

Preliminary Roost Assessment



Toilet block, Rossett

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Revision History

ADAS Ref (Revision number)	Date	Amendment

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Summary

RSK ADAS Ltd was commissioned by Rossett Community Council to conduct a Preliminary Roost Assessment (PRA) to determine suitability for roosting bats at the Toilet Block, The Green, Rossett. The proposed works comprise conversion of a toilet block to a Community Hub building. Several design plans are being considered.

A PRA was carried out on 29th July 2021 and no roosts were found. The building was considered to have a negligible potential to support bat roosts.

The proposed development works therefore are not constrained by the presence of bats.

It is recommended that if external lighting is required, it is sensitively designed as not to impact any bats foraging or commuting in the wider area.

To enhance the site for bats, it is recommended a bat box is installed on an adjacent mature tree within The Green.

1 Introduction

1.1 Background and Survey Objectives

ADAS was commissioned by Pete Morris of Rossett Community Council to undertake a Preliminary Roost Assessment (PRA) at the Toilet Block, Rossett, Wrexham. (National Grid Ref.: SJ 36914 57422) to determine suitability for roosting bats in support of a planning application to renovate the property.

The objectives of this study are to;

- *identify any bat roosts within the building;*
- *assess the potential for bat roosts within the building;*
- *identify the value of any roosts present; and,*
- *detail any measures required to ensure proposed works do not negatively affect bat populations.*

1.2 Site Description

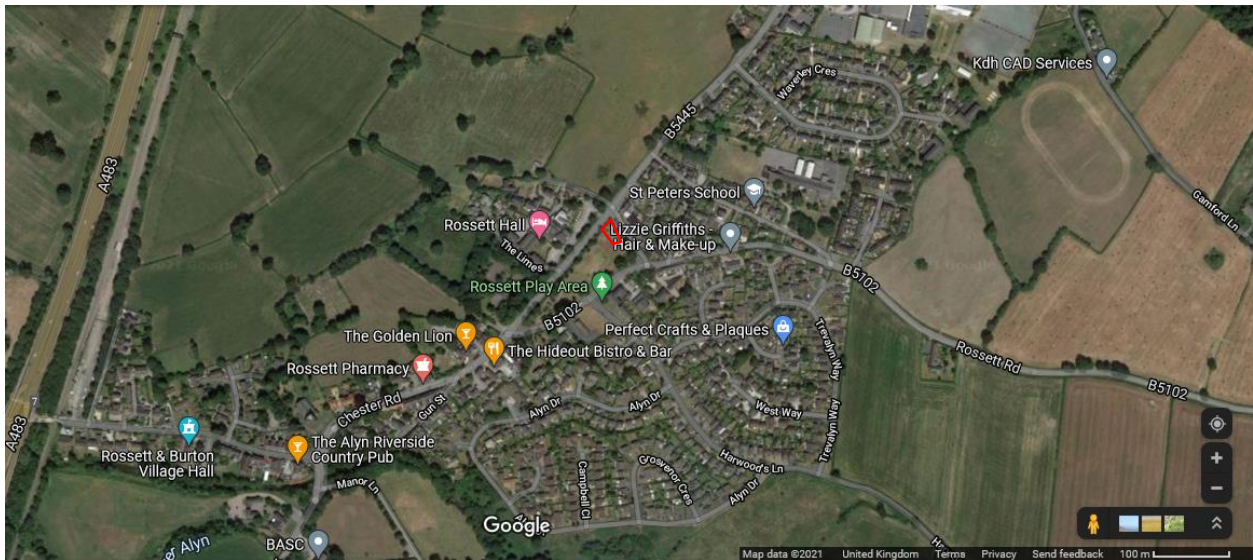
The building is located at the northern corner of The Green, Wrexham, North Wales, LL12 0DS, within the village children's play park (Appendix 1). The park is bordered by mature trees and hedges, and primarily comprises managed short sward amenity grassland. The park lies at the northern edge of the residential village of Rossett and borders agricultural fields to the north. It is on the Welsh-English border, adjacent to Chester Road (the B5445) and 400 m north east of the River Aylun.

The building has a footprint of 50 square meters and comprises a single story, rendered, brick-built, tiled roof public toilet block. On the face of the building is a Public Access Defibrillator (PAD). The block is disused but well-maintained and is sectioned off into a female, male, and disabled toilets, with a storage section in the middle. Each section has external access doorways.

The roof void is partitioned into 2 sections. The smaller section over the disabled toilet, accessed via a loft hatch, is insulated and felt-lined. The larger roof void is open over the storage area and is insulated over the male and female toilets. This section of the roof is additionally lined with broken polystyrene panels. The eaves support plastic guttering and abut the roof tiles, separating the internal void from the tile infill that blocks the ends of the tiles. The windows are sealed closed, single-glazed with frosted glass and the casings are in a good state of repair. Internally the toilets are tiled and the storage area has exposed brickwork (see photos in Appendix 2).

The location of the building is outlined in red in Figure 1 and in Appendix 1.

Figure 1. Building Location



1.3 Description of the Proposed Development

The proposed development does not yet have confirmed design plans. Current plans either involve the conversion of the existing brick-built structure or full demolition of the current structure and building a new structure on a similar footprint.

The development plans aim to provide a Community Hub with potential for public toilets, indoor seating, and a café.

2 Legislation

2.1 Bats

Bats are protected under the Wildlife and Countryside Act 1981 (as amended) and the Conservation of Habitats and Species Regulations 2017. It is illegal to kill or injure bats, cause disturbance at their resting places or to block access to, damage or destroy their roost.

2.2 National Planning Policy Framework

The National Planning Policy Framework (NPPF) July 2021, is an update to the previous version issued in March 2018 and is a policy framework document which provide a range of important principles. Paragraph 174 of the NPPF states that decisions should contribute to and enhance the natural local environment by:

‘Minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures.’

Paragraph 175 goes on to state:

‘... take a strategic approach to maintaining and enhancing networks of habitats and green infrastructure; and plan for the enhancement of natural capital at a catchment or landscape scale across local authority boundaries.’

When determining planning applications, local planning authorities should aim to conserve and enhance biodiversity by applying the following principle (paragraph 180):

‘development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to improve biodiversity in and around developments should be integrated as part of their design, especially where this can secure measurable net gains for biodiversity or enhance public access to nature where this is appropriate. .’

2.3 Local Planning Policy

Table 1. Summary of relevant local planning policy (Wrexham County Borough Council)

Policy	Description
Local Planning Guidance Note No. 32: Biodiversity and Development	<i>Policy PS2</i> <i>Development must not materially detrimentally affect countryside, landscape/townscape character, open space, or the quality of the natural environment.</i> <i>Policy PS11</i>

Policy	Description
	<i>Encouragement will be given to proposals which improve the biodiversity value of sites and to the establishment of local nature reserves where the nature conservation and landscape interest of the land will be protected and enhanced.</i> <i>Policy EC4</i> <i>Development proposals should provide for the conservation and management of hedgerows, trees, orchards, woodland, wildlife and other natural landscape and water features, and include new planting in order to enhance the character of the landscape and townscape. Development which results in the loss or significant damage to valuable trees, important hedgerows or ancient woodland sites will not be permitted.</i>

3 Methodology

3.1 Desk Study

A request for records of known bat roosts to a Local Record Centre was not made. However, ADAS used Natural England's MAGIC online resource to identify records of bat European Protected Species Mitigation Licences within 2 km of the site.

The only Statutory Designation for nature conservation within 2 km of the building is *Marford Quarry SSSI*¹, noted for its diverse invertebrate population.

3.2 Preliminary Roost Assessment

A PRA was carried to determine suitability of the building for roosting bats. ADAS Ecological Consultant Jordane Marsh BSc (Hons) QCIEEM, under the guidance of Rob Nicholson BSc (Hons) MCIEEM, a highly experienced bat surveyor (licence no. 2015-14102-CLS-CLS), conducted an internal and external inspection of the building on the 29th July 2021. This involved systematically checking the exterior and all accessible internal areas of the building, identifying and classifying any features or structures suitable for bat roosts and potential entry / exit points, including evidence of bats such as droppings, urine staining, scratch marks or feeding remains. Window panes and other external surfaces were checked for droppings or other secondary evidence. A torch was used to illuminate recesses and crevices where present. Close-focusing binoculars were used to examine the external features. All areas internally were accessible to survey, including both roof void spaces. A ladder was used to inspect all roof tiled ends. The assessment

¹ **SSSI**. Site of Special Scientific Interest

was based on the most recent guidance included in the Bat Conservation Trust's *Bat Surveys for Professional Ecologists: Good Practice Guidelines* (Collins, 2016), which is summarised in Table 2.

Table 2. Classification of buildings and trees, according to their potential to support roosting bats

Category (Bat Potential)	Description
Negligible value	Building, structure or tree where surveyor has not identified any suitable potential roosting features, or where those that are present are of such poor quality or condition, such that bats are highly unlikely to use them
Low value	Building, structure or tree with one or more potential roost sites that could be used by individual bats opportunistically. However, these potential roost sites do not provide enough space, shelter, protection, 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).
Moderate value	Building, structure or tree with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions and surrounding habitat but unlikely to support a roost of high conservation status (with respect to roost type only – the assessments in this table are made irrespective of species conservation status, which is established after presence is confirmed).
High value	Building, 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.
Confirmed roost	Bats or signs of bats, such as droppings and / or feeding remains, found, or information provided via desk study which indicates a roost.

3.3 Limitations

The larger roof void was long and dark and was cluttered with debris restricting views of the roof void surfaces in some areas.

4 Results

4.1 Desk Study

The data search returned no records of European Protected Species Mitigation licences for bats within 2 km of the building. A map is provided in Appendix 3.

4.2 Preliminary Roost Assessment

The building is a single story, rendered, brick-built, tiled roof public toilet block. The block is disused by the public but it is well-maintained and is sectioned off into a female, male, and disabled toilets, and a storage room in the middle, each with solid external access doorways. Internally the toilets are tiled and the storage room has exposed brickwork. The windows are sealed closed, single-glazed with frosted glass and the casings are in a good state of repair with no cavities forming gaps or crevices. The external render is not peeling and forms no crevices and there are no missing or lifted tiles from the roof.

Each of the rooms are most recently used for storage, with tools, paint cans and Christmas decorations covering much of the internal floor space.

The roof void is partitioned into 2 sections, the smaller section over the disabled toilet, accessed via a loft hatch, is insulated and felt-lined and shows evidence of an old large wasp infestation. There were numerous dead wasps, one main nest over a foot wide and several small satellite nests. Access is through tiny plastic air brick holes at the tile eaves.

The larger roof void is open over the storage area and is insulated over the male and female toilets. This section of the roof is additionally lined with broken polystyrene panels. There is boxed and old guttering stored in this roof void.

The eaves support plastic guttering which tightly abuts the roof tiles, separating the internal void from the tile infill that blocks the ends of the tiles (see photos in Appendix 2). Some end tiles had lost their brick infill, exposing potential cavities under the tiles. On closer inspection, these gaps did not appear to penetrate a significant distance into the building and cobwebs could be seen within the gaps. These instances were all able to be fully inspected individually with a ladder and torch.

No evidence such as droppings were encountered during the survey in any of the rooms in the building or on external features.

Given the poor of quality features identified on the building and lack of field signs of bats externally and internally, the building is considered to have negligible potential for roosting bats. Similarly, no access points were identified which would allow bats to enter or exit the roof void and therefore the potential for use by hibernating bats is considered negligible. This assessment is, to some extent, supported by the lack of mitigation licences for bats issued in the area.

5 Conclusion and Recommendations

The building was considered to have a negligible potential to support bat roosts due to the poor suitability of features identified on the building and the lack of field signs of bats both externally and internally. The proposed development works are therefore considered highly unlikely to be constrained by the presence of bats.

It is unknown at present if any external lighting will be included as part of the proposed development. If so, this lighting should be minimal and designed sensitively. To avoid potential disturbance to bats in the general area, if present, lights should be directional or shrouds or baffles fitted and any security lighting should be sensor activated.

To further enhance the area, it is recommended that a bat box is erected on an adjacent mature tree to potentially enhance the site for and attract bats to the area. In accordance with guidance from the local planning policy, where possible, it is recommended that planning designs include the addition of native nectar-rich and fragrant plants to the area, to encourage invertebrates and in turn to provide a good food source for bats. Examples of suitable native nectar-rich fragrant plants are provided in Appendix 4.

6 References

Bat Conservation Trust, 2020. *Artificial Lighting Guidance*. Retrieved from Bat Conservation Trust: <https://www.bats.org.uk/our-work/buildings-planning-and-development/lighting>

Bat Conservation Trust, 2015. Encouraging bats, Retrieved from Bat Conservation Trust: https://cdn.bats.org.uk/pdf/Resources/Encouraging_Bats.pdf?mtime=20181101151549&focal=none

Collins, J. (ed.) (2016) *Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd edn)*. The Bat Conservation Trust, London.

Natural England, 2021. *Magic Map Application*. [Online] Available at: <http://magic.defra.gov.uk/magicmap.aspx> .

Stace. C., 2019. *New British Flora of the British Isles*. 4th Edition. Cambridge University Press.

Appendix 1: Site Plan

- Current building outlined in yellow, potential proposed footprints for new building designs outlined in blue and pink.

See following page.



Appendix 2: Photographs



Photograph 1: Front elevation



Photograph 2: Wasp nest in smaller roof void



Photograph 3: Satellite wasp nests



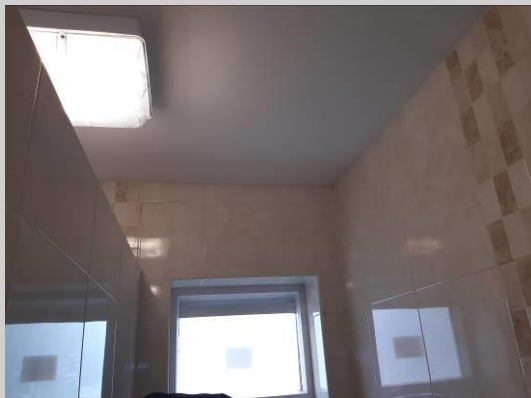
Photograph 4: Dead wasp



Photograph 5: Storage in larger roof void



Photograph 6: Broken insulation in larger roof void



Photograph 7: Internal tiling



Photograph 8: Window frame



Photograph 9: Damaged but stable tile infill



Photograph 10: Filled tile end



Photograph 11: Cobwebbed stable tile end



Photograph 12: Cobwebbed damaged tile end

Appendix 3: Desk study map

- Statutory Designations, Habitats, EPSM licences 2 km buffer (MAGIC)

See following page.

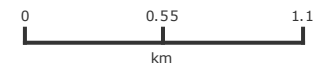
MAGiC AGIC Maps 2 km Designations Habitats and EPSL



Legend

- | | |
|---|--|
| Sites of Special Scientific Interest (Wales) | Mixed mainly broadleaved |
| Priority Habitat Inventory - Deciduous Woodland (England) | Mixed mainly conifer |
| National Forest Inventory (GB) | Shrub |
| Assumed woodland | Uncertain |
| Broadleaved | Windthrow |
| Cloud \ shadow | Young trees |
| Conifer | Granted European Protected Species Applications (England) |
| Coppice | Amphibian |
| Coppice with standards | Bat |
| Failed | Cetacean |
| Felled | Invertebrate |
| Ground prep | Other Mammal |
| Low density | Plant |
| | Reptile |

Projection = OSGB36
 xmin = 331700
 ymin = 355300
 xmax = 342300
 ymax = 360100



Map produced by MAGiC on 8 September, 2021.
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Appendix 4: Examples of Native Nectar Rich Fragrant Plants

Species	Flowering season
Corncockle (<i>Agrostemma githago</i>)	Summer
Cornflower (<i>Centaurea cyanus</i>)	Late spring and summer into autumn
Corn marigold (<i>Glebionis segetum</i>)	Late summer
Corn poppy (<i>Papaver rhoeas</i>)	Late summer
English Bluebell (<i>Hyacinthoides non-scripta</i>)	Spring
Field poppies (<i>Papaver rhoeas</i>)	Summer
Common Knapweed (<i>Centaurea nigra</i>)	Summer to autumn
Musk Mallow (<i>Malva moschata</i>)	Summer to autumn
Ox-eye daisy (<i>Leucanthemum vulgare</i>)	Summer
Primrose (<i>Primula vulgaris</i>)	Spring
Red campion (<i>Silene dioica</i>)	Spring
Scabious (<i>scabiosa</i> sp.)	Summer
St John's wort (<i>Hypericum perforatum</i>)	Spring
Wood forget-me-not (<i>Myosotis sylvatica</i>)	Spring
Yarrow (<i>Achillea millefolium</i>)	Early summer
Angelica (<i>angelica sylvestris</i>)	Summer
Borage (<i>Borago officinalis</i>)	Summer to early autumn
Coriander (<i>Coriandrum sativum</i>)	Summer
English marigolds (<i>Calendula officinalis</i>)	Early summer to autumn
Fennel (<i>Foeniculum vulgare</i>)	Summer to early autumn
Feverfew (<i>Tanacetum parthenium</i>)	Summer to autumn
Hyssop (<i>Hyssopus officinalis</i>)	Summer to early autumn
Lavenders (<i>Lavandula</i> sp.)	Summer
Lemon balm (<i>Melissa officinalis</i>)	Spring and early summer
Marjoram (<i>Origanum majorana</i>)	Summer
Rosemary (<i>Salvia rosmarinus</i>)	Spring
Sweet Cicely (<i>Myrrhis odorata</i>)	Spring to early summer
Thyme (<i>Thymus vulgaris</i>)	Summer