

Planning Department
The Quays
Brunel Way
Baglan Energy Park
Briton Ferry
SA11 2GG

30/04/2021

Dear Sir/Madam,

BWRIAD / PROPOSAL: Development of a Global Centre of Rail Excellence, comprising of two test tracks of loop configuration being an electrified high speed rolling stock test track of 6.9km in length and an electrified low speed infrastructure test track of 4.5km, with overhead line equipment (OLE) and dual platform station test environment; together with operations and control offices (including staff accommodation and welfare), shunter cabins (2 no.), research and development, education and training, rolling stock storage sidings and maintenance/cleaning/decommissioning facilities; and associated, drainage, internal vehicular accesses, branch line rail connection, staff and visitor car parking, lighting, electrical infrastructure (including substations and lineside shore supplies and transformers), fencing (perimeter security, acoustic and stock proof), land reformation and hard and soft landscaping, together with demolition of existing building/structures (cross-boundary application).

LLEOLIAD / LOCATION: Land At And Surrounding Nant Helen Open Cast Coal Site, Neath Port Talbot

Thank you for consulting Natural Resources Wales (NRW) about the above, which we received on 28/03/2021.

We provided comments on the above proposal at statutory pre-application stage, our comments can be viewed in the Pre-application Consultation report dated October 2020. As a result of our and other consultee's comments at pre application stage, further information has been added to the Environment Statement (ES) supporting this proposal. Our advice on the scheme has therefore changed to address the new information that has been provided in support of the application.

We continue to have significant concerns with the proposed development as submitted. We recommend you should only grant planning permission if the following requirements are met and you attach the following conditions to the permission. Otherwise, we would object to this planning application.

Requirement 1 - Plans: All plans associated with this development are amended in line with the established principles of habitat mitigation/ enhancements agreed under consented application 20/0738/FUL.

Requirement 2 – Air Quality: The submission of a revised ‘Air Quality’ chapter (section 14) of the Environment Statement (ES) to include a justification of the chosen meteorological data on which the modelling was based upon.

Condition 1 – Landscape Strategy: No development or phase of development, shall commence until a site wide landscape strategy has been submitted to and approved in writing by the Local Planning Authority.

Condition 2 – Construction Environmental Management Plan: No development or phase of development, including site clearance, shall commence until a site wide Construction Environmental Management Plan has been submitted to and approved in writing by the Local Planning Authority.

Condition 3 – Environmental Management and Monitoring Plan: Prior to the operation of the development, or phase of development, an Environmental Management and Monitoring Plan, detailing strategies for the management, maintenance and monitoring measures of the ecological, environmental and landscape features at the site shall be submitted to and approved in writing by the Local Planning Authority.

Preparation of Management Plans

We acknowledge that there are multiple plans recommended in the ES as techniques for collating the mitigation and enhancement measures for each different topic area. At pre- application stage we advised that it would be beneficial to combine the various plans into two structured documents, a Construction Environmental Management Plan (CEMP) and a Environmental Management and Monitoring Plan (EMMP), to ensure the inter-dependencies of the different topic areas are realised and that there is no conflict at the following stages i.e. reserved matters, construction and when the development becomes operational.

We have reviewed the ES submitted in support of the outline application and note that several sections have been modified to reflect our pre-application comments. We have identified the following plans included/ recommended in the ES:

- Outline Construction Environmental Management Plan (Outline CEMP- Appendix 3A) to include: Ecological Protection Plan (EPP);
- Landscape Strategy for Reserved Matters (Appendix 9G)
- Water Framework Directive Strategy (Appendix 11A)
- Drainage Strategy (Appendix 11B)
- Ecological Management Plan (EMP) (section 4.3.22 of the Outline CEMP Appendix 3A)

- Ecological Management and Monitoring Plan (EMMP) – ES Section 7.22.2.
- Dust Management Plan (DMP)

Reference to the EMP is only made within the CEMP, it is therefore unclear whether this reference should be updated in line with the amendments made in ES Section 7.22.2 and replaced by the EMMP.

We also note that the Landscape Strategy has not been included within the EMMP and a separate document will be produced to address all landscape mitigation and monitoring related issues as outlined in Appendix 9G.

We have provided an outline of what we would expect to be included in the Landscape Strategy (Condition 1), CEMP (Condition 2) and EMMP (Condition 3) in the [Appendix](#) of this letter.

Landscape

Our advice relates to the potential impacts on the Brecon Beacons National Park (BBNP) which at its closest point is located approximately 96m from the development. The development would be prominent from several areas within BBNP, which are of high scenic quality and sensitivity.

We note that the ES has assessed the development to have a significant permanent adverse effect on the BBNP. Should your Authority consider that this significant impact can be accommodated by considering other benefits of the development, our advice is to minimise the effects by ensuring sound place-making and green infrastructure techniques is embedded from the very outset of planning consent to achieve high-quality design.

Visual Effects

The Special Qualities of the BBNP, as described in the National Park Management Plan, will be affected by this development. This includes the sweeping grandeur & outstanding natural beauty (including prominent hilltops with extensive views in all directions) and the remoteness of the park.

The development would be visible from Landscape Character Areas Y Mynydd Du, Waterfall Country & Southern Valleys and Fforest Fawr, as identified in BBNP's Landscape Character Assessment. All three areas are noted for their scenic quality, views from high ground and tranquillity and remoteness. Developments outside the BBNP affecting tranquillity and special qualities and strategies should aim to reduce the visual impact beyond the boundary and applications resisted which would harm the special qualities. All character areas are of high scenic quality and high sensitivity. All are noted as of high sensitivity and value in the ES.

There would be significant adverse visual effects on receptors at eight viewpoints within the park for a considerable time period (during the four-year construction period and continuing for up to 15 years after completion). Beyond 15 years significant adverse effects would remain at two viewpoints. The woodland planting proposed should integrate much of the development into the surrounding landscape within the 15-year period. However, some of the rail infrastructure and engineered features (overhead lines and cuttings) will remain noticeable as permanent features in the views, continuing to have an adverse effect on the scenic quality of views and the sense of tranquillity & remoteness.

Night-time Visual Effects

There is potential for light pollution and impact on the BBNP's Dark Skies. We note the production of a Night-time Assessment (Appendix 9E), and intention to produce a full lighting assessment and design as part of the detailed design, informed by BBNP Policy 12 Light Pollution & Obtrusive Lighting SPG 2015 & Institute of Lighting Professionals GN01:2011.

The development is in the 'External Zone' outside the National Park. We note that the Night-time Assessment has only visited residential viewpoints and has made observations about the BBNP International Dark Sky Reserve.

The test tracks would not be lit but lighting would be required for the depot and potentially the platforms. The main sources of lighting would appear to be from train headlights and cabin lights, buildings, car parking and potentially the platforms and siding areas.

Whilst the Night-time Assessment appears generally sound, the viewpoints chosen are all in settlements, which are already affected by lighting to some extent. There will, nevertheless, be views of lighting within the dark landscape of Mynydd y Drum from these areas and light pollution from trains visible from footpaths within the BBNP on higher ground which would affect dark skies to an extent.

Regarding the detailed lighting assessment to be resolved via Reserved Matters, we suggest a viewpoint from Camnant Road and from the National Nature Reserve at Penwyllt, to illustrate night-time views from the BBNP.

NRW have recently produced an evidence base regarding Dark Skies which should be considered and used to assist the assessment. Please refer to the [Dark Skies and Light Pollution in Wales](#) webpage, which includes a link to the Tranquillity and Place – Dark Skies evidence report.

Mitigation

The 20/0738/FUL (Powys CC) planning application that was approved earlier this year, included woodland planting to mitigate the visual effects of that development. We understand this development makes use of the future baseline from application 20/0738/FUL being constructed.

It is also understood that the construction works for this development are anticipated to begin within three years of the application 20/0738/FUL being completed. This development would result in the loss of grassed habitats on the embankments and cuttings, which would be re-seeded following construction.

Whilst some additional native tree and shrub planting, e.g. around the Onllwyn washery, compared with the 20/0738/FUL application baseline may help to reduce the visual impact of the buildings, it would not be possible to reduce the adverse effects of the rail infrastructure that has been identified in the Landscape Visual and Impact Assessment (LVIA).

We also note there continues to be discrepancies between the different plans submitted. Plan 003B (Washery Indicative Masterplan) doesn't show the landscape mitigation and plan 003A/figure 1.6A (Illustrative Masterplan) only shows some of the landscape mitigation. The Habitats Creation & Enhancement Plan – Habitat (Fig 7.9) still shows acid grassland/ lichen heath on the north embankment, instead of woodland and is at odds with the photomontages and approved earthworks plan of 20/0738/FUL. We advise

your Authority to also review Figure 7.11 (20/0738/FUL) which also shows future baseline habitats but does not show the landscape mitigation planting.

Mitigation proposals plan Figure 9.14 shows woodland planting to the north embankment, along with other areas of mitigation planting. The plans need to be accurate and show all the proposed mitigation and habitats.

Requirement 1: All plans associated with this development are amended in line with the established principles of habitat mitigation and enhancement agreed under consented application 20/0738/FUL.

We note Appendix 9G Landscape Strategy for Reserved Matters, which includes recommendations for plans, supporting graphics (photographs & sections) & text. We advise that photomontages at different stages of establishment from viewpoints in the BBNP should be included as part of the monitoring, to ensure that visual impacts on the BBNP can be monitored and action taken to ensure effects are minimised.

Appendix B of the Planning Design and Access Statement (dated March 2021), includes examples of building design. In view of the scale of the buildings, we would advise that an Environmental Colour Assessment at Reserved Matters, to ensure they are successfully integrated with their surroundings & in views from the National Park. The design would need to reflect the rural location. Opportunities to include Green Infrastructure, such as green roofs and walls, in the design would benefit of further investigation and application. Additional mitigation planting to the north east should also be considered to reduce the long-term effects of the development on the BBNP.

We note that the ecology chapter of the Outline Construction Environmental Management Plan (CEMP) (Appendix 3A) suggests a five-year period of monitoring and management, although it is acknowledged that the effectiveness of the planting to achieve a non-significant effect on the BBNP needs at least 15 years to establish. This is largely due to the challenges of establishing trees and shrubs on colliery spoil. We consider the length of vegetation monitoring should be reviewed and in line with the detailed 25-year monitoring strategy to be submitted to discharge Condition 12 of planning application 20/0738/FUL and as indicated in ES Section 7.22.2 (content of EMMP).

To this extent we would therefore advise that you secure the submission and implementation of a landscape strategy via planning condition:

Condition 1 – Landscape Strategy: No development or phase of development, shall commence until a site wide landscape strategy has been submitted to and approved in writing by the Local Planning Authority.

This will help to ensure necessary management and monitoring measures are agreed prior to commencement of development or phase of development and implemented for the protection of the environment during construction. We have provided an outline of what we would expect to be included in this document in Appendix A of this letter.

Protected Sites

Special Areas of Conservation (SAC)

As identified within the ES, there are three SACs within 15 km of the development, namely:

- Coedydd Nedd a Mellt SAC, 2.9 km to the south-east (designated for its sessile oak - *Ilex* and *Blechnum* woodland rich in bryophyte and lichen assemblages)
- Cwm Cadlan SAC and, 9.5 km east (designated for its *Molinia caeruleae* meadows and associated alkaline fens)
- Blaen Cynon SAC, 9.2 km east (designated for its population of marsh fritillary butterfly).

We have reviewed the information provided within the ES and ES Appendix 7Q (Habitat Regulation Assessment Report dated 18/01/2021).

From the information provided, we consider that the development may affect the SACs. We have identified the following potential impact pathways to features of these sites:

- Water pollution
- Aerial emissions

The above pathways may not result in an adverse effect if the following measures are adhered to/ implemented:

- Developer adheres to the relevant [pollution prevention guidelines](#) and measures as identified within the CEMP.
- Developer adheres to the Construction Dust Assessment Methodology (Appendix 14A) and the mitigation and enhancement discussed in section 14.10 of Chapter 14 (Air Quality) of the ES.

No assessment of likely significant effect under Regulation 63 of the Conservation of Habitats and Species Regulations 2017 (as amended) has been undertaken by your Authority or it has not been forwarded to us for consideration.

Should you conclude that the development is likely to have a significant effect on the National Site Network, we look forward to being re-consulted. In the absence of this assessment, we cannot offer assurances that the development would not result in an adverse effect upon the SAC.

Sites of Special Scientific Interest (SSSI)

The ES identifies the presence of 12 SSSIs within 5 km of the development and concludes that many of the sites will not be directly or indirectly affected.

The only sites that have been identified to be potentially adversely affected by the development are the Nant Llech SSSI (designated for its stream and associated cliff communities and woodland) and Gorsllwyn Onllwyn SSSI (designated for its mire and acid pasture).

1. Sensitive Freshwater Receptors

These two sites are hydrologically connected to the development. As such there is the potential for these to be adversely affected by changes in water quality during construction or operation. The ES concludes that the effects would be temporary and reversible, and the

likelihood of any pollution incidents to occur would be minimised by adopting appropriate water quality pollution control measures during site clearance, construction and operation.

Condition 2 – Construction Environmental Management Plan: No development or phase of development, including site clearance, shall commence until a site wide Construction Environmental Management Plan has been submitted to and approved in writing by the Local Planning Authority.

Based on the information submitted in the outline CEMP (ES Appendix 3A) and provided the outlined measures are implemented, we consider that the development is not likely to damage the features for which Nant Llech and Gorsllwyn Onllwyn SSSIs are of interest.

2. Sensitive Aerial Receptors – NO_x and SO₂

The Gorsllwyn Onllwyn SSSI is located within 100m of the development (closest point is the stabling track) and on the opposite side of the A4221 where the access to the Onllwyn Washery is located. The Gorsllwyn Onllwyn SSSI contains a raised bog to fens with acid grassland habitat feature (National Vegetation Classification M17a), which is sensitive to ammonia, nitrogen and sulphur deposition.

The ES assesses the impact of rail emissions on ecological receptors during the operational phase and acknowledges that there is no published guidance on how to assess the impacts on ecological habitats.

We concur with the conclusion of the ES on the assessment of effects related to changes in traffic flows associated to the construction and operational phase of the development. ES Tables 14-6 and 14-9, indicate that additional construction traffic and operational traffic flows would not be high enough to trigger further assessment.

Regarding the NO_x emissions, ES Table 14-5 confirms that the nitrogen critical load for Gorsllwyn Onllwyn SSSI is 5 – 10kgN/ha/yr which is appropriate for the vegetation range of this site which includes the M17a habitat. The ammonia critical level for this site is 1µg/m³.

ES Table 14-13 summarises the predicted nitrogen deposition levels at the identified receptor sites during the operational phase of the rail. Receptors T0, T10, T20, T50, T100, T150 and T200 fall within Gorsllwyn Onllwyn SSSI. The Process Contribution (PC) at several receptors is above 1%, so significant effects on this site cannot be ruled out (ES Section 7.19.20).

We acknowledge the rationale given in ES Sections 7.19.20 to 7.19.23, which explain that the operational impacts of the rail on protected sites are not likely to be significant. The PC at Gorsllwyn is above 1% up to 50m into the SSSI from the A4221 boundary but it drops below 1% at 100m. M17a raised bog habitat forms part of a mosaic and is within 100m of the A4221. Further consideration should be given to nitrogen deposition reduction measures and appropriate monitoring. We acknowledge that other sources of nitrogen affect this site (agriculture and transport) and that this development alone would not contribute excessively to the overall levels of deposition.

We concur with the findings of the ES in relation SO₂.

Dispersion Model Source Meteorological Data

We note that Rhose airport meteorological station has been used to source data for the dispersion models because of its proximity (50km) to the site. We do not consider data from this station would be appropriate to inform the dispersion models for Nant Helen. Rhose is near to the coast but the development site is inland surrounded by hills. The topography and weather influence between the two sites are not therefore comparable.

Requirement 2 – Air Quality: The submission of a revised ‘Air Quality’ chapter (section 14) of the Environment Statement to include a justification of the chosen meteorological data on which the modelling was based upon.

We advise that justification for using Rhose as a source for meteorological data is sought with explanations of why any other potential alternative stations which have similar topography to the development have not been considered.

3. Sensitive Aerial Receptors – Dust

The ES identifies dust emissions associated with the construction phases of the development to affect air quality. The ES identifies the Gorsllwyn Onllwyn SSSI as a medium-sensitivity ecological receptor. We consider stringent dust control measures will need be put into place to avoid any damage to the sensitive basin mire, marshy grassland, and raised bog features present in the site. A Construction Dust Assessment Methodology and Baseline has been provided in Appendix 14A. The ES also confirms that measures minimising risk of dust soiling and ecological impacts of the development will be included within a Dust Management Plan (DMP).

Section 4.13 of the outline CEMP (Appendix 3A) suggests that the DMP may include monitoring of dust deposition, dust flux, real-time PM₁₀ continuous monitoring and/or visual inspections. We would expect regular checks of the proposed 100m “buffer zone” to be included within the DMP/ CEMP.

The “buffer zone” includes land within the Gorsllwyn Onllwyn SSSI, as illustrated in Figure 14.4 (Construction dust). If the usual value used to identify nuisance dust deposition in residential areas is applied (200mg/m²/day), and appropriate measures are taken to reduce emissions in a timely manner if required, we do not consider there would be a significant impact on protected sites.

We advise that dust level deposition of 500mg/m²/day or more to be damaging to the Gorsllwyn Onllwyn SSSI.

Protected Species

We have reviewed the information within the ES Chapter 7 and associated species survey reports, specifically appendices 7E (Amphibians); 7I (Riparian mammals); 7J (Bat Roost); 7N (Bat Activity); 7L (dormouse);

ES Section 7.19 assesses the potential effects of the development on biodiversity both during the construction and the operational phases, as well as direct and indirect effects. It recognises that protected species disturbance may result from construction activities and operation caused by habitat removal, noise, vibrations, lighting and collision.

Mitigation measures are proposed in ES Sections 7.21 and 7.22 to address habitat loss/severance and collision risk and to ensure compliance with relevant legislation. Tracks

will be fenced off to prevent wildlife crossing and new culverts which are required for drainage, will also provide passage to bats and otters. There are currently no details about the design of these culverts and the ES clearly states that these will not be available until the detailed design stage. We note ES Section 7.22.2 refers to an additional plan (Figure 7.9 Species), which illustrates the indicative location of the wildlife corridors (culverts) as recommended at pre-application stage.

Based on the survey results and the mitigation measures proposed, we are satisfied that the development is unlikely to significantly affect the aforementioned species. We consider all recommendations described in the ES to be appropriate. However, further information on wildlife corridors/ culvert(s) design will be required at Reserved Matters stage to demonstrate appropriate measures will be in place to reduce the collision risk to bats and otters due to the operation of trains along the tracks which will continue into the evening and at night. We would expect these measures to be included within the CEMP (Condition 2) and EMMP (Condition 3).

Condition 3 – EMMP: Prior to the operation of the development, or phase of development, an Environmental Management and Monitoring Plan (EMMP), detailing strategies for the management, maintenance and monitoring measures of the ecological, environmental and landscape features at the site shall be submitted to and approved in writing by the Local Planning Authority.

Provided appropriately designed wildlife crossings are incorporated within the design layout as indicated in Figure 7.9 we do not consider the development would be detrimental to the maintenance of the population of the aforementioned species concerned at a favourable conservation status in its natural range.

Land contamination & water quality

We have reviewed the information submitted within the ES Chapter 11, associated Appendix 6A, Geotechnical and Geo-environmental Desk Study dated December 2021 and Appendix 11B, Drainage Strategy Report dated February 2021 (Ove Arup & Partners Ltd). We understand that surface water drainage from the development will be discharged via a variety of methods into the local water course network and infiltration to natural ground will occur. We have no comments to make on site drainage.

It is recommended that the requirements of Planning Policy Wales and the Environment Agency Guiding Principles for Land Contamination (GPLC 1, 2, and 3), March 2010, should be followed.

These comments are based on our assumption that gross contamination is not present at this location. If, during development, gross contamination is found to be present at the site the developer and your Authority should re-consult us.

Other Matters

Our comments above only relate specifically to matters included on our consultation topic list, *Development Planning Advisory Service: Consultation Topics* (September 2018), which is published on our [website](#). We have not considered potential effects on other matters and

do not rule out the potential for the proposed development to affect other environmental interests.

We advise the applicant that, in addition to planning permission, it is their responsibility to ensure they secure all other permits/consents/licences relevant to their development. Please refer to our [website](#) for further details.

Yours sincerely,

Cinzia Sertorio
Advisor - Development Planning
Natural Resources Wales

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Appendix

Landscape Strategy

The Landscaping Strategy should include:

- Earthworks plan showing existing and proposed landforms and retaining structures and including contours and/or spot heights as appropriate
- Highway and utility plan, plotting the location of highway sight lines and existing and proposed utilities on the layout plan to ensure tree planting and hedgerows essential for landscape integration of the development are achievable
- Details of existing habitats/ trees and hedgerows on the site to be retained and measures for their protection, remedial work and management
- Details of existing and proposed ponds, ditches and wetland areas
- Details of existing and proposed walls, fences, surfacing and structures, including historic features
- Details of treatment of site boundaries
- Details of the extent, distribution and type of new planting
- Details of the extent, distribution and type of new habitat creation on the site
- Specification of ground preparation and planting operations, including specification of topsoil quality and depth, remediation of compacted soils, planting season, plant protection, watering of newly planted stock, mulching etc.
- Details and timings of when the landscape scheme will be implemented including the phasing of any landscaping
- Details of contingency measures should any trees or plants die, be removed or become seriously damaged within 25 years of planting
- Maintenance schedule setting out annual operations, frequency and standard of workmanship during the establishment period
- Long term management plan, setting out management activities, frequency and standard of workmanship, responsibilities for management and monitoring

Construction Environmental Management Plan (CEMP)

The CEMP should include:

- Construction methods: details of materials, how waste generated will be managed
- General Site Management: details of the construction programme including timetable, details of site clearance; details of site construction drainage, containments areas, appropriately sized buffer zones between storage areas (of spoil, oils, fuels, concrete mixing and washing areas), details of fuel and chemical storage and containment, and any watercourse or surface drain
- Biodiversity Management: details of tree and hedgerow protection; Invasive Non-Native Species (INNS) management plan; Details of Pre-commencement Surveys, including methodologies and timing; species and habitats protection (identification of “biodiversity protection zones”); avoidance and mitigation measures to include location and timing of sensitive works to avoid harm to ecological features of importance and lighting plan
- Control of Nuisances: details of restrictions to be applied during construction including timing, duration and frequency of works; details of measures to minimise noise and vibration from piling activities, for example acoustic barriers; details of dust control measures and monitoring

- Pollution Prevention: demonstrate how relevant Guidelines for Pollution Prevention and best practice will be implemented, including details of emergency spill procedures and incident response plan
- Details of the persons and bodies responsible for activities associated with the CEMP and emergency contact details
- Ecological clerk of works to ensure construction compliance with approved plans and environmental regulations.

Environmental Management and Monitoring Plan (EMMP)

The EMMP should include but not limited to:

- Purpose and conservation objectives for the proposed works
- Detailed design(s) and/or working method(s) to achieve stated objectives
- Maintenance schedule setting out annual operations, frequency and standard of workmanship during the vegetation establishment period
- Extent and location/ area of proposed works on appropriate scale maps and plans
- Timetable for implementation demonstrating that works are aligned with the proposed phasing of development
- Ecological Compliance Audit, including key performance indicators
- Persons responsible for: implementing the works; lines of communication; review of monitoring results; and, publication of monitoring results and outcomes
- Details of initial aftercare and long-term maintenance
- Actions to be taken in event previously unidentified species/ habitat features are found
- Details of measures to prevent or reduce incidental capture or killing
- Aims and objectives of monitoring to match the stated purpose
- Identification and clarification of baseline conditions prior to the start of development
- Appropriate success criteria, thresholds, triggers and targets against which the effectiveness of the various measures being monitored can be validated
- Methods for data gathering and analysis
- Location of monitoring
- Timing and duration of monitoring – appropriate to the species/habitat/feature concerned
- Details of contingency measures should any trees or plants die, be removed or become seriously damaged for the whole length of the monitoring plan