbol
Hardstanding	
Amenity grassland	
Tall ruderal	
Fence	
Scattered trees	
Building	
Target note	