

BAT RISK ASSESSMENT AND SURVEY REPORT

HMP HAVERIGG MILLOM

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BAT RISK ASSESSMENT AND SURVEY REPORT

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GRID REF SD 14584 78932

REPORT FOR ANSCOMB CIVIL ENGINEERING LTD

Quality Assurance

Version	Prepared by	Date	Checked by	Date	Approved by	Date
R1	Sam	25/06/2021	Graeme	01/07/2021	Graeme	01/07/2021
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This assessment is intended to provide an accurate description of findings from the desktop study and from survey work undertaken on the dates shown; however, it cannot fully account for the reliability of third party data provided or for any changes to site conditions following the completion of the survey work due to activities carried out on-site or the dynamic nature of the natural environment. All work carried out by Naturally Wild Consultants Ltd is subject to our Terms and Conditions.

The report has been produced in accordance with current best practice guidelines



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EXECUTIVE SUMMARY

Naturally Wild were instructed to undertake a bat risk assessment and bat activity surveys at HMP Haverigg, Millom. The survey area comprised two disused accommodation blocks (F3/F4 and F5/F6) surrounded by amenity grassland, hardstanding and metal security fencing. The proposals are to demolish both buildings due to safety concerns relating to external cladding. There are currently no plans to replace the buildings.

The assessment comprised two parts: a desktop study and a site visit. The desktop study collated available public information regarding the biodiversity of the area, including the habitat structure of the site and surrounding area and the presence of any designated sites. Bat records within 2 km of the site were requested from the Cumbria Biodiversity Data Centre (CBDC). In addition, an Ecological Assessment report produced by ARCADIS in 2019 for land to the south of the site was reviewed.

The initial site visit consisted of an assessment of all habitats on-site and in the surrounding area to determine their value for bats (as well as other protected/notable species) and was conducted on Tuesday 15th June 2021 by ecologist Sam Gate (BSc Hons, ACIEEM). In addition, as both buildings (F3/F4 and F5/F6) were considered to be of value for roosting bats, two bat activity surveys were undertaken to confirm the presence or likely absence of bats. The bat surveys were carried out on the evening of Tuesday 6th July 2021 and the morning of Tuesday 20th July 2021.

The two buildings were initially considered to offer moderate suitability for bats due to a number of external Potential Roosting Features (PRFs), what appeared to be a possible old bat dropping and a CBDC bat record within the prison complex. However, bats were confirmed to be likely absence during the bat activity surveys. Numerous nesting gulls (*Laridae* spp.) were recorded on the roofs of both building. The remainder of the surveyed area was considered to be of low ecological value due to the predominance of amenity grassland and hardstanding which was surrounded by c.5 m high security fencing.

Following the site assessment and in review of the findings, a series of ecological mitigation, compensation and enhancement measures to be incorporated into the works have been outlined. These include avoiding the typical bird nesting season (March to August); precautionary measures in relation to great crested newts (GCNs) (*Triturus cristatus*), natterjack toads (*Bufo calamita*) and reptiles; implementation of a sensitive lighting scheme; enhanced nesting/roosting habitat for bats and birds and wildlife-friendly landscape planting (if required). Full details are provided in Section 5.

Providing the recommendations of this report are implemented in full, Naturally Wild would conclude that there will not be a significant impact to bats or any other protected species as a result of the proposed works.



BAT RISK ASSESSMENT AND BAT SURVEY REPORT: HMP HAVERIGG, MILLOM.

1 INTRODUCTION

Naturally Wild were instructed to undertake a bat risk assessment and bat survey report at HMP Haverigg, Millom (Figure 1). The survey area comprised two disused accommodation blocks (F3/F4 and F5/F6) surrounded by amenity grassland, hardstanding and metal security fencing. The main objective of the assessment was to determine the suitability of the site to support bats (and other protected species) and to check for any evidence of their presence, as well as the presence of any protected or notable habitats.

The proposals are to demolish both buildings due to safety concerns relating to external cladding. There are currently no plans to replace the buildings. As part of the planning process, an ecological assessment is required to determine if any protected or notable species/habitats are likely to be affected by the proposed works, and to show how any negative ecological impacts would be mitigated and compensated.

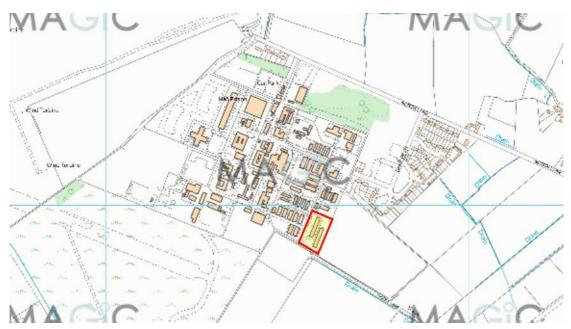


Figure 1. Site location plan. Red line shows the area of the proposed works. (© Crown Copyright and MAGIC database rights 2021. Ordnance Survey 100022861).



2 RELEVANT LEGISLATION

British wildlife is protected by a range of legislation, the most important being the Wildlife and Countryside Act 1981, the Countryside Rights of Way Act 2000 and The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019. The Wildlife and Countryside Act, as amended mainly by the Countryside Rights of Way Act, protects species listed in Schedules 5 and 8 of the Act (animals and plants respectively) from being killed, injured, and used for trade. For some species, such as great crested newts and all bat species, the provisions of this act go further to protect animals from being disturbed or taken from the wild and protects aspects of their habitats. The Act also stipulates that offences occur regardless of whether they were committed intentionally or recklessly. The parts of this legislation that apply to most reptile species are in regard to killing, injury and trade only and do not protect their habitat, nor are they protected from disturbance or from being taken from their habitat.

The Conservation of Habitats and Species Regulations ('the Habitats Regulations') is the English enactment of European legislation and provides similar but subtly different protection for species listed on Schedules 2 and 4 of those regulations. Species to which these provisions apply are known as European Protected Species. Activities that might cause offences to be committed can be legitimised by obtaining a licence from the relevant statutory body.

All British bat species are listed on Schedule 5 of the Wildlife and Countryside Act 1981 and are afforded protection under Section 9 of this Act. In addition, all British bat species are listed on Schedule 2 of The Conservation of Habitats and Species Regulations and are protected under Regulation 39 of these Regulations. The Act and Regulations makes it an offence to:

- Intentionally kill, injure, take (handle) or capture a bat;
- Intentionally or recklessly damage, destroy or obstruct access to any place that a bat uses for shelter or protection (this is taken to mean all bat roosts whether bats are present or not) – under the Habitats Regulations it is an offence to damage or destroy a breeding site or resting place of any bat; or
- Intentionally or recklessly disturb a bat while it is occupying a structure or place that it uses for shelter or protection under the Habitats Regulations it is an offence to deliberately disturb a bat (this applies anywhere, not just at its roost) in such a way as to be likely to affect its ability to survive, breed, reproduce, rear or nurture its young, or hibernate.

Further details of the above legislation, and of the roles and responsibilities of developers and planners in relation to bats, can be found in Natural England's (formerly English Nature) Bat Mitigation Guidelines (Mitchell-Jones, 2004), and further details on the legislation protecting other species of British wildlife relevant to this assessment can be found in Section 8.1 of this report.



3 METHODOLOGY

3.1 Overview

The assessment comprised two parts: a desktop study and a series of site visits. All survey and assessment work has been completed in line with official guidelines produced by Natural England and the Chartered Institute for Ecology and Environmental Management, and British Standard document BS 42020: 2013 'Biodiversity – Code of practice for planning and development.'

The desktop study collated available public information regarding the biodiversity of the area, including the habitat structure of the site and surrounding area and the presence of any designated sites, and any records of previously granted European Protected Species (EPS) mitigation licences in relation to certain species, using the Multi-Agency Geographic Information for the Countryside (MAGIC) resource. Bat records within 2 km of the site were requested from the Cumbria Biodiversity Data Centre (CBDC). In additions, an Ecological Assessment¹ report produced by ARCADIS in May 2019 for land to the south of the site was reviewed.

The objective of the surveys was to determine the suitability of the site for roosting bats and check for any evidence of their presence. In accordance with good practice, the assessment would also ascertain if any other protected species may be using the site, document the habitats present and determine any potential ecological impacts during and following the completion of the works. The findings of the assessment would identify the need for any additional survey effort, mitigation measures and/or compensation to be incorporated into the proposed works. All survey work would be completed under suitable weather conditions and by an experienced ecologist.

The survey work and the preparation of this report has been conducted by ecologist Sam Gate (BSc Hons, ACIEEM), who is experienced in carrying out ecological assessments.

3.2 Survey Area

The application site is located at Grid Reference SD 14584 78932 and can be accessed via North Lane (Figure 2). The assessment focused on the application site, as well as all habitats in the immediate surrounding area (where access was available).





Figure 2. Location of the surveyed area. Site boundary is shown by the red line.

(Image taken from Google Earth Pro: ©2021 Google)

3.3 Survey Constraints

There were no constraints with regards to site access or completion of the survey objectives across the site.

3.4 Site Assessment

The initial survey was carried out on Tuesday 15th June 2021 and consisted of an assessment of the habitats on-site to determine their suitability for roosting bats. An assessment of the on-site buildings was carried out in order to identify the presence of any potential roost features (PRFs) for bats, and/or evidence of roosting bats, in accordance with the current Bat Conservation Trust (BCT) survey guidelines (Collins, 2016). An external inspection of the buildings was carried out, focusing on features that may provide roosting opportunities or access points to roosting features internally, such as the cladding, facias and roofing felt. An internal inspection was also carried out, with any roof spaces present checked for evidence of bats. The buildings were then categorised based on their assessed value for roosting bats, in accordance with the BCT guidelines, detailed in Table 1.



Table 1. Guidelines for assessing bat roosting potential of structures and trees.

Suitability	Habitat description	Further action required?		
Negligible	Negligible habitat features on-site likely to be used by roosting bats.	No further bat risk assessment effort or bat activity surveys are required.		
Low	A structure 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). 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.	Structures: One bat activity survey is required to determine whether the structure is being utilised by roosting bats; this may be a dusk or dawn survey. This survey must occur between May and August. The discovery of a roosting bat during this single bat activity survey will require further survey effort. Trees: No further bat risk assessment effort or bat activity surveys are required.		
Moderate	A 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.	Two bat activity surveys are required to determine whether the structure or tree is being utilised by roosting bats; this should be comprised of one dusk and one dawn survey. One survey must occur between May and August.		
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.	Three bat activity surveys are required to determine whether the structure or tree is being utilised by roosting bats; this should be comprised of one dusk and one dawn survey, with an additional survey (either dusk or dawn). Two surveys must occur between May and August.		

Evidence of roosting bats includes: bat droppings in, around or below an entrance hole; staining around an entrance hole; audible squeaking at dusk or in warm weather; smoothening of surfaces around cavity or an entrance hole; distinctive smell of bats.

The assessment was completed using ladders, binoculars and a powerful torch and under suitable weather conditions – in warm (18°C), overcast (7 Oktas) weather with no rain and a light breeze (1 Beaufort).

3.5 Bat Activity Surveys

In addition to the above, as both buildings (F3/F4 and F5/F6) were assessed to be of value for roosting bats during the initial assessment, in accordance with the above guidelines, two activity surveys were carried out. A dusk emergence survey was carried out on the evening of Tuesday 6th July 2021 and a predawn return to roost survey was carried out on the morning of Tuesday 20th July 2021. The dusk survey was carried out by six surveyors using bat detectors (Magenta Bat5 and Batbox Duet) and direct visual observation. Due to the overall lack of activity and a number of PRFs that were considered to have low suitability, three surveys carried out the dawn survey on the moderate PRFs using the same equipment and methodology described above. The surveyors took up suitable vantage points around the buildings in order to observe any bats emerging or returning to roost, with the detectors used to identify bat calls and confirm species present.



The dusk survey commenced 15 minutes before sunset and ended an hour and a half after sunset and the dawn survey commenced an hour and a half before sunrise and concluded 15 minutes after sunrise. Naturally Wild staff who conducted the dawn surveys included Matthew Buxton (MSc, BSc Hons, Natural England bat survey licence ref: 2015-16720-CLS-CLS), Michael Underwood (MSc, BSc Hons, Natural England bat survey licence ref: 2020-44798-CLS-CLS), Sam Gate, Sarah Barry (MSc, BSc Hons), Aaron McFarland (MSc, BSc Hons) and Kimberley Gate (1 year experience). Sam Gate, Aaron McFarland and Kimberley Gate conducted the pre-dawn survey.

3.6 Other Wildlife

In accordance with good practice, the site and surrounding areas were assessed for their potential to support other protected species and for the presence of any evidence of protected species. Based on the habitats present, the assessment was carried out with regard to badgers (*Meles meles*), great crested newts (GCNs) (*Triturus cristatus*), natterjack toads (*Bufo calamita*), reptiles and nesting birds.



4 RESULTS

4.1 Desktop Study

4.1.1 Designated Sites

No designations fall directly within or adjacent to the proposed works. Three overlapping designations do however fall within 2 km, details are provided in Table 2 below and locations are displayed in Figure 3.

Table 2. Statutory designations in the areas surrounding the site.

Name	Reference	Description	Area (ha)	Distance
Duddon Estuary Ramsar	UK11022	Intertidal sands and mudflats leading from River Duddon into the Irish Sea. Supports a large assemblage of	6779.71	550 m south
Duddon Estuary Site of Special Scientific Interest (SSSI)	1003904	internationally important wintering and passage waterfowl such as Northern pintail (<i>Anas acuta</i>), knot (<i>Calidris canutus</i>) and redshank (<i>Tringa totanus</i>). Most important site in Cumbria for sanddune communities. Nationally important populations of natterjack toad. Sanddune systems support a range of rare plant and invertebrate species. Past mining and iron-making activities have created slag banks and coastal lagoons.	6785.95	550 m south
Morecambe Bay Special Area of Conservation (SAC)	UK0013027	Designated features include GCN and a range of coastal habitats such as estuaries, mudflats, sandflats inlets, salt meadows.	61537.51	550 m south





Figure 3. Location of the surveyed site in relation to the surrounding statutory designated sites. (© Crown Copyright and MAGIC database rights 2021. Ordnance Survey 100022861).

The proposed works are not listed on MAGIC on the Duddon Estuary SSSI's Impact Risk Zone actions that would require consultation with Natural England. They are not listed in the site vulnerabilities for Duddon Estuary Ramsar or undermine the conservation objectives of the Morecambe Bay SAC. Further, no qualifying habitat is present on the application site that would support the designated features associated with these sites. As such, in consideration of the above and due to small scale nature of the works and the relative distance from the proposed works to the SSSI, SAC and Ramsar, no significant adverse impacts are expected. Notwithstanding, it is considered that appropriate mitigation measures will be required to minimise any in-direct impacts.

Notable Habitats: Three large areas of Coastal and Floodplain Grazing Marsh Habitat of Principal Importance (HoPI) surrounded the prison complex to the north, east and south. The nearest parcel was located directly to the south of the survey boundary. Priority habitats associated with the coastal designations were located more than c.500 m from the proposed works. No other priority and/or noteable habitats within 500 m of the proposed works were noted on MAGIC.

Due to the small scale nature of the proposed works, which will be contained within the prison complex, no direct impacts are expected to the surroudning HoPI as a results of the works. However, appropriate mitigation measures will be required to minimise any in-direct impacts.



4.1.2 Bat Records

A total of 13 bat records were returned from CBDC, including records for brown long-eared bat (*Plecotus auritus*), common pipistrelle (*Pipistrellus pipistrellus*), a pipistrelle species (*Pipistrellus sp.*), Natterer's bat (Myotis nattereri) and whiskered/Brandt's bat (*Myotis mystacinus/brandtii*). A single record for a Natterer's bat was located within the prison ground. No other records were within or in close proximity of the proposed works. No previously granted EPS licences for bats were present within 2 km on MAGIC.

4.2 Bat Risk Assessment

4.2.1 On-Site Assessment

The site comprised two buildings (F3/F4 and F5/F6) surrounded by hardstanding, amenity grassland and metal security fencing. This section of the prison was located at the south-east of the wider prison complex. The value of these habitats to bats for roosting, foraging and commuting activities are discussed below.

Buildings: A total of two buildings are present on the site and each was assessed for its value to support roosting bats. The results of this assessment are summarised in Table 3 and the locations of each building are shown on Figure 4.

Table 3. Building Descriptions and Assessment of Bat Roosting Value.

Building Ref.	Description	Assessment	Bat Value
F3/F4	Temporary accommodation block with a flat, felt roof and plastic cladding (Image 1). Two storeys to the north half (Image 2) with a single storey to the south. Internally the building has an entrance lobby leading to a central corridor along both storeys (Image 3). Numerous accommodation rooms ran either side of the corridors (Image 4). All internal walls were panelled, and no roof voids were present.	PRFs were noted along the overhanging roofing felt at the southern aspect of the building (Image 5). Gaps along the cladding between the two storeys were also recorded across the building (Image 6) as well as a hole in the entrance porch ceiling panelling (Image 7). What appeared to be a possible, old bat dropping was found within a storage cupboard at the entrance lobby (Image 8). However, the windows to the building had been left open. As such, if the dropping was confirmed as bat, it could be attributed to an opportunistic bat entry into the building.	Moderate
F5/F6	Temporary accommodation block with a flat, felt roof and plastic cladding. Two storeys to the north half with a single storey to the south (Image 9). Internally the building has an entrance lobby leading to a central corridor (along both storeys). Numerous	PRFs were noted along the overhanging roofing felt (Image 10). Gaps along the cladding between the two storeys were also recorded across the building (Image 11). A larger gap within the boarding between the two floors was recorded on the eastern aspect (Image 12).	Moderate



Building Ref.	Description	Assessment	Bat Value	
	accommodation rooms ran either side of the corridors. All internal walls were panelled, and no roof voids were present.			



Figure 4. Building locations.
(Image taken from Google Earth Pro: ©2021 Google).

Amenity Grassland: The majority of the land surrounding F3/F4 and F5/F6 comprised amenity grassland which was maintained at a short sward (Image 13).

Amenity grassland, by its nature, offers limited opportunity for foraging or commuting bats (and other wildlife) due to its managed and/or disturbed nature and lack of species diversity. As such the amenity grassland was considered to be of low ecological value at a site level but negligible at a wider level

Hardstanding: Hardstanding pathways lead up to and around F3/F4 and F5/F6 (Image 13).

Hardstanding offers very limited foraging and commuting habitat for bats (and other wildlife) due to its managed and/or disturbed nature and lack of species diversity and cover offering sheltering opportunity. As such the hardstanding was considered to be of negligible ecological value at a site and a wider level

Fencing: Metal security fencing (measuring approximately 5 m) separated this area from the wider prison complex (Image 13).



Although the tall boundary fencing would not prevent bats from entering the site, it prevents access for a range of other wildlife.

4.2.2 Off-Site Assessment

In the immediate area, the site is surrounded by the wider prison complex, residential houses with associated gardens and agricultural fields / Coastal and Floodplain Grazing Marsh HoPI with small parcels of scrub. As discussed in the Ecological Assessment by ARCADIS, the field to the south comprises improved grassland, scrub, marshy grassland, swamp, a pond and ephemeral short perennial vegetation. Sand dunes and coastal habitats associated with Duddon Estuary Ramsar and SSSI and Morecambe Bay SAC are present in the wider surrounding area.

Although the scrub, gardens, field boundaries and invertebrate rich habitats associated with the coastal designations offer foraging and commuting value for bats, providing standard mitigation measure are incorporated into the works, they will not be directly impacted due to the small-scale nature of the proposed works which will be restricted to the current site footprint.

4.2.3 Bat Activity Surveys

Due to both buildings (F3/F4 and F5/F6) being assessed to have some value for roosting bats, two bat activity surveys were carried out. The weather conditions for both surveys were considered suitable for bats to be active and are summarised in Table 4.

Table 4. Bat activity survey weather conditions.

Date	Survey start	Sunset/ sunrise	Survey end	Temp. (°C)	Precipitation	Wind (Beaufort)	Cloud (Oktas)
06/07/21	21:32	21:47	23:17	15	None	1-2	1
20/07/21	03:36	05:06	05:21	13 (16)	None	1	0

Results of each of the bat activity surveys are provided in the paragraphs below. It should be noted that only a summary of the key findings has been provided, although full results are available upon request.

No emergences were recorded during the dusk survey. The overall level of bat activity was considered to be very low, with brief common pipistrelle (*Pipistrellus pipistrellus*) calls heard but not seen in the surrounding area between 22:30 hrs and 22:51 hrs.

No re-entries were recorded during the pre-dawn survey. The overall activity level was again considered to be very low. A brief noctule (*Nyctalus noctula*) call was heard but not seen at 03:40 hrs. A single common pipistrelle was observed flying over the top of building F3/F4 at 04:10 hrs.

4.2.4 Assessment Summary

During the initial survey, a number of external PRFs were recorded around each building which had the potential to support roosting bats and what appeared to be a possible, old bat dropping was recorded within F3/F4. In combination with CBDC bat record in close proximity of the works, the results of the building assessments indicated that F3/F4 and F5/F6 had **moderate suitability** for bats.



Based on the results of the dusk and dawn survey, bats are considered to be likely absent from the buildings due to the very low level of bat activity and the absence of any emergences or re-entries to and/or from the buildings. Although a possible old, bat dropping was found, no suitable roosting features were found within F3/F4 and the age of the dropping prevented an accurate identification. No other evidence of bats was found within the buildings. The suitability of the site was found the be further reduced during the bat activity surveys due to high levels of flood lighting across the site and the relatively high presence of gulls.

Notwithstanding this, in the absence of suitable mitigation, any works carried out on these buildings have the potential to result in in-direct impacts to bats in the surrounding area.

4.3 Other Wildlife

The site was considered to be of negligible value for badgers due to the security fencing preventing access and lack of potential for sett creation. The surrounding grassland, scrub and woodland parcels could provide suitable foraging habitat for badgers. Although know to be present in the wider area, no suitable habitat was found on-site for GCNs, natterjack toad and reptiles (particularly common lizard (*Zootoca vivipara*)). Further, no ponds were located within 500 m² of the proposed works.

Notwithstanding, the works are expected to have a negligible impact on any of these species due to a lack of suitable habitat on-site and the small-scale nature of the works which will be contained within the prison complex.

The buildings were considered to have value for nesting birds, particularly with regard to gull species (*Laridae* spp.) and numerous nests with young were recorded on the roofs of both buildings.

Without appropriate mitigation and compensation, the works are expected to have a moderate to high impact on nesting birds at a site level, but a low impact at a wider level.

Bat Risk Assessment and Survey Report

HMP Haverigg, Millom

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² Typical maximum ranging distance of GCN.



5 CONCLUSIONS AND RECOMMENDATIONS

The two buildings were initially considered to offer moderate suitability for bats due to a number of external PRFs, what appeared to be a possible old bat dropping and a CBDC bat record within the prison complex. However, bats were confirmed to be likely absence during the bat activity surveys. Numerous nesting gulls were recorded on the roofs of both buildings. The remainder of the surveyed area was considered to be of low ecological value due to the predominance of amenity grassland and hardstanding which was surrounded by c.5 m high security fencing. Following the site assessment and in review of the findings, Naturally Wild would recommend the following:

5.1 Mitigation Measures

- Based on the results of the activity survey, which indicate the likely absence of bats, no further survey effort in the form of activity surveys is considered necessary.
 - In the unlikely event that a bat(s) is encountered at any point during the works, it is a legal requirement to stop and contact a suitably qualified ecologist to discuss further survey effort and the requirement to obtain an EPS mitigation licence from Natural England to legally permit the works.
- Due to the suitability of the buildings to support nesting birds, demolition works should be carried out outside of the nesting season, which is defined as running from March to August, inclusive. If this is not feasible for any reason, a nesting bird survey must be carried out by a suitably qualified ecologist shortly prior to the start of works to ensure no active nests are present. In the event that any active nests are found during this survey or at any point during the works, a suitable exclusion zone should be put around the nest, with no work taking place in this area until such time as the nest can be confirmed as no longer active.
- In the unlikely event that any GCN or natterjack toad are found f or reptiles are being encountered
 on a regular basis during site clearance, it is a legal requirement to stop work. Naturally Wild
 should be contacted for advice on how to proceed, which may include consultation with Natural
 England in the event that any GCN or natterjack toad are found.
- A sensitive lighting scheme should be implemented during and after construction to avoid indirect disturbance to foraging and commuting bats, birds and small mammals that may be using the surrounding habitats, and should include the following elements:
 - o Sensitive positioning of lighting to avoid unnecessary spill onto surrounding
 - Angle of lighting: avoidance of direct lighting and light spill onto areas of habitat that are of importance as commuting pathways and/or foraging areas;
 - Type of lighting: studies have shown that light sources emitting higher amounts of UV light have a greater impact to wildlife. Use of narrow-spectrum bulbs that avoid white and blue wavelengths are likely to reduce the number of species impacted by the lighting;
 - Reduce the height of lighting columns to avoid unnecessary light spill.

5.2 Compensation Measures

The un-development land remaining following the demolition of the two buildings will provide
compensatory nesting habitat for nesting bird species (particularly gulls). If development is
proposed in the future, allowance for nesting birds may need to be considered within the design.



5.3 Enhancement Measures

- Additional bat and/or bird boxes could be incorporated into the works/further plans to further enhance nesting and roosting opportunity in the area.
- Any landscape planting should use native plant species that will enhance the ecological value of the site for local populations of invertebrates, birds, bats and small mammals.

Providing the recommendations of this report are implemented in full, Naturally Wild would conclude that there will not be a significant impact to bats or any other protected species as a result of the proposed works.



6 SITE IMAGES



Image 1. F4/F4 building with single storey to the south.



Image 2. Two storey section of F3/F4.





Image 3. Internal corridor of F3/F4.



Image 4. Room within F3/F4.



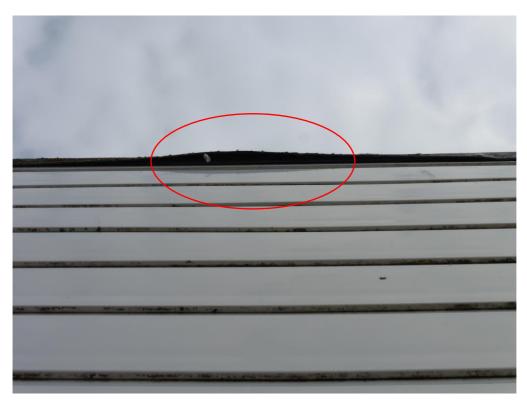


Image 5. Lifted overhanging felt on the southern aspect of F3/F4.



Image 6. Lifted cladding between the two storeys of F3/F4.





Image 7. Hole above the porch area of F3/F4.

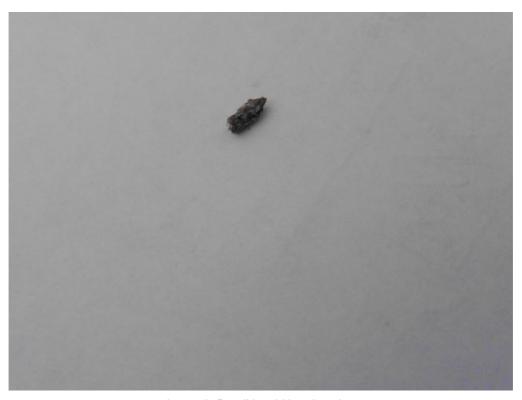


Image 8. Possible, old bat dropping.





Image 9. F5/F6 with single storey to the south, two storey to the north. Same structure and interior as F3/F4.

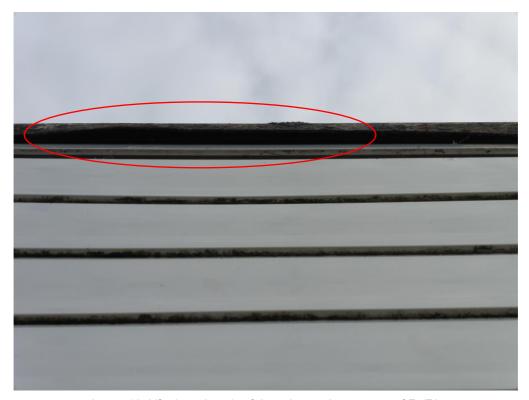


Image 10. Lifted overhanging felt on the southern aspect of F5/F6.





Image 11. Lifted cladding between the two storeys of F5/F6.



Image 12. Gap within boarding on the eastern aspect of F5/F6.





Image 13. Surrounding amenity grassland, hardstanding and security fencing.



7 BIBLIOGRAPHY & REFERENCES

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8 APPENDICES

8.1 Additional Information for the Legislation of Other Protected Species

Badgers: The badger is geographically widespread across the UK; however, they are still vulnerable to baiting, hunting and detrimental impacts of development to their habitat. Both the badger and its habitat are protected under The Protection of Badgers Act 1992, Schedule 6 of the Wildlife and Countryside Act 1981 (as amended) an Appendix Three of the Bern Convention; therefore, badgers have legal protection against deliberate harm or injury and it is an offence to:

- Interfere with a badger sett by damaging or destroying it
- Kill, injure, take or possess a badger
- · Cruelly ill-treat a badger
- Obstruct access to a badger sett
- · Disturb a badger whilst it is in a badger sett

Nesting Birds: Birds receive protection under the Wildlife and Countryside Act 1981 (as amended). It is an offence to intentionally or recklessly kill, injure or take any wild bird; take, damage or destroy a nest of a wild bird whilst it is in use or being built; or to take, damage or destroy an egg of a wild bird. The birdnesting season is defined as being from 1st March until 31st August with exceptions and alterations for some species.

Great Crested Newts and Natterjack Toad: These species are protected under Schedule 2 of The Conservation of Habitats and Species Regulations. These species are also afforded full protection under the Schedule 5 of the Wildlife and Countryside Act 1981. Under such legislation it is an offence to:

- Intentionally or recklessly* kill, injure or capture a great crested newt or natterjack toad;
- Possess or control any live or dead specimen or anything derived from a great crested newt or natterjack toad;
- Intentionally or recklessly* damage, destroy or obstruct access to any structure or place used for shelter or protection by a great crested newt or natterjack toad; and
- Intentionally or recklessly* disturb a great crested newt or natterjack toad while it is occupying a structure or place which it uses for that purpose.
- Damage or destroy a breeding site or resting place.
- Sell, barter, exchange or transport or offer for sale great crested newts or natterjack toads or parts of them.

*Reckless offences were added by the Countryside and Rights of Way Act 2000, which applies only to England and Wales.

To undertake surveys for great crested newts or natterjack toads it is necessary to hold an appropriate licence issued by Natural England.



Reptiles: All native British species of reptile (of which there are 6) are listed on Schedule 5 of the Wildlife and Countryside Act 1981 and, as such, are protected from deliberate killing, injury or trade; therefore, where development is permitted and there will be a significant change in land use, a reasonable effort must be undertaken to remove reptiles off site to avoid committing an offence. The same Act makes the trading of native reptile species a criminal offence without an appropriate licence.