



FORMER HOT MILL, LLANWERN

Summary of Ecological Assessments

Tata Steel UK Ltd

2486598-D06 (02)

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General Notes

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1 Introduction

1.1 Purpose of this report

- 1.1.1 This report summarises the potential ecological constraints of the proposed demolition of the former Hot Mill and associated equipment and infrastructure, at the Tata Steelworks in Llanwern, Newport. It summarises the main results of assessment with regard to potential effects on designated sites, habitats and protected species and the outline mitigation strategy to avoid impacts.

1.2 Ecological assessment undertaken

- 1.2.1 The following surveys and assessments were undertaken in 2024/2025 by RSK Biocensus and are summarised in this report. They were carried out for the 'Site', which is the Construction, Design, Management (CDM) boundary where works are proposed to demolish the former Hot Mill and associated equipment and infrastructure. For the bat preliminary roost assessment and emergence surveys, some buildings outside the CDM boundary were included to give wider context (for full details see the respective reports). Surveys completed include;

- A preliminary bat roost assessment (PRA) survey of buildings inside and outside the CDM boundary in March 2024;
- Bat hibernation surveys of the Hot Mill building December 2024 to February 2025;
- Breeding bird surveys, with a specific focus on birds nesting on the Hot Mill and adjacent buildings, between April and June 2025;
- Further PRA, bat dusk emergence, dawn re-entry and static detector monitoring surveys of the Hot Mill and adjacent buildings between May and August 2025;
- A preliminary ecological appraisal (PEA) survey in July 2025; and,
- A (shadow) Habitat Regulations Assessment (HRA) Stage 1: Screening assessment report, produced August 2025.

1.3 Proposed development

- 1.3.1 Proposed demolition of the former Hot Mill and adjacent buildings. Works are anticipated to commence in Autumn 2025 and last for a duration of c. three years.
- 1.3.2 The aim is to remove all buildings (with the exception of existing substations) within the redline boundary and infill all cellars and other underground structures.

2 Surveys and Assessment

2.1 Designated sites

Habitat Regulations Assessment – Stage 1 Screening

2.1.1 The Habitat Regulations Assessment – Stage 1 Screening report (RSK Biocensus 2025d) considered whether the project would result in significant effects on four internationally important designated sites located within 10 km of the Site, which are designated for their nature conservation interests. These are:

- Severn Estuary Special Areas of Conservation
- Severn Estuary Special Protection Area
- Severn Estuary Ramsar Site
- River Usk Special Areas of Conservation

2.1.2 It was concluded that the proposed demolition activities are not likely to have a significant effect on any of the internationally important designated sites listed above, either alone or in combination with any other plans or projects.

Other designated sites

2.1.3 No other statutory or non-statutory designated sites are anticipated to be affected by works, see the PEA report (RSK Biocensus 2025c) for details of this assessment.

2.2 Habitats

2.2.1 The Site was mostly comprised of dilapidated buildings, hard-standing and bare ground interspersed with scattered scrub (mostly non-native buddleia), ruderal and ephemeral plants. There were two areas of rank grassland and several settling ponds.

2.2.2 All the buildings and structures on Site are proposed to be demolished, with exception of existing substations. Vegetation and all materials are proposed to be removed. Settling ponds and basements are anticipated to be in-filled and the ground levelled.

2.2.3 Although most of the site is hard-standing or bare ground, the works would result in some minimal loss of biodiversity. However, the habitats on Site were not species-rich and were considered of low ecological value. Settling ponds were not suitable for aquatic fauna and flora. No notable or protected plants species were identified. See the PEA report (RSK Biocensus 2025c) for details of this assessment.

2.2.4 As no development is proposed there is currently no requirement for habitat restoration or ecological enhancement within the Site. This will cause some loss of biodiversity however the habitat loss is considered of low biodiversity value. It is likely the same habitats will re-establish following completion of the demolition works.

2.3 Protected species

2.3.1 Protected species potentially affected by the works include nesting birds and roosting bats. No other protected or priority species are considered likely to be present or would be significantly impacted by works. See the PEA report (RSK Biocensus 2025c) for details of this assessment.

Birds

- 2.3.2 The breeding bird survey by RSK Biocensus (2025a) identified a peak count of 219 gulls (herring gull and black-backed gull), many of which were nesting on the roof of the former Hot Mill building. A single pair of peregrine falcons were also considered to be nesting inside the Hot Mill building and also jackdaw, stock dove and grey wagtail nesting inside and around the Hot Mill and associated structures. Whitethroat and lesser whitethroat were nesting in scrub around the site.
- 2.3.3 No bird species designated as features for the Severn Estuary SPA/Ramsar were identified on site. However herring gull is a species of principal importance as listed under Section 7 of the Environment (Wales) Act 2016.
- 2.3.4 All wild birds, their nests and their eggs are protected under Section 1 of the Wildlife and Countryside Act 1981 (as amended). Peregrine are also given additional protection under Schedule 1 of the act and it is 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 with dependent young.
- 2.3.5 Consideration needs to be given to timing and methods of works which may disturb nesting birds. These works should ideally be carried out outside of the nesting season where possible (nesting bird season is affected by climactic conditions but is generally taken as March to August inclusive). However due to the size of the building and duration of works, it is understood that avoidance by timing will not be possible. Deterrents would therefore also need to be used to dissuade birds from nesting. During works in the nesting season (normally March to August), monitoring would be required by a suitably trained ecologist to observe possible nesting locations and appropriate buffer zones implemented to prevent disturbance. Mitigation proposals are provided in the breeding bird report (RSK Biocensus 2025a), and include timing of works and use of deterrents such as flying kites and hawks.

Bats

- 2.3.6 Bat surveys carried out by RSK Biocensus in 2024 and 2025 identified small numbers of lesser horseshoe, common pipistrelle and brown long-eared bats roosting in the former Hot Mill building and adjacent buildings.
- 2.3.7 All bat species, their breeding sites and resting places are protected by law. A bat mitigation licence will therefore be required from Natural Resources Wales (NRW), prior to start of any works which may impact bats.
- 2.3.8 Bat survey details, mitigation and compensation measures are detailed in the bat survey report (RSK Biocensus 2025b). The outline mitigation strategy will ensure that works can be undertaken in a legally compliant manner and demolition of the buildings will not effect the favourable conservation status of the bat species present. This mitigation strategy will form the method statement for the bat mitigation licence (the bat licence application is intended to be submitted at the same time as the prior notification for demolition).
- 2.3.9 The mitigation is based on enhancing a building (B16) that is outside the CDM boundary and therefore not currently due for demolition. B16 is currently used by small numbers of common pipistrelle and lesser horseshoe bats, but due to windows along every elevation, it is sub-optimal for day roosting (for lesser horseshoe). This will be enhanced by boarding up windows, installing bat boxes externally for crevice dwellers (common pipistrelle and

brown long-eared) and opening internal doors to provide access to the majority of B16. Features will be installed as per the mitigation strategy within the bat report to further enhance the building for roosting bats. Additional bat boxes (suitable for pipistrelles and brown long-eared, as well as other species) will be installed on trees to the north of the railway line, on the edge of Tata landholding.

- 2.3.10 Prior to the start of demolition, equipment and machinery is proposed to be removed from the interior of the former Hot Mill. These will be unbolted and lifted out via existing cranes. Such works do intermittently take place already within the building, as part of routine maintenance. Provided works are discussed in detail with an ecologist, and areas with potential for roosting bats to be present are checked in advance, it is considered that this could start in advance of the bat mitigation licence having been received, as the risk of causing an offence is negligible. Ecological supervision of these works has been planned.
- 2.3.11 The enhancements to B16 (as described above) will provide interim mitigation measures to enable the demolition of the Hot Mill. Medium/long-term mitigation measures will be agreed as part of any future regeneration and redevelopment of the wider site. This will be dealt with at the appropriate time through an amendment to the NRW licence or through a new licence in due course.

3 Conclusion

- 3.1.1 Provided works are carried out with standard pollution prevention measures and under existing controls relating to water discharge then no designated nature conservation sites are anticipated to be affected by works.
- 3.1.2 With consideration for bats and nesting birds, as detailed in reports, and by working under the bat mitigation licensed method statement with ecological supervision, where required, it is not anticipated that protected species would be significantly impacted by works.

4 References

RSK Biocensus (2025a) Llanwern Hot Mill: Breeding Bird Report. 2486598. RSK Biocensus, Bristol

RSK Biocensus (2025b) Former Hot Mill, Llanwern: Bat Activity Survey Report. 2486598. RSK Biocensus, Bristol

RSK Biocensus (2025c) Hot Mill, Llanwern: Preliminary Ecological Appraisal. 2486598. RSK Biocensus, Bristol

RSK Biocensus (2025d) Llanwern: Habitats Regulations Assessment: Screening Report. 2486598. RSK Biocensus, Bristol

Appendix A – Site Plans

Appendix B - Site Photographs

	
Photo 1: Hot Mill building (north side) with areas of grassland in foreground	Photo 2: Hot Mill building and structures (north side). Mosses and sedum on hard-standing with butterfly bush scattered along edges
	
Photo 3: One of several buildings within the Site (north side) brick built with flat topped roof (several have been found to be bat roosts)	Photo 4: Dense areas of butterfly bush along edges of Hot Mill
	
Photo 5: Grassland with abundant creeping thistle on northern side.	Photo 5: Grassland encroached by bramble on northern side.

Photographs (cont.)



Photo 7: Target note 4: Polluted settling pond



Photo 8: Target note 5: Polluted settling pond



Photo 9: Target note 7: Polluted settling pond



Photo 10: Target note 6: Settling pond - under treatment



Photo 11: Filter bed of common bulrush as part of water treatment area: Target note 6



Photo 12: One of the buildings (reheat office) identified as a bat roost (on north side)

Photographs (cont.)



Photo 13: mostly bare ground with some ephemeral and scattered scrub on south side



Photo 14: mostly bare ground on south side



Photo 15: Bare ground with gravel and ephemeral, mostly biting stonecrop and moss on south side



Photo 16: Hard-standing with some ephemeral and scattered scrub on south side



Photo 17: Bare ground with gravel on south side



Photo 18: Bare ground with some ephemeral, moss and butterfly bush on south side



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