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BAT SURVEY REPORT

for

PROPOSED EXTENSION OF EXISTING PIG FARM

GRAIGUE

BALLINAKILL

CO. LAOIS

On behalf of

Tuleka Trading Company

SEPTEMBER 2024

TABLE OF CONTENTS

DOCUMENT CONTROL

Revision No.	Date	Note	Author
F1	25/09/2024	Final for Planning	DW

1 INTRODUCTION

Gannon + Associates were commissioned by Tuleka Trading Company to carry out bat survey works in regards to the proposed extension of the existing pig farm at Graigue, Ballinakill, Co. Laois (planning ref. no.: 24/60311).

The proposed development site encompasses an existing pig farm and part of an agricultural field to the east. The proposed development broadly comprises the construction of five modern animal house units, three feed silo's and associated works.

A further information request issued by Laois County Council in relation to the proposed development on 26/07/2024 included the following under Item 1(c):

> ***"Bat Survey***
>
> *The Planning Authority notes that a site assessment was undertaken on the 3rd November 2023 to examine the ecological context of the proposed development.*
>
> *The Planning Authority refers to the inconsistency in referencing to the removal of mature trees, hedgerows or treelines. The Planning Authority requests that the applicant revisits the assessment of bats, including undertaking a survey of bats during the optimal survey season.*
>
> *The conclusion of that assessment, and an assessment of the potential impact on bats with the proposed tree / hedgerow removal shall be submitted*."

The proposed development comprises the extension of an existing pig farm. There is no demolition of existing structures proposed. The only trees/hedgerows proposed for removal is a section of approximately 30m of existing hedgerow to the rear of the storage unit, east of the site entrance (see Figure 4 further below). As such, this section of hedgerow was the focus of the bat surveys and assessment.

FIGURE 1. SUBJECT HEDGEROW.

2 LEGISLATION

All bat species in Ireland, and their roost sites, are protected under the following national and international legislation:

- Wildlife Act (1976) & Wildlife (Amendment) Act 2000;

- EC Directive on the Conservation of Natural Habitats and of Wild Fauna and Flora (Directive 92/43/EEC), i.e. the 'Habitats Directive';
- The Convention on the Conservation of European Wildlife and Natural Habitats, i.e. the 'Berne Convention'; and
- The Convention on the Conservation of Migratory Species of Wild Animals, i.e. the 'Bonn Convention'.

Under Section 23 of the above listed Wildlife Acts (1976-2000) it is offence to wilfully interfere with or destroy the breeding or resting place of any bat species. The provisions of Section 23 state that it is an offence to:

- Intentionally kill, injure or take a bat;
- Possess or control any live or dead specimen or anything derived from a bat;
- Wilfully interfere with any structure or place used for breeding or resting by a bat; and
- Wilfully interfere with a bat while it is occupying a structure or place which it uses for that purpose.

In view of their sensitive status across Europe, all species of bat have been listed on Annex IV of the EC 'Habitats Directive' and some, such as the lesser horseshoe bat, are given further protection and listed on Annex II of this Directive. This Directive was transposed into Irish law as the European Communities (Natural Habitats) Regulations, 1997, and combined with the Wildlife Acts (1976-2016), ensures that individual bats and their breeding sites and resting places are fully protected.

A list of bat species known to occur in Ireland is given in Table 1. This includes nine resident species and two vagrant species, which have only been recorded on a single or handful of occasions in Ireland.

TABLE 1. STATUS AND DISTRIBUTION OF BAT SPECIES IN IRELAND.

Species	Conservation Status (NPWS, 2019)	Occurrence in Ireland	Distribution in Ireland (McAney, 2006)
Common Pipistrelle (*Pipistrellus pipistrellus*)	Favourable	Resident	Widespread
Soprano Pipistrelle (*Pipistrellus pygmaeus*)	Favourable	Resident	Widespread
Nathusius' Pipistrelle (*Pipistrellus nathusii*)	Unknown	Resident	Widespread
Leisler's Bat (*Nyctalus leisleri*)	Favourable	Resident	Widespread
Brown Long-eared Bat (*Plecotus auritus*)	Favourable	Resident	Widespread
Brandt's bat (*Myotis brandtii*)	Data deficient	Vagrant	Handful of records from counties Wicklow, Clare and Kerry
Daubenton's Bat (*Myotis daubentonii*)	Favourable	Resident	Widespread
Whiskered Bat (*Myotis mystacinus*)	Favourable	Resident	Widespread
Natterer's Bat (*Myotis nattereri*)	Favourable	Resident	Widespread
Greater Horseshoe Bat (*Rhinolophus ferrumequinum*)	n/a	Vagrant	One existing record from Co. Wexford
Lesser Horseshoe Bat (*Rhinolophus hipposideros*)	Inadequate	Resident	West of Ireland

3 METHODOLOGY

3.1 Field Surveys

3.1.1 Roost Inspection Survey

A roost inspection survey was carried out by a qualified ecologist with Gannon + Associates on 14th August 2024 of trees of the subject hedgerow within the proposed development site. The survey was carried out in-line with the best practice methods outlined in the Bat Conservation Trusts "*Bat Surveys for Professional Ecologists*", 4th edition (Collins, 2023). The survey involved a ground-level visual assessment of trees within the hedgerow. Trees were searched, using binoculars for magnification where necessary, for the presence of potential roost features (PRF). This was carried out with accordance to the methodology given in the *Bat Roosts in Trees* – (Bat Tree Habitat Key, 2018).

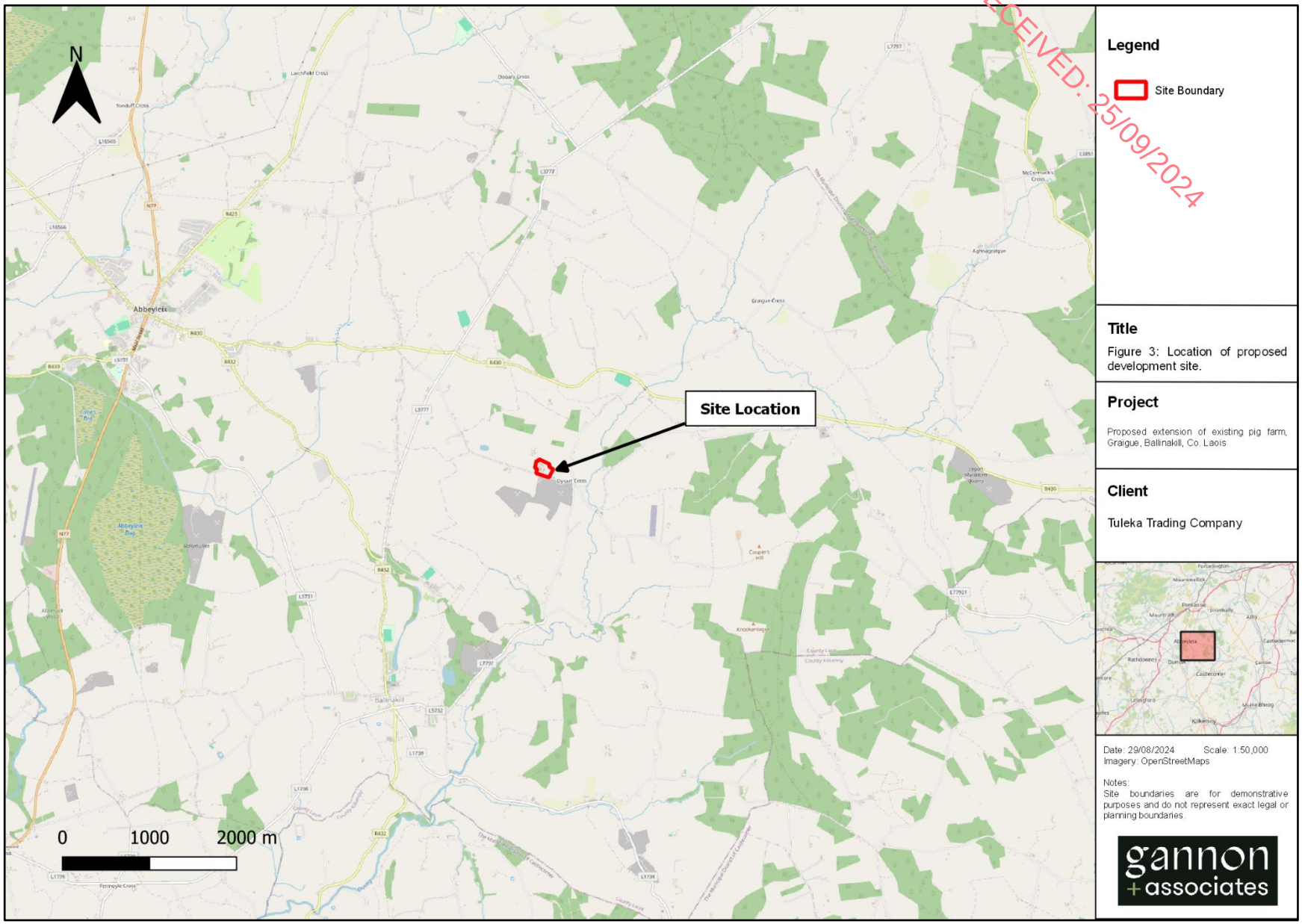
3.1.2 Emergence Survey

A dusk emergence survey was carried out on the subject trees within the proposed development site by Gannon + Associates on 14th August 2024 using direct observation and handheld bat detectors (both heterodyne and full-spectrum). The purpose of the emergence survey was to determine the presence of roosting bats in the trees via the direct detection of emerging bats post-sunset.

A high-sensitivity thermal imaging camera was also utilised as a survey aid, as per Fawcett Williams (2021). Thermal imaging significantly improves the detectability of bats emerging/re-entering roost sites, as the camera is not restricted by the available visible light. Footage was then reviewed following the survey to ensure no potential emergence was missed during the survey.

The survey followed the best practice methods outlined in the Bat Conservation Trusts "*Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th edition)*" (Collins, 2023). The survey commenced *c.*15 minutes prior to sunset and concluded *c.*2 hours post-sunset. Temperatures were mild, ranging from *c.*18 - 15°C with little wind and no precipitation. Any bats detected emerging from the subject trees were recorded on field sheets and maps, as was any general bat activity in the immediate area.

FIGURE 2. EXAMPLE OF THERMAL IMAGAGING CAMERA FOOTAGE SHOWING SUBJECT HEDGEROW.



Legend

Site Boundary

Subject Hedgerow

Title

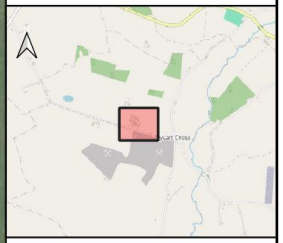
Figure 4: Existing layout of proposed development site.

Project

Proposed extension of existing pig farm, Graigue, Ballinakill, Co. Laois

Client

Tuleka Trading Company



Date: 29/08/2024 Scale: 1:1,500
Imagery: Google Satellite

Notes:
Site boundaries are for demonstrative purposes and do not represent exact legal or planning boundaries.

gannon + associates

4 RESULTS

4.1 Field Surveys

4.1.1 Roost Inspection Survey

The subject hedgerow is approximately 30m in length and comprises a mix of hawthorn, blackthorn, dog rose and elder. There is thick undergrowth of bramble and ivy, and the tree bases/trunks are similarly covered in thick ivy growth. No potential roost features were identified. This hedgerow, lacking any large mature trees and densely overgrown, is considered to be of Low-Negligible suitability for roosting bats.

FIGURE 5. SUBJECT HEDGEROW.

The surrounding habitat comprises agricultural grassland with boundary hedgerows to the east, and the existing pig farm to the west.

FIGURE 6. EXISTING PIG FARM AND AGRICULTURAL GRASSLAND BOUNDING SUBJECT HEDGEROW.

It is noted there is a derelict cottage and hay shed east of the proposed development site. The cottage is likely of Moderate suitability for roosting bats. However, this cottage is located outside of the proposed development site and screened by existing large mature trees.

FIGURE 7. COTTAGE AND HAY SHED EAST OF PROPOSED DEVELOPMENT SITE.

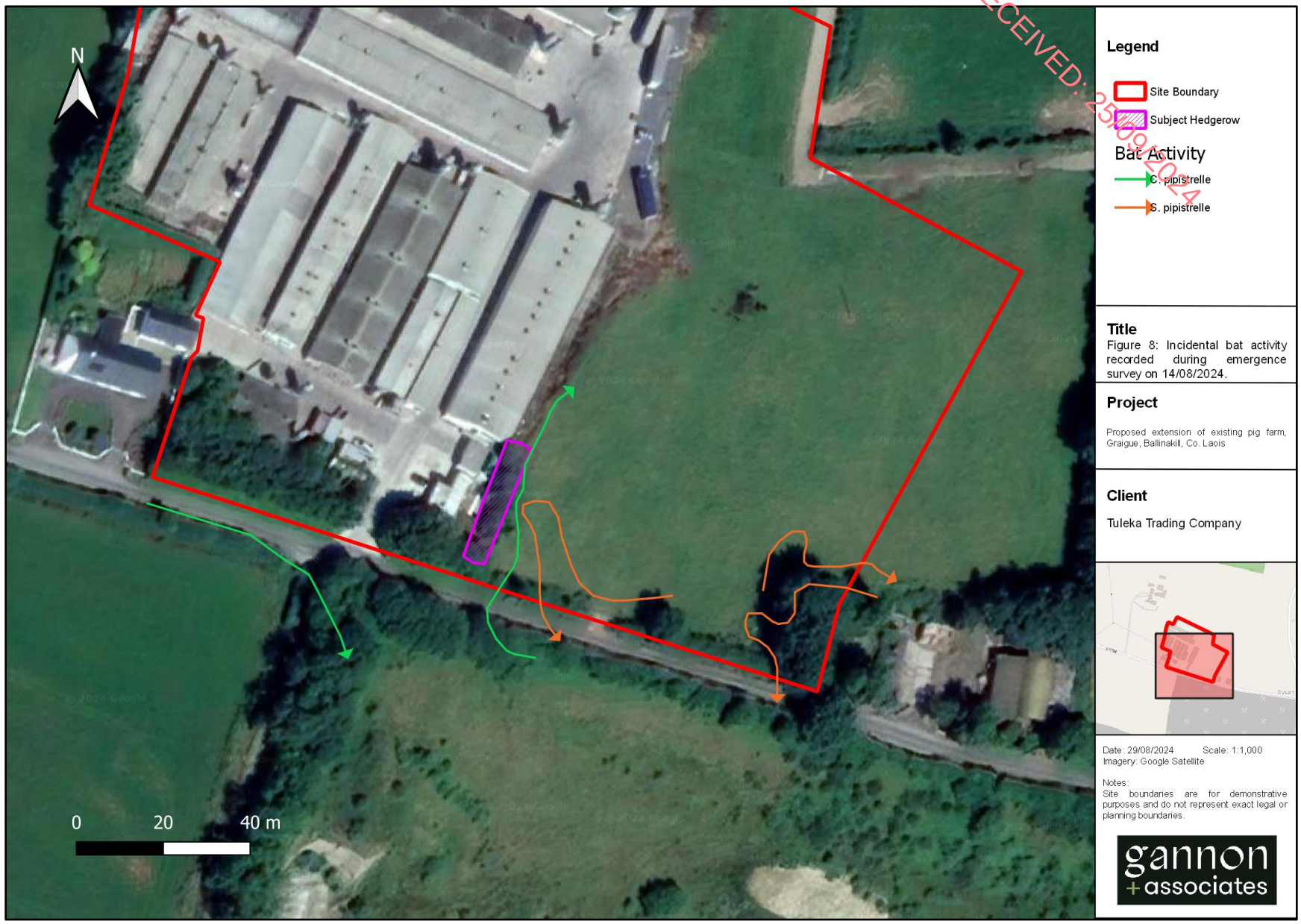
4.1.2 Emergence Survey

No bats were recorded emerging from the subject hedgerow during the emergence survey. Overall bat activity recorded was low. A total of two bat species were recorded: Common pipistrelle and soprano pipistrelle. Survey results are outlined below and shown in Figure 8.

14th August 2024

Sunset: 20:58 Temperature: 18-15°C Precipitation: None Wind: Light breeze

The first observation comprised a common pipistrelle travelling along road-side hedgerow south of the proposed development site at 24-minutes post-sunset. A soprano pipistrelle was observed foraging along hedgerows in the south-east of the proposed development site at 39-minutes and 43-minutes post-sunset. At 47-minutes post-sunset a common pipistrelle was observed travelling north adjacent to the subject hedgerow. At 61-minutes post-sunset a soprano pipistrelle was observed travelling west along a roadside hedgerow, and turning south before subject hedgerow.



5 IMPACT ASSESSMENT

Loss of Roosting habitat

The proposed development comprises the extension of an existing pig farm. There is no demolition of existing structures proposed. The only trees/hedgerows proposed for removal is the subject section of approximately 30m of existing hedgerow. No bats were recorded roosting in any tree of this hedgerow during surveys and the hedgerow is considered to be of Low-Negligible suitability for roosting bats. As such there will be no removal of bat roosting habitat as a result of the proposed development.

Loss of Foraging habitat

As outlined above, the only trees/hedgerows proposed for removal is the subject section of approximately 30m of existing hedgerow. General bat activity levels recorded during the emergence were low, with no notable use of the subject hedgerow as a foraging or commuting feature for bats. As such, the removal of a 30m section of hedgerow as a result of the proposed development is not considered a significant impact on local bat populations.

6 CONCLUSION

Bat roost assessment and emergence surveys were carried out on a section of hedgerow proposed for removal within the proposed development site in August 2024. No bats were recorded emerging from the subject hedgerow and overall low levels of bat activity were recorded in the surrounding area, comprising two species - common pipistrelle and soprano pipistrelle. No significant impacts are predicted on local bat populations as a result of the proposed development.

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