

Bat Derogation Licence Application

Templetney Water Treatment Plant, Co. Tipperary

February 2026

Prepared for:



O'DONNELL 
ENVIRONMENTAL



Summary

Project: Templetney Water Treatment Plant, Co. Tipperary.

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Coordinates: 52.3954894, -7.6174132 (WGS84).

Company Profile: O'Donnell Environmental is an independent environmental consultancy established by Tom O'Donnell in 2019. O'Donnell Environmental is a Chartered Institute of Ecology and Environmental Management (CIEEM) 'Registered Practice', which demonstrates our commitment to high professional standards, accountability and the delivery of the best outcomes for biodiversity and our Clients.

Project Reference: 2025/24

Document Rev. No.	Status	Contributor	Date
1	Final Issue	CB, TO'D	18.11.2025
2	Final Issue	TO'D	28.01.2026
3	Derogation Application	CB, TO'D	19.02.2025

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1 Introduction

O'Donnell Environmental Ltd. were commissioned by Ayesa on behalf of Uisce Éireann to undertake bat surveys and reporting at Templetney Water Treatment Plant, Co Tipperary (see **Figure 1.1**).

The site measures approximately 0.1ha and contains hardstanding, a water storage tank, metal structures and a Pump House building. The Pump House is constructed of concrete blocks laid block-on-flat with a decorative concrete block facing externally and it is understood that there is no cavity between the two. The building is roofed with an artificial-slate roof with a modern, breathable roofing membrane. External lighting is provided but is manually controlled and ordinarily not in use.

The proposed works are intended to avoid the excessive accumulation of heat, which currently represents an issue for machinery and staff. It is possible that the excessive accumulation of heat in the attic of the Pump House, especially during hot summer sunshine, may represent a threat to bats roosting within. The proposed works are likely to avoid a situation where overheating of immobile bats occur.

In order to address the accumulation of excessive heat within the Pump House, the Client proposed to carry out the following works:

- Replace the roller door with a new louvered style door.
- Installation of an extraction fan through the wall to control room temperature.
- Replacement of the three 'High Lift Pumps' within the Pump House with more powerful High Lift Pumps.

Appendix B shows the proposed design. The proposed works will not result in any direct disturbance or loss of roosting space within the attic of the Pump House. No works require access to the attic of the Pump House, and no night-works are proposed.

Bat roosting was known to occur within the Pump House building. The aims of the current study are to:

- Assess and evaluate the likely importance of the existing structures to bats.
- To characterise the known roost in terms of species and size of colony.
- To identify access and egress points.
- To assess the likely effects of the proposed work on bats, if any, and to recommend appropriate mitigation and enhancement measures.

1.1 LEGAL STATUS OF BATS

All bat species and their roosting sites are strictly protected under both national and international law. The purpose of this legislation is to maintain and restore bat populations within their natural range. Where human activities have the potential to compromise bat populations, measures are required to be put in place to avoid impacts or compensate and mitigate for those impacts. A grant of planning permission does not constitute a licence or permit to disturb bats or interfere with their breeding or resting places.

The key legislation which provides protection to bats is as follows:

- Wildlife Act (1976) and subsequent amendments which makes it unlawful to intentionally disturb, injure or kill a bat or disturb its resting place without a valid 'Regulation 54 Derogation', issued by NPWS.
- The EU Habitats Directive (which has been transposed into Irish law with the European Communities (Birds and Natural Habitats) Regulations 2011) which seeks to protect rare species, including bats, and their habitats and requires that appropriate monitoring of populations be undertaken. All Irish bat species are listed in Annex IV, while Annex II provides additional protection for the Lesser Horseshoe Bat.

1.2 STATEMENT OF AUTHORITY

O'Donnell Environmental Ltd. is an independent environmental consultancy established by Tom O'Donnell BSc (Hons) MSc CEnv MCIEEM in 2019. Since then, O'Donnell Environmental has established itself as a provider of quality, Client-focused ecological and environmental services to public and private sector Clients nationwide. O'Donnell Environmental is a Chartered Institute of Ecology and Environmental Management (CIEEM) 'Registered Practice' which demonstrates our commitment to high professional standards and accountability. O'Donnell Environmental maintains an ISO 9001:2015 certified Quality Management System, ensuring consistent quality and customer focus.

Tom O'Donnell is a Chartered Environmentalist and a full member of the Chartered Institute of Ecology and Environmental Management. He was awarded a BSc in Environmental and Earth System Science [Applied Ecology] in 2007 and an MSc in Ecological Assessment in 2009, both from UCC. Tom has over 10 years professional experience in the environmental industry, including working on projects such as windfarms, overhead power lines, roads, cycleways and residential developments. Tom is licensed by NPWS for roost disturbance (Ref: DER/BAT 2023-16) and to capture bats (C25/2023).

Colm Breslin BSc (Hons) is a Qualifying member of the Chartered Institute of Ecology and Environmental Management. He was awarded a BSc in Biological, Earth and Environmental Sciences [Ecology and Environmental Biology] in 2023 from UCC. Colm has experience in habitat mapping, bat activity surveys and preliminary roost assessments for a variety of windfarm and residential developments. Colm is licenced by NPWS for roost disturbance (Ref: DER/BAT 2025-108), to capture bats (C03/2025), and to photograph bats (009/2025).



Figure 1.1 - Study Site Location

Project:
Proposed Works at Templetney WTP

Prepared for:
Uisce Eireann

Tom O'Donnell CEnv MCIEEM
D: 17/11/2025

2 Methodology

The bat survey was carried out through desk study, visual assessment of buildings and active bat emergence surveys. Each of these are described below.

All surveys were carried out with cognisance of industry standard best practices, including the following:

- Bat Conservation Trust guidelines Bat Surveys for Professional Ecologists: Good Practice Guidelines 4th edition (note that the guidelines were recently updated to 4th edition) (Collins, 2023).
- Bat Mitigation Guidelines for Ireland (Marnell et al., 2022).

2.1 DESKTOP REVIEW

A desktop review of publicly available relevant data was undertaken on the National Biodiversity Data Centre (NBDC) and National Parks & Wildlife Service (NPWS) websites. The National Biodiversity Data Centre was reviewed for relevant data, specifically i) existing species records for the 10km square in which the study site is located (S22) and ii) an indication of the relative importance of the wider landscape in which the study site is located, based on Model of Bat Landscapes for Ireland (Lundy *et al.* 2011). In the latter, the index ranges from 0 to 100, with 0 being least favourable and 100 most favourable for bats.

2.2 DAYTIME ASSESSMENT

Daytime assessment consisted of exterior (and interior where possible) visual examinations of structures on the site by Colm Breslin and Claire McCarthy BSc (Hons) MSc on 30th September 2025.

The survey aimed to identify any evidence of the presence of roosting bats, and to assess the suitability of the structures for roosting bats. Daytime visual surveys help to determine the appropriate survey effort required during night-time emergence or re-entry surveys. Potential Roost Features (PRFs) are described according to the scheme outlined in **Table 2.1**, below.

Droppings were collected from the pump room and sent to SureScreen Laboratories for DNA analysis to confirm species identification.

Table 2.1. Scheme for describing the potential suitability of features for bats.

Suitability	Description
Negligible	Negligible features which are likely to be used by roosting bats.
Low	A feature with one or more potential roost sites that could be used by individual bats opportunistically. Potential roost sites which do not provide appropriate conditions and / or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats (i.e. unlikely to be suitable for maternity or hibernation). A tree of sufficient size and age to contain PRFs but with none seen from the ground or features seen with only very limited roosting potential.
Moderate	A structure or tree with one or more potential roost sites that could be used by bats due to characteristics and surrounding habitat but unlikely to support a roost of high conservation status.
High	A structure or tree with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions and surrounding habitat.

After 'Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th Edition)', Collins (2023).

2.3 EMERGENCE SURVEYS

Two emergence surveys were conducted on the Pump House during Autumn 2025 (see **Table 2.2** below). The surveys were carried out by three surveyors, Tom O'Donnell, Claire McCarthy and Colm Breslin, with two being present on each occasion. Surveyors were positioned to maximise views of the structures, in combination with night vision aids (NVAs) following best practice guidelines (Collins, 2023). Particular attention was applied to any identified access/egress points noted during previous daytime visual roost assessments.

Guide IR Pro 19 thermal imaging cameras were positioned to optimise views of structures, following Collins (2023). Echolocation recordings were made using Anabat Scout full spectrum recorders. Additionally, WA Song Meter Mini full-spectrum detectors were placed within the viewsheds of night vision aids to correlate any potential emergence with echolocation data. Surveys were carried out during suitable weather conditions. See **Plates 2.1 - 2.2** for views of thermal camera perspectives. The thermal imaging cameras had almost complete coverage of the Pump House, and a small gap on the north-east gable covered by visual monitoring.

Table 2.1 - Details of bat emergence surveys carried out on the Pump House building.

Survey Date	From - To Times	Sunset Time	Weather	Surveyors
30 th September 2025	18:55 – 20:40	19:09	F2, 8 Oktas, 15°C, light to moderate rain	CMcC, CB
15 th October 2025	18:20 – 20:10	18:37	F2-3, 4 Oktas, 12°C, no rain	CB, TO'D



Plate 2.1 Thermal perspective overlooking the western aspect of the Pump House.



Plate 2.2 Thermal perspective overlooking the eastern aspect of the Pump House.

2.4 EVALUATION & IMPACT ASSESSMENT

Evaluation of ecological features follows the NRA (now TII) publication 'Guidelines for Assessment of Ecological Impacts of National Roads Schemes' (2009). Impact assessment follows 'Guidelines on The Information to be Contained in Environmental Impact Assessment Reports' published by the EPA (2022). Reporting generally follows Chartered Institute of Ecology and Environmental Management (2018) 'Guidelines for Ecological Impact Assessment in the UK and Ireland - Terrestrial, Freshwater, Coastal and Marine'.

2.5 SURVEY LIMITATIONS

Full site and building access was supplied by the Client. All relevant structures were surveyed generally according to industry best-practice and standards (Marnell et al. (2022), Collins (2023)).

Surveys took place in autumn outside the period which is optimal for survey of maternity roosting sites and therefore it was not possible to establish the size of the breeding population. Sub-optimal weather was experienced during the survey of 30th September 2025 when light to moderate rain occurred.

It is considered that in the current instance, given the results obtained and works proposed, the study was not limited in any significant way.

3 Results

The proposed site occurs in an agricultural landscape and adjoining land used are pasture, tillage residential and transport. The area contains some foraging and commuting habitat for bats and experiences relatively low levels of light pollution.

3.1 DESKTOP REVIEW

Relevant publicly accessible data were reviewed as outlined below.

3.1.1 Designated Sites

No nature conservation sites designated for bats under either national or European legislation are located proximal to the proposed works and are therefore not relevant to the current assessment.

3.1.2 Data Search

National Biodiversity Data Centre holds previous records of bat presence from within the 10km square (S22) in which the proposed site is located. These records are for:

- Common pipistrelle (*Pipistrellus pipistrellus*)
- Soprano pipistrelle (*Pipistrellus pygmaeus*)
- Leisler's bat (*Nyctalus leisleri*)
- Daubenton's bat (*Myotis daubentonii*)
- Brown long-eared bat (*Plecotus auritus*).

The overall bat suitability index value (35) according to 'Model of Bat Landscapes for Ireland' (Lundy *et al.* 2011) suggests the landscape in which the proposed site is located is of moderate to high suitability for bats in general. Species specific scores are provided in **Table 3.1**. The proposed site occurs outside the known range of Lesser Horseshoe Bat.

Table 3.1 - Suitability of the study area for the bat species according to 'Model of Bat Landscapes for Ireland' (Lundy *et al.* 2011).

Common name	Scientific name	Suitability index
<i>All bats</i>		35
Soprano pipistrelle	<i>Pipistrellus pygmaeus</i>	48
Brown long-eared bat	<i>Plecotus auritus</i>	54
Common pipistrelle	<i>Pipistrellus pipistrellus</i>	54
Lesser horseshoe bat	<i>Rhinolophus hipposideros</i>	2
Leisler's bat	<i>Nyctalus leisleri</i>	49
Whiskered bat	<i>Myotis mystacinus</i>	22
Daubenton's bat	<i>Myotis daubentonii</i>	41
Nathusius' pipistrelle	<i>Pipistrellus nathusii</i>	1
Natterer's bat	<i>Myotis nattererii</i>	44

Source: <https://maps.biodiversityireland.ie/Map>. Accessed 17/11/2025.

All bat species likely to occur at the proposed site are of 'Least Concern' within Marnell *et al.* (2019). The most recent Article 17 report (NPWS, 2025) states the conservation status of such bat species are 'favourable'.

3.2 DAYTIME ASSESSMENT

Features on site were assessed for their suitability for roosting bats following Collins (2023) (see **Table 2.1**). The site contains manmade structures only and no significant trees are present within the study area.

The study area contains a water tank and some small metal structures (see **Plates 3.9-3.10**), in addition to the Pump House. These metal structures are considered to have negligible suitability for roosting bats and no evidence of such was recorded during surveys. These other structures are not considered further, and the discussion below relates to the Pump House only.

The Pump House is constructed of concrete blocks with an artificial slate roof (see **Plate 3.11**). No windows are present, and interior access is provided by way of roller doors and other pedestrian access doors. The Pump House is composed of a number of rooms that are connected by gaps above the internal walls and the ceilings (see **Plate 3.6**). Droppings were noted in several locations, with most being present in the pump room (see **Plate 3.7**). A dropping sample was collected from the pump room and sent for DNA analysis to Surescreen Scientifics. Testing results confirmed this dropping was attributed to Soprano pipistrelle (see **Appendix A**). Dead juvenile bats were found within the pump room specifically (see **Plate 3.8**), indicating the presence of maternity roosting. These individuals are presumed to have entered the interior space through the aforementioned gap between the wall and ceiling. The pumps appear to operate continuously within the structure and produce significant noise which the roosting bats appear accustomed to.

The roller door to the pump room was ajar on both survey and a gap above the roller door also provides for bat access. Human access to the attic is provided by way of one attic hatch in the pump room ceiling. A modern Breathable Roofing Membrane (BRM) has been used, with urine stains evident from the underside (see **Plate 3.2**). It was not possible to confirm which type of BRM is present, with Bat Conservation Trust advising that all BRMs are potentially dangerous to bats. From available vantages, there is no evidence of significant fraying or entangled bats at the time of survey.

Externally, deep grout lines are present between blockwork, and these extend vertically up beyond the soffit (see **Plate 3.5**). These grout lines create a small gap which facilitates bat access and egress into the attic space and are present around the entire structure. An accumulation of droppings was noted externally on the south-western side of the Pump House externally during the September survey, indicating proximity to the roosting location within (see **Plate 3.4**). This accumulation was no longer present at the time of the October survey.



Plate 3.1 Interior of pump room.



Plate 3.2 Attic hatch within pump room.



Plate 3.3 Interior of Pump House.



Plate 3.4 Accumulation of droppings on the exterior.

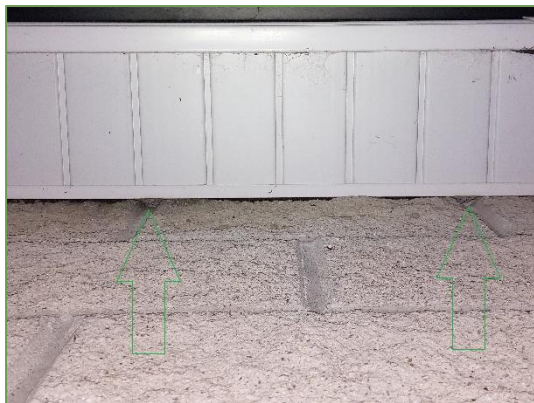


Plate 3.5 Block work walls with grout lines (green arrows) extending up last soffit, providing crawl space for bat access/egress.



Plate 3.6 Gaps between wall and ceiling appear to provide interior access for bats.



Plate 3.7 Bat droppings within Pump House.



Plate 3.8 Dead juvenile bats found within the pump room - indicates maternity roosting.



Plate 3.9 Water tank within the study area.



Plate 3.10 Metal structures (control room etc.) within the study area.

3.3 EMERGENCE SURVEYS

Emergence surveys were conducted on the Pump House on two occasions in autumn 2025; 30th September 2025 and 15th October 2025 (see **Table 2.1**).

15 bat emergences were recorded during the survey on 30th September 2025, while 30 emergences were recorded during the survey on 15th October 2025. It is likely that rain may have suppressed emergences during the September survey, and three re-entries were recorded on that occasion indicating suboptimal foraging conditions. All but one emergence were from the grout lines described above, and the locations identified in both surveys are collated and shown in **Plate 3.11** and **Plate 3.12**. White arrow indicates observed emergence / re-entry points and red circles identify those most commonly used. One Common pipistrelle emergence was observed from above the roller door in the pump room, and the attic-hatch was open at this time.

Three species were recorded during emergence surveys, and of these only Common pipistrelle and Soprano pipistrelle were recorded to have emerged from the Pump House. The third species, Leisler's bat, was observed foraging at height over the study area on occasion and did not interact with the Pump House. Overall, 180 registrations were recorded during emergence surveys (and some of these would have been recorded simultaneously on multiple recorders given the small size of the target building). Of these 180 registrations, 74% are attributable to Common pipistrelle and 8% were attributable to Soprano pipistrelle. The remaining 18% was

attributable to Leisler's bat which as described above were not recorded to have interacted with the site.

Upon egress, the majority of bats flew directly north-west, towards a nearby treeline off-site. Echolocation registrations recorded were typically associated with emerging or re-entering pipistrelles and foraging behaviour by pipistrelles was generally not observed within the study area. One Common pipistrelle was observed at 19:28 flying for a number of minutes in circles off the eastern boundary of the site while emitting loud social calls (see **Plate 3.13**), possibly associated with courtship behaviour known as 'song-flight'.



Plate 3.11 View of western side of Pump House building, arrows indicate observed access/egress points. Red circles indicate those observed to most commonly observed to be used.



Plate 3.12 View of south eastern side of Pump House building, arrows indicate observed access/egress points. Red circles indicate those observed to most commonly observed to be used.

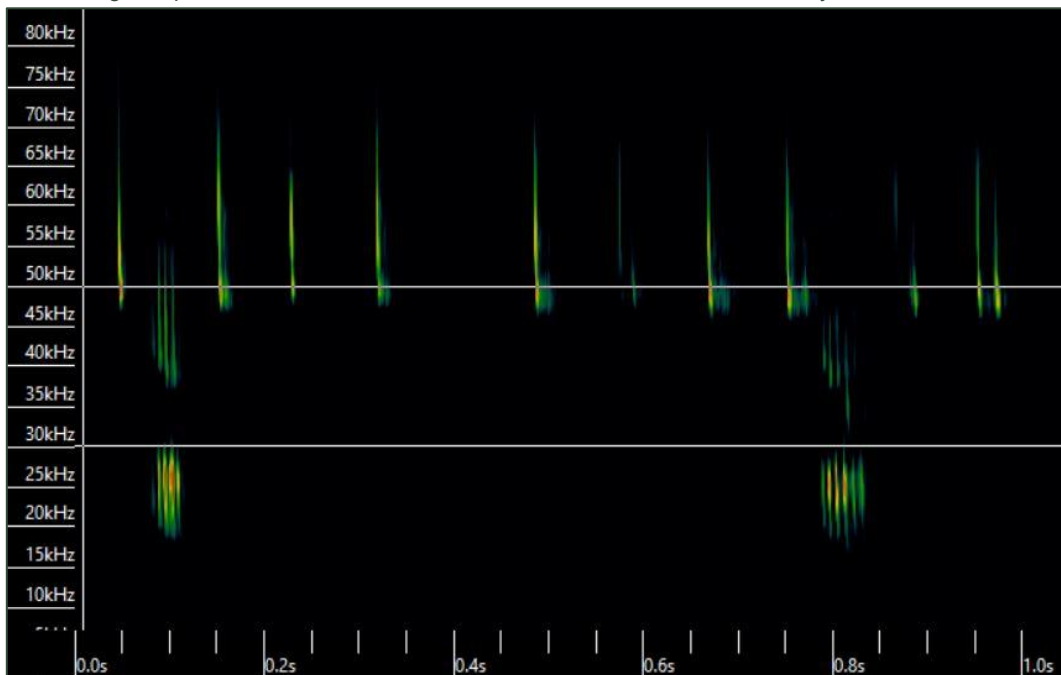


Plate 3.13 Sonogram showing example of Common pipistrelle 'Type D' social calls (following Middleton et al. (2022), possibly associated with 'song-flight' behaviour by a male.

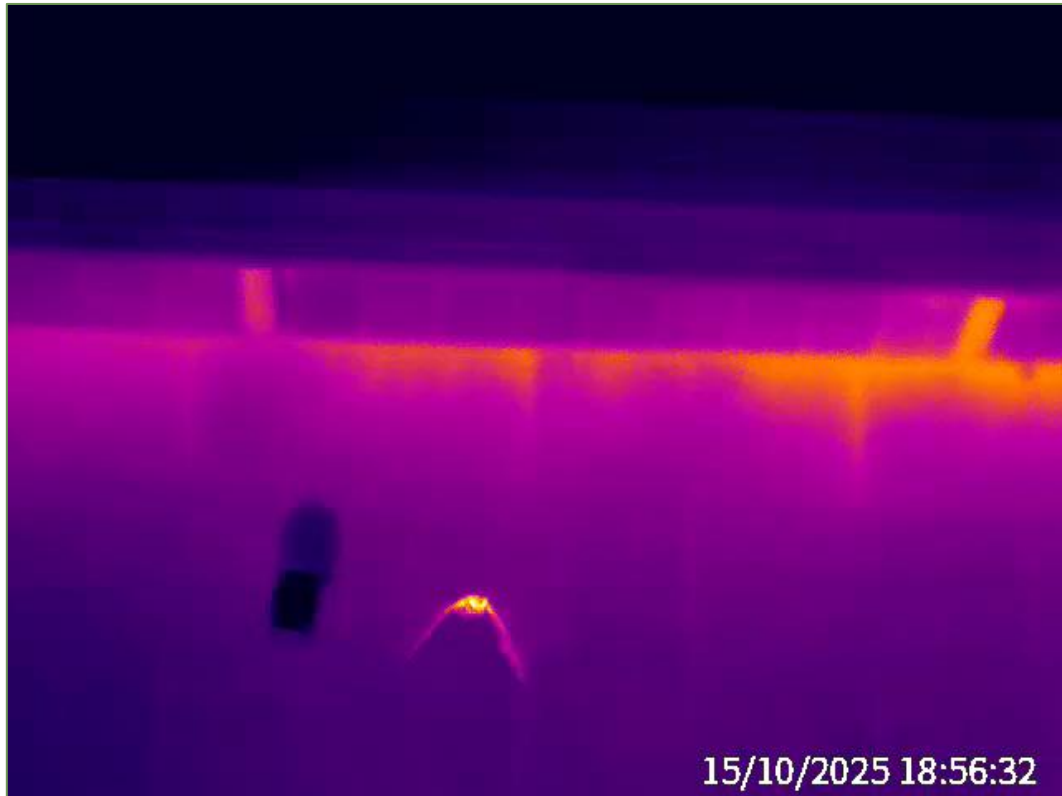


Plate 3.14 Thermal image of Common Pipistrelle immediately after emergence.

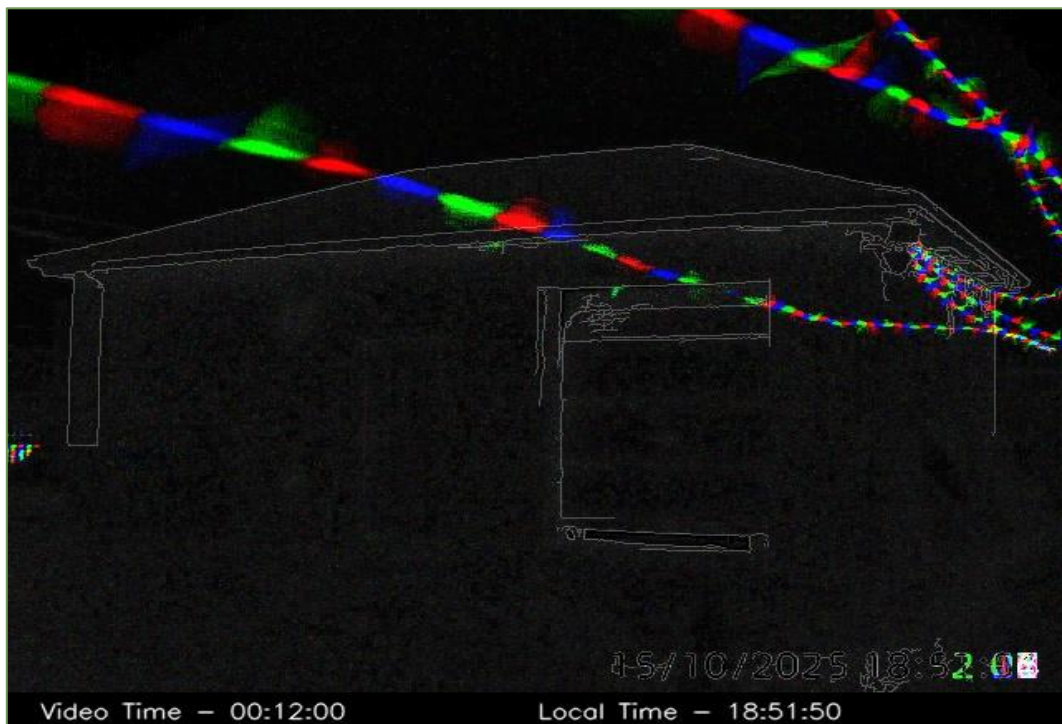


Plate 3.15 30-second summary image of bat emergence from western corner of pumphouse.

3.4 SUMMARY OF RESULTS

Overall, the Pump House is considered of 'high' suitability for roosting bats following Collins (2023). The building is used by both Soprano pipistrelle and Common pipistrelle at a minimum and is likely to be used to varying extents throughout the year. Most importantly, visual inspection and the results of emergence survey indicates the building hosts a maternity roost although it was not possible to confirm the pipistrelle species (common or soprano or both) which forms maternity colonies. The timing of the survey means it has not been possible to determine the size of the colony in terms of numbers of individuals.

An exact roosting location (e.g. on the wall plate or between roofing membrane and slates) has not been identified and it is likely that multiple locations within the attic/roof of the Pump House are used depending on species, time of the year and type of colony. Activity recorded in the study area consisted mostly of emergence/commuting (to the west) and the site otherwise does not contain features likely to be used by foraging or commuting bats.

It is possible that the current pumping arrangement contributes to excessive heat accumulation in the attic space, especially in the summer, which may represent a threat to the colony.

Based upon the results of surveys described above, and considering the local context of the proposed site, the study site is considered to be of **Local Importance (Higher Value)** for bats. Following Marnell et al. (2022) the significance of this identified roost is considered to be high.

4 Potential Impacts and Mitigation Measures

Potential impacts and mitigation measures are discussed separately below. Uisce Éireann proposes to carry out minor works at the existing Templetney WTP Pump House to address the accumulation of excessive heat within the building (see **Appendix B**). The potential for these works to impact upon roosting bats has been considered. As outlined above it is possible that the excessive accumulation of heat in the attic of the Pump House, especially during hot summer sunshine, may represent a threat to bats roosting within.

4.1 POTENTIAL IMPACTS

No direct interference or loss of roosting space will occur as a result of the proposed works. Potential impacts will be limited to temporary disturbance effects only, due to noise and vibration during drilling and other mechanical works. Bats roosting within the Pump House will already be accustomed to a high level of noise and disturbance from the existing pumps.

Installation of the extraction pipe through the blockwork wall will involve the use of a motorised coring machine, which will generate noise, vibration and dust during the works. Replacement of the existing solid roller shutter door with louvered doors will also involve a brief works period during which noise, vibration and dust will likely be generated but to a lesser extent than would be associated with coring works for the extractor fan. Replacement of the three 'High Lift Pumps' is likely to take several days but based on current information will not be associated with significant additional noise or vibration impacts. The proposed works will not affect the ability of bats to commute through the study area, and no works which may affect the foraging potential of the study area are proposed.

No measures are required during the operational phase. As outlined below, the attic hatch will be fastened and kept closed when not in use.

The likely effects are generally amenable to mitigation, as outlined below. In the absence of mitigation, the works would likely have a temporary, 'slight' negative effect at a local level following EPA (2022).

4.2 MITIGATION MEASURES

Unimpeded access to the attic and roof space will be maintained for bats during (and after) the proposed works. There is no proposed modification of any access/egress points associated with the roost, or modification to the roosting location (attic) itself.

In order to avoid unnecessary disturbance on the maternity colony during coring of wall for the extractor fan and installation of the louvered door, these works will only be carried out between September and April inclusive. Seasonal restrictions on the pump replacement works are not considered warranted in this instance.

Prior to the commencement of works, a bat licensed Ecologist will be engaged to provide a toolbox talk on-site. The bat licensed Ecologist will examine the gap between the ceiling and internal wall to ensure no bats are present, and this space will be filled using foam pipe lagging or a similar product (not expanding foam) to prevent further bat access to the ground floor

rooms of the Pump House. This measure will ensure that further juvenile bats (see **Plate 3.8**) do not fall into the rooms and become trapped.

The attic hatch (see **Plate 3.2**) will be kept closed during works and fasteners installed to prevent strong winds opening the hatch once the Louvered doors are installed. Keeping the hatch closed will provide an effective measure to reduce noise and dust related disturbance on bats

As outlined above, no access into the attic is required or will be allowed during works. No night-time works requiring external illumination are required or will be allowed.

Further measures (e.g. exclusion of bats from the building during works) are not considered viable or appropriate in this instance due the nature and scale of works proposed.

4.3 MEASURE FOR THE FUTURE CONSERVATION OF THE ROOST

An emergence count will be carried out following the methodology outlined herein in June or July. The purpose of the monitoring is to establish a baseline understanding of the maternity colony, which may contribute to any future asset-management decisions.

Monitoring data will be submitted to the National Biodiversity Data Centre and Bat Conservation Ireland.

5 Derogation Licence Application

Bespoke and appropriate mitigation measures have been outlined in **Section 4.2** above. No additional measures are considered feasible in terms of further reducing the impact of the scheme on bat species locally.

A derogation license is requested for the proposed works. Please see information below in regard to responses to the three tests which will be considered during the Regulation 54 Derogation decision making process.

5.1 TEST 1 – REASON FOR DEROGATION

The reason for the current derogation is contained within Option 2(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”*.

Uisce Éireann proposes to carry out minor works at the existing Templetney WTP Pump House to address the accumulation of excessive heat within the building (see **Appendix B**), which presents an issue for machinery and staff.

The potential for these works to impact upon roosting bats has been considered. No direct interference or loss of roosting space will occur as a result of the proposed works. Potential impacts will be limited to temporary disturbance effects only, due to noise and vibration. In the absence of the proposed maintenance works, it is possible that the excessive accumulation of heat in the attic of the Pump House, especially during hot summer sunshine, may represent a threat to bats roosting within.

5.2 TEST 2 – ABSENCE OF ALTERNATIVE SOLUTIONS

Alternative solutions are considered below and detailed as to their suitability.

5.2.1 Alternative 1 – Do Nothing

As discussed above, it is possible that the excessive accumulation of heat in the attic of the Pump House, especially during hot summer sunshine, may represent a threat to bats roosting within. Under a do-nothing scenario, heat generated by the pumps during the summer months may result in sub-optimal roosting conditions for the maternity colony and possible heat-induced bat mortality. Additionally, juveniles are able to access the interior of the structure and become trapped.

This solution was not considered suitable, and alternative options are required.

5.2.2 Alternative 2 – Exclude Bats Entirely From the Pump House

Exclusion of bats entirely from the attic space of the pump house would result in the complete and unnecessary loss of maternity roosting within the site. Under this scenario, a net loss in high-quality roosting spaces will occur on the local bat population. Uisce Éireann are committed to accommodate the existing bat colony within the Pump House.

This solution was not considered suitable, and alternative options are required.

5.2.3 Alternative 3 – Address Overheating Issue While Preserving the Roost

The mitigation for the proposed works involve leaving the attic in its entirety for bat species as it currently exists. The proposed works consist of maintenance only. Potential impacts will be limited to temporary disturbance effects only. Through application of outlined mitigation measures (e.g. avoidance of maternity season), no loss in roosting space will occur as a result of the proposed works.

Both during and following the completion of works, the roosting space for bats within the Pump House will be retained.

This solution is considered likely to represent a 'neutral' or 'slight positive' effect on bats.

Alternative 3 was considered the most suitable option in this instance.

5.3 TEST 3 – IMPACT OF A DEROGATION ON CONSERVATION STATUS

No loss of roosts will occur as a result of the proposed works, which are intended to address overheating within the pump room only. The existing roosting space, and primary access/egress points will be maintained throughout and following the works.

Temporary disturbance of a confirmed maternity roost cannot be avoided as the necessary repairs are located proximal to identified roosting locations. This disturbance has been appropriately mitigated through seasonal avoidance primarily, in addition to toolbox talk and retention of access/egress.

The conservation status of all of the roosting bat species identified within the Pump House are considered of 'Least Concern' (Marnell et al., 2019). The most recent Article 17 report (NPWS, 2025) states the conservation status of these species as 'favourable' also. The mitigation stipulated within **Section 4.2** above are considered sufficient to effectively mitigate any potential temporary disturbance effects.

The Pump House is not accessible to Lesser Horseshoe Bat, with the site located outside of their known range. No designated sites listed for Lesser Horseshoe Bat are located within 10km of the site. As a result, there is no potential for ex-situ effects.

Considering the above, the proposed derogation is not considered to be detrimental to the maintenance of the populations of the relevant species to which the Habitats Directive relates at a favourable conservation status in their natural range.

5.4 Measure For The Future Conservation Of The Roost

While no permanent negative effects are likely to occur, Uisce Éireann are committed to the conservation of the colony and so a survey will be carried out to provide further detail on the maternity colony. An emergence count will be carried out following the methodology outlined herein in June or July. The purpose of the monitoring is to establish a baseline understanding of the maternity colony, which may contribute to any future asset-management decisions.

Monitoring data will be submitted to the National Biodiversity Data Centre and Bat Conservation Ireland.

6 References

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Appendix A - DNA Analysis

Folio No: 4231-2025
Purchase Order: 202524
Contact: O'DONNELL ENVIRONMENTAL LTD
Issue Date: 10.10.2025
Received Date: 07.10.2025

Biological Report

Technical Report



SureScreen Scientifics

Folio No: 4231-2025
Purchase Order: 202524
Contact: O'DONNELL ENVIRONMENTAL LTD
Issue Date: 10.10.2025
Received Date: 07.10.2025

Biological Sample Analysis

Summary

Most biological materials (tissue, feces, hair, blood, etc.) contain small amounts of DNA from the organism of which it originated. Using molecular methods such as PCR (polymerase chain reaction) and DNA sequencing, SureScreen Scientifics are able to analyze an unknown sample to determine which species the sample originates from our methods are optimized for the detection of species including bats (over 92% of bat species worldwide can be identified including all 18 UK bat species), mammals; bees, wasps & hornets; birds; fish; plants (from roots, leaves, stem and even dried wood) and many more species.

Results

Lab ID	Site Name	OS Reference	Sample Type	Species Name	Match(%)
B5744	Templetney WWTP - TTPa	S 26104 27160	Bat Dropping	Soprano pipistrelle (Pipistrellus pygmaeus)	98.57
Genetic Sequence TATGCCTTAATTATAATCGGGGGGCTTTGGAAGTACTGGTTCCACCTTATGATCGGAGCCCCCGACATGGCCTTT CCTCGTATAAATAATATGAGTTTCTGACTTCTGCCCCCTTCTTTTCTACTACTACTAGCCTCATCTATAGTGAAGCG GGAGCGGGTACGGGCTGAACAGTCTATCCCCCTTAGCAGGAAATCTAGCCCACGCGGGAG					

Matters affecting result: none
Reported by: Consuela Sopronyi

Approved by: Chelsea Warner

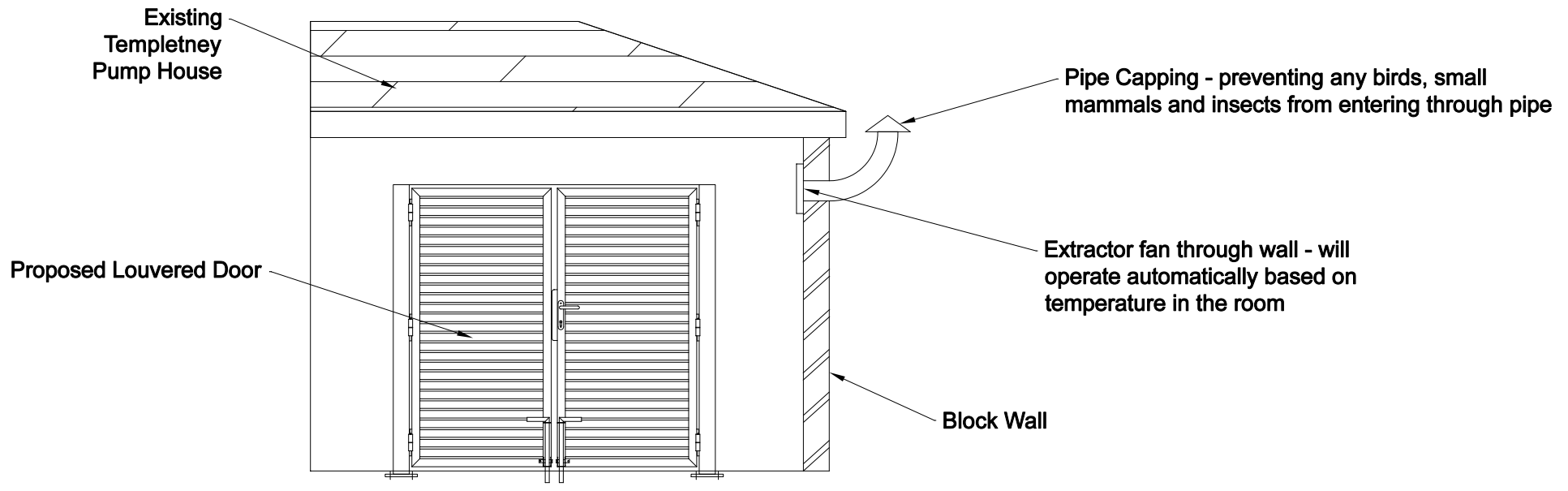
Methodology

Once samples have arrived in the laboratory, the DNA is isolated using a commercial DNA extraction kit. Using PCR, DNA (if present within the sample) is amplified using universal molecular markers designed to amplify a short fragment of the DNA of the target species group (i.e. mammal, fish, arthropod, reptile, plant etc.). If amplification is successful, the resulting DNA sequence is revealed using a process known as Sanger Sequencing in order to obtain the genetic sequence of the mitochondrial gene within the sample. The sequence results are aligned against a library of known reference sequences using bioinformatics software, which enables us to determine which species the DNA sequence from the sample matches with, informing the species identity and sequence similarity (match %). If the initial analysis is unsuccessful, the entire process is repeated up to two additional times with a fresh reserve sample (if available) in order to obtain a species identification. If no DNA is detected after three attempts, then we can be confident that any further analysis of the sample will likely also fail to result in species identification.

Interpretation of Results

- Sample Type:** The sample you send to us can come from a variety of sources. Fecal, dropping, urine, hair, blood, carcass (skin, flesh, bone), gamete, plant matter or unknown biological material all contain DNA that we can test for in order to identify the species of origin.
- Genetic Sequence:** The unique DNA sequence obtained from the sample.
- Match (%):** How closely matched the DNA sequence from your sample is to the sequences within our reference database. This can be interpreted as a score of result accuracy, with the maximum score of 100% indicating an exact match of the sample to the indicated species' reference sequence. Lower scores (80-99%) indicate some variation between the sample and reference sequence, likely due to natural variation between individual genetic sequences and/or systematic variations generated through the sequencing process. Scores below 80% similarity should be interpreted with care and can indicate part degraded or part contaminated samples.
- Inconclusive Result:**
- Degraded sample:**
DNA is degraded and we are unable to determine species identification due to degradation of sample DNA. This can happen either before sample collection (old samples, exposure to UV etc.) or after sample collection if stored for long periods before analysis or not handled correctly.
- Inhibited/contaminated sample:**
We are unable to determine species identity due to contamination or the suspected presence of large quantities of PCR inhibitors. Contamination sources can originate from other species which could have come into contact with the samples, or human contamination during sample collection.
- Alternative Result:** Sometimes, for targets such as bat dropping analysis, other mammalian species such as rodents are detected. We find this to be a common occurrence as some bat droppings can be similar in appearance to rodent droppings. Although sometimes unexpected, repeat analyses in these cases would likely return the same results.

Appendix B - Project Design



NO	DATE	BY	DESCRIPTION	CHK	APP



KILCASH RATIONALISATION PROJECT

DRAWING TITLE
 TEMPLETNEY WTP SITE
 PROPOSED MODIFICATIONS TO EXISTING
 PUMPHOUSE

STATUS
 DETAILED DESIGN

Date: 30/05/23	Scale:	Drawn: CM	By: FR	Check: FR
Project No.: W3800	Dwg. No.: W3800-AYS-02-WN-DR-C-5225	Rev: 00		

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