



f.a.o. David Baker
Sirius Planning

(Sent via email: david.baker@thesiriusgroup.com)

Dyddiad/Date: 12th November 2021

Ein Cyf / Our ref: PA/21/0063

Eich Cyf / Your ref:

Gofynnwch am / Please ask for: David Cross

Llinell Uniongyrchol / Direct Line: 01685 724632

e-bost / e-mail: David.cross@merthyr.gov.uk

Dear Mr Baker

RE: Proposed industrial development for the recycling and processing of plastic materials on land at Goat Mill Road.

I write in response to your request for pre-application advice for a proposed plastic recycling and processing facility, with associated office accommodation, external storage area, car parking and weighbridge. Advice was previously given in January 2020 on the initial proposal, which set out the key issues to be addressed in the planning application. It is acknowledged that the statutory pre-application consultation is currently being undertaken with the local community and consultees. As part of this process a series of survey reports and assessments have been undertaken and plans have been prepared that illustrate the final design of the development.

To avoid repetition, this response will focus on the information that is forthcoming in the planning application and should be read in conjunction with the previous pre-application advice (PA/19/0056), which also sets out the policy context and principles of the development.

Design and landscaping

The Design & Access Statement provides a general explanation of the design principles that have informed the final layout of the development. In particular, the industrial units are located to the north of the site away from the residential properties. This also links well with the established industrial estate along Goat Mill Road. I note that the fire water storage tank and pump house would be discreetly positioned between the industrial buildings. The location of the staff car park in the northern part of the site is also appropriate to minimise disturbance to residents at times when there are shift changes and the traffic movements could be a source of nuisance in the early hour of the morning or later evening.

The majority of the site would be used as an external storage area, which is understood to be a crucial element to the proposal and that the layout of the plastic bales is partly governed by the permits you will require from NRW and the need to minimise any fire risks. A plan that shows the typical dimensions for the plastic bales should be provided, particularly their maximum height, to aid in our assessment of the potential impacts they may have on the surrounding area. Consideration will need to be given the use of an appropriate condition to limit the height of any materials stored externally.

The proposed industrial units are of a typical portal frame design with a metal cladding system utilised on the elevations and the roof. The use of green cladding is deemed appropriate and would enable the development to blend in a bit better with its surroundings and minimise any significant contrast in colour when viewed from Goat Mill Road through the existing vegetation.

Merthyr Tudful
... lle i fod yn falch ohono

Merthyr Tydfil
... a place to be proud of

The submitted elevations indicate a large glazed area on the northern side of Unit 1, which appears to serve the offices. However, it is not clear on the plan where the entrance to the building would be, assuming there is a separate access to the offices. Nor have I been able to review the proposed floor plans for the buildings, which would be required as part of the planning application. Additionally, it might be helpful if the details shown in Section B, which crosses through the site and Unit 1, were to include the existing office building to the north-west, opposite the site. This would help to provide a better impression of the scale of the building within the local context

It is noted that the proposed water lagoon would be situated in the southern part of the site outside of the main fenced-off storage compound. This is a welcomed approach and as mentioned in our previous pre-application response, there is an opportunity to enable this part of the site to be open to the public for informal recreation to compensate for the loss of access across other parts of the site, which is understood to have been used regularly by dog walkers. Further details are required in relation to the water lagoon to better understand its construction and what is to be provided along its embankments e.g. barriers and/or vegetation etc. The section details provide an indication of its depth and suggests that there may be some kind of railing around its perimeter. Alongside the functional aspect of the lagoon, there is opportunity to provide a significant enhancement to the quality of the area in terms of landscaping and ecology. For instance, appropriate planting could be introduced along the embankments to help reduce the potential for people to interact with the water environment, whilst creating improved habitats.

The proposed landscaping masterplan requires a lot more detail to demonstrate an appropriate scheme. The plan sets out the principles of retaining the vegetation along the site boundaries, the retention of grassland habitats and the planting of small clusters of trees. However, there would be overall a significant loss of grassland environments and trees within the main part of the site to be developed. To compensate for this loss, a greater level of landscaping would be expected to provide enhancements elsewhere. For instance, a more substantial tree planting scheme could be provided along the southern boundary adjacent to the lagoon. This would have the benefit of screening the external storage area that would be visible from the residential properties to the south (albeit at a distance). It would provide a more pleasing environment around the lagoon itself and may provide a connecting corridor for various species between the woodland areas to the east and west. I would also suggest that the lagoon be positioned further south slightly to enable better pedestrian access all around.

It has been noted in the documents that an area of land in the northern part of the site may be used in the future to accommodate a further industrial unit. Until such time, views toward the open storage area would be quite visible. The Rights of Way Division have also noted that there are plans to introduce an active travel route in this area to improve the wider north/south links. As such, it is considered appropriate for the proposed landscaping scheme to include additional screen planting along the northern boundary. This would not only help compensate for the loss of vegetation and habitats within the site, it would better integrate the development with its surroundings.

The landscaping scheme should specify the planting species that are appropriate for the condition of the site, along with their size and numbers etc. It has been highlighted by our Landscape Architect that the nature of the substrates that make up the majority of the site, consist of waste materials from the iron / steel making process. The resultant processes that have led to the existing ground conditions are the result of excavation, filling and re-compaction of the substrate leading to a hard pan. In places there may well be worked out iron deposits, blast furnace slag and mixtures of other waste from both mining, mineral extraction and ferrous metal production. As such, it is necessary to establish the necessary ground preparation that would be required to ensure the success of the landscaping works.

Merthyr Tudful
... lle i fod yn falch ohono

Merthyr Tydfil
... a place to be proud of

Given the scale of the development and the extensive hardstanding to be created, in this instance it is considered that a detailed landscaping scheme should be presented with the planning application, which would assist in weighing up the merits of the development. A management plan, typically for a period of at least 5 years, would also be required.

Landscape assessment

A Landscape and Visual Appraisal (LVA) has been undertaken to assess the potential impact of the development on the surrounding environment, which includes a study area of 2.5km radius from the site boundary. However, due to the dense urban form, landform variations and mature vegetation, the landscape and visual affects is focused on a 1km study area. This assessment is supported by a series of photomontages of the development, which presents a clear impression of the proposal from a number of viewpoints. The LVA comes to the overall conclusion that the site is of a low landscape value, being of low importance and rarity at a local scale. It also notes that the site can suitably accommodate the development without a substantial change in character. In respect of the visual impacts, it is noted in the LVA that in general the site is well screened from the surrounding publicly accessible areas. Although there remains potential for the development to be more visible from some private gardens where there may be views across the site, these are likely to be at a distance where such impact is not substantial. From such vantage points, the development would also likely be seen in the context of the wider industrial estate along Goatmill Road. It is considered that a modern wooden acoustic fence should be erected along the southern boundary of the site and around the southern entrance in place of the mesh like fencing proposed. This would better screen the external storage area from the nearby residential areas (to the south and south-west) where views of the plastic bales, even at a distance, is likely to be unsightly. Notwithstanding the conclusions reached in the noise assessment, the use of an acoustic fence would further minimise any potential impact on residential amenity. It is acknowledged in the LVA that the landscaping scheme is an important element to integrating the development within its surroundings. As such, I would refer back to the above comments regarding the need for a detailed landscaping scheme and areas of additional planting.

Heritage impact

Given the scale and location of the development in the Merthyr Tydfil Landscape of Outstanding Historic Interest an ASIDOHL2 (Assessment of the Significance of Impact of Development on the Historic Landscape) has been undertaken. This report acknowledges that the site has largely been subjected to past remediation works and that the direct physical impact on the identified Historic Landscape Character Areas (HLCA) would be slight. Similarly, in terms of the potential indirect impacts on the surrounding HLCA's, it was concluded to be slight. Taking into account the moderate significance of the HLCA's (Dowlais Great Tip, Trecatti, Trehir and Twyn-Y-Waun), the overall impact is considered to be slight. However, it has been noted that the northern tip of the site lies within an archaeological sensitive area, which has the potential for some below ground archaeological resources. The report advises that this could be mitigated by a suitable condition, which could entail the need to submit a watching brief before any ground works is undertaken. As part of the planning application, GGAT (Glamorgan Gwent Archaeological Group) will be consulted on the proposed development.

Ecological implications

In the previous pre-application advice, it was requested that a Preliminary Ecological Appraisal be undertaken, which would form the baseline ecological data for the site. Additionally, it is noted that a National Vegetation Survey, Badger Survey, Wintering and Breeding Bird Surveys, Reptile Survey, Invertebrate Survey and Bat Activity Surveys have all carried out. It has been highlighted by our Ecologist that all the survey work (and therefore biological data) is to a greater or lesser extent now technically out of date.

Merthyr Tudful
... lle i fod yn falch ohono

Merthyr Tydfil
... a place to be proud of

As such, it is advised that the CIEEM Advice Note be followed (see attached ecologist comments), which essentially requires the report author to reconsider any aspects of the survey work that may need to be updated. In the case of surveys undertaken more than 18 months ago, it would be necessary for the ecologist to revisit the site to update any assessments and review the validity of the reports.

Notwithstanding the above matters, our Ecologist has raised a number of points in respect of the content of the reports, which has been set out in the attached comments. In addition to any updates to the survey reports, it has been noted that greater detail is required in respect of the proposed lagoon and the landscape and ecological management plan.

Transport considerations

It is acknowledged that a Transport Assessment (TA) has been undertaken that considers the potential traffic movements associated with the development. It also includes sustainable transport, the parking demands and the provision for electric vehicle charging facilities.

The recycling facility would operate on a 24 hour and 7 days a week basis with operatives working on a daily 4 shift pattern. Deliveries to and from the site would take place between the hours of 6am to 6pm. The TA indicates that approximately 110 people would be employed but taking into account the shift pattern, this would equate to approximately no more than 55 people on site at any one time (during shift change over periods). On this basis, it is concluded in the TA that a total of 90 parking spaces would be provided, which includes additional overflow spaces. To support sustainable transport, a cycle stand would be provided on site and a travel plan has been prepared, which promotes the need to inform staff of the nearby pedestrian/cycle routes and supports a car-share scheme.

It has been highlighted by our Highway Engineers that an assessment of the current traffic movement along the highway network would not be representative of the normal highway condition, due to the effect that the Covid pandemic has had on travel patterns. Notwithstanding this, it has been noted that the TRICS assessment indicates the development would result in 1-2 additional vehicle movement per minute along the highway during peak times. Additionally, it is noted that 1 Ordinary Goods Vehicles (OGV) trip is expected per 6min/30min in the AM/PM peak times respectively. Given the 7.5 ton weight limit along High Street in Dowlais, it is expected any deliveries would be directed along the A4060 or A4102. Given the predicted travel movements, our Highway Engineers have not identified any significant highway safety concerns. Additionally, the level of on-site parking appears to be acceptable given the number of staff present at any one time and the proposed shift pattern.

Waste Planning Assessment

The Waste Planning Assessment provides a clear justification for the proposed recycling facility. It is noted that 150,000 tonnes of plastic material per annum would be processed at the site, with the main objective being to recovery the value from waste materials and reduce the amount of waste that would otherwise be destined for landfill. In this regard, the proposed facility would increase the amount and types of material that can be processed and moved up the waste hierarchy, which would contribute to the Welsh Governments strategic objective to achieve a zero-waste nation by 2050. It is acknowledged that the processing of the waste material would be contained within the proposed industrial units, which would help to minimise any potential impacts on the surrounding area. This is further supported by a series of other assessments that consider the potential impacts on nearby residential properties.

Merthyr Tudful
... lle i fod yn falch ohono

Merthyr Tydfil
... a place to be proud of

Energy Strategy

A Sustainability & Energy Strategy report has been prepared which considers the requirements of Policy EcW9 of the Local Development Plan, given the location of the site within a Heat Priority Area. It is acknowledged that a district heating scheme would not be viable largely as the development relates to a recycling and processing facility and does not have the capacity to generate energy from the waste.

However, it is proposed to utilise a Combined Heat and Power (CHP) unit as part of the recycling process to provide power and hot water for the washing process, which in turn would reduce the energy demands on site. It is noted in the strategy that the CHP would be located somewhere between the two proposed industrial units. However, this does not appear on the site plan and there are no specific details of the CHP unit. Whilst the strategy indicates the details of this will be finalised prior to development, it would be advised that this information should accompany the planning application, as it will be necessary to consider the visual impacts it has on the area, as well as the potential noise and air quality impacts. Notwithstanding this, the principle of utilising a CHP system is supported.

Local amenity

The proposed development would be situated in close proximity to a number of residential properties located on the opposite side of Goatmill Road, including Incline Top to the west, Bradley Gardens to the southwest and Mount View to the south. An environmental Noise Assessment has been carried out, which considers the predicted noise levels of the proposed development and the effect this may have on the nearby properties. The assessment also considers vibrations that may occur during the construction phase.

The assessment indicates that the plant noise levels would not likely exceed the background noise levels during both the daytime and evening periods, which shows a low impact on the surrounding area. During the construction phase, there is likely to be elevated noise levels, which is to be expected and can be managed through best practice and conditions i.e. to limit construction hours. The assessment sets out a number of mitigation measures such as, the use of appropriate material on the industrial buildings, the type of reverse noise alarms to be used on mobile plant and traffic management within the site.

The conclusions of the report indicate that the noise levels would not be significant and would be within acceptable limits. Whilst this suggests that the development would not adversely impact on the nearby residential properties, it should be noted that Environmental Health have not offered any further advice at this stage and will need to be consulted as part of the planning application process.

Given that the details of the proposed CHP have not been fully set out, there is a question as to whether this unit (depending on where it might be located) would contribute to the noise levels i.e. humming sounds. Additionally, it was previously noted by Environmental Health that an air quality assessment might be necessary. At that time details of the CHP were not available and so our comments focussed on the operational processes of the recycling facility. It would appear from the energy strategy that the CHP would be located externally and would include a flue system. As such, it is advised that details of the likely emission from the CHP be submitted with the planning application for Environmental Health's consideration.

In regards to the proposed lighting strategy for the site, it is acknowledged that a lighting assessment has been prepared, which sets out the locations of the external LED lighting and the various measures that would be put in place i.e. to minimise the impact on ecologically sensitive areas. The assessment includes a lux plan, which illustrates the lighting levels being low beyond the boundaries of the site. This suggests that the lighting may not be a source of nuisance to local residents. However, our ecologist has raised concerns that there is too much illumination of the habitats along the boundaries.

Merthyr Tudful
... lle i fod yn falch ohono

Merthyr Tydfil
... a place to be proud of

The Waste Planning Assessment makes reference to the potential for odours from the recycling facility, which may be contained within the buildings and regulated by an environmental permit. Whilst it is suggested that this may have a minimal impact on the area, it would be helpful if as part of the application that the Waste Planning Assessment could set out what measures might be put in place in the event of an issue arising. This would assist in addressing such issues should this concern be raised during the application.

Environmental impacts

In our previous pre-application response, it was noted that Japanese Knotweed was likely to be present in various parts of the site. Accordingly, an appropriate mitigation strategy has been prepared for the eradication of this invasive species. A total of 7 strands have been identified across the site and it is proposed that the knotweed would be excavated and placed in a treatment bund, followed by on-site burial. It has been noted by our Landscape Architect that the proposed strategy appears to be satisfactory provided that the mitigation is strictly followed to avoid any contamination being spread to other areas.

The proposed site lies within an area identified by The Coal Authority to be at high risk from past coal mining activities, which may have some implications on the ground stability. A site investigation report (desk study) has been prepared, which considers the ground conditions and includes a mining risk assessment. It is understood that that The Coal Authority have been consulted as part of the PAC process and that their advice will also be sought as part of the planning application. Furthermore, it is noted in the site investigation report that consideration is given to land contamination and that an intrusive investigation is required in order to confirm the presence or otherwise of contaminant sources and to quantify the risks to identified receptors. At this stage Environmental Health have not offered any further comments on this matter. It is likely that a condition would be suggested to ensure the further investigation works are undertaken prior to works commencing on site.

Details of the proposed drainage strategy are noted, which takes into consideration the existing watercourses including that which extends from the open cast mine (Ffos Y Fran). Detailed comments on the drainage proposal are not set out in this pre-application response given that it will form part of a separate application for SAB approval.

Conclusions

Whilst the majority of the key environmental issues appear to have been fully considered, as highlighted above, there are a few areas where additional information would be helpful in the assessment of the application, particularly in relation to the landscaping scheme and ecology. This response clearly cannot take into account matters which may come to light during the application process.

The above advice is made at an officer level and would therefore not prejudice any decision that may be made in the future by the Council. I trust the above is of assistance and self-explanatory. If you need to discuss this further please do not hesitate to contact David Cross.

Yours sincerely



P.P. JUDITH JONES
CHIEF OFFICER PLANNING & NEIGHBOURHOOD SERVICES

Merthyr Tudful
... lle i fod yn falch ohono

Merthyr Tydfil
... a place to be proud of

INTERNAL MEMORANDUM

To: David Cross
From: Matt Davies (Ecologist)

Ext: 5278

Memo number: 1

Date of previous memo: -

Date: 03/11/2021

SUBJECT: PA/21/0063 | Land adjacent to Goat Mill Road, Merthyr Tydfil | Proposed Plastic Recycling Facility

Comments were originally made regarding this scheme at the previous Pre-Application Enquiry stage (memo dated 8th November 2019).

Ecological survey work

A range of survey work was requested at this time to form baseline ecological data for the site. All the requested onsite survey work has been undertaken and reports detailing onsite survey work undertaken since 2019 have been submitted in support of the above application. All survey work (and therefore biological data) is to a greater or lesser extent unfortunately now technically out of date (see Table 1 below)

Table 1– age of survey data.

Survey	Date of Survey	Approximate age of survey data on 02 nd November 2021
Preliminary Ecological Assessment (PEA)	31 st January 2019	2 years, 9 months (33 months)
National Vegetation Classification Surveys (NVC)	09 th June 2020	1 year, 4 months (16 months)
Badger Survey	31 st July 2019	2 years, 3 months (27 months)
Wintering Bird Survey	4 th March 2020	1 year, 8 months (20 months)
Breeding Bird Survey	31 st July 2019	2 years, 3 months (27 months)
	22 nd August 2019	2 years, 2 months (26 months)
Reptile Survey	19 th May 2020 (first visit)	1 years, 5.5 months (17.5 months)
	1 st July 2020 (final visit)	1 years, 4 months (16 months)

Invertebrate Survey	10 th May 2020	1 year, 6 months (18 months)
	25 th June 2020	1 year, 4 months (16 months)
	3 rd September 2020	1 year, 2 months (14 months)
Bat Activity Survey (transects)	06 th April 2020 (first transect)	1 year, 7 months (19 months)
	14 th October 2020 (final transect)	1 year, 0.5 months (12.5 months)
Bat Activity Survey (statics)	06 th May 2020 (first date)	1 year, 6 months (18 months)
	19 th October 2020 (final date)	1 year, 0.5 months (12.5 months)

Therefore, the recommendations set out within the following advice note will be followed:

Box 1

CIEEM Advice note. On the Lifespan of Ecological Reports & Surveys. April 2019. This document states the following:	
Age of survey data	Report / Survey Validity
<12 months	Likely to be valid in most cases.
12-18 months	Likely to be valid in most cases with the following exceptions: - Where a site may offer existing or new features which could be utilised by a mobile species within a short timeframe; - Where a mobile species is present on site or in the wider area, and can create new features of relevance to the assessment; - Where country-specific or species-specific guidance dictates otherwise. Report authors should highlight where they consider it likely to be necessary to update surveys within a timeframe of less than 18 months.
18-36 months	A professional ecologist will need to undertake a site visit and may also need to update desk study information (effectively updating the Preliminary Ecological Appraisal) and then review the validity of the report, based on the factors listed below. Some or all of the other ecological surveys may need to be updated. The professional ecologist will need to issue a clear statement, with appropriate justification, on: - The validity of the report; - Which, if any, of the surveys need to be updated; and - The appropriate scope, timing and methods for the update survey(s)

In addition to the matter of the age of the survey data, there are a number of issues regarding the content of the reports as they stand at present, i.e., 'at the time the survey work was undertaken'. These are detailed within the remainder of this document.

SINC quality

The onsite grassland habitats have all been classified under the National Vegetation Classification Survey (NVC) assessment criteria. They have also been assessed against the Priority Habitat status.

However, none of the onsite habitats or species have been assessed against the following:

- *Criteria for the Selection of Sites of Importance for Nature Conservation in the County Boroughs of Blaenau Gwent, Caerphilly, Merthyr Tydfil and Rhondda Cynon Taff (The 'Mid-Valleys Area'). June 2008.*

When assessed on this basis, each grassland habitats are of SINC quality on their own merits (under H4: Neutral Grasslands, H5: Calcareous Grasslands and H7: Marshy Grasslands). The site also therefore is of SINC quality in terms of H18 (Mineral Spoil Tips and Other Post-industrial Land).

These assessments must be made and information added into the Ecological Appraisal report.

NB the site may also be of SINC quality under S6:Invertebrates; both for general invertebrate criteria due to the onsite presence of a number of Nationally Scarce species and also for specific aspects of the onsite invertebrate species (under Butterflies and also Dragonflies + Damselflies). The author of the invertebrate survey report will be requested to make these assessments and add any relevant comments to an amended document.

Habitats of Principal Importance

The site qualifies as a Section 7 Habitat of Principal Importance under the Environment (Wales) Act 2016. It is classified as 'Open Mosaic Habitat on Previously Developed Land'.

Stepwise approach

Planning Policy Wales Edition 11 (2021) stipulates a stepwise approach the Council must take when considering planning applications in the context of Biodiversity. Any adverse environmental effects are firstly avoided, then minimised, mitigated, and as a last resort compensated for; enhancement must be secured wherever possible.

Has the applicant already demonstrated consideration of alternative sites that would result in less harm, no harm or gain (avoidance)?

I think it would be useful for the applicant to provide an outline of the avoidance, minimisation, mitigation, compensation and enhancement measures to be provided. This will need to set out clearly which measures fit into each category.

There must be more in the way of compensation for the loss of the onsite grassland (semi-improved calcareous grassland, semi-improved neutral grassland, marshy grassland) as much of this will be lost. NB the Phase 1 Habitat Plan – North (Figure 3 / Rev 9131-E-03A / 21/09/2021) indicates that whilst there is some scrub encroachment, most of the grassland habitats are intact in the areas for the proposed buildings and hardstanding. In addition, the Invertebrate survey has reported Nationally Scarce species and Section 7 species of principal importance within these areas.

Compensation must be sought for equivalent areas of grassland habitats. With the area that is proposed to be taken up by the built elements, this will not be possible onsite. Offsite compensation may be acceptable (depending on the exact details).

I also refer to previous comments made regarding this scheme at the Pre-Application Enquiry stage (memo dated 8th November 2019). Green roofs to include species that will be lost due to the development could in part compensate for the loss of the onsite grassland. The SuDs scheme for the site will need to take this into consideration.

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. The SuDs scheme for the site will need to take this into consideration.

Other things to consider – 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.

Lighting Assessment

The following document has been prepared:

- 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

Comments (apart from the obvious incorrect address):

When will lights be in use (times of day, times of year)??

Page 3 – '*... lux contour plots provided do not consider the proposed shielding mitigation method. Thus, the calculations are very much a worst-case impact.*'

The best-case scenario must be provided in order to allow a full assessment of the impacts of the proposed onsite lighting on biodiversity. At present, there is too much illumination of habitats around the boundaries; partly due to an insufficient physical buffer (particularly along the western boundary).

In accordance with the BCT/ILP guidelines (<https://theilp.org.uk/publication/guidance-note-8-bats-and-artificial-lighting/>) illuminance on the habitat outside of the built elements of the site must be 0.2lux on the horizontal plane and 0.4lux on the vertical plane. This must be fully demonstrated.

NB the type of fencing at the boundaries could further reduce light spill into surrounding retained habitat. Fencing will be opaque to prevent any unnecessary light spill.

Page 5 (Table 3) – Colour temperature 3000K. The guidelines from BCT/ILP ideally require a colour temperature of <2700K. Can this be amended please?

Bats

Given the assemblage of bat species using the site (at least 8 species including two of the more rare species – lesser horseshoe and Nathusius' pipistrelle), it is especially important to ensure bats are still able to access foraging habitat and can move through and around the site.

The road to the west of the site (Goat Mill Road) is illuminated. Onsite commuting and foraging bats are likely therefore to use the darker eastern edge of the tree screening habitat (in the west of the site).

The road to the east of the site (A4060) is not illuminated, but may equally create a barrier (and collision risk) at night due to lights from passing high speed vehicles. Similarly therefore, onsite

commuting and foraging bats are likely to use the darker western edge of the young plantation woodland habitat (in the east of the site).

Post-construction, when the habitat at the centre of the site is lost and the proposed site lighting is in operation, these edge habitats are likely to take on greater significance. There must be enough of a buffer to allow these areas to be viable. How wide is the buffer along this western edge? If not sufficient bats will have nowhere to go other than into the pathway of traffic to the east. This will produce a barrier to commuting and foraging bats. There equally needs to be a buffer along the eastern edge of the tree screening to the west of the site. This all needs to be properly considered with appropriately wide buffers provided around the site that must be kept dark (amendments to the lighting scheme along with fencing and new planting could assist with this) and there must be provision for hop-overs or safe crossing points where required.

Given lesser horseshoe bats have been detected onsite, an enhancement would be the addition of a structure to act as a night roost constructed in a suitable area within the retained habitat in dark areas.

Birds

As previously stated, the bird survey work is out-of-date. In addition, the survey effort is inadequate.

Breeding Bird Survey

The breeding bird survey was undertaken in July and August. The BTO methodology cited in the Ecological Appraisal requires the first survey in the early part of the breeding season (April to mid-May) and the second at least 4 weeks later (mid-May to the end of June).

Current bird survey methodologies (including the BTO methodology) were designed to monitor long-term trends in bird populations at a national level. As such, they are thought to be unsuitable for fine-scale applications, such as ecological impact assessments.

New guidelines (for breeding birds) have been designed to address this issue and have recently been published - Bird Survey Guidelines www.birdsurveyguidelines.org.

Therefore, the bird surveys will be repeated using these new Bird Survey Guidelines.

Wintering Bird Survey

This survey consisted of a single visit to site in March. A wintering bird survey normally consists of x4 monthly visits (ideally Nov, Dec, Jan, Feb). Therefore, further survey effort is required.

Reptiles

Froglife advice sheet 10 is referred to in the x60 refugia were employed during the reptile presence or likely absence survey equating to just 4 per hectare (approx.). The Froglife Advice Sheet 10 (1999) recommends between 5 and 10 per hectare.

Most survey visits were undertaken in June and July (sub-optimal months for reptile survey). Natural England Technical Information Note TIN102, albeit now discontinued, provides a useful calculation for minimum survey effort taking into account the fact that the likelihood of detecting reptiles varies substantially between species and across the survey season. Each species is given a recommended minimum number of 'standard effort units' from 25 to 50. The calculation for the survey work undertaken onsite gives a result of 22 standard effort units.

Due to these limitations, the reptile survey work is not adequate. It will either be repeated, or reptiles will be assumed to be present onsite and an appropriate and robust Reptile Mitigation Strategy (RMS) submitted for written approval prior to planning determination.

Landscape and Ecological Management Plan (LEMP)

- o Landscape Masterplan. Goat Mill Road, Merthyr. Drawing number JAY1001 04 17 R0. Revision n. Approval date 26/08/2021.

There is a lack of detail within this document. A detailed LEMP (as referred to in the Ecological Appraisal document) is required to cover 25 years post development. A management company will need to be set up or engaged to undertake this work and agreements made to protect the habitats and ecological features long-term.

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.

What provision will there be to prevent pollution of the habitats outside of the built elements of the site post-construction. For example, in terms of the nearby watercourse (to the north and west). What will be there in terms of buffering this from the site? Will there be planting and fencing to screen off and buffer the watercourse?

This document could include any working method statements required, for example for reptiles (RMS), badgers etc.

The LEMP will be required for written approval prior to planning determination.

Construction Environmental Management Plan (CEMP)

A CEMP will be required detailing how onsite, adjacent and nearby ecology would be protected during the construction process. For example, how will dark areas be maintained for the protection of nocturnal and crepuscular species? What provision will there be to prevent pollution of the habitats outside of the built elements of the site during construction, for example, in terms of the nearby watercourse (to the north and west). Is the ground contaminated given its industrial past? What provision is there for prevention of pollutants being transferred to the wider environment? How will animals be prevented from becoming trapped in ditches/trenches? Etc.

The CEMP is required for written approval prior to planning determination.

Photographs

The Ecological Appraisal report has no photographs of the site – these will be added to the document.

Lagoon

Full details of the lagoon are required in terms of its creation, specification, management and maintenance etc and how this will benefit onsite biodiversity.