



LLANWERN HOT MILL

Breeding Bird Report

Tata Steel

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General Notes

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Executive Summary

1. RSK Biocensus was appointed by Tata Steel to complete breeding bird surveys at the former Hot Mill building at Llanwern Steelworks, with a specific focus on nesting gulls and peregrines which were known to be using the building for nesting. These surveys were carried out between April 2025 and June 2025 following good practice guidance, to inform the proposed demolition of the Hot Mill.
2. A desk study was undertaken to identify designated sites with features of ornithological interest, and to gather existing records of priority bird species for the Site and the surrounding area.
3. A total of 13 bird species were recorded during the field surveys, of which six are protected and/or notable. These included a minimum count of 219 herring and lesser black-backed gulls around the area of the Hot Mill that is due to be demolished, with the majority nesting on the building itself. Whilst none of these nests were seen due to lack of access to the roof, activity during other site surveys, particularly the bat surveys, confirmed the presence of juvenile lesser black-backed and herring gulls around the building, confirming nesting.
4. A pair of peregrine falcons were seen entering a large gap in the cladding on the northern side of the building on visit 2 and have been recorded in this area for several years by both previous RSK Biocensus surveyors and Tata staff, indicating a likely nest site.
5. All wild birds, their nests and eggs are protected by the Wildlife and Countryside Act 1981. The presence of nesting gulls and peregrines will have implications for the methods and timings for demolition of the building, especially for peregrines which are a Schedule 1 species which have additional protection from disturbance whilst nesting or with dependent young.
6. Mitigation measures to avoid impact to nesting birds will be required and compensation recommended, such as the installation of a peregrine nest on another structure in advance of demolition. It is not possible to compensate for the loss of gull nesting sites within the demolition phase, as no alternative building is currently proposed. However, it is likely that these species will utilise other flat roof industrial buildings within Llanwern and surrounding industrial parks to the west and east. Many of these structures could also be used as a nesting site to compensate for the loss of habitat for nesting stock dove and jackdaw.

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1 Introduction

1.1 Purpose of the report

- 1.1.1 RSK Biocensus was appointed by Tata Steel to complete breeding bird surveys at the former Hot Mill building at Llanwern Steelworks, Newport, Wales NP19 4QZ. The surveys were carried out between April and June 2025 inclusive, with a specific focus on nesting gulls and peregrine falcons (*Falco peregrinus*).
- 1.1.2 The surveys were required to inform the proposed demolition of the former Hot Mill as it was known that high numbers of nesting gulls use the building, and peregrines have been sighted around the building for several year by site staff.
- 1.1.3 The red-line boundary for the area proposed to be demolished (hereafter referred to as 'the Site') is shown in Figure 1.
 - The aims of this report is to document the results of the nesting bird surveys, and includes the following: Identify the nesting bird populations present within the Site and adjacent land; specifically, the species present and their distributions, their use of the Site (e.g., for nesting, foraging, roosting), and their abundance.
 - Discuss the results in the context of the relevant designated sites.
 - Discuss the results in the context of the legal and conservation statuses of the species recorded and to inform and demolition of the former Hot Mill.
- 1.1.4 Throughout this report, bird names follow British (English) vernacular names (BOU, 2022). Appendix A provides a species list for all birds included in this report.

1.2 Landscape context

- 1.2.1 The c. 32 hectare (ha) Site is located east of the city of Newport. A review of aerial photographs and OS maps shows that the Site is bordered to all directions by the wider Llanwern Steelworks site, with the A4810 (Queensway) road 200m to the south, and the Tata exchange railway sidings c.330m north, which are separated from the mainline railway by a (c. 100m wide) woodland strip.
- 1.2.2 The Llanwern Steelworks site is bordered by industrial landscapes to south, east and west, with agricultural fields to the north. The Gwent levels are c.930m south and the Severn Estuary is located approximately 3km to the south.
- 1.2.3 The Site comprises 28 buildings and structures within the north-west of Llanwern steelworks complex, located around the Hot Mill. The Hot Mill occupies a large part of the Site area, with a footprint of approximately 11.6 hectares. Surrounding the Hot Mill are a number of structures ranging from single storey buildings which were used as offices, to four storey concrete cooling towers and water treatment plants. A large part of the land between buildings is bare ground or hardstanding in form of slag, gravel or tarmac. Scrub, ruderal and ephemeral vegetation has begun to colonise the mounds of fuel ash/slag and the edges and cracks within the hard standing and bare ground.

1.3 Proposed works

- 1.3.1 Proposed demolition of the former Hot Mill and surrounding buildings. Works are anticipated to commence in Autumn 2025 on the Hot Mill and last for a duration of c. three years. The adjacent buildings are planned to be demolished at a later stage (likely 2-3 years from the start of the demolition works).
- 1.3.2 The aim is to remove all buildings within the redline boundary and infill all cellars and other underground structures.

1.4 Previous sightings

- 1.4.1 Peregrines have previously been observed on the former Hot Mill building by both RSK Biocensus surveyors and Tata site staff, with reports since at least 2024. This includes when a female peregrine was incidentally observed perching on the western end of the building, north elevation (grid reference: ST 37565 86694) on 26th March 2024 by RSK Biocensus during a preliminary bat roost assessment survey. Whilst the exact location was not confirmed, an assumption was made that they were likely to be nesting in this location.
- 1.4.2 Herring and lesser black-backed gulls have been observed over the Hot Mill by various members of staff over the years, so it has been presumed that they are using the Hot Mill as a nesting site based on evidence during breeding bird surveys and with the discovery of chicks/fledglings on subsequent surveys.

1.5 Legislation

Nesting bird legislation

- 1.5.1 All wild birds, their nests and their eggs are protected under Section 1 of the Wildlife and Countryside Act 1981 (as amended). It is an offence to intentionally or recklessly:
- Kill, injure or take any wild bird; or
 - Take, damage or destroy the nest of any wild bird whilst that nest is in use or being built.
- 1.5.2 Peregrines are also given additional protection under Schedule 1 of the act and it is therefore an offence to intentionally or recklessly:
- Disturb a Schedule 1 bird while it is building a nest or is in, on or near a nest containing eggs or young; or
 - Disturb dependent young of a Schedule 1 bird.
- 1.5.3 Note that there are several exceptions to the offences created by the Wildlife and Countryside Act 1981 (as amended), including acting under a licence,
- preserving public health;
 - preserving public or air safety;
 - preventing the spread of disease; or,
 - preventing serious damage to livestock, or foodstuffs for livestock, crops etc.

- 1.5.4 However, the demolition works planned for the Hot Mill building do not appear to meet the purposes for which a licence to authorise otherwise illegal actions may be issued by Natural Resources Wales (NRW). Action can only be taken under general licences for the purpose of, An offence would be committed if action could not be justified or defended for any of these purposes.
- 1.5.5 Table 1 below provides a summary of the legislation considered in this assessment. This legislation has been used to inform the approach adopted in this report, and when discussing the results of the desk study and bird surveys in the context of the proposed development.

Table 1: Legislation considered in this assessment

Legislation/Source	Notes
The Conservation of Habitats and Species Regulations (Habitats Regulations) 2017 (as amended)	Affords protection to certain species and habitats listed on the relevant schedules.
The Wildlife and Countryside Act (WCA) 1981 (as amended)	
Environment (Wales) Act 2016	Places a duty on planning authorities to consider habitats and species of principal importance in planning applications.

2 Methodology

2.1 Priority species

2.1.1 For the purposes of this report the priority species comprise those listed as priority species in the 'Bird Survey Guidelines for assessing ecological impacts' (Bird Survey and Assessment Steering Group, 2025) and species which could form qualifying species of relevant designated sites:

- Qualifying features of relevant designated sites, including for example EC Birds Directive (2009/147/EC) Annex I Species
- Species listed under Schedule 1 of the Wildlife and Countryside Act 1981 (as amended).
- Species listed under Section 7 of principal importance under Environment Wales (2016) Act.
- Birds of Conservation Concern (BoCC) Wales 4 Red and Amber listed species¹ (Johnstone *et al.*, 2021).
- Localised or highly specialised species regardless of inclusion above.
- Nationally – or locally declining species regardless of inclusion above.
- Colonial nests or roost sites containing more than one individual of any species.
- Exceptional counts or aggregations of any species.

2.1.2 In addition, records of secondary species were also noted i.e. species which fulfil none of the criteria above, such as BoCC Green listed species/non-native bird species.

2.2 Desk Study

2.2.1 The desk study included a search for any statutory and non-statutory designated sites with potentially relevant ornithological interest features that could impact the breeding bird assemblage at this Site. This identified any relevant European designated sites² (Special Protection Areas (SPAs) and Ramsar sites) located within 10km kilometres (km) of the Site, any relevant national statutory designated sites e.g., Sites of Special Scientific Interest (SSSIs) located within 10 km of the Site, and any relevant non-statutory designated sites located within 10 km of the Site.

2.2.2 The search areas used took into consideration the potential distance or area over which impacts from the proposed development could potentially occur.

2.2.3 Whilst desk study data are useful in providing supplementary ecological information for a Site, these data are dependent on the submission of records to the relevant organisations. As such, a lack of records for a particular species does not necessarily

¹ Categorise the UK's regularly occurring bird species according to their level of conservation concern. Whilst conferring no legal protection, these lists are useful in guiding conservation action for individual species when birds may be affected by projects (Stanbury *et al.*, 2021).

² Within this report, the term 'European Site' refers to Special Protection Areas (SPAs) (which form part of the National Site Network in the UK) and Ramsar sites.

mean that the species is absent from the Site and/or wider search area. Similarly, records of a particular species do not necessarily mean that the species is still present.

2.3 Field surveys

Survey area

- 2.3.1 The survey mostly focused on birds that were nesting around the Hot Mill building itself but did also include observations of other birds on other buildings, structures and vegetation within the Site.
- 2.3.2 Surveys were undertaken in suitable weather conditions, avoiding extreme temperatures, heavy rain, snow, or fog during which bird activity may be atypical and/or surveying may be impractical. The dates, timings, and weather conditions for the three survey visits are shown in Appendix B.

Survey methodology

- 2.3.3 The surveys were undertaken between April 2025 and June 2025 inclusive, in accordance with guidelines regarding the number/timing of visits specified in the Bird Survey Guidelines for Assessing Ecological Impacts (BSG) (Bird Survey and Assessment Steering Group, 2025). Three survey visits were completed - one per month in April, May and June. Surveys were undertaken by a suitably experienced ornithologist.
- 2.3.4 During each survey visit, the surveyor stopped at six different locations within close proximity to the Hot Mill, and counted the number of gulls and any other birds that they could see perching on the edge of the building or flying over the top of the building. Close attention was also paid to any signs of peregrines nesting, particularly on the northern elevation at the western end where they had been seen by other surveyors on previous visits.
- 2.3.5 All bird species encountered by sight or sound were recorded and mapped onto ArcGIS Field Maps software using standard British Trust for Ornithology (BTO) species codes and behaviour notation (Marchant, 1983). Particular attention was paid to recording priority species for the surveys (herring gull, lesser black-backed gull and peregrine).
- 2.3.6 Surveys were undertaken between the hours of 10:30 – 13:30 and in suitable weather conditions, avoiding extreme temperatures, heavy rain, snow or fog during which bird activity may be atypical and/or surveying may be impractical. The areas surveyed were alternated between survey visits so that different areas of the Site were surveyed at different times. Survey dates, timings and weather conditions are detailed in Appendix B.
- 2.3.7 Surveys were led by an ornithologist who is experienced in conducting bird surveys in relevant habitats. These ornithologists are Chartered Institute of Ecology and Environmental Management (CIEEM) members at the appropriate level and follow their code of professional conduct when undertaking ecological work.

Limitations

- 2.3.8 All of the surveys were conducted from ground level as the top of the building is inaccessible. As the building was very tall and has a flat roof, the roof top itself was not visible from the ground. This may have had a significant effect on the survey results, with the possibility that many gulls could have been nesting in the middle of the roof that could

not be viewed from ground level. Therefore, the survey results should be interpreted as a minimum count rather than an absolute.

- 2.3.9 Unfortunately, the western end of the building could not be accessed during the second survey visit, meaning that the results from this particular survey may not be an accurate reflection of the total number of birds present as any birds nesting at the western end were not recorded.
- 2.3.10 Observations were repeatedly made from opposite sides of the building, meaning that there was the potential for some double-counting of gulls. However, this possibility is likely outweighed by the fact that there may have been some gulls nesting in the middle of the building that could not be seen.

Validity of data

- 2.3.11 In accordance with industry guidelines (CIEEM, 2019), unless the Site changes significantly, the desk study and surveys carried out to inform this report should remain valid for at least 18 months. After 18 months, an ecologist would need to reassess the Site to determine if the results remained valid.

3 Results

3.1 Desk Study

Statutory designated sites

- 3.1.1 The desk study identified five nationally designated sites with breeding bird interest within 10km of the site boundary. These sites are listed in Table 2 in order of proximity to the site; short descriptions are given for the sites. Some of the sites share several designations.

Table 2: Statutory sites within 10 km of the site boundary (2km for SSSIs and LNRs)

Site name	Reasons for designation	Approximate distance (m) and direction from site
Severn Estuary (Wales)	Ramsar site	3006 – south east
Qualifying features: • dunlin – passage and wintering Estuary with immense tidal range • gadwall – wintering • redshank – passage and wintering • Ringed plover – passage • Run of migratory fish • Shelduck – wintering Unusual estuarine communities • Waterbird assemblage – wintering • Whimbrel - passage • White-fronted goose - wintering		
Severn Estuary (Wales)	SPA	3006 – south east
Qualifying features: • Bewick's swan • dunlin • gadwall • greater white-fronted goose • redshank • shelduck • waterbird assemblage		
Severn Estuary (Wales)	SAC	3006 – south east
Qualifying Annex I habitats: • Estuaries • Mudflats and sandflats not covered by seawater at low tide • Reefs • Atlantic salt meadows (<i>Glauco-Puccinellietalia maritimae</i>) • Qualifying Annex II species: • Sea lamprey • River lamprey • Twaite shad		
Severn Estuary (England)	Ramsar	7798 – south east
The Severn Estuary Ramsar (England) shares the same citation with the Severn Estuary Ramsar (Wales), already shown in this table.		
Severn Estuary (England)	SAC	7798 – south east
The Severn Estuary SAC (England) shares the same citation with the Severn Estuary SAC (Wales), already shown in this table.		
Seven Estuary (England)	SPA	7798 – south east

The Severn Estuary SPA (England) shares the same citation with the Severn Estuary SPA (Wales), already shown in this table.

3.2 Field surveys

- 3.2.1 A total of 13 bird species were recorded within the red line boundary and within 20m of the red line boundary during the surveys. Of these, six were priority species, comprising
- One species listed under Schedule 1 of the Wildlife and Countryside Act (1981).
 - Three BOCC Red listed species.
 - Two BOCC Amber listed species.
- 3.2.2 Herring gull is listed under Section 7 of the Environment (Wales) Act 2016³ which was recorded within the survey area.
- 3.2.3 No bird species designated as features for the Severn Estuary SPA/Ramsar were identified on site.
- 3.2.4 Full survey data is provided in Appendix D. Table 5 below shows the peak counts of each priority species recorded during each survey. The table also includes the legal/conservation status of each species (refer to Section 1.5) and a description of the bird activity. Records of priority species are shown on Figures 2-4.

3.3 Peregrine results

- 3.3.1 No peregrine activity was observed anywhere around the Hot Mill on visit 1 (April 2025).
- 3.3.2 On visit 2 (May 2025), a pair of peregrines were seen entering and leaving a hole in the cladding on the northern side of the Hot Mill (see photos on Appendix E). This area appeared suitable for nesting, and peregrines have been identified here before, either perched on the roof or on exposed bars within the louvre slats. Based on a pair seen in this locations over multiple years, these birds were most likely using this location as a nest site.
- 3.3.3 Two peregrines were seen flying over the building on visit 3 (June 2025) but none were seen entering the building itself. This may reflect the fact this visit took place at the end of June which is toward the end of the breeding season (late March to mid-July)⁴, therefore nesting activity may have ceased.

3.4 Gulls

- 3.4.1 Herring gull and lesser black-backed gull were both very active all around the hot mill with a peak count of 219 (123 herring/ 96 lesser black-backed gull) counted on visit 3. However, it must be noted that this only represents the number seen from ground level,

³ Monlife (2019), Appendix 2 Environment (Wales) Act 2016 – Section 7. Available online: [NERC ACT 2006: SECTION 42 LIST OF SPECIES OF PRINCIPAL IMPORTANCE FOR CONSERVATION OF BIOLOGICAL DIVERSITY IN WALES, JANUARY 2008](#) (accessed: July 2025)

⁴ BTO (2025) BirdFacts Species: profiles of birds occurring in the United Kingdom. BTO, Thetford (www.bto.org/birdfacts, accessed on 13/08/2025).

meaning that it is highly likely that there were birds nesting in the middle of the building that were not picked up from any of the viewpoints.

- 3.4.2 Some gulls were observed perching on the edge of the hot mill itself, whilst others were just seen in flight over the top of the building.

3.5 Other nesting bird species under Amber List

- 3.5.1 Whitethroat was heard singing within the red line boundary in both areas of bramble to the north of the Hot Mill and in areas of buddleia to the south-east of the Hot Mill. Whilst no direct evidence of nesting was found, it is presumed that this location is used as nesting habitat.
- 3.5.2 Grey wagtail was seen on all three visits, with a pair seen landing on the roof on the northern side of the building on visit 3. Therefore, it is presumed that there was a nest site somewhere within the vicinity of the hot mill, even though no direct evidence of nesting was found.
- 3.5.3 Magpie were seen on visits 2 & 3, including two separate sightings of birds perched on the northern side of the hot mill roof on visit 3. No direct evidence of nesting was found.

3.6 Nesting bird species on Green List

- 3.6.1 Stock Dove were recorded at possible nest sites on all three visits, with most sightings being of birds flushed from underneath the network of piping around the outside of the building. A small number of feral pigeons were seen perching on the north-east side of the hot mill roof on visit 1 but were absent on visits 2 & 3.
- 3.6.2 Jackdaw and carrion crow were seen perching on the hot mill roof on all three visits but the only instances of nesting activity were jackdaws seen visiting possible nest sites in the north-west and southern side of the building on visit 2. Two ravens were seen perching on the southern side of the building on visit 3 but the lack of activity on visits 1 & 2 suggests that these were likely non-breeders just visiting the site.
- 3.6.3 One swallow was recorded in flight to the north-east of the building, however this was the only sighting and this species was not thought to have been nesting anywhere around the building.
- 3.6.4 Lesser whitethroat was heard singing in an area of buddleia to the south-east of the building on visit 2, which suggests this could have been a possible breeding site for this species.

Table 2: Highest peak count per transect route of priority species recorded during the 2025 nesting bird surveys

Species	Priority species					Highest peak count per transect route			Description of activity
	SPA/Ramsar site sp.	Annex 1	Sch. 1	EAS7	BoCC	Visit 1	Visit 2	Visit 3	
Herring Gull	-	-	-	✓	Red	56	108	123	Widespread all over Hot Mill building. Most birds were seen perching on the edge of the roof but some were seen in flight over the top of the building.
Lesser Black-backed Gull	-	-	-	-	Red	62	53	96	Widespread all over Hot Mill building. Most birds were seen perching on the edge of the roof but some were seen in flight over the top of the building.
Peregrine	-	✓	✓	-	-	0	2	2	Pair seen entering gap in cladding on northern side of building on visit 2. Two seen in flight over Hot Mill on visit 3 were presumably the same birds that had finished their nesting period.
Magpie	-	-	-	-	Amber	0	3	1	Two separate sightings of birds perching on northern side of building on visit 2. The other sightings on visits 2 & 3 were of flyover birds.
Whitethroat	-	-	-	-	Red	0	1	2	One heard singing in Buddleia to SE of building on visit 2, with another two singing in Bramble within red line boundary on

Species	Priority species					Highest peak count per transect route		Visit 3	Description of activity
	SPA/Ramsar site sp.	Annex 1	Sch. 1	EAS7	BoCC	Visit 1	Visit 2		
									northern side of building on visit 3.
Grey Wagtail	-	-	-	-	Amber	1	1	2	Pair seen landing on roof on northern side on visit 3, with a single bird seen loafing at ground level in same area on visit 2.

3.6.5 Table 4 shows the highest peak counts of the secondary species recorded during the surveys.

Table 3: Highest peak count per transect route of secondary species recorded during the 2025 nesting bird surveys

Species	Highest peak count per visit		
	Visit 1	Visit 2	Visit 3
Feral Pigeon	6	0	0
Stock Dove	4	9	4
Jackdaw	5	10	4
Carrion Crow	3	2	3
Raven	0	0	2
Swallow	0	1	0
Lesser Whitethroat	0	1	0

4 Discussion

4.1 Usage of site by breeding birds

- 4.1.1 Nesting herring gull, lesser black-backed gull and jackdaw were recorded from all areas around the Hot Mill building itself, including from the roof and from the cladding along the sides of the building. Stock doves were flushed from underneath the network of piping that surrounds the building on numerous occasions, indicating that they were probably using it as a nesting site. Grey Wagtails were also heard singing in the area, and so were also presumed to be nesting within vegetation nearby. Peregrines are highly likely to be nesting on the northern side of the building.
- 4.1.2 Whitethroat and lesser whitethroat were noted from areas of bramble and buddleia to the north and to the south-east of the site, in areas that were included within the red line boundary.
- 4.1.3 No bird species designated as features for the Severn Estuary SPA/Ramsar were identified on site.

4.2 Nesting bird timings

- 4.2.1 The timings below are indicative, individuals and colonies may breed outside of the below timings based on location, climate in a given year and food supply.
- 4.2.2 Breeding pairs of gulls begin courting and nest building in April/May and lay eggs from early May. The young hatch after 3-4 weeks and fledge after 5-6 weeks, in July/August.
- 4.2.3 Jackdaws generally lay eggs between mid-March and mid-April, with incubation lasting another 20 days on top of this and fledging occurring after another 32 days (around mid-June). This means that the total nesting period for this species is between early March and the end of June.
- 4.2.4 Stock Doves begin nesting later than many other species with egg laying taking place between early April and late August. Incubation takes another 21-22 and the chicks typically don't fledge for another 28-29 days, meaning that the total nesting period is between late March and mid-October. This means that this species may be sensitive to demolition for a longer period of time, so any demolition that takes place until mid-October will need to be supervised by an appropriately experienced ecologist (as detailed in section 5).
- 4.2.5 Grey Wagtails generally lay eggs between the end of March and mid-June and incubation taking place for another 12-13 days, with fledging happening after another 14-15 days. This means the total nesting period for this species is between mid-March and mid-July.
- 4.2.6 The peregrine nesting period generally lasts from late March to mid-June. Pairs return to their nesting site in January/February and eggs are laid in late March – early April. Eggs are incubated by the female and hatch after 30-32 days. The young then fledge 5-6 weeks after hatching and stay in the area for two to three months while they learn to catch their own food. After this time they disperse from the area. Peregrines can have multiple potential nest sites in a season and may use an alternative site later in the breeding season if their first attempt at a nest site fails.

4.3 Recommendations

- 4.3.1 Consideration needs to be given to timing and methods of certain works which may disturb nesting peregrine or impact other nesting birds during the nesting period. These works should ideally be carried out outside of the nesting season (September to February) where possible. However due to the size of the building and duration of works, it is understood that avoidance by timing will not always be possible. Deterrents would therefore also need to be used to dissuade birds from nesting i.e. the use of scaring devices and physical preventative measures such as nets, wires, spikes. Although would also need to consider potential for disturbance to both peregrines and roosting bats with regard to type of deterrent used and location.
- 4.3.2 Several measures are available to deter and prevent birds from nesting in or on industrial buildings. These methods are listed below. An appropriately experienced bird control specialist / pest controller should be consulted on the best method(s) to use in this instance, to comply with legislation. Methods to deter or disturb birds to prevent them nesting need to be started prior to nesting season. Once nest building has started, all wild birds are protected by the relevant legislation and some of the below may not be appropriate.

Input to the demolition design and phasing

- 4.3.3 The best deterrent is likely to be human disturbance so it will be important to ensure demolition works start promptly outside of the bird nesting season (nesting bird season is impacted by climactic conditions, but majority of species have finished nesting September, through to February).
- 4.3.4 It is considered that the Peregrines are likely to be nesting within the Hot Mill building behind the cladding near the roof, on the north elevation. If the exact location of the nest can be confirmed it may be possible to phase the demolition, beginning from the eastern end, leaving the current nesting location intact and phasing the demolition of this area outside of the nesting period.
- 4.3.5 Leaving the existing nesting location until the end of the demolition process may prevent the birds from moving elsewhere on the building to nest, should their existing location be removed first. Consideration would need to be given to what works take place within an established buffer zone, whilst birds are using nesting location, currently it is suggested 250m may be appropriate but this would need to be monitored to confirm nesting peregrines are showing no signs of disturbance.
- 4.3.6 The alternative may be to design the demolition to remove features likely to be used by nesting peregrines first to reduce the likelihood of them nesting. This could include removing the roofing from the building first to try and discourage the peregrines from nesting underneath. This method should also work to prevent gulls from nesting on top of the roof whilst the demolition is taking place.

Peregrine monitoring

- 4.3.7 The building would need to be monitored to determine if and where peregrines establish their nest site in 2026. For works in the area where peregrine are likely nesting it may be necessary to establish a buffer zone where any activities that could potentially disrupt peregrines should be temporarily halted until the young have fledged and nest is no longer active. The recommended buffer zone is generally considered to be 500m but this

will depend on background levels of disturbance (e.g. human presence, vehicle movements etc) and the extent to which peregrines have become habituated to it and in which case a reduced buffer could be considered. It is suggested that a minimum buffer of 250m be applied from the suspected nest site and the works required prior to demolition are monitored as indicated below.

4.3.8 It is suggested that a way to proceed would be as follows:

- Suitably experienced Ecological Clerk of Works to monitor area for 2 days prior to any work starting, to confirm nest location.
- Monitor the start of works for the first two days to assess the peregrines' response, if peregrines do not appear to be disturbed and are showing no signs of disturbance then monitor on a weekly basis. Work in this area will need to be stopped or paused if monitoring indicates that peregrines are being disturbed and are at risk of abandoning their nest.

Provision of alternative nest boxes

4.3.9 Due to the Schedule 1 status of the peregrine, it may be best practice to deploy an alternative nest box on another area of the steel works that is not scheduled for demolition. However, this may not be a sensible solution as if this could create an extra constraint if demolition does eventually take place at this alternative location or if it is in a place which is likely to be disturbed. The nest box or ledge would need to be installed on a tall building or structure in a place which could be left undisturbed.

Netting

- 4.3.10 Given the scale of the building and number of access points, it is considered unlikely that netting could be used safely and effectively in this instance. It is included for completeness, as it may be a tool that is used during specific instances of the demolition programme (given a three year programme). Design of netting installation would require evaluation from an ecologist, due to risk of birds and bats being trapped (noting consideration on bats not covered in this report).
- 4.3.11 Bird-proof netting can be installed by bird control specialists to cover areas of the building in which peregrine have nested previously. Netting may also prevent entrance to the building by other bird species. This method has been employed at power stations and old factories prior to their demolition to prevent peregrines from nesting on them.
- 4.3.12 Due to the condition of the building it may be difficult to safely install netting and conduct the regular checks necessary. Netting can be costly depending on the coverage needs, time consuming to install, and will need to be evaluated carefully with regards to health and safety considerations. Netting in areas visible to the public can cause negative publicity.
- 4.3.13 Other physical deterrents such as spikes or wire could also be used to prevent nesting, although in this situation there are similar limitations to their use.
- 4.3.14 If it were to be used, netting should be only installed during the winter season when birds are unlikely to be nesting (i.e. October to January) or after a suitably experienced ecologist has confirmed that no birds are nesting within any areas of the building to be subject to netting (acknowledging that netting the entire structure is not feasible). Netting could be used to obstruct specific gaps, such as around the location of the peregrine nesting site.

This area has not been used by bats (and is at top of building) so would be unlikely to create an obstruction to bat roosts identified.

- 4.3.15 Netting should be checked regularly to ensure no gaps have opened up and that no birds are trapped either in the building or in the netting itself. Checks should be made weekly in winter and daily from late February to mid-September. Checks can be made by a site employee that has received a briefing from an ecologist on how best to check the netting and how to resolve or report any issues.

Drones

- 4.3.16 Aerial drones can be deployed whilst the building is being demolished to locate any remaining nests on top of the Hot Mill. These would be remotely controlled and would help identify areas where exclusive zones need to be set-up. This would mean that no further demolition can take place in these areas until the nests are no longer active or the young have fully fledged.

4.4 Potential Disturbance-Causing Methods

- 4.4.1 Alternative bird deterrent methods are available and are regularly utilised by bird control experts. However, these methods may not be appropriate for the Site as they could potentially disturb nesting peregrine falcons and cause them to abandon their nest, whether they are nesting on the building or in a nest box. An appropriate bird control specialist should be consulted on the best method(s) to use in this instance, to comply with legislation. Methods to deter or disturb birds to prevent them nesting need to be started prior to nesting season. Once nest building has started, all wild birds are protected by the relevant legislation and some of the below may not be appropriate.

Hawking

- 4.4.2 Hawking, i.e. flying a specially trained hawk or falcon around the building, can be used to deter pigeons and gulls from nesting within the Site, and may also deter peregrine falcon from nesting. However, as there is a risk this method will cause abandonment of active nests, if employed this method should only be started outside of the peregrine nesting period (i.e. August to January) when it has been confirmed by an ecologist that the nest is not in use.

Acoustic scaring/kites

- 4.4.3 Acoustic scaring methods use a recording of a call of a bird of prey to deter birds, usually gulls and pigeons, from nesting on a building such as a factory or industrial units or in a city centre. Hawk kites can also be used on buildings and structures to deter nesting birds, often in conjunction with acoustic scaring methods.

Laser deterrent

- 4.4.4 Laser technology is employed in industrial, urban, and aviation areas by bird control specialists to deter species such as pigeons and gulls from nesting within the area. A high-powered green laser beam moves across the area and induces a flight response from the birds without causing them harm. With repeated use, nesting attempts will be disrupted and birds should move away from the area. A single laser can cover a significant distance assuming no obstacles and has proven to be effective at deterring pigeons and gulls, though it is not known whether peregrines and smaller birds would also be deterred by it.

4.5 Recommendations for nesting bird mitigation measures

- 4.5.1 It is recommended that a combination of the above deterrent / disturbance measures are put in place outside of the bird nesting season (October to February). This may include a combination of Kites, hawking, lasers and netting in strategic locations.
- 4.5.2 During works in the nesting season (normally March to August), a suitably trained ecologist will observe possible nesting locations for stock doves, gulls, jackdaws, grey wagtails and any other species that may be nesting on site to seek to identify any nesting bird behaviour. They will look for nesting material or other signs of an active nest (i.e. a nest with eggs or young, or adults in the process of nest-building or sitting in preparation for laying eggs).
- 4.5.3 If any active nests are found, a buffer (exclusion) zone will be created (radius dependent on the bird species and location of the nest) within which no work can take place. Once any young have fledged and the nest is no longer in use, then work can proceed in this location. Note that some nesting birds can lay multiple clutches of eggs on a nest in one season.

Peregrine monitoring

- 4.5.4 The building would need to be monitored to determine if and where peregrines establish their nest site in 2026. For works in the area where peregrine are likely nesting it may be necessary to establish a buffer zone where any activities that could potentially disrupt peregrines should be temporarily halted until the young have fledged and nest is no longer active. The recommended buffer zone is generally considered to be 500m but this will depend on background levels of disturbance (e.g. human presence, vehicle movements etc) and the extent to which peregrines have become habituated to it and in which case a reduced buffer could be considered. It is suggested that a minimum buffer of 250m be applied from the suspected nest site and the works required prior to demolition are monitored as indicated below.
- 4.5.5 It is suggested that a way to proceed would be as follows:
 - Suitably experienced Ecological Clerk of Works to monitor area for 2 days prior to any work starting, to confirm nest location.
 - Monitor the start of works for the first two days to assess the peregrines' response, if peregrines do not appear to be disturbed and are showing no signs of disturbance then monitor on a weekly basis. Work in this area will need to be stopped or paused if monitoring indicates that peregrines are being disturbed and are at risk of abandoning their nest.

4.6 Compensation measures

Potential compensation measures for nesting gulls

- 4.6.1 It is not possible to compensate for the loss of gull nesting sites within the demolition phase, as no alternative building is currently proposed. However, these species are not limited by nesting sites so it is likely that these species will utilise other flat roof industrial buildings within Llanwern and surrounding industrial parks to the west and east. Many of these structures could also be used as a nesting site to compensate for the loss of habitat for nesting stock dove and jackdaw.

Potential compensation measures for peregrines

- 4.6.2 Due to the presence of Schedule 1 nesting peregrines on the northern side of the building, we would need to provide compensation to prevent the loss of a key nesting site. A combination of nest boxes and ledges will need to be put up in other parts of the Llanwern complex that are not subject to disturbance nor demolition. This includes areas of the hot mill that are not subject to demolition and any tall structures around the complex, including lighting towers. We recommend that these nest boxes/ledges are installed in the winter period (September to February) to encourage the peregrines to nest away from the former hot mill before it gets demolished from March onwards.

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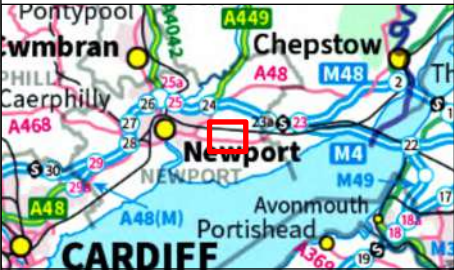
Figures

Figure 1: 2486598 - Llanwern Hot Mill - Figure 1 - Site Location Plan

Figure 2: Peregrine Nest Site Location



Legend:
 Site boundary

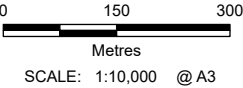


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Rev	Date	Description	Drn	Chk	App

Llanwrn Hot Mill



TITLE: Figure 1:
Site Location Plan





Legend:

- CDM boundary
- Peregrine nest

00	06/08/2025	2486598	RS	LB	RH
Rev	Date	Description	Drn	Chk	App

Llanwern Hot Mill

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EXPERTS IN ECOLOGY

TITLE: Figure 2:
Peregrine Nest Site Location

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Appendix A - Bird Species

Table 5: List of bird species mentioned in the report. This will include those species recorded during the surveys, but also any additional species included in the report e.g. desk study records .

Common name	Scientific name
Feral pigeon	<i>Columba livia</i>
Stock dove	<i>Columba oenas</i>
Herring gull	<i>Larus argentatus</i>
Lesser black-backed gull	<i>Larus fuscus</i>
Cormorant	<i>Phalacrocorax carbo</i>
Peregrine falcon	<i>Falco peregrinus</i>
Magpie	<i>Pica pica</i>
Jackdaw	<i>Coloeus monedula</i>
Carrion crow	<i>Corvus corone</i>
Raven	<i>Corvus corax</i>
Swallow	<i>Hirundo rustica</i>
Lesser whitethroat	<i>Curruca curruca</i>
Whitethroat	<i>Curruca communis</i>
Grey wagtail	<i>Motacilla cinerea</i>
Feral pigeon	<i>Columba livia</i>

Appendix B - Survey Details

Table 6: Non-breeding bird survey dates, timings and weather conditions are provided below.

Transect 1

Survey visit	Date	Start time	End time	Temp. (°C)		Wind (Beaufort scale)			Cloud cover	Rain	Visibility	Sunrise	Sunset
				Min	Max	Min.	Max.	Direction					
1	09/04/2025	10:15	12:45	9	13	2	3	NE	0/8	None	Excellent	06:21	19:59
2	14/05/2025	10:00	12:30	12	14	2	3	NE	0/8	None	Excellent	05:06	21:03
3	26/06/2025	10:40	13:20	17	19	3	4	SW	7/8	Light drizzle	Excellent	04:36	21:44

Appendix C - Desk Study Records

Records of relevant priority species from within 1 km of the Site, provided by the South East Wales Biodiversity Records Centre are listed below.

Table 7: Protected species records within 1 km of the site boundary

Scientific name	Common name	Designation	Most Recent	Any records within 100 m
Birds				
<i>Alcedo atthis</i>	kingfisher	WCA1.1	2024	☒
<i>Anas acuta</i>	pintail	WCA1.2, Amber, GB RDB(CR)	2019	
<i>Botaurus stellaris</i>	bittern	WCA1.1, S7, Red, GB RDB(VU)	2024	
<i>Cettia cetti</i>	cetti's warbler	WCA1.1	2024	
<i>Charadrius dubius</i>	little ringed plover	WCA1.1	2021	
<i>Circus aeruginosus</i>	marsh harrier	WCA1.1, Amber	2023	
<i>Circus cyaneus</i>	hen harrier	WCA1.1, S7, Red, GB RDB(VU)	2016	
<i>Falco columbarius</i>	merlin	WCA1.1, Red, GB RDB(EN)	2023	
<i>Falco peregrinus</i>	peregrine	WCA1.1	2024	
<i>Falco subbuteo</i>	hobby	WCA1.1	2019	
<i>Limosa limosa</i>	black-tailed godwit	WCA1.1, Amber, GB RDB(EN)	2006	
<i>Milvus milvus</i>	red kite	WCA1.1	2020	
<i>Numerius phaeopus</i>	whimbrel	WCA1.1, Amber, GB RDB(CR)	2018	
<i>Pandion haliaetus</i>	osprey	WCA1.1, Amber	2024	
<i>Phoenicurus ochrurus</i>	black redstart	WCA1.1, Amber, GB RDB(EN)	1983	☒
<i>Tringa ochropus</i>	green sandpiper	WCA1.1, Amber, GB RDB(EN)	2020	
<i>Turdus iliacus</i>	redwing	WCA1.1, GB RDB(CR)	2023	☒
<i>Turdus pilaris</i>	fieldfare	WCA1.1, Amber, GB RDB(CR)	2019	☒
<i>Tyto alba</i>	barn owl	WCA1.1	2020	
<i>Upupa epops</i>	hoopoe	WCA1.1, Amber	2024	

Table 6: Noteworthy species records within 2 km of the site boundary

Scientific name	Common name	Designation
Birds		
<i>Acanthis cabaret</i>	lesser redpoll	S7, Amber
<i>Actitis hypoleucos</i>	common sandpiper	Amber, GB RDB(VU)
<i>Alauda arvensis</i>	skylark	S7, Amber
<i>Anas crecca</i>	teal	Amber
<i>Anthus pratensis</i>	meadow pipit	Red
<i>Anthus trivialis</i>	tree pipit	S7, Red
<i>Apus apus</i>	swift	Red, GB RDB(EN)
<i>Ardea cinerea</i>	grey heron	Amber
<i>Aythya ferina</i>	pochard	Red, GB RDB(EN)
<i>Calidris alpina</i>	dunlin	Red, GB RDB(EN)
<i>Calidris canutus</i>	knot	Amber
<i>Charadrius hiaticula</i>	ringed plover	S7, Red, GB RDB(VU)
<i>Chloris chloris</i>	greenfinch	Red, GB RDB(EN)
<i>Chroicocephalus ridibundus</i>	black-headed gull	S7, Red, GB RDB(VU)
<i>Coccothraustes coccothraustes</i>	hawfinch	S7, Amber, GB RDB(EN)
<i>Cuculus canorus</i>	cuckoo	S7, Red, GB RDB(VU)
<i>Curruca communis</i>	whitethroat	Red
<i>Emberiza schoeniclus</i>	reed bunting	S7
<i>Falco tinnunculus</i>	kestrel	S7, Red, GB RDB(VU)
<i>Fulica atra</i>	coot	Amber
<i>Gallinago gallinago</i>	snipe	Amber
<i>Larus argentatus</i>	herring gull	S7, Red, GB RDB(EN)
<i>Larus canus</i>	common gull	Amber
<i>Larus fuscus</i>	lesser black-backed gull	Red
<i>Larus marinus</i>	great black-backed gull	Amber, GB RDB(EN)
<i>Linaria cannabina</i>	linnet	S7, Red
<i>Locustella naevia</i>	grasshopper warbler	S7, Red
<i>Lymnocyptes minimus</i>	jack snipe	Amber
<i>Mareca penelope</i>	wigeon	Amber
<i>Motacilla cinerea</i>	grey wagtail	Amber
<i>Motacilla flava</i>	yellow wagtail	S7, Red
<i>Muscicapa striata</i>	spotted flycatcher	S7, Red
<i>Numerius arquata</i>	curlew	S7, Red, GB RDB(EN)
<i>Oenanthe oenanthe</i>	wheatear	Amber
<i>Passer domesticus</i>	house sparrow	S7, Amber

<i>Passer montanus</i>	tree sparrow	S7, Red, GB RDB(VU)
<i>Phylloscopus trochilus</i>	willow warbler	Red
<i>Picus viridis</i>	green woodpecker	Amber
<i>Pluvialis squatarola</i>	grey plover	Red, GB RDB(VU)
<i>Prunella modularis</i>	dunnock	S7, Amber
<i>Puffinus puffinus</i>	manx shearwater	Amber
<i>Pyrrhula pyrrhula</i>	bullfinch	S7, Amber
<i>Regulus regulus</i>	goldcrest	Red
<i>Saxicola rubetra</i>	whinchat	Red
<i>Scolopax rusticola</i>	woodcock	Red, GB RDB(VU)
<i>Spatula clypeata</i>	shoveler	Amber
<i>Sturnus vulgaris</i>	starling	S7, Red, GB RDB(VU)
<i>Tadorna tadorna</i>	shelduck	Red, GB RDB(EN)
<i>Tringa erythropus</i>	spotted redshank	Amber, GB RDB(EN)
<i>Tringa totanus</i>	redshank	Red, GB RDB(VU)
<i>Turdus philomelos</i>	song thrush	S7
<i>Turdus viscivorus</i>	mistle thrush	Amber, GB RDB(VU)
<i>Vanellus vanellus</i>	lapwing	S7, Red, GB RDB(EN)

Appendix D - Survey Data

Table 8: Full data from the surveys for non-breeding birds undertaken between April 2025 and July 2025 are provided below.

Species			Priority species status					Number of individuals recorded		
Common name	Scientific name	BTO Code	SPA/Ramsar site	Annex 1	Sch. 1	NERC S7	BoCC	V1	V2	V3
Feral Pigeon	<i>Columba livia</i>	FP	-	-	-	-	Green	6	0	0
Stock Dove	<i>Columba oenas</i>	SD	-	-	-	-	Amber	4	9	4
Herring Gull	<i>Larus argentatus</i>	HG	-	-	-	✓	Red	56	108	123
Lesser Black-backed Gull	<i>Larus fuscus</i>	LB	-	-	-	-	Red	62	53	96
Peregrine	<i>Falco peregrinus</i>	PE	-	-	✓	-	Green	0	2	2
Magpie	<i>Pica pica</i>	MG	-	-	-	-	Amber	0	3	1
Jackdaw	<i>Coloeus monedula</i>	JD	-	-	-	-	Green	5	10	4
Carrion Crow	<i>Corvus corone</i>	C.	-	-	-	-	Green	3	2	3
Raven	<i>Corvus corax</i>	RN	-	-	-	-	Green	0	0	2
Swallow	<i>Hirundo rustica</i>	SL	-	-	-	-	Green	0	1	0
Lesser Whitethroat	<i>Sylvia curruca</i>	LW	-	-	-	-	Green	0	1	0
Whitethroat	<i>Curruca communis</i>	WH	-	-	-	-	Red	0	1	2

Species			Priority species status					Number of individuals recorded		
Common name	Scientific name	BTO Code	SPA/Ramsar site	Annex 1	Sch. 1	NERC S7	BoCC	V1	V2	V3
Grey wagtail	Motacilla cinerea	GL	-	-	-	-	Amber	1	1	2

Appendix E - Photographs

Photographs of habitats within the survey area used by non-breeding birds surveys are provided below.



Plate 1 – Zoomed out view of gap in cladding where peregrines were seen entering on north-western side.



Plate 2 – Zoomed in view of peregrine nesting location north-western side.

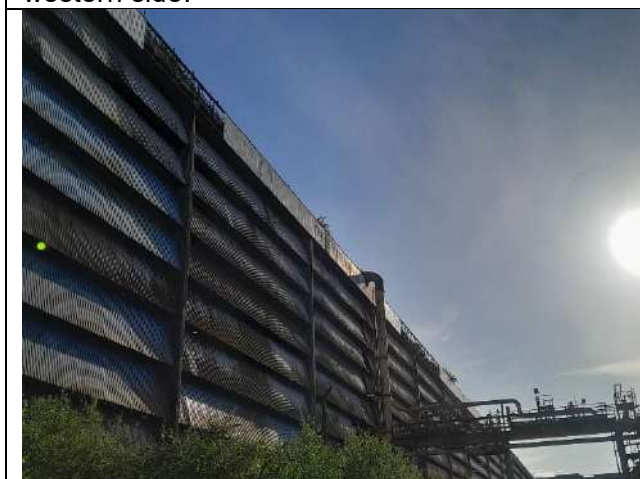


Plate 3 – Side-on view.



Plate 4 – Side-on view.



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