Re: Barn at Plex Farm, Buxton.

Access Ecology Ltd undertook a Phase 1 habitat survey and bat survey assessment of the above. The assessment took place on the 18th - 22nd July 2013. A full report including the results of consultations with Derbyshire Wildlife Trust and Derbyshire Bat Group will be submitted in due course, however due to the time constraints on the proposed development this summary email has been requested.

Phase 1 habitat survey
Three habitat types were recorded on within the proposed work area; Tall ruderal, scattered trees and partially re-vegetated hard standing.
All of the habitats identified were found to be common and lacking in floristic diversity and as a result were deemed as being of low ecological value.

Bat survey assessment
Jon Goodrick, Ecologist (Class 2 bat licence ref: CL S0 652) and Johnny Mobbs, Assistant Ecologist undertook the assessment. The bat survey assessment was split into four parts; an internal and external visual assessment of the building; a Dusk emergence survey; Dawn return survey; and a remote Anabat survey. The surveys were undertaken during a period of suitable weather conditions (i.e. temperatures above 10^0C, little wind and no rain).

<u>Ground based risk assessment of trees</u>
The three trees scheduled for removal were assessed for their potential to support roosting bats. Following the assessment the trees were assessed as having two trees were assesses as having low or whist the third was assessed as having negligible potential for roosting bats.

<u>Internal and external visual assessment of the barn</u>
The survey was undertaken using the standard methodology recommended by the Bat Conservation Trust within *Bat Surveys: good practice guidelines* (Hundt, 2012). A full summary of the methodology used, building plans and photographs will be submitted within the final report.

The barn is a traditional two storey stone built barn, the buildings original roof has been replaced with a modern dual pitch concrete tile roof supported by modern machined timbers. The roof is also lined with bitumen underfelt. The stonework would suggest an original construction date within the mid-late 19th century, but the building has been modified at later dates to integrate a number of stables.

The building's exterior is in a well maintained state with the majority of the pointing and tiling intact. There are gaps under the eaves of the roof on the east and west sides which in areas exposes the internal bitumen lining. Further potential access points are provided by the stable doors of which the upper portion is left open for much of the year.

Internally, the building is split into two floors although the upper floor is a partial mezzanine with a large open area allowing access between the upper storey and ground floor. The timbers and roof structure are in good condition with no obvious damage or splits in the timbers and the bitumen felt lining intact. The walls of the building display some evidence of cracking and include a number of crevices although these for the most part are cobweb filled. The internal walls also include a number of the original timber lintels which provide potentially suitable crevices for bats in the form gaps around the lintel and splits within the timbers.

No evidence of bat activity was found during the internal and external inspection.

Dusk emergence survey (18th July 2013) Start 21:15 Sunset 21:30 Finish 23:00

The survey was undertaken using the standard methodology recommended by the Bat Conservation Trust within *Bat Surveys: good practice guidelines* (Hundt, 2012). A full summary of the methodology used and activity plans will be submitted within the final report.

Both surveyors were equipped with Batbox Duet detectors. One surveyor (Jon Goodrick) was positioned on the west side of the building, between the building and surrounding trees, observing the western aspect of the building and southern gable. The second surveyor (Johnny Mobbs) was positioned to the North east of the building to allow an unrestricted view of the northern gable, and eastern wall and roof.

Extensive foraging activity was recorded by both surveyors during the survey with up to four bats observed at any one time. At least two species were recorded during the survey with common pipistrelle bats and *Myotis* sp. bats observed. The majority of the activity on site was attributable to common pipistrelle bats. The first bat recorded was a common pipistrelle bat at 21:49 heard but not observed by Jon Goodrick. The activity was recorded almost constantly from this point until 22:56. The first visual record of a bat was a single pipistrelle seen commuting along trees lining the public footpath adjacent to the northern gable of the building by Johnny Mobbs at 21:54. Further bats were observed; foraging between the trees and building to the west of the building between 21:54 and 22:30 (>4 common pipistrelle) and at 22:45 (*Myotis* sp.); Foraging around the north eastern corner of the building between 22.00 and 22.20 (Common pipistrelle); and foraging along the eastern face of the building 22:01 (Common pipistrelle).

No roosting activity was recorded during this survey.

Dawn return (23rd July 2013) Start 03:38 Sunrise 05:08 Finish 05:08

The survey was undertaken using the standard methodology recommended by the Bat Conservation Trust within *Bat Surveys: good practice guidelines* (Hundt, 2012). A full summary of the methodology used and activity plans will be submitted within the final report.

Both surveyors were equipped with Batbox Duet detectors. One surveyor (Jon Goodrick) was positioned on the west side of the building, between the building and surrounding trees, observing the western aspect of the building and southern gable. The second surveyor (Johnny Mobbs) was positioned to the North east of the building to allow an unrestricted view of the northern gable, and eastern wall and roof.

Extensive foraging activity was recorded by both surveyors during the survey with up to four bats observed at any one time. All of the activity recorded on site was attributable to common pipistrelle bats. Foraging activity was recorded around the building constantly from 03:52 until 04.43 with up to 4 bats recorded at one time. The last bat recorded was a common pipistrelle bat at 04:43 observed by Jon Goodrick foraging between the barn and trees to the west. The bat was observed to fly beyond the trees to the North before disappearing from view.

No roosting activity was recorded during this survey.

Remote Anabat survey

A single Anabat was placed within the northern roof space during the dawn survey on 23rd July 2013. The Anabat was placed facing towards the southern gable wall.

2 recordings were made by the Anabat recorded within the roof. All of the recordings corresponded with pipistrelle sp. (one was definable to common pipistrelle *Pipistrellus pipistrellus*). All of the recordings made were brief and muffled suggesting they were of bats flying close to the building externally rather than bats flying within the building. This is further reinforced by the timing of the calls with the latest recording made at 04:12 approximately 56 minutes prior to sunset. The remaining call was recorded at 04:00. The calls recorded all correspond with in flight calls, no social calls or roost "chirping" was recorded.

The activity recorded during the remote survey does not suggest the presence of a roost.

Interpretation of results

Habitats

All of the habitats identified within the proposed work area were deemed to be of limited ecological vaue.

Bats

The results of the survey assessment do not suggest the presence of a roost on site. No evidence of roosting activity was recorded during any of the surveys although extensive foraging activity was recorded surrounding the building.

Birds

A small number of swallow nests were noted within the barn.

Conclusions

Habitats
No further survey is required.

Bats
As the site is not considered to be a roost site, a Natural England Licence for development is not required in order for the tree felling and barn conversion to continue.

However, as bats area a highly mobile species and will change roost site readily it is recommend that in line with good practice the proposed conversion of the building and tree felling be carried out under the control of the following reasonable avoidance measure.

- <!--[if !supportLists]--><!--[endif]-->If bats are found at any point during the conversion of the barn or tree felling, works should be suspended and Access Ecology Ltd contacted immediately.

To enhance the ecological value of the site and in accordance with the aims of The National Planning Policy Framework, it is suggested that the developer may wish to include suitable features for roosting bats within the converted building and new stable block. Such features could include roof boxes or wall boxes. The entrance points to these roost locations should be carefully placed to avoid areas of artificial lighting.

In addition as the site has been shown to provide a substantial foraging resource any landscaping for the final building should include suitable night flowering species.

Nesting birds
As the current building includes nesting features for swallows which will be lost when the building is converted it is recommended that the converted building and new stable block be fitted with suitable replacement nesting features.