

Table 11: Detailed assessment of PRF identified during the PRA

Building Code (ref. Figure 4)	Description of Structure	Field Signs Identified [Y/N]	PRF Description	Roost Suitability Level*
Structure 1 Grid Ref: O 05091 29169	Old Dairy Shed - 2-storey agricultural building with corrugated steel roof. (Outside Footprint of PA)	N	This structure is exposed which is not suitable for crevice dwelling species of bats. There is minimal insulation; therefore, this structure was not identified to have adequate shelter for roosting bats.	L - N
Structure 2 Grid Ref: O 05126 29197	Long Cattle shed Single storey buildings of mixed construction and roof types (slate and corrugated iron). (Inside Footprint of PA)	N	Building has suitable openings in the eaves for bats. This structure is heavily exposed provides minimal shelter with no insulation. Therefore, there is Low to Negligible roost potential.	L - N
Structure 3 Grid Ref: O 05137 29145	Long Cattle shed Single storey buildings of mixed construction and roof types (slate and corrugated iron). (Inside Footprint of PA)	N	Building has suitable openings in the eaves for bats. This structure is heavily exposed provides minimal shelter with no insulation. Therefore, there is Low to Negligible roost potential.	L - N
Bridge 1 Grid Ref: O 05085 29394	Footbridge Flat Concrete and Steel Gate posts (Inside Footprint of PA)	N	Structure is a flat singular concrete piece, heavily exposed provides negligible shelter with no insulation.	N 0
Bridge 2 Grid Ref: O 04907 29250	Bridge Arched Natural Stone and concrete (Bridging FW1/FW4) (Outside Footprint of PA)	N	The structure bridges the Camac River (FW1) at the South-west border of site surrounded by tree lines of varying quality with some isolated foraging areas (scrub/meadow mosaic).	M - L 1

Negligible Roost Suitability – N; Low Roost Suitability – L; Moderate Roost Suitability – M; High Roost Suitability – H.

Table 12: Results of PRA roost Survey after Day inspection and Dusk Emergence Survey

Building Code	Internal Inspection (Y/N)	External Inspection (Y/N)	Roosts and Bat Species
Structure 1	Y	Y	None (Absent)
Structure 2	Y	Y	None (Absent)
Structure 3	Y	Y	None (Absent)
Bridge 1	N	Y	None (Absent) (commuting & Foraging activity)
Bridge 2	N	Y	None Determined (commuting & Foraging activity)

Tree Surveys

During the bat surveys, specific trees or cluster of trees were checked for Potential Roost Features (PRFs), however the surveys did not identify any trees with active roosts present. Dawn and Dusk activity surveys were conducted along transects correlating to the hedgerow and treelines under investigation. No significant activity, foraging or roosting, was recorded during these surveys.

Local bat species do use the Hedgerows and treelines within the project area for commuting purposes (See Flightline and Commuting routes **Figure X** in **Bat Survey Summary**). Trees surveyed for PRFs are as follows:

For a full description of the condition of existing Hedgerows and Trees within the project area, please see the accompanying Clondalkin Rugby Club Tree Report prepared by Ethan Gannon, Veon Arboricultural Division (June 2022).

Table 13: Trees investigated for PRFs

Hedgerow/ Tree line Number	Tree Description	Potential Roost Features (PRFs)	Tree Potential	Roosts and Bat Species
Hedgerow 2	Ash (<i>Fraxinus excelsior</i>) 19m Mature	Prominent tree. Growing on adjoining land side of river, outside of the site area. Ivy is suppressing crown. Minor symptoms of ash dieback	3	None
Hedgerow 2	Ash (<i>Fraxinus excelsior</i>) 19m Mature	Prominent tree. Growing on adjoining land side of river, outside of the site area. Ivy is suppressing crown. Minor symptoms of ash dieback	3	None
Hedgerow 2	Crack willow (<i>Salix x fragilis</i>) 14m Mature	Growing on adjoining land side of river, outside of the site area but its crown overhangs the site area. Large size limbs removed in the past have left wounds for decay development.	2	None
Hedgerow 2	Sycamore (<i>Acer pseudoplatanus</i>) 16m Mature	Growing on the adjoining land side of the river. Ivy cover is extending into its upper crown.	3	None
Hedgerow 2	Ash (<i>Fraxinus excelsior</i>) 18m Mature	Growing on adjoining land side of river, outside of the site area. Ivy is suppressing crown. symptoms of ash dieback. Deadwood in crown.	2	None
Hedgerow 3	Ash (<i>Fraxinus excelsior</i>) 14m Mature	A line of ash trees making up part of the upper canopy at the northern end of Hedge No.2. They are becoming suppressed by ivy. They are showing symptoms of ash dieback	3	None

Hedgerow 4	Ash (<i>Fraxinus excelsior</i>) 15m Over Mature	Growing out of the corner of the stone wall that runs through Hedge No.4. Signs of internal decay in lower trunk. Ivy is suppressing its crown	2	None
Hedgerow 4	Elm (<i>Ulmus glabra</i>) 9m Semi-Mature	It is standing dead and will become decayed and unstable.	2	None

Walking Transects

Walking transects are a suitable survey method to cover large accessible areas to provide an indication on how local bat populations are utilising habitats within a survey area.

Please note: Each geo-reference point is a bat observation. Individual bats are often recorded multiple times as the surveyor passes through their foraging/commuting habitat. Therefore the observations recorded are indicative of levels of bat activity only.

Please also note: Bats species that have quiet echolocation calls, such as brown long-eared bats, tend to be under-represented by this type of survey. Loud bat species such as Leisler's bat and Pipistrellus species are easily picked up by bat detectors and therefore this survey type.

Three walking transects were completed as part of the 2022 surveys:

- 28th June 2022
- 7th July 2022
- 12th July 2022



Figure 5: Directions of D&D Activity Transect Walks

The transect walking route covered all the hedgerows and treelines within the site. It also encompassed the agricultural courtyard with Structures 1-3 (surveyed for PRFs and Present/Absent Roosts) and the amenity Grasslands within the project area (PA). These activity walks were predominately perimeter transects (yellow lines), with one transect walk across the width of the grasslands respectively (blue lines).

The Camac River (FW1) and Baldonnell Upper (FW4) were also walked, including Bridge Structures 1 and 2. The public road to the south, outside the site footprint, was walked within the confines of the overall site area. The roads to the North, West and East of the site were not walked, due to Health and Safety, Access, and Heavy Traffic issues (N7 and R136, respectively) and they are also outside the confines of the Site Footprint.

Walking Transect 1 Dusk – 28.06.22

A total of four species of bat were recorded: Leisler's (*Nyctalus leisleri*), Soprano Pipistrelle (*Pipistrellus pygmaeus*), Common Pipistrelle (*Pipistrellus pipistrellus*), and Nathusius' Pipistrelle (*Pipistrellus nathusii*).

The most frequently encountered bat species was Common Pipistrelle bats. A singular Leisler's bat was recorded in the open areas within the courtyard around Structure 3 and adjacent to 'Hedgerow 5'. Soprano Pipistrelle bats were recorded in three locations, while Nathusius' Pipistrelle (*Pipistrellus nathusii*) bat was recorded once along the river course and once crossing over the farm courtyard.

Weather and Time Conditions were optimal, but overall Bat Activity was very low across the whole site. The only area of continuous activity (moderate) was along the Camac River.



Figure 6: Heat Map of Dusk Transect Survey 1 (1/3)

Walking Transect 2 Dusk – 07.07.22

A total of seven species of bat were recorded: Leisler's (*Nyctalus leisleri*), Soprano Pipistrelle (*Pipistrellus pygmaeus*), Common Pipistrelle (*Pipistrellus pipistrellus*), Whiskered (*Myotis mystacinus*), Daubenton's (*Myotis daubentonii*), Natterer's bat (*Myotis nattereri*), and Nathusius' Pipistrelle (*Pipistrellus nathusii*).

The most frequently encountered bat species was Common pipistrelle bats. Leisler's bats were the second most frequently recorded, with Soprano Pipistrelle a close third. All three were primarily recorded along 'Hedgerows 1 and 5'. There was pronounced activity to the South-east at the point where 'Hedgerow 1' meets 'Hedgerow 6' adjacent to the N7. A singular Natterer's bat (*Myotis nattereri*) was recorded in this area also.

There were three streetlights non-operational in this area, creating a dark space within the pronounced light spillage from the motorway (N7). Common pipistrelle was the most frequently recorded species in this area. A singular Nathusius' Pipistrelle was recorded. Again, within the open courtyard areas of the farm buildings.

Daubenton's and Whiskered bats were recorded along the southwest road boundary route of the public road, close to the area where the Baldonnell Upper (FW4) (along the) flows along the inside hedge boundary, creating a pooled area of water at the house/field boundary.



Figure 7: Heat Map of Dusk Transect Survey 2 (2/3)

Weather and Time Conditions were optimal, and overall Bat Activity was high, although not across the whole site. The only area of continuous activity (moderate) was along the Camac River (FW1) and Baldonnell Upper (FW4) areas in the south. Although commuting bats species were recorded along the internal hedgerows ('Hedgerows 4&5') frequency, activity was minimal, with respective bat passes occurring on average once every four minutes.

Walking Transect 3 Dawn – 12.07.22

A total of four species of bat were recorded: Leisler's (*Nyctalus leisleri*), Soprano Pipistrelle (*Pipistrellus pygmaeus*), Common Pipistrelle (*Pipistrellus pipistrellus*), and Nathusius' Pipistrelle (*Pipistrellus nathusii*).

The most frequently encountered bat species was Leisler's. Leisler's bats were frequently recorded in open areas and along 'Hedgerow 6'.

Singular instances of Common Pipistrelle, Soprano Pipistrelle and Nathusius' Pipistrelle (*Pipistrellus nathusii*) were also recorded along 'Hedgerow 6'.

All four species were also recorded in the vicinity of the Camac River course, to the West of the site.

Weather and Time Conditions were optimal, however overall Bat Activity was very low. The only area of continuous activity (moderate) within the footprint of the project was along the Camac River (FW1).

Although commuting bats species were recorded along the external hedgerows ('Hedgerows 2&6') frequency, activity was almost negligible, with respective bat passes occurring on average once every five to six minutes, if at all.



Figure 8: Heat Map of Dawn Transect Survey 1 (3/3)

Figure 9 below combines the three transect survey walks plotted against the overall footprint of the site.

While some activity was recorded within the site over the three survey nights, this activity remained low, with only four species recorded: Leisler's (*Nyctalus leisleri*), Soprano Pipistrelle (*Pipistrellus pygmaeus*), Common Pipistrelle (*Pipistrellus pipistrellus*), and Nathusius' Pipistrelle (*Pipistrellus nathusii*).