The St Lawrence Academy, Scunthorpe

BAT INVESTIGATION SURVEY REPORT

For

NPS North West Ltd
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Compiled by Ecology Services Ltd
Members of the Institute of Ecology and Environmental Management

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1.0 INTRODUCTION

1.1 Ecology Services Limited was commissioned by NPS North West Limited in during February 2010, to carry out a bat investigation at St Lawrence Academy, Doncaster Road, Scunthorpe.

1.2 The bat investigation survey is required to establish the potential presence of a bat roost/s at The St Lawrence Academy, as the site is to be subject to demolition and a new school development.

1.3 A daytime inspection was undertaken to assess structures in relation to bats on the 16th of February 2010. The aim of the survey was to ascertain if the buildings contained potential for a bat roosts and if evidence of use was present. Should evidence of bats be located then a scheme for the protection of them and their roosts would need to be implemented, which could involve the requirement for a European Protected Species Licence to be in place, where bats or their roosts would be affected.

1.4 All daytime survey works were undertaken by an experienced bat ecologist under supervision of Mr S Irwin, who holds a Natural England Scientific and Education Licence.

2.0 STATUTORY AND PLANNING CONTEXT

Bats and their Requirements

2.1 All British bats and their roosts are afforded protection under the 1981 Wildlife & Countryside Act (as amended) and are listed under Annex IV of the Habitats Directive as in need of protection. When dealing with cases where a European Protected Species (all UK bats) may be affected, a planning authority is a competent authority within the meaning of regulation 6 of the Habitats Directive, and therefore has a statutory duty under regulation 3(4) to have due regard to the requirements of the Habitats Regulation in the exercise of its functions. Therefore the Directive's provisions are clearly relevant in reaching planning decisions and these should be made in a manner which takes them fully into account.

2.2 Guidance is contained in Planning Policy Statement 9 (PPS9) on the consideration that should be given to Protected Species where they may be affected by development. PPS9 'Building in Biodiversity paragraphs 5.34 & 5.35 identifies that bats are highly dependant upon built structures and new developments/conversions can take account of this by incorporating roosts into such structures. Furthermore where a European protected species are affected by development then a licence to derogate from the Habitats Directive, 1994 Regulations would be required. Licence applications are processed and issued by Natural England subject to three tests being met one of which is that the action proposed '*will not be detrimental to the maintenance of the population of the species concerned at a favourable conservation status within their natural range'*.

2.3 A bat roost may be defined in several ways:

a) Summer breeding roost.
b) Hibernation roost.
c) Transitional or temporary roost.

2.4 Roost selection is often closely correlated, to suitable foraging habitat within a reasonable commuting distance from the roost. Different sites are used

throughout their active season which is dependent upon insect densities and abundance. Climatic conditions can also affect their ability to successfully forage. All British bats are insectivorous.

2.5 Most bat species use buildings as roost sites or temporary shelter. The two main roost types encountered in buildings/structures are;

a) Breeding roosts – early May to late August,
b) Hibernation roost – October to April.

2.6 Bats do not cause damage to the buildings/structures that they use. Hibernating bats using buildings are normally found in small numbers, as opposed to greater numbers, in a breeding roost. Contractors should be aware of the differential.

3.0 SURVEY METHODS

3.1 The optimum period to investigate buildings for evidence of a bat roost is May to August. However, that is not to say they can not be inspected and assessed outside of that time period. Frequently the results from a building inspection can be conclusive, which can save time and expense for Planning Applicants. It should be borne in mind that equally the inspection can be inconclusive. If bat roost potential was found of potential was found to be medium to high or the results of the survey were inconclusive then recommendations would indicate the requirement for nocturnal/dawn observation surveys to be undertaken at the site during the breeding season of bats (May – August).

3.2 The buildings inspection survey was conducted on the 16th of February 2010 at which time bats will be in their hibernation season, which is not the optimum time to investigate buildings for evidence of bat use. However the buildings could be adequately assessed using surveyor experience and knowledge of bat ecology, and a detailed search of the loft space was undertaken, therefore for the reason of timing of the survey is not considered to be a significant constraint. Exterior elevations were investigated, with the aid of close focussing binoculars, for places that are frequently used by bats as roosts or as access points into roost chambers.

3.3 During the buildings inspection survey, the surrounding area was assessed in relation to suitable habitat that may be of value to bats.

4.0 SURVEY RESULTS

4.1 The St Lawrence Academy is situated on the outskirts of Scunthorpe amid a mainly built up area dominated by residential dwellings. Although at approximately 0.5 kilometre to the west of the site there is habitat by way of tree lines and open green space that will be of benefit for foraging bats, notably Pipistrelle, (*Pipistrellus*), which is the most frequently encountered bat species in urban environments. Additionally residential gardens and tree lined roads will also provide foraging opportunities for the same species. Where such habitat is close to buildings, then the percentage use of those buildings by bats will increase given that roost potential is present.

4.2 Three large buildings are present within the site and consist of the main school, a sports hall and a garage/equipment/machinery storage building. The school building is traditionally constructed in brick, with a hipped slate roof and overall is in good condition, whilst the other two buildings are modern pre-fabricated structures with a flat and semi curved roofs.

4.3 Throughout the entire roof of the school building, large loft spaces are evident; they are of dimensions that would be suitable for loft dwelling bats; typically Brown Long Eared (*Plecotus auritus*). However, no evidence was found that would suggest the recent or historic presence of this or any other bat species.

4.4 Whilst undertaking the search of the loft it was noted that underfelt or sarking boards are absent beneath the roof slates, which will significantly reduce potential for crevice dwelling bats such as Pipistrelle, whereby they often roost between the two materials. The sports hall and the garage/equipment building offer no opportunities for roosting bats whatsoever.

4.5 The external investigation found that gaps which bats often use at soffit, barge or fascia boards are absent, which will further reduce bat roost potential. However at ridge tiles there are a number of places where bats could access the space beneath. Due to the time of year the presence of droppings is highly unlikely on external elevations, but from the inspection, roost potential is considered not to be sufficiently high enough to instigate nocturnal obseravtions over the breeding season.

5.0 CONCLUSION

5.1 From the survey results it can be concluded that although the loft spaces at the main building of St Lawrence Academy are suitable for loft dwelling bats, they show no evidence of use and the immediate habitat is not entirely suited to their specific foraging requirements. Furthermore it can also be concluded that the potential for bat use is low and on this basis nocturnal observations will not be recommended.

5.2 The two remaining buildings the sports hall or the garage/equipment storage buildings are considered to be of no value to roosting bats.

5.3 Despite roost potential being low, precautionary procedures are always advisable where some opportunities for roosting bats exist in association with suitable foraging habitat.

6.0 IMPLICATIONS AND RECOMMENDATIONS

6.1 From the results of the survey, it can further be concluded that based on the inspection, there are no apparent implications in relation to bats that would prevent the proposed re-development proceeding, and thus will not result in the loss of high value bat roost potential.

6.2 No evidence of bats or potential bat roosting habitat was found at this site, using the survey methods described above. Therefore, there are no apparent implications for development with regards to bats.

6.3 However, although no evidence of bats was found and roost potential is low, it is recommended that before any demolition work is conducted at the main school building, that the ridge tiles, where some potential for bats was identified, should be removed in a careful manner under the supervision of a bat licensed ecologist. It would be beneficial to undertake the removal of ridge tiles during April or September when bats are out of hibernation and not within their breeding season.

6.4 In relation to bats there are no implications or restrictions at the sports hall or the garage/equipment storage building.

6.5 If bats or evidence of a roost is suspected or discovered during this time then it is probable that a European Protected Species (EPS) licence will be required. The decision to apply for a licence would be depend upon whether or not the proposed work would result in the likelihood of an offence being committed and guidance on this matter would generally be provided by a bat ecologist.

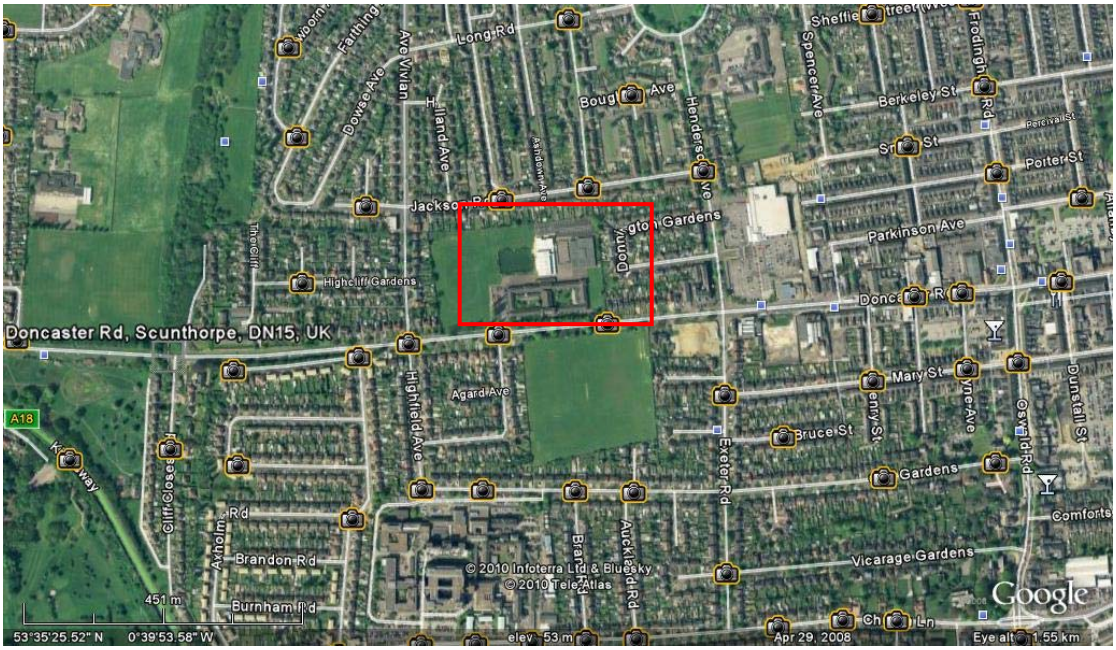
6.6 Furthermore, if evidence of a roost was found, it is probable that there would be time implications in relation to the work commencing, as nocturnal/dawn surveys would be required to gather specific information for a licence application. The surveys would need to be undertaken over the breeding season, which is May – August. Several visits are usually required as bats, particularly Pipistrelle, often have more than one roost and do not necessarily occupy a single roost over the entire breeding season.

6.7 Contractors should adopt a standard awareness of the possible presence of undetected singular or small numbers of bats, which often use buildings at anytime of the year. If **bats are found or suspected** of being present then, as a legal requirement work should cease and further advice sought from either Natural England of the consultant.

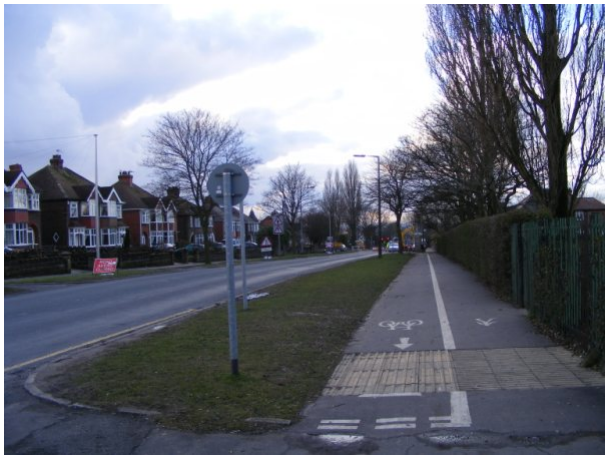
6.8 As a level of bat roost potential exists and will be lost to re-development it is recommended that roost provision for crevice dwelling bats is incorporated into new build.

PHOTOGRAPHS

Site Photographs

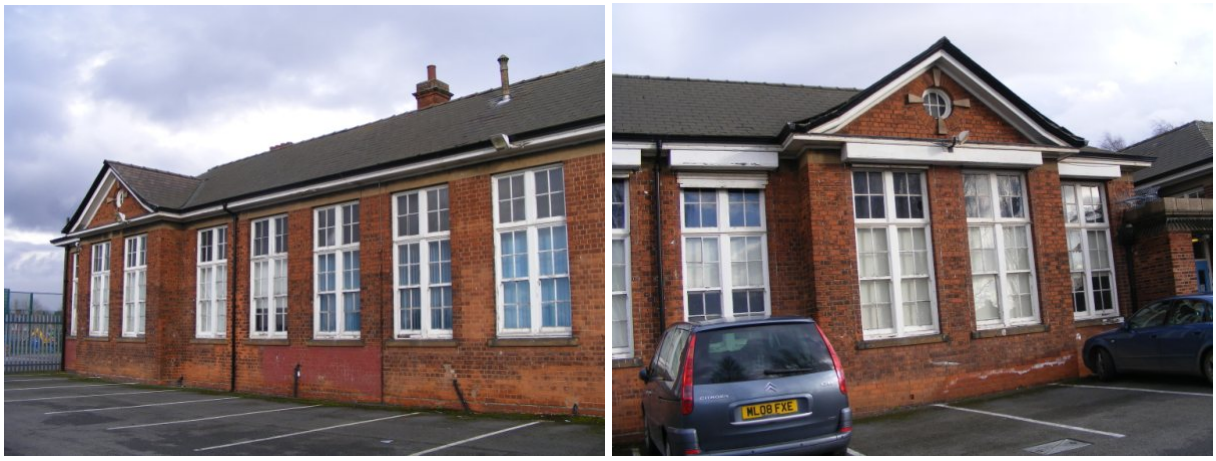


Location of The St Lawrence Academy

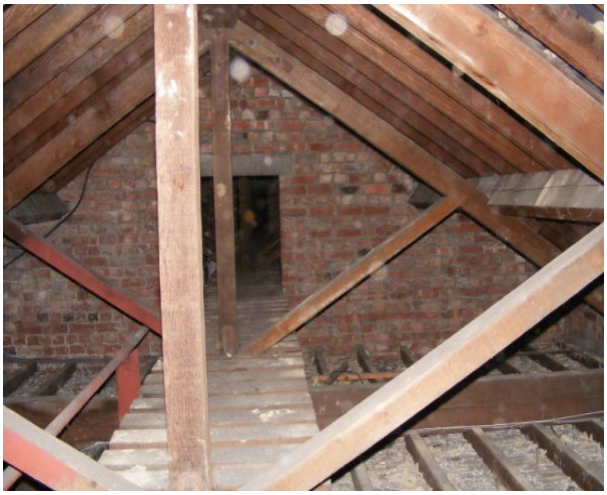


Typical Street Scene

Building Frontage



School Elevations



Section of Loft Space