Bat Report

Proposed Development at Kingswood Drive and Kingswood Road, within the Citywest Business Campus, Naas Road, Dublin 24

21 June 2022

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1 Introduction

1.1 Background to the assessment

In 2018, Citywest Ltd was granted planning permission for a two-storey data centre and associated works (under Reg. Ref.: SD18A/0301). Planning conditions regarding bats were stipulated, as follows:

2 (d): Prior to the commencement of development the applicant shall submit a physical bat assessment report conducted between the months of April - September clearly outlining if there is bat value on the proposed site. This shall be conducted by an independent, suitably qualified ecologist. If bats are found on the proposed site or in the near vicinity the applicant shall follow all recommendations by the ecologist and retain the services of the ecologist during the construction period, all findings shall be submitted to SDCC and agreed with SDCC Public Realm Section

2 (e): Prior to the commencement of development the applicant shall submit an appropriate detailed lighting plan for bats, which will include 'bat-sensitive' lighting proposals

3 (c): Five bat boxes will be installed at locations agreed and supervised by a qualified bat specialist. A three-year bat monitoring programme shall also be undertaken by a qualified and experienced bat expert with yearly reports submitted to the Council's Heritage Officer.

K2 Strategic Infrastructure Ireland Ltd. intend to apply for amendments to the development permitted under Reg. Ref.: SD18A/0301. In preparation for amendment planning application and to address the aforementioned planning conditions, NM Ecology Ltd. was commissioned to carry out a bat survey of the site, and to advise K2 Strategic Infrastructure Ireland Ltd. on measures to comply with the planning conditions.

1.2 Statement of authority

All surveying and reporting was carried out by Nick Marchant, the principal ecologist of NM Ecology Ltd. He has fifteen years of professional experience, including eleven years as an ecological consultant, one year as a local authority biodiversity officer, and two years managing an NGO in Indonesia.

He has an MSc in Ecosystem Conservation and Landscape Management from NUI Galway and a BSc in Environmental Science from Queens University Belfast. He is a member of the Chartered Institute of Ecology and Environmental Management, and operates in accordance with their code of professional conduct.

1.3 Conservation and legal status of bats in Ireland

Bats are common and widespread throughout Ireland, particularly in areas with woodland and water. In the red list of terrestrial mammal species (Marnell et al 2019[1]), all Irish bat species are listed as 'least concern', which means that they are "*widespread and common*" and "*do not qualify for Critically Endangered, Endangered, Vulnerable or Near Threatened status*" under IUCN criteria.

Nonetheless, in recognition of their vulnerability to development, all bats are afforded strict legal protection. Under the *European Communities (Birds and Natural Habitats) Regulations 2011* (as amended) it is an offence to kill any protected animal, deliberately disturb them during breeding, rearing, hibernation or migration, or to damage / destroy a breeding site or resting place. Bats are also protected by the *Wildlife Act 1976* (as amended).

1.4 Methods

Bat surveying techniques

Survey methods were developed using *Bat Surveys for Professional Ecologists: Good Practice Guidelines*[2]. The site was inspected during daylight to assess the suitability of the habitat for bats, and to identify any potential roost features in trees or buildings.

After sunset, a transect survey of the site was carried out, which involved a continuous walk at a slow pace throughout the site, recording bats using a handheld detector (Anabat Walkabout, Titley Scientific Inc). The transect route covered all boundaries of the site, the margins of the scrub (which was too dense to access), and the grassland in the west of the site. The transect took approx. 30 minutes, and was repeated on two occasions: one immediately after sunset, and a second approximately one hour after sunset.

No potential bat roosts were found within the site boundary, so an emergence / re-entry survey was not considered necessary.

The survey was undertaken on the 18th of June 2022, which was during the peak season of bat activity, and coincided with the maternity period, i.e. the birth and raising of offspring. Weather conditions at the time of survey were ideal for bats, with warm temperatures, light winds and no rain.

[1] Marnell, F., Looney, D. & Lawton, C.(2019) Ireland Red List No. 12: Terrestrial Mammals. National Parks and Wildlife Service, Department of the Culture, Heritage and the Gaeltacht, Dublin, Ireland.
[2] Collins, J. (ed.) (2016). *Bat surveys for professional ecologists: good practice guidelines* (3rd edn). The Bat Conservation Trust, London

2 Development proposals

2.1 Baseline description of the site

The site is located in a suburban setting in the south-west of Dublin City. It is part of the Citywest Business Campus, which is an industrial / commercial estate on the margins of Dublin City.

The western half of the site is classified as dry meadow habitat, and the eastern half is classified as scrub / immature woodland. There is a former agricultural hedgerow along the eastern boundary of the site, and a treeline along the southern boundary.

2.2 Description of the proposed development

The proposed development is described as follows:

> Amendments to the development permitted under Reg. Ref.: SD18A/0301. The proposed amendments include alterations to the permitted two storey data centre building, associated alterations to the facade, provision of a canopy over the loading docks, alterations to the generator compound, generators and flues, provision of an ESB substation compound and all associated and ancillary works.

The development will require the clearance of all dry meadow, scrub and hedgerow habitat, but the treeline on the southern boundary will be retained.

3 Survey Results

3.1 Habitat suitability for foraging / commuting bats

The preferred foraging habitats for bats are woodland, hedgerows / treelines and lakes / rivers. The scrub, hedgerow and treeline in the east and south of the site would represent suitable habitat in this regard. There is currently no artificial lighting within the site boundary.

Bats must 'commute' through suitable habitat to reach their foraging areas, so it is also important to consider the landscape surrounding a site (Figure 1). In particular, it is important to consider artificial lighting, because most bat species avoid brightly lit areas. This is a key issue for the proposed development site, because there are roads lined with streetlights on the northern (Kingswood Drive) and western (Kingswood Road) boundaries of the site, and security lighting at the KAL Group development to the south of the site. Most other land to the north, west and south of the site also has artificial lighting.

Therefore, at present the only land without artificial lighting in the immediate vicinity of the site is the plot immediately to the east. However, planning permission has been granted for four warehouse / industrial buildings on this land (planning reference SD21A/0150), and at the time

of survey (June 2022) the development was under construction. All vegetation adjoining the site had been cleared. It is assumed that artificial lighting will be installed around the exterior of the warehouse / industrial buildings, which would mean that the proposed development site is enclosed by artificial lighting on all sides.

On this basis, we consider the proposed development site to be a fragment of suitable habitat surrounded by habitat that is broadly unsuitable for bats. This substantially reduces the likelihood that any bats could reach the site.

Figure 1. Habitats in the surrounding area. The proposed development site is marked with an indicative red outline. Roads and other existing developments are located to the north, west and south, and an active construction site is located to the east

3.2 Habitat suitability for roosting bats

All trees with the site boundary are immature or semi-mature, with a maximum height of approx. 10 m. None have any crevices or cavities that would be suitable for roosting bats. There are no buildings or any other potential roost features within the site boundary. Therefore, the site has negligible suitability for roosting bats.

Figure 2	Bat Transect Survey
Location	Kingswood Road, Citywest
Applicant	Citywest Ltd
Date	21 Jun 2022

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Legend

- Proposed development site
- Transect route
- Leisler's bat pass

NM ECOLOGY

0 20 40 60 80 100 m

3.3 Results of bat survey

A transect survey was carried out on 18 June 2022, using the methods outlined in Section 1.4. It was within the ideal survey season for bats, and in ideal weather conditions. A map of the survey route and bat records is provided in Figure 2.

Only a single bat was encountered during the survey: a Leisler's bat in the centre of the site. It was recorded in full darkness, so the bat was not seen. However, Leisler's bats typically fly in open air at heights of 10 – 30 m above ground level, and they rarely feed in proximity to hedgerows / treelines or other related habitats. On this basis, we assume that the Leisler's bat was foraging high above the site and surrounding area, and had little association with the site.

No other bat activity was recorded anywhere else in the site. Streetlighting was observed along Kingswood Drive on the northern boundary of the site, Kingswood Road on the western boundary of the site, and security lighting was observed in the KAL Group property to the south of the site. As noted in Section 3.1, this reduces the likelihood that bats will reach the site.

4 Conclusions and Recommendations

Only a single bat was recorded, a Leisler's bat foraging in open air above the site. Considering that the site contains some habitats suitable for bats (hedgerows, treelines, scrub), it is notable that widespread bat species such as common pipistrelle or soprano pipistrelle were not recorded. This suggests that the site and surrounding area have low suitability for foraging bats.

Planning Condition 2(d) for the development is as follows: "*Prior to the commencement of development the applicant shall submit a physical bat assessment report conducted between the months of April - September clearly outlining if there is bat value on the proposed site*". Based on the results of our survey in June 2022 we conclude that there is negligible bat value at the site.

Bat sensitive lighting will be implemented as per Planning Condition 2(e). Five bat boxes will be installed within the site, as per Planning 3(c). Most trees on the southern boundary of the site will be retained, so the bat boxes should be installed at these locations. However, most trees in this area are relatively small, and have abundant growth of branches near ground level, so there are relatively few suitable locations for the bat boxes. A poplar in the centre of the treeline looks most suitable, but it may be necessary to remove some branches in order to provide a clear space for bats to enter and exit the boxes. NM Ecology Ltd will advise on suitable locations for the bat boxes when the construction of the proposed development is complete.

A three-year bat monitoring programme will be implemented, as required under Planning Condition 3(c). However, based on the results of the survey in 2022, it is considered unlikely that significant bat activity will be recorded.