

INTERNAL MEMORANDUM

To: David Cross
From: Matt Davies (Ecologist)
Ext: 5278

Memo number: 1

Date of previous memo: -

Date: 11/04/2022

SUBJECT: P/22/0064 | Land adjacent to Goat Mill Road, Merthyr Tydfil | Proposed Plastic Recycling Facility

See previous comments made regarding PA/21/0063 Memo #1 (dated 03/11/2021).

In response to the comments made at the Pre-App Enquiry stage, the following documents have been provided:

- a) Written response
- b) Ecological Addendum
- c) Construction and landscape Ecological Management Plan (CLEMP)

Ecological survey work

For clarity, the previous comments did not require all 'technically' out of date survey work to be repeated. Only that the recommendations as set out in 'CIEEM Advice note. On the Lifespan of Ecological Reports & Surveys. April 2019' would be followed.

Document a) reports that a further site visit had been undertaken in January 2022 to assess the current habitat conditions (effectively updating the Preliminary Ecological Appraisal). Alongside which there was an update to the badger survey and Wintering Bird Survey (WBS).

No change in baseline habitat conditions was observed. On the basis of this, it is judged that updates to the previously undertaken reptile, invertebrate and bat surveys are not required.

This is acceptable.

Not clear whether an updated data search has been undertaken. Clarification required.

SINC quality

The further assessments requested have been made and there are onsite habitats and invertebrate populations that qualify in accordance with SINC criteria. In addition the site qualifies as Open Mosaic Habitat on Previously Developed Land (Section 7 habitat of principle importance – Environment Wales (Act) 2016). Onsite compensation is not possible and so offsite habitat compensation (equal to the area of grassland to be lost = c.10ha) is proposed. This would be acceptable, however this will be subject to the details of the proposal.

Other previously suggested options that may also help regarding compensation included the following:

- Green roofs to include species that will be lost due to the development could in part compensate for the loss of the onsite grassland.
- Hard surfacing/car parking should be created from ground reinforcement grass grid material – perhaps reinforcing the existing habitat rather than removing it entirely. Hard standing / impermeable materials will be kept to an absolute minimum.
- Mitigating the impact of the scheme by giving over the 'Future Building Area' to be part of the retained and protected habitat around the site.

Have these suggestions been dismissed/ruled out? If so, what are the reasons?

Lighting Assessment

The following documents have been submitted (1= original plan; 2= updated document):

1. Lighting Assessment. Draft report. Land off Goat Mill Road, Powys. WLC Lighting Design. Version D1. Document reference: WLC329-LA-001. Date verified: 23.08.21
2. Lighting Assessment. Draft report. Land off Goat Mill Road, Merthyr Tydfil. WLC Lighting Design. Version D3. Document reference: WLC329-LA-001. Date verified: 02.03.22

The lighting is planned to be operational – 24 hours a day, 7 days a week. Is this absolutely necessary?

The layout of the scheme shows bulkhead lights along the western elevations of Building 1. Why are these required? Are these necessary?

Why are the lighting columns needed along the western elevation of Building 2?

Is the layout of the scheme fixed? Could the buildings be placed adjacent to the eastern boundary with no lighting or windows on the eastern elevation? This would improve light spill along the eastern boundary?

Does the car park require lighting? In a relatively recent planning application for a car park next to the Orbit Centre in Merthyr (P/20/0006), the lighting element was dropped over concerns regarding light spill into nearby habitat.

Lighting plan Version D3 states 'The rear Pudsey Diamond shields cannot be represented within the lux contour lines but have been proposed to further reduce possible impact on the surrounding areas. Thus, the calculations are very much a worst-case impact.'

What is the reason these shields cannot be represented?

Bats

Firstly, a static survey, by its very nature, can only provide results that represent a snapshot in time and space, i.e., they can only tell you what bat species were present in each location during a set time period. Presence at these set times and locations does not therefore preclude presence at other times and in other locations. In addition, the positions of the two static detectors were changed for each month they were deployed and so comparisons between months cannot effectively be made. All the results of the static detector survey show, is that LHS bats are present onsite. They don't provide much information regarding their use of the onsite habitat.

Secondly, all bat species are impacted by Artificial Light at Night (ALAN). Whilst pipistrelle bats are known to feed on insects attracted to light, other bat species generally avoid all lights (Stone

et al 2009¹, 2012², 2015a³). This puts these 'light intolerant' species at a competitive disadvantage.

Additionally, insects are thought to be attracted to lit areas, resulting in fewer insects being present in surrounding darker areas (a 'vacuum effect') which impacts bat populations further afield. This is an extra impact on the ability of light intolerant bat species in the area to feed.

The impacts of the proposed lighting therefore needs to be considered beyond the limits of those species that are relatively more light intolerant.

Other research (Mathews et al, 2015⁴) has compared the activity of common species of bat in lit areas with dark areas. Activity of three species (noctule, serotine and soprano pipistrelle) in lit areas was found to be either similar to, or lower than bat activity in dark areas. An increase in activity for common pipistrelle was seen, but only at locations that offered a high degree of shelter, e.g., from hedgerows or trees.

So, ALAN can impact all bat species including common pipistrelle.

The point being that although being particularly light sensitive, lesser horseshoe bats are not the only species impacted by ALAN.

At present it appears that close board fencing is only proposed adjacent to the lagoon. This should be continued along the eastern boundary. NB I do not expect that the fencing will mitigate a large amount of the light spill, but 'some' darker areas will obviously be created. Planting (in association with the fencing) could also assist with blocking some of the light spill along this boundary – has this been considered?

Birds

Happy with the information provided and the extra survey effort.

Reptiles

RMS strategy included within the CLEMP – see comments later in this document.

Landscape and Ecological Management Plan (LEMP)

A CLEMP document has been provided.

Point 4.15 – this needs amendment. Works must be undertaken in daylight hours only (similarly for point 4.24).

Point 4.17 – are sandbags sufficient to prevent run-off into streams? These will be used in conjunction with silt fencing.

Points 4.26 to 4.29 (Reptile Mitigation Strategy)

Information to add

- Action that will be taken if [active] reptiles are encountered and require removal.
- Following the cut to 50mm – the sward must be maintained at this height until commencement of works.

¹ Stone, E.L., Jones, G., Harris, S. (2009). Street lighting disturbs commuting bats. *Curr. Biol.* 19, 1123–1127

² Stone, E.L., Jones, G., Harris, S. (2012). Conserving energy at a cost to biodiversity? Impacts of LED lighting on bats. *Glob. Change Biol.* 18, 2458–2465.

³ Stone, E.L., Harris, S., Jones, G. (2015a). Impacts of artificial lighting on bats: A review of challenges and solutions. *Mammal Biol.* 80, 213–219.

⁴ Mathews, F., Roche, N., Aughney, T., Jones, N., Day, J., Baker, J., Langton, S. Barriers and benefits: implications of artificial night-lighting for the distribution of common bats in Britain and Ireland. *Philosophical Transactions of the Royal Society B*, March 2015

Point 5.10

'From a wildlife point of view, ponds do not need to have large areas of open water ...'

NB areas of water are required to be left open for newt courtship displays.

Other requirements regarding the ponds and scrapes not covered or to be confirmed?

- Pond depth varied from shallow shelves to at least 1m.
- Open to the south so it can warm quickly in the sun
- South-facing banks with dense vegetation and sun warmed areas of open ground
- Log piles/hibernacula
- Scalloped edges
- Pond part of varied landscape with links to hedges, scrub, woodland, rough pasture

Points 5.18 and 5.19 (night roost structure)

The general principles listed are agreed. A fully worked up design will be submitted. See P/22/0009 for similar agreed design and spec.

Figure 1 – target note 5

Would the night roost structure be better positioned within the woodland to the east?

Point 5.21

Ibstock C boxes are designed to be integrated into buildings rather than erected on trees. The following would be more appropriate: <https://form.jotform.com/212403080501336> - specifically with a curved back.

7.0 MONITOR THE SITE AND REVIEW PLAN

Document needs to specify this is a 25 year post-development plan (as previously specified) rather than 10 years.

Monitoring of the bat house needs to be included.

Who will be responsible for undertaking the maintenance and management works?

Part of the management of the retained habitats will be prevention of access by the general public where possible. Access certainly should not be encouraged. Has this been addressed?

Figure 1 – there doesn't seem to be any Heras fencing shown to protect the trees/woodland block to the west of the site? Is this an error?

Will there be planting and fencing to screen off and buffer the watercourse?

Is the ground contaminated given its industrial past? What provision is there for prevention of pollutants being transferred to the wider environment?