

Appendix 7U

Response to LPA ecology
chapter PAC comments

Comment number	Category	LPA comments (including written response and those raised during meeting 17.11.2020)	Arup response 3.2.2021
1	Desk study	The desk study doesn't appear to mention that a search for local records was undertaken using SEWBRc. As BIS doesn't normally cover NPT clarification should be provided as to whether BIS accessed the SEWBRc records as well. If not then it is recommended that a SEWBRc search is undertaken. In addition, we would expect evidence of the search having been undertaken – so either the search results should be provided as a confidential annex or at least a unique search code should be provided.	The chapter incorrectly referred to SeWBRc records. Arup had used Aderyn records, and therefore the report has been updated to confirm this. Aderyn records were from BIS, SEWBRc, NRW, WWBIC and Cofnod records.
2	Surveys	Clarification of whether the washery buildings and structures were checked for nesting barn owl should be provided. The washery has had a nest in the past.	Reference to barn owl checks has been added to survey methodology in Table 3 and results in paragraph 7.14.89, confirming no evidence of barn owl was recorded within the site.
3		In relation to badger sett locations – we would normally expect these to be provided in a confidential annex, providing details in a public document is not ideal considering persecution issues.	Target notes relating to the badger sett locations have been removed from the site. This has also been done to the Phase 1 report, which will be public. A confidential version has also been made which will be available upon request.
4	SINCs	The SINC section 7.14.7 is missing details of a number of NPT SINCs. Such information was issued on the 21/11/19 so it's unclear why this is not included. It may be necessary to update further sections to ensure SINCs are appropriately assessed. We also note that there seems to be mention of SINCs within xm of the site but not in relation to them being on site. This is not correct as a number of the NPT SINCs are within the red line boundary and in areas where habitats will be impacted (e.g. 7.20.12), this should be revisited.	Details relating to the additional SINCs are detailed within the report – in the baseline sections, and assessment.
5		It should be noted that the wrong SINC guidelines are referenced. Therefore, it is possibly that the assessment of habitats and species against SINC criteria is incorrect. This should be double checked as this may have knock on ramifications throughout the ES chapter. Welsh guidelines can be found at: https://www.biodiversitywales.org.uk/Local-Wildlife-Sites . Also see the NPT SPG for local amendments	These have been updated, and references checked throughout the evaluation and assessment sections.
6	NVC	It should be noted that the table included an incorrect assessment of swamp in relation to priority habitats – the extent of swamp is not a	Amended within the ES chapter. The conclusion of the chapter already states that this habitat is UK BAP/section 7.

Comment number	Category	LPA comments (including written response and those raised during meeting 17.11.2020)	Arup response 3.2.2021
		reason to discount it as a priority habitat. There seems to be some misinterpretation of the definition of this habitat, this should be corrected.	
7		Has the sparse grassland on coal spoil been assessed in relation to the Open Mosaic Habitats on previously developed land habitat type?	Amended to make SINC habitat in results/evaluation and conclusions.
8		A plan showing where all of the qualifying S7/UKBAP/SINC/LBAP habitats / habitats supporting species are on the site would be helpful.	A plan (Figure 7.10) has been produced of the future baseline habitat evaluation as this is most relevant to the assessment.
9	Future Baseline description	The description of the future baseline is not easy to follow. It is unclear what has/will change in light of the earthworks so it's not clear what the impact will be from the GCRE development as this future baseline is not clearly presented	The text has been amended in the Future Baseline description and also evaluation, and a Table comparing the existing baseline with the future baseline has also been provided in Appendix Q. Additionally, new plans have been created to show a) the Future Baseline (Figure 7.11) b) an evaluation of the Future baseline habitats (Figure 7.10) c) mitigation and enhancement proposed in relation to impacts on the Future baseline as a result of the GCRE project (Figure 7.9). Descriptions in each assessment section i.e. habitats, species, has also been updated to more clearly describe habitats of the future baseline which will be affected, and what will be created as mitigation / enhancement as per Figure 7.9.
10		It can also be confusing as measures delivered as part of the earthworks are referred in the impacts assessments as part of mitigation for losses of habitats etc. It is not appropriate to use measures being delivered by a different scheme as part of the mitigation for the current scheme and it is also difficult to see how measures as part of the earthworks can form both baseline and mitigation. A much clearer divide between the two schemes is needed to ensure we can fully understand the impacts of the GCRE.	
11	Plans	The description of the existing baseline/future baseline is very difficult to follow and visualise without a plan. Full details of the phase 1 habitat survey for the existing baseline is presented but nothing similar for the future baseline so it's quite difficult to follow when the impact assessment is then assessing a combination of the two that is not presented. A plan updating the phase 1 with the details of the earthworks and associated mitigation should be presented so we can fully understand the baseline and therefore what will be impacted. This will also provide evidence to backup the statements in the ES that relate to the future baseline. With no evidence currently included on the future baseline it is difficult to fully understand the scheme and judge if the ES is appropriate.	As discussed above, new plans have been created to show a) the Future Baseline (Figure 7.11) b) an evaluation of the Future baseline habitats (Figure 7.10) c) mitigation and enhancement proposed in relation to impacts on the Future baseline as a result of the GCRE project (Figure 7.9). Additionally, the extended phase 1 habitat plans have been updated to provide a zoomed in plan of different sections.

Comment number	Category	LPA comments (including written response and those raised during meeting 17.11.2020)	Arup response 3.2.2021
12		More detailed plans should be provided that show areas of habitat that will be impacted/lost to the development. The current scale of the plans is such that it is very difficult to see the areas impacted, to be able to get an understanding of the extent of loss, connectivity etc. The descriptions in the ES are not detailed enough to be able to establish a clear understanding of impacts or even where the habitat or species habitats is within the site that is being discussed – more detailed or closer scale plans showing the areas of habitats impacted would be helpful.	
13	Marsh Fritillary	7.20.4 Discusses marsh fritillary, however there seems to be a lot of information missing that would inform this assessment. This might stem from the incomplete SINC information mentioned above. It should be noted that the SINC Land at Marigold Place supports Marsh fritillary, this is 1.4km from site. This site is connected to the Marsh Fritillary sites as Rhos Common, Crynant and Ystradgynlais beyond. The area as a whole is a part of a significant metapopulation. Therefore, any suitable marshy grassland in the area could currently be or can be, in the future, an important resource to that metapopulation. It's not entirely clear from the ES whether there is suitable habitat on site and whether it will be impacted. Further clarification would be helpful. It is noted that most of the habitat is not suitable but whether there are any suitable patches is unclear. This section should be revisited to consider the full picture. There may also be potential enhancement opportunities in relation to improving the suitability of habitat for Marsh Fritillary on site. A discussion with Butterfly Conservation in relation to the balance of risk between habitat provision and collision mortality is recommended to establish whether habitat improvements or deliberate deterrent would have the best conservation outcome for the species.	The additional marsh fritillary sites have been added and considered in the ES chapter and HRA. Clarification that no marsh fritillary habitat within the site added. The invertebrate specialist employed by Arup for the invertebrate surveys / reporting and BC were both consulted regarding views on habitat enhancement vs collision risk.
14	Fungi	7.20.39 The substrate from the diverse fungi area in the Washery to be lost is to be reused as part of the construction – clarification should be provided as to what this will be used for and whether the substrate will provide opportunity for fungi to re-establish (i.e.	Detail has been provided in paragraphs 7.17.14, and within the fungi assessment, and areas shown on Figure 7.9 which would be left to re-establish as suitable habitat.

Comment number	Category	LPA comments (including written response and those raised during meeting 17.11.2020)	Arup response 3.2.2021
		recreate habitat) or whether it is a construction material with no opportunity for habitat re-creation.	
15	Birds	Further detail is needed in relation to the provision of bird habitat in line with the habitat regulations.	Information has been added to the bird assessment confirming the additional habitat which will be created, which is hopefully also made clearer in the accompanying plan (Figure 7.9)
16	Design	The car park shown on the masterplan seems to be missing from the ecology plans in Vol 3. Clarification should be provided as to whether the car park location has been appropriately assessed.	This has been added to the plans
17		Mention of a drainage regime is made but it is not clear whether any changes to the drainage on site will impact biodiversity. Any hydrological changes could impact habitats that are reliant on wet conditions. Clarification should be provided.	This has been reviewed and considered. References have been made in embedded mitigation, in terms of SuDS, and throughout the assessment.
18	Air Quality and Water Quality/Resources Impacts	Further clarity on the potential impacts from air quality and water quality should be provided. How will air or water pollutants adversely impact a habitat or species? What effect would this have ecologically?	Further details have been included within the assessment section referencing the assessment provided in the air quality and water chapters.
19		There doesn't seem to be much detail presented in relation to what pollutants, what levels, what impact could they have on habitats and species. It's not clear whether impacts would be significant. Further explanation is needed.	Impact assessment sections for statutory sites, non statutory sites and habitats have been updated in relation to the updated air quality chapter to detail air pollutants and likely impacts.
20		Also, any changes to water features through construction e.g. culverting etc should also be discussed. It is noted that the Water Resources chapter cross references to the Biodiversity chapter to discuss the ecological impacts of works set out in that chapter however, very little is mentioned in the Biodiversity chapter. In addition, the Water Resources Chapter appears to set out impacts that have not been considered in the Biodiversity Chapter e.g. the diversion of the River Dulais tributary.	This has been referenced within the assessment sections.

Comment number	Category	LPA comments (including written response and those raised during meeting 17.11.2020)	Arup response 3.2.2021
21	Habitat Connectivity	Each section appears to state that the loss of habitat at the Washery site will not have an impact upon connectivity due to the scale of loss. This is difficult to confirm due the scale of the plans and the lack of detail on the scale of loss. Further clarification is therefore needed.	The phase 1 plan has been amended to provide a zoomed in version, and the text amended to make this clearer.
22		Clarification should be provided in relation to animals crossing the tracks. In some sections connectivity between habitats is broken because of a fence (e.g. badgers) but this is not mentioned for other species. Obviously the type of fence will influence what animal can pass through but further clarity on the assumption about where fencing will be barrier and to which species would be helpful.	We have added details of fencing and added to relevant species sections.
		In relation to badgers a clearer presentation of likely badger movement around the site would be helpful to inform the fragmentation assessment.	Updated badger section in existing baseline to detail activity around the study area as well as the site, and confirming where activity is focused.
23		There seems to be an assumption that the provision of suitable habitat either side of the tracks will reduce the need for animals e.g. amphibians and reptiles to cross the tracks, roads etc. Unfortunately the need for populations to disperse when habitats reach capacity, in relation to migration to and from breeding habitat and the need for genetic exchange between populations to maintain long-term viability and health of a population means that the provision of suitable habitat is unlikely to be a key factor that reduces the need to cross roads, tracks or other man-made infrastructure. The existence of suitable habitat either side is more likely, in my opinion, to encourage movement.	This reference has been removed from all species sections.
24	Reptiles	A receptor site will need to be identified, proven suitable (ie not at capacity) and secured upfront. This is needed to prove that the mitigation is deliverable.	Potential reptile receptor site identified within the updated Mitigation plan.
25		In relation to the survey, clarification of time of day for the visits would be helpful. Also clarification of whether the temperature noted was the daily max or the temperature recorded at the time of survey.	Reptile report has been updated and text in ES chapter relating to reptile population sizes.

Comment number	Category	LPA comments (including written response and those raised during meeting 17.11.2020)	Arup response 3.2.2021
26		Concern that a population estimate is being made from a presence/absence survey. The number of survey visits in such a survey is not appropriate to inform a population survey – see Froglife Advice sheet 10 that discusses this. This limitation should be recognised. However, the survey did produce some high peak counts and therefore the assumption that there is a good population of Lizard is agreed although it may be prudent to prepare for an excellent population considering the limitations of the survey.	
	EMMP	We would expect the EMMP to cover at least 25 years but as the development is intended to be in perpetuity we would suggest that the EMMP continues for the same timeframe.	This has been amended to 25 years at which point it will be reviewed.
27		There is no clear commitment in relation to whether some of the proposals will be delivered. A clear commitment should be set out in relation to what is to be delivered, extent, where. It should be noted that biodiversity is a key requirement of SUDs so it would be expected that these features are designed with biodiversity interest. Green roofs are also recommended to be delivered, these can also form part of the SUDs.	Clarification in terms of what can be delivered has been provided where possible. Green roofs however remains as a potential enhancement, as it is not possible until the detailed design is developed to confirm whether this is appropriate.
28		Please note that the number and location (at least indicative areas) for placement of bird and bat boxes will be expected to be approved by the LPA, similarly the lighting design will be expected to require LPA approval.	Species specific mitigation and enhancements including bird and bat boxes, otter holts, reptile refugia are shown on the Mitigation plan. Text also added in Chapter re. LPA approval.
29	Residual impacts	Reference is made to table 7.15 in appendix 7O – this is missing.	This has been updated. New reference to Table 7.13 in Appendix S.
30		This assessment should quantify the losses and gains to the scheme and should clearly set out what mitigation is offsetting what impact.	A detailed breakdown has now been provided in the habitat assessment section.
31	Air quality	No assessment of air quality impacts upon Ancient woodland or SINC's is mentioned. These should at least be considered in the assessment even if they end up being screened out. https://iaqm.co.uk/text/guidance/air-quality-impacts-on-nature-sites-2020.pdf	The air quality chapter has been updated with modelling of nitrogen deposition in relation to all sensitive ecological receptors including ancient woodland and SINC's.

Comment number	Category	LPA comments (including written response and those raised during meeting 17.11.2020)	Arup response 3.2.2021
32	Climate change	Whilst proposals are not finalised there is mention of tree planting as part of the mitigation for climate change (as well as creation/management of other habitats). It is important that any tree planting proposals do not conflict with the biodiversity requirements as detailed in the biodiversity chapter. All landscaping proposals should be provided to the LPA for approval.	Tree planting is detailed within the Landscape chapter and associated plans.
33	HRA	Justification for ruling out air quality impacts on SACs needs further explanation – why is the distance too great for air quality impacts? Justification is not evidenced so need more detail.	Further details have been provided within the HRA, in reference to the updated air quality chapter.
34		Also note Marsh Fritillary comments above as this may also be relevant to the HRA.	This has been updated within the HRA similarly to the Statutory sites and marsh fritillary sections of the ecology ES chapter.
35	CEMP	The items in the CEMP re biodiversity are largely just a repetition of the ES. Further detail will need to be included to set out what exactly will be delivered, where, when and by whom.	The outline CEMP provided to support the outline application, is intended to detail general principles of best practice and mitigation during construction. It will be updated at the reserved matters stage to provide additional detail as requested.
36	Additional points raised in the meeting	consider water run off into Coed y Mellte, 2.9 km east. Also gors llyn in air quality assessment. Impact of air quality change on AW and SINC.	Coed y Mellte has been considered in terms of impacts from changes in water quality / quantity - along with other SSSIs. Assessment of AQ changes has been considered in relation SINC and AW
37	Other	an assessment of ecosystem resilience and an assessment of bird habitats in relation to the habitat regulations is still pending along with a habitat loss/gain balance. These are all essential for us to determine the application and should be provided.	An ecosystem resilience assessment has been provided within section 7.25. Bird habitat has been provided under the bird in the assessment section. This has been updated with clarification of new habitats to be provided, and gains are shown under habitats in the assessment section.