



An Roinn Tithíochta,
Rialtais Áitiúil agus Oidhreachta
Department of Housing,
Local Government and Heritage

Application for Derogation Licence

Under the European Communities (Birds and Natural Habitats) Regulations 2011 – 2021

Prepared by the Department of Housing, Local Government and Heritage

npws.ie

- This form is to be used by any person applying for a derogation licence under Regulation 54 or by the Minister under Regulation 54(A)
- Please ensure that you answer questions fully in order to avoid delays
- If you experience any problems filling in this form, please contact the Wildlife Licensing Unit;
- Please note – applications/reports received and licences issued under this derogation may be published on the NPWS website and/or the Department's Open Data website

Wildlife Licensing Unit,

Department of Housing, Local Government and Heritage

National Parks and Wildlife Service

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Part A. The Applicant: Personal Details

These questions relate to the person responsible for any proposed works and who will be the **named licensee**. As the licensee you will be responsible for ensuring compliance with the licence and its conditions, even though you may employ another person to act on your behalf.

If this application is being submitted on behalf of a third party please also complete Part B below.

1. (a) Name of Applicant

Title (Mr/Mrs/Miss/Ms/Dr)	Forename(s)	Surname
Mr	Eamonn	Power
(b) Address Line 1	Kilbarry Developments Limited	
Address Line 2	Studio 14, The Atrium Maritana Gate Canada Street	
Town	Waterford	
County	Waterford	
Eircode	X91 A250	
(c) Contact number	0863885075	
(d) Email address	eamonn@whiteboxltd.ie	
(e) Address where works are to be carried out if different from (b) above.		
Address Line 1	Lacken Road	
Address Line 2	Kilbarry	
Town	Waterford	
County	Waterford	
Eircode	Grid Reference: Longitude: -7.1295798 and Latitude: 52.2286636	

Part B. Details of Person Submitting Application on Behalf of Applicant/Licensee

Information relating to the person (e.g. ecologist) responsible for submitting the application on behalf of the applicant/licensee should be entered below:

1. (a) Name of Person/Ecologist

Title (Mr/Mrs/Miss/Ms/Dr)	Forename(s)	Surname
Dr	Jane	Russell-O'Connor
(b) Company Name	Russell Environmental & Sustainability Services Limited	
Address Line 1	16 Newtown Park	
Address Line 2		
Town	Tramore	
County	Waterford	
Eircode	X91X4C8	
(c) Contact number	0861756495	
(d) Email address	jane@russellenvironmental.ie	

(e) Relationship to Applicant	None – Employed consultant
--------------------------------------	----------------------------

Part C. The Application

1. **Species of Animal:** Please indicate which species is affected by the proposed works:

- Bat
- Otter
- Kerry Slug
- Natterjack Toad
- Dolphin
- Whale
- Turtle
- Porpoise

Please detail the exact species (scientific name): Soprano Pipistrelle *Pipistrellus pygmaeus*
Common Pipistrelle *Pipistrellus pipistrellus* and Leisler’s Bat *Nyctalus leisleri*

- 2. Please provide the maximum number of individuals affected* 55 based on sonar readings
- 3. Please provide the maximum number of breeding or resting sites affected* Tree works to 3 x Monterey Cypress trees and 2 x Monterey Pine trees
- 4. Please provide the maximum number of eggs to be taken* N/A
- 5. Please provide the maximum number of eggs to be destroyed* N/A

*If no figures can be provided for the maximum number of individuals, breeding sites, resting places and eggs to be covered by the derogation please provide reasons why.

6. **Species of Plant:** Please indicate which species is affected by the proposed works:

- Killarney Fern
- Slender Naiad
- Marsh Saxifrage

7. If you previously received a derogation for any species of animal or plant please state licence number and confirm that you have made a return to NPWS on the numbers actually affected by that licence

8. **Proposed Dates for Works:** Please indicate the timeframe that you propose to carry out works. Dates set by NPWS may differ from dates proposed here.

As soon as possible

Start Date:

End Date:

9. Please tick which reason below explains How this Application Qualifies under Regulation 54(2)(A-E) of the European Communities (Birds and Natural Habitats) Regulations:

a.	In the interests of protecting wild flora and fauna and conserving natural habitats	<input type="checkbox"/>
b.	To prevent serious damage, in particular to crops, livestock, forests, fisheries and water and other types of property	<input type="checkbox"/>
c.	In the interests of public health and public safety, or for other imperative reasons of overriding public interest, including those of a social or economic nature and beneficial consequences of primary importance for the environment	<input checked="" type="checkbox"/>
d.	For the purpose of research and education, of re-populating and re-introducing these species and for the breeding operations necessary for these purposes, including artificial propagation of plants	<input type="checkbox"/>
e.	To allow, under strictly supervised conditions, on a selective basis and to a limited extent, the taking or keeping of certain specimens of the species to the extent specified therein, which are referred to in the First Schedule	<input type="checkbox"/>

10. Report Checklist: Please append a detailed report to support this application and ensure that it contains the following information:

11.1	Explanation as to why the derogation licence sought is the only available option for works and no suitable alternative exists as per Regulation 54 of the European Communities (Birds and Natural Habitats) Regulations.	<input checked="" type="checkbox"/>
11.2	Evidence that actions permitted by a derogation licence will not be detrimental to the maintenance of the populations of the species to which the Habitats Directive relates at a favourable conservation status in their natural range as is required under Section 54(2) of the European Communities (Birds and Natural Habitats) Regulations.	<input checked="" type="checkbox"/>
11.3	Details of any mitigation measures planned for the species affected by the derogation at the location, along with evidence that such mitigation has been successful elsewhere.	<input checked="" type="checkbox"/>
11.4	As much information as possible to allow a decision to be made on this application.	<input checked="" type="checkbox"/>

Part D. Declaration

I declare that all of the foregoing particulars are, to the best of my knowledge and belief, true and correct. I understand that the deliberate killing, injuring, capturing or disturbing of protected species, or damage or destruction of their breeding sites or resting places or the deliberate taking or destroying of eggs is an offence without a licence and that it is a legal requirement to comply with the conditions of any licence I may be granted following this application. I understand that NPWS may visit to check compliance with a licence.

Please note that under Regulation 5 of the European Communities (Birds and Natural Habitats) Regulations 2011-2021 an authorised officer may enter and inspect any land or premises for the purposes of performing any of his or her functions under these Regulations or for obtaining any information which he or she may require for such purposes.

Signature of the Applicant



Date

Name in BLOCK LETTERS

PRIVACY STATEMENT

Please note that under Data Protection legislation Wildlife Licencing Unit staff may only discuss licence applications with the applicant, and not with any third party. See Privacy Statement at www.npws.ie/licences

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Department of Housing, Local Government and Heritage



An Roinn Títhíochta,
Rialtais Áitiúil agus Oidhreachta
Department of Housing,
Local Government and Heritage



**Russell Environmental and
Sustainability Services Limited**

KILBARRY PHASE 4 TREE WORKS

Lacken Road, Waterford

Dusk to Dawn Bat Survey 2

Authored by: Dr Jane Russell-O'Connor

Russell Environmental and Sustainability Services Limited

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24th of October 2024

Table of Contents

	Page No.
SUMMARY	2
1.0 Introduction	3
1.1 Site Location	3
1.2 Site Description	4
2.0 Bat Survey	7
2.1 Survey Methodology	7
2.1.1 Survey Constraints	7
3.0 Brief Description of the Site from the perspective of Bats	7
4.0 Results of Bat Survey	8
4.1 Indication of Significance of Site for Bats	8
4.2 List of Irish Bat Species and Declared Status on Site	8
5.0 Legal Status and Conservation Issues - Bat	8
6.0 Potential Impacts of Proposed Phase 4 Tree Works on Bat Fauna	9
7.0 Mitigation Measures	9
8.0 Predicted and Residual Impact of the Proposed Tree Works	10
References and Bibliography	11
Appendices	13
i General Bat Ecology	
ii Description of Bat Species Known or Expected in the Area	
iii Echo Touch Recordings for Bat Survey	

SUMMARY

Site:	Hedgerow along the Lacken Road, Waterford
Structure:	Hedgerows/Treelines
Co-ordinates:	Longitude: -7.1295798 and Latitude: 52.2286636.
Bat species present:	Soprano Pipistrelle <i>Pipistrellus pygmaeus</i> Common Pipistrelle <i>Pipistrellus pipistrellus</i> Leisler's Bat <i>Nyctalus leisleri</i>
Roost location:	Mature/dead trees in hedgerow/treeline
Survey by:	Dr. Jane Russell-O'Connor
Date:	23rd and 24th October

1.0 Introduction

To determine whether significant works to the mature trees in the hedgerow/treeline removal was possible a second bat survey was requested by Kilbarry Developments Limited. The previous dusk and dawn survey of this habitat on the 7th, 8th and 9th of April 2024, determined that Soprano Pipistrelle *Pipistrellus pygmaeus* and Leisler’s Bat *Nyctalus leisleri* species were roosting in this location.

1.1 Site Location

The site is located near the Six Crossroads Business Park and Waterford City (Figures 1 and 2), along the Lacken Road. The hedgerow borders an agricultural tillage field and is comprised of a stone-faced bank with hedgerow species and mature trees (Figures 3 and 4). The midpoint of the hedgerow/treeline has the following coordinates Longitude: -7.1295798 and Latitude: 52.2286636.

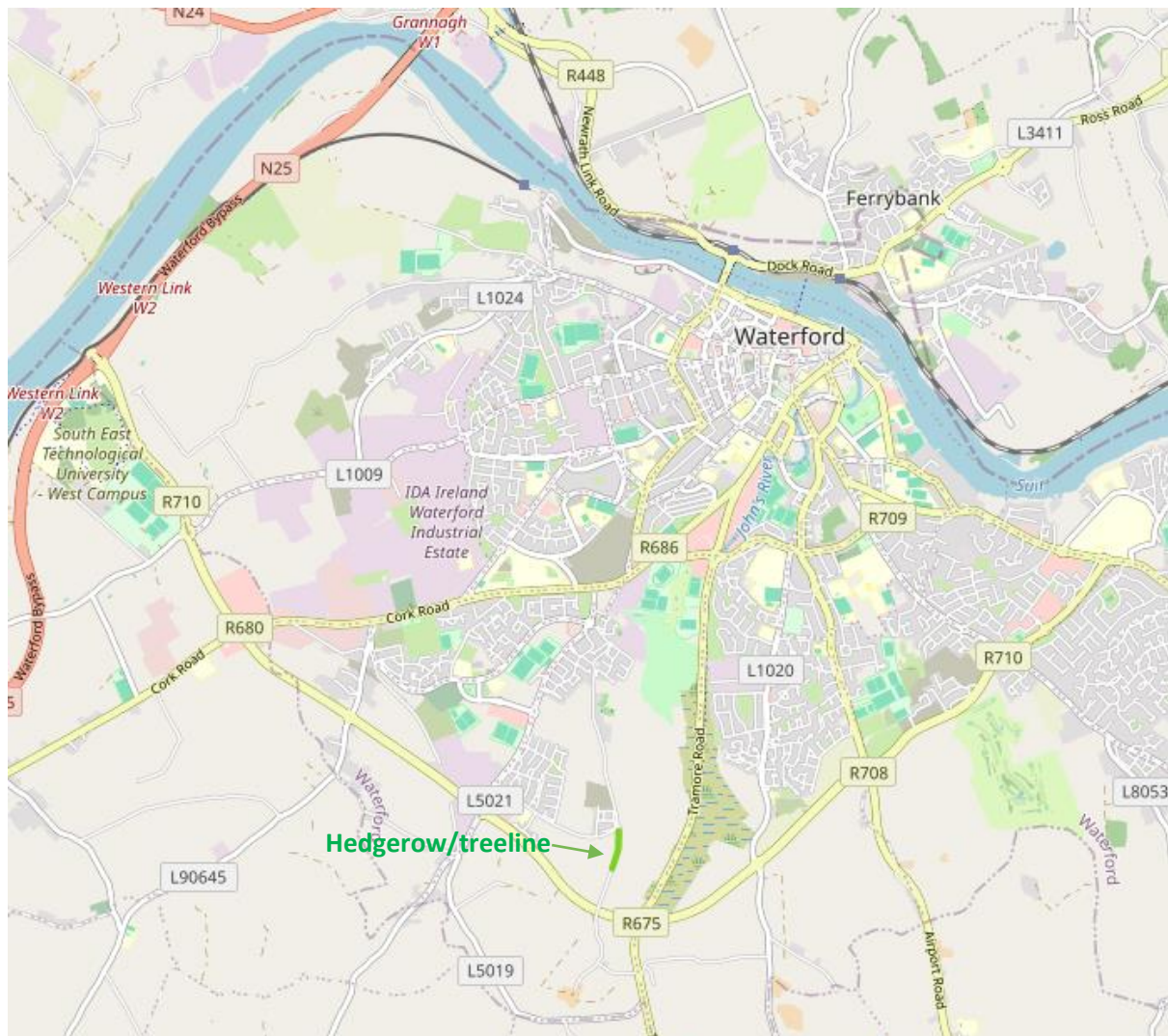


Figure 1 Location (EPA, 2024).

1. 2 Site Description

The hedgerow/treeline is comprised of mature coniferous trees and deciduous trees with a number of dead stumps and trees atop a stone-faced hedge bank and narrow grass verge, on the roadside. The adjacent field was under tillage and has now been harvested.

Flora

The predominant species in the hedgerow/treeline are mature Monterey pine *Pinus radiata*, Monterey cypress *Cupressus macrocarpa* and some immature Sycamore *Acer pseudoplatanus*. Other species present are immature Field elm *Ulmus minor*, occasional Hawthorn *Crataegus monogyna* and immature Sycamore *Acer pseudoplatanus*. Species present in the ground flora, in the stone-faced bank and verge are Bramble *Rubus fruticosus agg.*, Cleavers *Galium aparine*, Cocks-foot *Dactylis glomerata*, Cow Parsley *Anthriscus sylvestris*, Creeping bent *Agrostis stolonifera*, Creeping buttercup *Ranunculus repens*, Dandelion *Taraxacum officinale*, Dock *Rumex obtusifolius*, Dog rose *Rosa canina*, Hart's-tongue fern *Asplenium scolopendrium*, Herb-Robert *Geranium robertianum*, Honeysuckle *Lonicera periclymenum*, Holly *Ilex aquifolium*, Ivy *Hedera helix*, Navelwort *Umbilicus rupestris*, Nettle *Urtica dioica*, Soft shield fern *Polystichum setiferum* and Woundwort (hedge) *Stachys sylvatica* (Figures 3, 4 and 5).

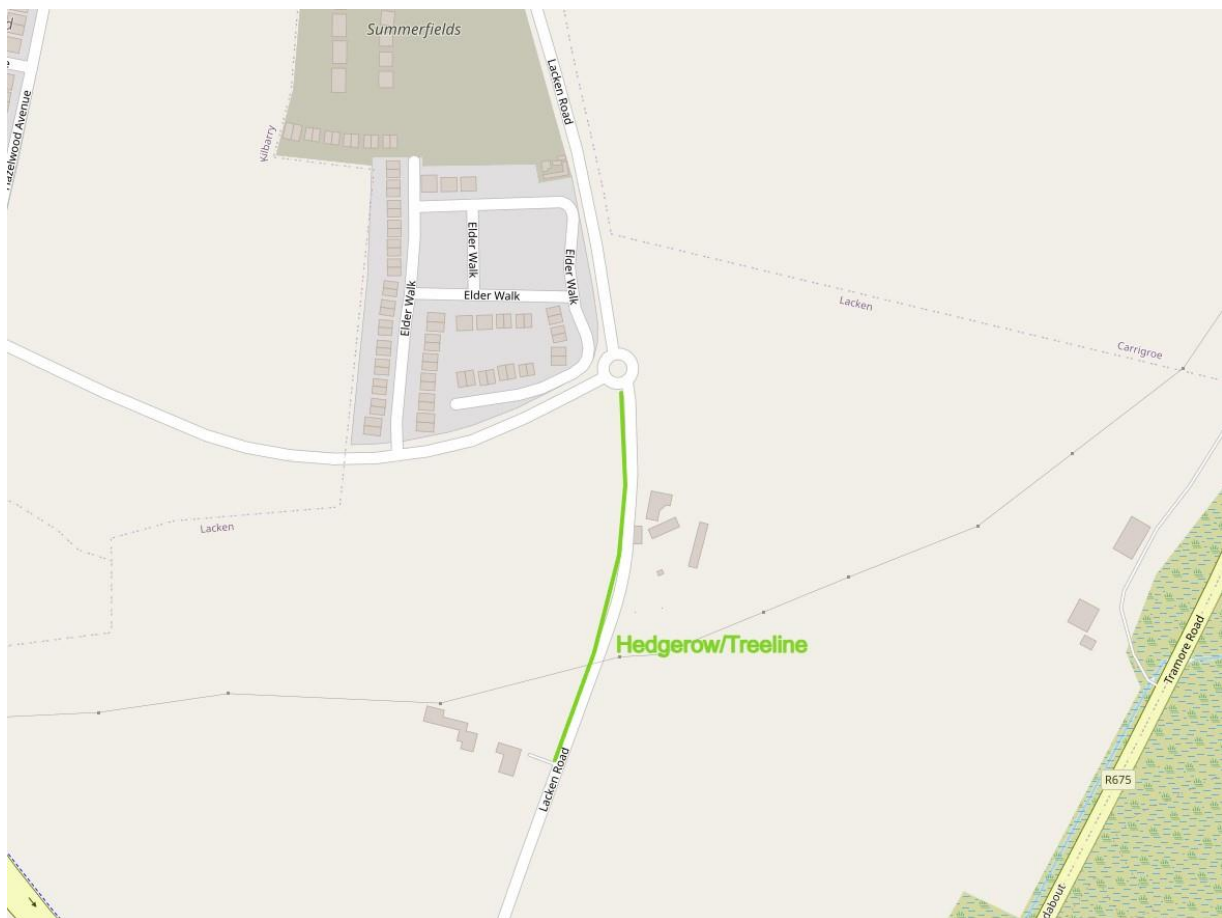


Figure 2 Exact hedgerow/treeline location (EPA, 2024).

Other Fauna

There were the following bird species either observed or heard in the hedgerow/treeline: Blackbird *Turdus merula*, Bullfinch *Pyrrhula Pyrrhula*, House sparrow *Passer domesticus*, Magpie *Pica pica*, Robin *Erithacus rubecula*, Rook *Corvus frugilegus* and Woodpigeon *Columba palumbus*.



Figure 3 Hedgerow/treeline adjacent to the Lacken Road.



Figure 4 Hedgerow/treeline from the field side.



Figure 5 Dead tree which provides a suitable roost site for bats.

2.0 Bat Survey

This report presents the results of a site visit by ecologists from Russell Environmental and Sustainability Services during dusk of the 23rd of October and dawn of the 24th of October 2024. The emergence dusk survey commenced at 6.50pm and was completed at 7.30pm. The dawn re-entry survey took place from 7.20am until 8.00am.

The fauna occurring on the site are described and the likely impacts of the proposed works on the fauna are discussed with recommendations for mitigation measures where necessary.

2.1 Survey Methodology

Survey of fauna was carried out by means of a thorough search within the hedgerow/treeline.

During the dusk and dawn survey a SSF Bat 2 heterodyne, ultrasonic detector and an Echo Meter Touch 2 (for Android) Bat detector with software app on Samsung Galaxy were used.

A SSF Bat 2 Fledermaus Detector was also used at a range of different frequencies.

A DS300 Depstech Digital Borescope, fibre optic, inspection camera was also used to look into small cavities, where necessary.

Vantage points were adjacent to the hedgerow treeline along the Lacken Road.

The nature and type of habitats present are also indicative of the species likely to be present.

A digital camera was used to document items of interest.

2.1.1 Survey Constraints

The survey was carried out by means of a thorough examination of the hedgerow/treeline. There were no climatic and seasonal constraints in regard to survey as it was undertaken within the active season at dusk.

Dusk temperatures reached 12⁰ Celsius and dawn reached 13⁰Celsius.

3.0 Brief Description of the Site from the Perspective of Bats.

The site is located in a peri-rural location of Waterford City and surrounded by occasional dwellings and farmland, mostly under tillage with associated hedgerows and or hedgerows/treelines. Phases 1 and 2 of the Kilbarry housing development are completed/under construction. Phases 3 and 4 of the development have been granted planning and construction has begun on Phase 4.

The hedgerow/treeline provide suitable habitats for foraging for bats and the more mature trees may provide crevices that are suitable for roosting.

4.0 Results of Survey

In the survey conducted on 23rd and 24th of October 2024 (Appendix iii), there was evidence of roosting sites in the mature trees of the hedgerow/treeline. The sonar results identified that three species of bat (Soprano Pipistrelle *Pipistrellus pygmaeus*, Common Pipistrelle *Pipistrellus pipistrellus* and Leisler's Bat *Nyctalus leisleri*) emerged from the coniferous trees at the time of the dawn survey and re-entered the coniferous trees in the hedgerow/treeline during the dawn survey. The activity in the trees shown on the sonar readings in Appendix iii.

Throughout dusk and dawn, the hedgerow/treeline was observed by two surveyors for emergence and re-re-entry of bats species.

There are also number of dead trees and rotten stumps within the hedgerow/treeline, that provide suitable conditions for roost sites for all three species recorded, identified in the daytime survey of 9th April 2024.

4.1 Indication of Significance of Site for Bats

During the dusk to dawn survey, there were a number of bats seen flying along and, in the hedgerow/treeline. This activity was also recorded by both bat detectors and recorded by the Echo Touch meter as detailed in Appendix iii. A total of 54 bats were detected during the dusk survey and the dawn survey recorded a further 55 bats by the Echo Touch 2 Pro meter (Appendix iii). There were more bats detected by the second surveyor, but it is difficult to record exact numbers from the Fledermaus Detector.

4.2 List of Irish Bat Species and Declared Status on Site

Within the hedgerow/treeline following species were recorded via the bat detectors. The roost sites are the mature Monterey pine trees and Monterey cypress trees in the hedgerow/treeline.

The results of the survey are further detailed in Table 1.

Species	Locations
Soprano pipistrelle (<i>Pipistrellus pygmaeus</i>)	Foraging in the environs, roosting in the mature coniferous trees of the hedgerow/treeline
Common pipistrelle (<i>Pipistrellus pipistrellus</i>)	Foraging in the environs, roosting in the mature coniferous trees of the hedgerow/treeline
Leisler's bat (<i>Nyctalus leisleri</i>)	Foraging in the environs, roosting in the mature coniferous trees of the hedgerow/treeline

5.0 Legal Status and Conservation Issues – Bats

All Irish bat species are protected under the Wildlife Act (1976) and Wildlife Amendment Act (2000). Also, the EC Directive on The Conservation of Natural habitats and of Wild Fauna and Flora (Habitats Directive 1992), seeks to protect rare species, including bats, and their habitats and requires that appropriate monitoring of populations be undertaken. Across Europe, they are further protected under the Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention 1982), which, in relation to bats, exists to conserve all species and their habitats. The Convention on the Conservation of Migratory Species of Wild Animals (Bonn Convention 1979, enacted 1983) was instigated to protect migrant species across all European boundaries. The Irish government has ratified both these conventions.

All bats are listed in Annex IV of the Habitats Directive and the lesser horseshoe bat is further listed under Annex II.

6.0 Potential Impacts of the Proposed Tree Works on Bat Fauna

As three species of bat were roosting in the trees (Soprano Pipistrelle *Pipistrellus pygmaeus*, Common pipistrelle *Pipistrellus pipistrellus* and Leisler's Bat *Nyctalus leisleri*) should work be required to remove the hedgerow/treeline or significant tree works then a derogation licence will be required for any significant branch removal or tree topping.

The site adjacent to the hedgerow/treeline in which bats are roosting treeline is where the construction of housing is taking place. The hedgerow/treeline has trees with a number of overhanging branches and in some cases rotten timber, that if left may cause damage to the houses that are being constructed and thus the future occupants within. The works required do not involve the removal of the Monterey pine or Monterey cypress trees in which the bats are roosting, but tree surgery works are required to make these trees safe. In some cases, the trees are unbalanced and may fall and thus create a hazard for human health and safety (See accompanying Tree Survey Report).

The proposed works are to remove any dangerous, overhanging branches or branches that make the trees unbalanced on 2x Monterey pines (Nos 1 and 2) and 3 x Monterey cypress (Nos 4, 8 and 10).

7.0 Mitigation Measures

As there are currently bats present in the hedgerow/treeline there is a requirement for compulsory mitigation measures. Works shall follow the measures indicated below.

Application for a derogation licence

NB: Works on a known bat roost is a notifiable action under current legislation and a derogation licence has to be obtained from the National Parks and Wildlife Service before works can commence.

There is a licence required in this instance should any significant work be required to cut back the larger branches or top the trees in the hedgerow/treeline.

Measure 1: timing of maintenance works

Timing of the works should take place during mid-March to end of April, after the young are weaned and independent. A suitably qualified ecologist should be present on site during the tree surgery works.

Measure 2: maintenance

Any maintenance shall be done carefully with the possibility that individual bats may be found. Work should be conducted in a highly sensitive manner and, unless completely unavoidable, known roosts and timber with bat potential should not be directly sawn through. If such timber is removed, it should be lowered to the ground and left at the base of the tree permanently - or for at least 48 hours. Where it is impractical to lower potential or known bat roosts, piles of brash or logs can be used to soften the impact of them hitting the ground. If discovered, the animals shall be retained in a box until dusk and released on site under the guidance of a qualified bat handler and the NPWS regional ranger should be notified. Mobile Elevated Work Platform (MEWP) or ladder should be used by tree surgeon operatives to reduce disturbance within the trees

Measure 3: rodenticides

No rodenticide usage in or near the hedgerow/treeline.

Measure 4: bat boxes

Bat boxes are suitable for all three species of bats found in the environs and may be erected on trees.

8.0 Predicted and Residual Impact of the Proposed Tree Works

Bats are unlikely to be harmed if careful tree surgery work is carried out on the mature Monterey pine and Monterey cypress trees where there are known bat roosts, provided this work is completed at the appropriate time of year.

As the trees where the roosts are located are to be retained, bat roosts are likely to be maintained.

References and Bibliography

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Kelleher, C. (2006a) *Nathusius pipistrelle* *Pipistrellus nathusii* and *Brandt's Bat* *Myotis brandtii* - *New Bat Species to Co. Kerry – Irish Naturalists' Journal* 28: 258.

Kelleher, C. (2006b) *Brandt's Bat* *Myotis brandtii*, *New Bat Species to Co. Tipperary. Irish Naturalists' Journal* 28: 345.

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Whilde, A. 1993 *Threatened mammals, birds, amphibians and fish in Ireland. Irish Red Data Book 2: Vertebrates*. Belfast: HMSO.

Wildlife Act 1976 and Wildlife [Amendment] Act 2000. Government of Ireland.

Appendices

Appendix i General Bat Ecology

The bat is the only mammal that is capable of true flight. There are over 1,100 species worldwide, representing almost a quarter of all mammal species. There are 47 species in Europe - in Ireland, ten species of bat are currently known to exist, which are classified into two families, the Rhinolophidae (Horseshoe bats) and the Vespertilionidae (Common bats).

Prey

All the European bat species feed exclusively on insects. A Pipistrelle, weighing only 4 to 8 grams, will eat up to 3000 insects every night, ensuring a build up of fat in the bat's body to allow it to survive the winter deep in hibernation.

Breeding and longevity

Irish bats can produce one young per year but, more usually, only one young is born every two years (Boyd & Stebbings, 1989). This slow rate of reproduction inhibits repopulation in areas of rapid decline. Although bats have been known to live for twenty or more years, this is rare as most die in their first and the average lifespan, in the wild, is four years.

Threats

All bat species are in decline as they face many threats to their highly developed and specialised lifestyles. Many bats succumb to poisons used as woodworm treatments within their roosting sites (Racey & Swift, 1986). Agricultural intensification, with the loss of hedgerows, treelines, woodlands and species-rich grasslands have impacted bat species also. Habitual roosting or hibernation sites in caves, mines, trees and disused buildings are also often lost to development. Summer roosts are prone to disturbance from vandals. Agricultural pesticides accumulate in their prey, reaching lethal doses (Jefferies, 1972). Chemical treatments in cattle production sterilise dung thus ensuring that no insects can breed within it to be fed upon by bats. Likewise, river pollution, from agricultural runoff, reduces the abundance of aquatic insects. Road building, with the resultant loss of foraging and roosting sites is a significant cause in the reduction of bat populations across Europe.

Extinction

As recently as 1992, the greater mouse-eared bat *Myotis myotis* became the first mammal to become extinct in Britain since the wolf in the 18th century.

Appendix ii Description of Bat Species Known or Expected in the Area

Common pipistrelle *Pipistrellus pipistrellus*

This species was only recently separated from its sibling, the soprano or brown pipistrelle *P. pygmaeus*, which is detailed below (Barratt *et al*, 1997). The common pipistrelle's echolocation calls peak at 45 kHz. The species forages along linear landscape features such as hedgerows and treelines as well as within woodland.

Soprano pipistrelle *Pipistrellus pygmaeus*

The soprano pipistrelle's echolocation calls peak at 55 kHz, which distinguishes it readily from the common pipistrelle on detector. The pipistrelles are the smallest and most often seen of our bats, flying at head height and taking small prey such as midges and small moths. Summer roost sites are usually in buildings but tree holes and heavy ivy are also used. Roost numbers can exceed 1,500 animals in mid-summer.

Leisler's bat *Nyctalus leisleri*

This species is Ireland's largest bat, with a wingspan of up to 320mm; it is also the third most common bat, preferring to roost in buildings, although it is sometimes found in trees and bat boxes. It is the earliest bat to emerge in the evening, flying fast and high with occasional steep dives to ground level, feeding on moths, caddis-flies and beetles. The echolocation calls are sometimes audible to the human ear being around 15 kHz at their lowest. The audible chatter from their roost on hot summer days is sometimes an aid to location. This species is uncommon in Europe and as Ireland holds the largest national population the species is considered as Near Threatened here.

Appendix iii Recordings from the Echo Touch Meter 2 from the 23rd and 24th of October 2024

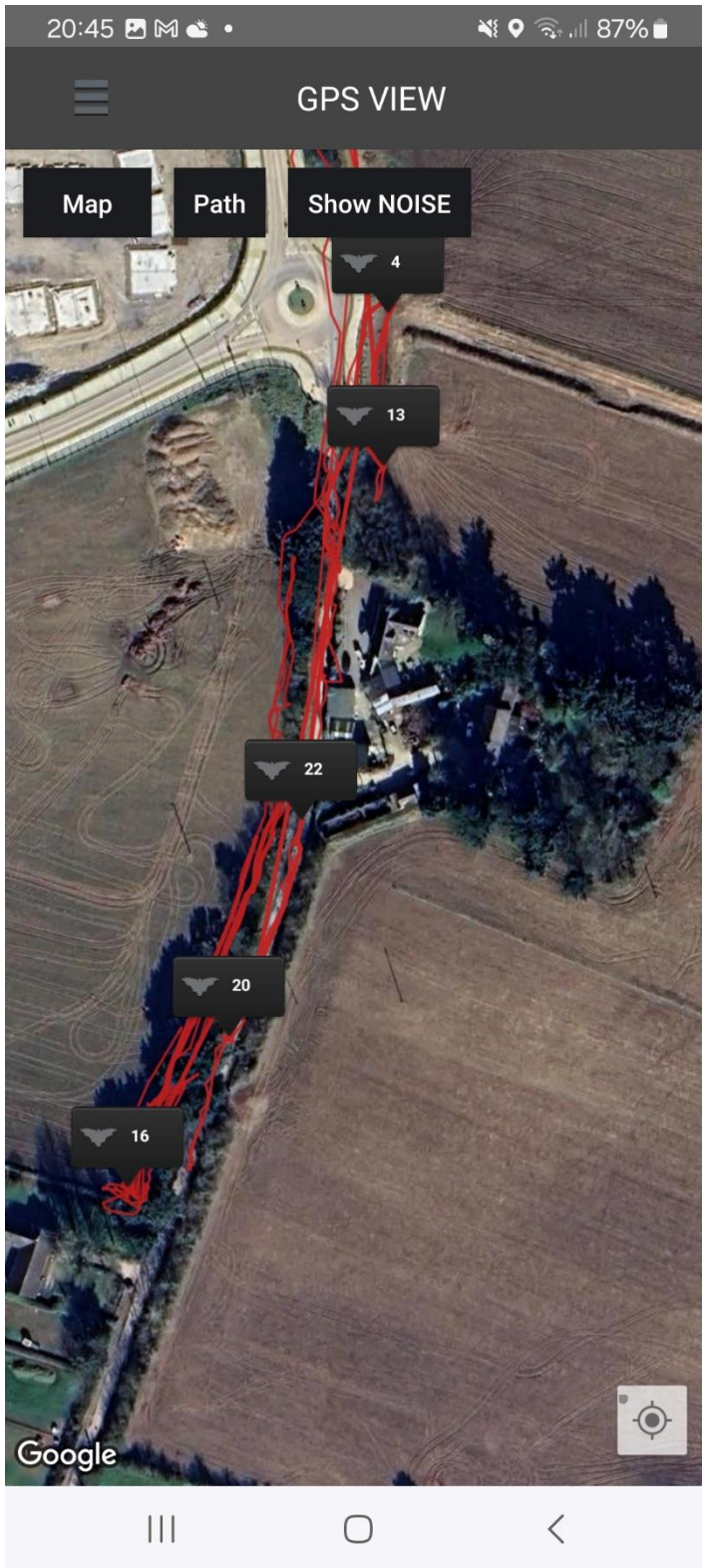


Figure 1 The sonogram readings for the hedgerow/treeline at Lacken Road. NB: These are cumulative readings from both the survey in April 2024 (count of 21) and the dusk readings on the 23rd of October (Count of 54).

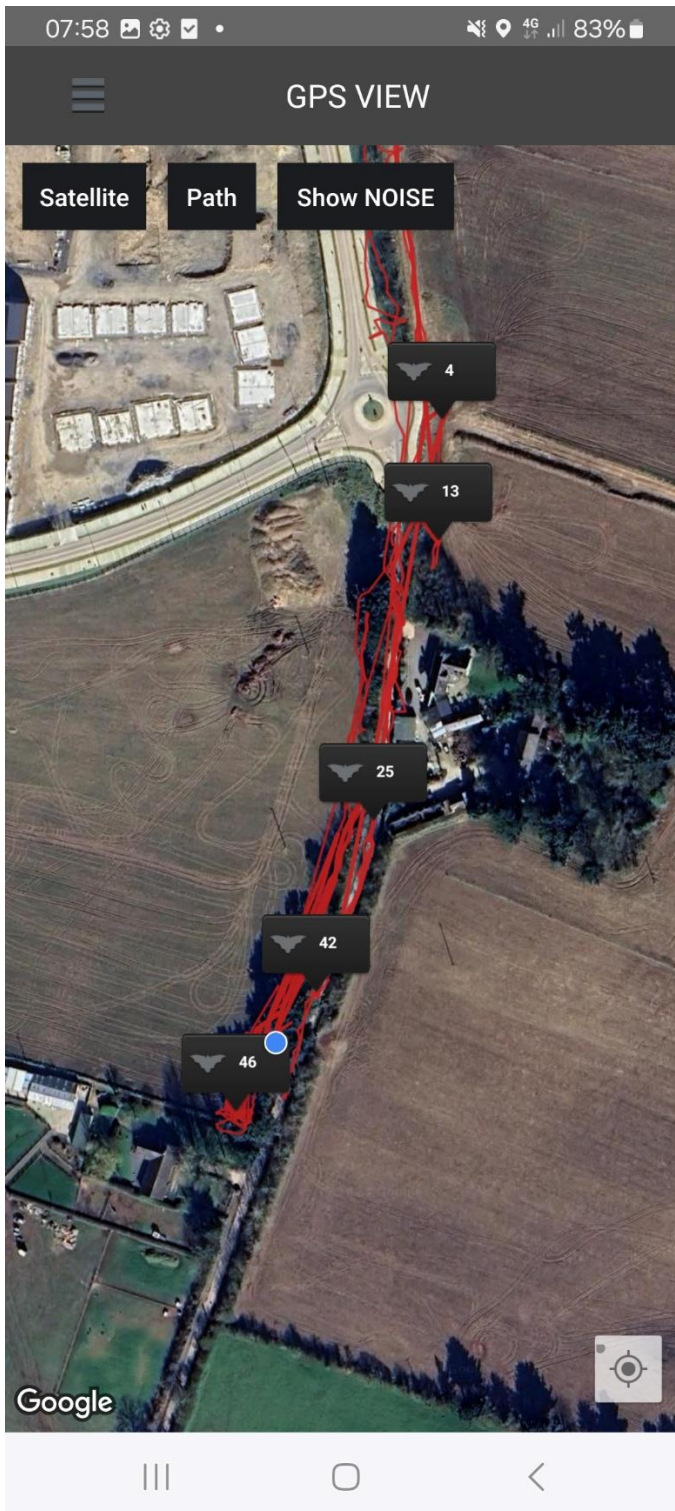


Figure 2 The sonogram readings for the hedgerow/treeline at Lacken Road. NB: These are cumulative readings from both the survey in April 2024, the dusk readings on the 23rd of October and the dawn readings from 24th of October (Count of 55).

R & H DOOL LANDSCAPE ARCHITECTS, ARBORICULTURISTS
AND ENVIRONMENTAL CONSULTANTS, CORK ROAD,
WATERFORD, X91 Y322. 051-384273

TREE SURVEY AND REPORT
Lacken Road, Waterford.

November 2024



TREE SCHEDULE EXPLANATORY NOTES

Column	Title	Explanation
1	Tree No	Number allocated to tree for reference purposes as shown on plan as No 1 onwards followed by tag number (e.g.1704) on the existing tree 1m high on the side facing the housing development.
2	Species	Botanical (Latin) or common name.
3	Age	Abbreviation to give indication as to what stage of life cycle the tree Y = Young tree or sapling SM = Semi-mature tree EM = Early maturity M = Mature FM = Fully Mature OM = Over Mature V = Veteran D = Dead
4	Condition	Physiological & Structural relative to age, health, form and safety.
5	Trunk	Trunk diameter at 1.5m height measured in mm
6	Height	Approximate total tree height in meters
7	BS	Approximate branch spread.
8	PM	Preliminary management including action needed, observations,

NOTE:

Unless otherwise stated, tree surveys are on the basis of above ground visual inspection and assessment, sometimes with the use of binoculars or other technical equipment, and without the tree being climbed.

There is no such thing as a '100% safe tree' in all conditions since even perfectly healthy trees may fall or suffer from branch break.

Normally trees come to the end of their lives either as a consequence of old age in combination with biotic living agents, i.e. fungi, insects, or abiotic agents i.e. extremes of weather, toxins, or from soil conditions, i.e. compaction, level changes, drainage etc.

CONDITION (Physiological and structural)

The physiological and structural condition would be initially recorded in the listed category from Good to Bad or Dead, and if required be further taken up in column 8 together with the appropriate management recommendations.

Good

Trees classified as good show no visible symptoms of ill-health or structural defect and are of good form with a well-balanced deep crown.

Fair

Trees which are perhaps 'par' for the course and which may have defects of one sort or another, but which do not represent a threat in their current environment

Poor

Trees which have defects which may require felling, tree surgery or monitoring

Bad or Dead

Trees in this category will usually be recommended for felling, except where the risk is not considered significant and retention for wildlife is desirable.

Preliminary management and observations

This is not a works schedule, and any recommendations are listed in the interests of health and safety.

Tree management would normally entail treatment of all dead /damaged wood, removal of other natural plants such as ivy from the trees, some of which have been on the trees for many years with no ill effect.

In column 8

a double asterisk ** indicates a recommendation for tree removal,

a single asterisk* indicates a recommendation for tree surgery, on health and safety grounds.

NAN= No action needed

Client:

Site: Lacken Road, Kilbarry

Date: November 2024

Tree No	Species	Age	Condition	Stem mm	Height m	Spread	Preliminary Management & Observations
1 1704	Monterey Pine	FM	Fair	850	14	14	*Twin trunk with oversized spreading tree
2 1711	Monterey Pine	FM	Fair	600	10	5	*Smaller tree similar age but under shadow of No 1.
3 1712	Sycamore	SM	Good	300	6	4	NAN
4 1713	Monterey Cypress	FM	Fair	630	9	5	**Twin trunk @ 1m with one sided lean
5 1714	Sycamore	SM	Good	450	8	4	NAN
6 1720	Sycamore	SM	Good	300	7	5	NAN
7 689	Sycamore	SM	Good	380	7	4	NAN
8 688	Monterey Cypress	FM	Fair	800	8	6	*Remove split trunk leaning into No 9
9 687	Sycamore	SM	Good	450	8	5	NAN
10 686	Monterey Cypress	FM	Poor	750	5	6	*No top or crown & Bad shape.
11 685	Monterey Cypress	FM	Fair	860	11	9	NAN
12 684	Monterey Pine	FM	Fair	820	11	8	NAN
13 683	Sycamore	SM	Poor	300	6	3	**Base rot
14 773	Sycamore	SM	Good	420	8	4	NAN
15 772	Sycamore	SM	Good	350	6	3	NAN
16 771	Monterey Pine	FM	Fair	700	11	9	NAN
17 710	Sycamore	SM	Poor	400	8	4	NAN
18 769	Monterey Pine	FM	Fair	700	12	9	Twin trunk @80cm.NAN
19 767	Sycamore	EM	Poor	500	8	6	Internal rot at base.NAN
20 766	Sycamore	EM	Poor	600	8	5	Internal rot at base up to 2m NAN

TREE REPORT:

The site:

We undertook the tree survey along a boundary on the Lacken road, Kilbarry, Waterford. The hedgerow vegetation and trees are growing on a clay, sod and stone berm and the majority are fully mature Pines and Cypress trees with opportunist sycamore in between. The Area A is devoid of trees but has a selection of suckering Elm and seedling Ash of indifferent health.

Tree survey:

There were 20 trees surveyed of which 11 are young Sycamore which range from 7 good to 4 poor with one (No 13) recommended for removal.

The 9 remaining trees were fully mature conifers which are 5 Monterey Pine and 4 Monterey Cypress in fair health and commonly planted as agricultural shelter belts from 1940 until the 1970's and one (No 4) is recommended for removal due to the survey.

There is a history of limb/branch removal from the conifers (No 1,2,4 & 8) around the overhead cables which transverse these trees in parts.

This has resulted in distorted growth with radiating limbs which will need reducing (No 1,2 & 8) to restore the balance with the remaining tree (No 4) removed as it is out of balance with a lean.

Area A:

This area was probably planted with the Pines and Cypress but have long since been removed and in their place seedling Ash and suckering Elm have sprouted up reaching up to 5m high. Many of the Ash are either dead, dying or poor and the Elms will never reach maturity as they go into decline once they grow much older and again resprout.

Conclusions & Recommendations:

From a health and safety concern a number of trees will need remedial surgery indicated with an * including one (No 8) which has a large broken limb resting on the Sycamore (No 9) but leaning over the road.

Infill planting with a mixture of native hedgerow plants could be carried out in Area A during the winter months with trees at 4m spacing and shrubs at 2 per m.

All the recommended works should be carried out between late November and March.

Consultant lead contact: Ron Dool

Consultants:-

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N Dip (Hort), including Wells Scholarship (USA).

Amie Dool, B.A. UCD, Nat Cert (Arbor) UK.

Serena Dool, PhD, BSc (Hons), School of Biology and Environment Science UCD,
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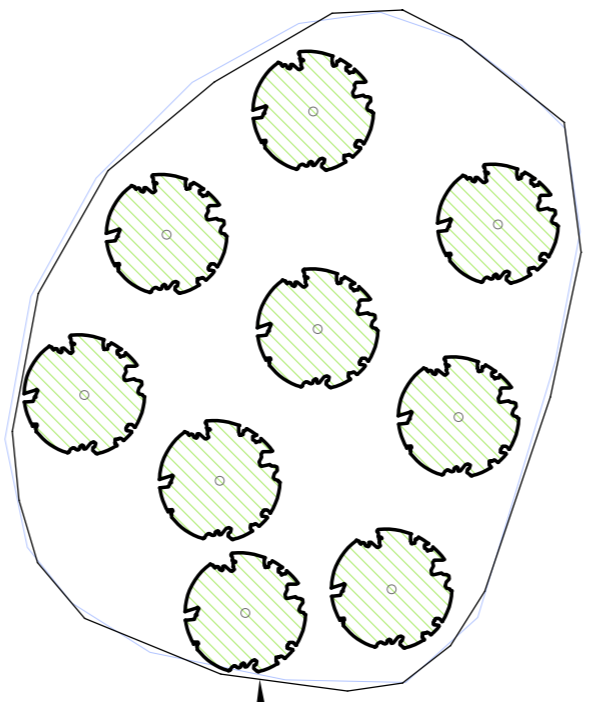


Block 3

NOTE:
DRAWING TO BE READ IN CONJUNCTION
WITH TREE SURVEY REPORT PREPARED
BY R & H DOOL LANDSCAPE ARCHITECTS

2 INDICATIVE TREE POSITION

1 TREE POSITIONS AS PER SITE SURVEY



NOTES

IMPORTANT NOTE:
Work to given dimensions only - do not scale print. All setting out
commencement of work. Any inaccuracies should be brought to
the attention of the architect in good time and in writing.
In accordance with all Irish Building Regulations and codes of
practice at the time of construction. All sub-contractors are
responsible for ensuring compliance with the regulations
within their own trade.
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DATE	REVISIONS TO DRAWING	BY

DATE	REVISIONS TO DRAWING	BY

STAGE
INFORMATION

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	<p>DRAWN: MH DATE: NOV 24 SCALE: A1 JOB NO.: Z20003 DWG NO.: 3.00 SCALE: A3 1:1,000</p>