



Parc Ynni Calon y Gwynt

ENVIRONMENTAL STATEMENT

Appendix 5A: Main Site Preliminary Ecological Appraisal





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ANNEX 5A.1

PARC YNNI CALON Y GWYNT MAIN SITE PRELIMINARY ECOLOGICAL APPRAISAL 2024

ANNEX 5A.2

LEGISLATION AND NATIONAL POLICY CONTEXT

ANNEX 5A.3

UPDATED DESK STUDY RESULTS

1 INTRODUCTION

1.1 BACKGROUND

- 1.1.1. WSP UK Limited (hereafter referred to as WSP) was commissioned by Wind2 (the Client) to undertake an updated Preliminary Ecological Appraisal (PEA) of the Parc Ynni Calon y Gwynt Site, Powys, mid-Wales (approximate central British National Grid (BNG) reference: SO 001 983), hereafter referred to as the 'Main Site'.
- 1.1.2. Data lifespan advice provided by the Chartered Institute of Ecology and Environmental Management¹ states that field data over 18 months old should be subject to renewed survey by a professional ecologist.
- 1.1.3. This PEA update is annexed by the original PEA carried out in June 2023 (**Annex 5A.1**), and forms part of the supporting documentation for an application to acquire consent to install 11 turbines, a temporary construction compound, on-site substation, control building, battery storage area and upgrades to existing and new access tracks, hereafter referred to as the 'Proposed Development'. The site, hereafter referred to as the Combined Site, comprises two areas, referred to as the 'Main Site' and the 'Access Road'.
- 1.1.4. This PEA update supersedes the original PEA carried out in June 2023. It should be noted that, since the original PEA, the following ecological assessments and surveys have been carried out within the Main Site, and the associated reports should be read in conjunction with this PEA update:
- A National Vegetation Classification (NVC) survey²;
 - A badger *Meles meles* survey³;
 - An aquatic walkover survey⁴;
 - Bat activity surveys⁵;
 - A suite of great crested newt *Triturus cristatus* surveys, including environmental DNA (eDNA) and a population size class assessment⁶;
 - A reptile walkover and habitat suitability assessment⁷;
 - Riparian mammal presence/likely absence surveys⁸;
 - A report to inform a Habitats Regulations Assessment⁹;
 - A Net Benefit for Biodiversity (NBB) report¹⁰; and

¹ CIEEM (2019) Advice Note. Available at: <https://cieem.net/wp-content/uploads/2019/04/Advice-Note.pdf> (Accessed: 23/05/2026).

² **Appendix 5C: Notable Habitats Report**

³ **Appendix 5D: Main Site Badger Survey Report**

⁴ **Appendix 5F: Main Site Aquatic Survey Report**

⁵ **Appendix 5G: Main Site Bat Activity Survey Report**

⁶ **Appendix 5I: Main Site Great Crested Newt Report**

⁷ **Appendix 5J: Main Site Reptile Survey Report**

⁸ **Appendix 5K: Main Site Riparian Mammal Survey Report**

⁹ **Appendix 5N: Habitat Regulations Assessment Screening Report**

¹⁰ **Appendix 5O: Net Benefit for Biodiversity Report**

- An outline Habitat Management Plan (oHMP)¹¹.

1.1.5. This document provides details of the PEA update for the Main Site only; the Access Road PEA is considered in a separate document (**Appendix 5B** of the Environmental Statement (ES)).

1.2 SCOPE OF REPORT

1.2.1. Wind2 commissioned WSP in 2026 to complete a PEA update of the Main Site. The brief was:

- In line with CIEEM's advice on data lifespan; to update field survey data to determine if any changes had occurred to the Main Site baseline ecology since 2023;
- To provide appropriate updates to recommendations to enable compliance with relevant nature conservation legislation and planning policy; and
- If necessary, to identify further need for avoidance, mitigation, compensation or enhancement measures and/or further ecological surveys.

1.3 RELEVANT LEGISLATION AND POLICY

The appraisal has been prepared in the context of the current national policy and legislative framework for nature conservation as summarised in **Annex 5A.1**. The report discusses the implications of the legislation and policy relevant to the Proposed Development. This does not constitute legal advice, and the original legislation should be consulted for details.

In January 2026 the Welsh Government published a revised list of Habitats and Species of Principle Importance to Conservation (traditionally referred to as Priority Habitats¹² and Priority Species) under Section 7 of the Environment (Wales) Act 2016. Habitats and Species listed under Section 7 should be '*maintained and enhanced*' under Section 6 of the Environment (Wales) Act 2016. A review of Section 7 Habitats and Species has been included within this PEA update. Hereafter, these features will be referred to as S.7 Priority Habitats/Species.

¹¹ **Appendix 5P: Outline Habitat Management Plan**

¹² In the absence of definitions of S.7 Habitats, professional judgement and reference to UK Biodiversity Action Plan (BAP) Priority Habitat definitions has been used to assess whether habitats identified qualify as S.7 Habitats. Where it is not possible to confidently assess a habitat as not qualifying as a S.7 Habitats, a precautionary approach has been assumed.

2 METHODS

OVERVIEW

- 2.1.1. This appraisal has been prepared with reference to current good practice guidance published by the CIEEM^{13,14, 15} and Joint Nature Conservation Committee (JNCC)¹⁶; and guidance contained in the British Standard – Code of Practice for Biodiversity and Development BS42020:201317.
- 2.1.2. This PEA update is based on the following data sources:
- A review of the ecological desk study data;
 - An updated extended Phase 1 habitat survey; and,
 - A preliminary bat roost assessment (PRA) of trees and structures.

DESK STUDY

- 2.1.3. The PEA published in May 2024 included a desk study that was completed in February 2024 for the Combined Site.
- 2.1.4. It was not considered necessary acquire a new data set for this PEA update as desk study data is not necessarily subject to the same lifespan constraints outlined by the CIEEM advice on data lifespan. Further, there have been minimal changes in land-use and habitat type at the Combined Site since the previous PEA. However, all S.7 Habitats/Species statuses have been reviewed within both field and desk study data sets, in light of the recent publication of a revised list of S.7 Habitats/Species.
- 2.1.5. The following data originally obtained to carry out the 2024 desk study of the Study Areas given below has been reviewed considering the revised S.7 lists:
- Data sourced from Biodiversity Information Service for Powys & Brecon Beacons National Park (BIS).
 - Records of legally protected and/or notable species within 1 km of the Combined Site and woodland parcels listed on the Ancient Woodland Itinerary (AWI) within the Combined Site.

SITE WALKOVER – HABITATS SURVEY UPDATE

- 2.1.6. A site walkover of the Main Site and an additional 30m around the Main Site, hereafter referred to as the 'Survey Area', was undertaken between 30 March and 2 April 2026 to record any changes to habitats that may have occurred since the 2024 PEA. The following changes were recorded: changes in characterisation that may warrant a change of Phase 1 habitat classification; changes in

¹³ Chartered Institute of Ecology and Environmental Management (CIEEM) (2017a). Guidelines for Preliminary Ecological Appraisal. CIEEM, Winchester.

¹⁴ CIEEM (2017b). Guidelines for Ecological Report Writing. CIEEM, Winchester.

¹⁵ CIEEM (2018). Guidelines for Ecological Impact Assessment in the UK and Ireland, Terrestrial, Freshwater and Coastal. CIEEM, Winchester.

¹⁶ JNCC (2016). Handbook for Phase 1 habitat survey – a technique for environmental audit. JNCC, Peterborough.

¹⁷ British Standards Institute (2013) Biodiversity code of practice for planning and development: BS42020. BSI. London.

habitat extent; and finally any changes to the habitat suitability for supporting protected and/or notable species.

- 2.1.7. Where changes to habitats were identified, habitats were described and mapped following the standard Phase 1 habitat survey methodology¹⁸. Where appropriate, consideration was given to whether habitats qualify, or could qualify, as S.7¹².
- 2.1.8. Target notes (TNs) were made to provide information on specific features of ecological interest or habitat features too small to be mapped. Any invasive non-native plant species (INNS) listed on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended) which were evident during the site walkover were also target noted.

PRELIMINARY ROOST ASSESSMENT OF STRUCTURES

- 2.1.9. A PRA was undertaken of all buildings identified within 200m of proposed wind turbine locations on the 7th of May 2026 in accordance with bat survey best practice guidance published by the Bat Conservation Trust (BCT)¹⁹. Any buildings or structures identified were assigned a suitability rating category for their potential to support roosting bats as defined within the current BCT guidelines, as described in **Table 1**.
- 2.1.10. Buildings or structures would only be considered as requiring further surveys if it was assessed as having suitability to support roosting bats.

Table 1: Bat Roosting Suitability Categorisation for Buildings and Structures (as per BCT guidelines)

Category	Description
None	No habitat features within 200m of proposed wind turbine locations likely to be used by any roosting bats at any time of the year (i.e., a complete absence of crevice/suitable shelter at all ground/underground levels).
Negligible	No obvious habitat features within 200m of proposed wind turbine locations likely to be used by roosting bats; however, a small element of uncertainty remains as bats can use small and apparently unsuitable features on occasion.
Low	A structure within 200m of proposed wind turbine locations with one of more potential roost sites that could be used by individual bats opportunistically at any time of the year. However, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions and/or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats (i.e., unlikely to be suitable for maternity

¹⁸ JNCC (2016). Handbook for Phase 1 habitat survey – a technique for environmental audit. JNCC, Peterborough.

¹⁹ Collins J. (ed.) (2023) Bat Surveys for Professional Ecologists, Good Practice Guidelines (4th Edition). The Bat Conservation Trust, London.

Category	Description
	and not a classic cool/stable hibernation site but could be used by individual hibernating bats).
Moderate	A structure within 200m of proposed wind turbine locations with one of more potential roost sites that could be used by bats due to their size, shelter, protection, conditions and surrounding habitat by unlikely to support a roost of high conservation status.
High	A structure within 200m of proposed wind turbine locations with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions and surrounding habitat. These structures have the potential to support high conservation status roosts, e.g., maternity, or classic cool/stable hibernation sites.

GROUND LEVEL TREE ASSESSMENT (GLTA)

- 2.1.11. Trees within the within 200m of proposed wind turbine locations were inspected from the ground to enable an assessment of their suitability to support roosting bats.
- 2.1.12. Where suitable features were noted, their location and a brief description of the character was recorded and a stability categorization was assigned as per **Table 2**.

Table 2: Bat Roosting Suitability Categorisation for Trees (as per BCT guidelines)

Category	Description
NONE	PRF not present.
PRF-M	PRF is suitable for multiple bats and may therefore be used by a maternity colony.
PRF-I	PRF is only suitable for individual bats or very small numbers of bats either due to size or lack of suitable surrounding habitat.
FAR	Further assessment required to establish if PRFs are present in the tree.

NOTES AND LIMITATIONS

- 2.1.13. Every effort has been made to provide a comprehensive PEA update; however, the following specific limitations apply to this document:
- Ecological survey data is typically valid for two years unless otherwise specified^{Error! Bookmark not defined.},¹⁴, for example, if conditions are likely to change more quickly due to ecological processes or anticipated changes in management.
 - Records held by local biological record centres and local recording groups are generally collected on a voluntary basis; therefore, the absence of records does not demonstrate the absence of species, it may simply indicate a gap in recording coverage.

- The ecological desk study was carried out from a central grid reference from the Combined Site. This was done because these were connected sites and desk study records within the search area are relevant to the Combined Site.
- Botanical surveys are seasonally limited, and throughout the spring and summer period certain species will be more or less evident at different times (i.e. depending on the flowering season). The update extended Phase 1 habitat survey was conducted within the optimal timeframe for habitat surveys. It is considered that sufficient information was gathered to enable an assessment of the habitat types present, in line with standard Phase 1 habitat categories and the potential for these to support protected or notable species.
- The update extended Phase 1 habitat survey was carried out over the period of only five days, over a large area; as such only a selection of all species that occur within the Survey Area will have been recorded. It is considered that sufficient information was gathered to enable an assessment of the habitat types present, in line with standard Phase 1 habitat categories and the potential for these to support protected or notable species. Further, the desk study data discussed within this report will supplement this survey data.
- The extended Phase 1 habitat map (**Figure 5A.8**) has been reproduced from field notes and plans. Whilst this provides a sufficient level of detail to fulfil the requirements of a PEA, the maps are not intended to provide exact locations of key habitats.
- Some minor changes to the Main Site have occurred since the PEA update walkover. Where these portions of the Main Site sit outside of the Survey Area used during the PEA update walkover, they have been assessed and habitats have been assigned to them based on inspection of aerial imagery and professional judgement. Following review of aerial images of the Main Site and the wider landscape and given the small areas involved, this approach is not considered a limitation to the resurvey.

3 RESULTS

DESK STUDY

AWI PARCELS

- 3.1.1. Four parcels of Ancient Semi-Natural Woodland (ASNW) were identified within the Combined Site, none of which were within the Main Site. See Access Road PEA (**Appendix 5B** of the ES).

SITE WALKOVER – HABITATS SURVEY UPDATE

- 3.1.2. The Phase 1 habitat survey of the Survey Area confirmed that the habitats within the Main Site had not significantly changed such that the results from the 2024 Phase 1 survey require amending, in relation to habitat classification, or condition. Habitat extent has changed marginally as the Combined Site boundary has changed since 2024.
- 3.1.3. The site walkover identified the following S.7 Priority Habitats within the Main Site:
- Montane heaths and grassland²⁰ (78.25ha, 0.69ha of which is blanket bog²¹);
 - Upland heathland (18.27ha);
 - Permanent ponds (possible) (0.02 ha);
 - Small, medium altitude rivers on acidic geology (3,549.9m); and
 - Inland rock outcrops and scree habitats (0.84ha).
- 3.1.4. There was no revision of any original determinations made of suitability of the Main Site habitats to support protected and notable species included in the 2024 Protected and Notable Species Assessment²².

S.7 Priority Species - Birds

- 3.1.5. Ten bird species that were considered to have potential to use suitable habitats within the Main Site and/or within 1km of the Combined Site have been added to the S.7 Priority Species list. A species identified within 1km of the Combined Site, the reed bunting *Emberiza schoeniclus*, has been removed from the S.7 Priority Species list since the 2024 PEA report.

S.7 Priority Species – Invertebrates

²⁰ Marshy grassland within the Energy Park is assumed to align with the S.7 Priority Habitat 'Montane heaths and grasslands' in the absence of a definition at this time. Montane habitats are those habitats which are above the tree line (the limit at which trees are able to grow). In Wales, this is between 300m and 600m. As the Energy Park is above 300m, marshy grasslands within the Energy Park have been assumed to qualify as the S.7 Priority Habitat montane heaths and grassland, although it should be noted that most of these were species-poor and dominated by purple moor-grass *Molinia caerulea*.

²¹ Blanket bog has been identified during National Vegetation Classification (NVC) survey of the Main Site. See **Appendix 5C**: Notable Habitats Report.

²² A badger sett has been identified within the Main Site boundary. See addendum to **Appendix 5D**: Main Site Badger Survey Report.

- 3.1.6. Ten invertebrate species that were considered to have potential to use suitable habitats within the Main Site and/or within 1km of the Combined Site have been removed from the S.7 Priority Species list since the 2024 PEA report.
- 3.1.7. Review of all species considered in-light of the recent update to the S.7 Priority Species list²³ highlighted several changes to S.7 Priority Species statuses. These are summarised in **Table 3**.

Table 3: Changes in S.7 Priority Species Status of species considered during PEA

Species added to S.7 Priority Species list	Species removed from S.7 Priority Species list
Birds	
Fieldfare <i>Turdus pilaris</i>	-
Garden warbler <i>Sylvia borin</i>	-
Goldeneye <i>Bucephala clangula</i>	-
Grey wagtail <i>Motacilla cinerea</i>	-
House martin <i>Delichon urbicum</i>	-
-	Reed Bunting
Short-eared owl <i>Asio flammeus</i>	-
Snipe <i>Gallinago gallinago</i>	-
Wheatear <i>Oenanthe oenanthe</i>	-
Whinchat <i>Saxicola rubetra</i>	-
Whitethroat <i>Curruca communis</i>	-
Invertebrates	
-	Autumnal rustic <i>Eugnorisma glareosa</i>

²³ Published in January 2026.

Species added to S.7 Priority Species list	Species removed from S.7 Priority Species list
-	Broom moth <i>Ceramica pisi</i>
-	Dusky brocade <i>Apamea remissa</i>
-	Feathered gothic <i>Tholera decimalis</i>
-	Galium carpet <i>Epirrhoe galiata</i>
-	Garden tiger <i>Arctia caja</i>
-	Ghost moth <i>Hepialus humuli</i>
-	Minor shoulder-knot <i>Brachylomia viminalis</i>
-	Oblique carpet <i>Orthonama vittata</i>
-	Shaded broad-bar <i>Scotopteryx chenopodiata</i>

PRA AND GLTA

- 3.1.8. The PRA and GLTA did not identify any PRFs within the building or trees within the 200m of proposed wind turbine locations.

4 SUMMARY

- 4.1.1. An ecological walkover survey determined that habitats on Main Site and within the Survey Area are unchanged since the Phase 1 habitat survey undertaken in 2023 although habitat extent has changed marginally as the Combined Site boundary has changed since 2024
- 4.1.2. A review of desk study data considering changes to the S.7 Priority Habitats/Species lists, applying the precautionary principle in lieu of definitive habitat descriptions and highlighted no significant changes to the status of Priority Habitats within the Main Site. Habitats on the Main Site are suitable for 10 recently added S.7 Priority bird species identified within the 2024 desk study data.
- 4.1.3. A number of ecological surveys and assessments that were recommended as part of the 2024 PEA have now been completed. Therefore, the outstanding ecological surveys and assessments that will be completed prior to full submission of the ES are:
 - A detailed analysis of data returned from NVC surveys undertaken at turbine locations and within Priority Habitats that will be affected by the Proposed Development to ensure that the habitat classifications have been accurately assessed. These will be detailed in a full report.
- 4.1.4. In accordance with the step-wise approach required for NBB, the design of the Proposed Development is such that the impact upon protected and/or notable species and habitats has been minimised as far as possible. This includes ensuring that no construction occurs within Llyn Mawr SSSI; and minimising construction within Priority Habitats and ASNW as far as possible. The stepwise approach in relation to the Proposed Development is further detailed in **Appendix 5O: Net Benefit for Biodiversity Report**.
- 4.1.5. No changes to standing recommendations in relation to avoidance or mitigation and enhancement measures detailed within the 2024 PEA report (**Annex 5A.1**) are made. Avoidance and mitigation measures are included within the Outline Construction Environmental Management Plan (CEMP).

FIGURES

Figure 5A.1 –Site Location

Figure 5A.2 – Statutory Designated Sites within 2 km

Figure 5A.3 – Statutory Designated Sites of International Importance within the relevant search areas of the Site

Figure 5A.4 – SSSI Designated for Bats within 30 km

Figure 5A.5 – Non-Statutory Designated Sites within 2 km

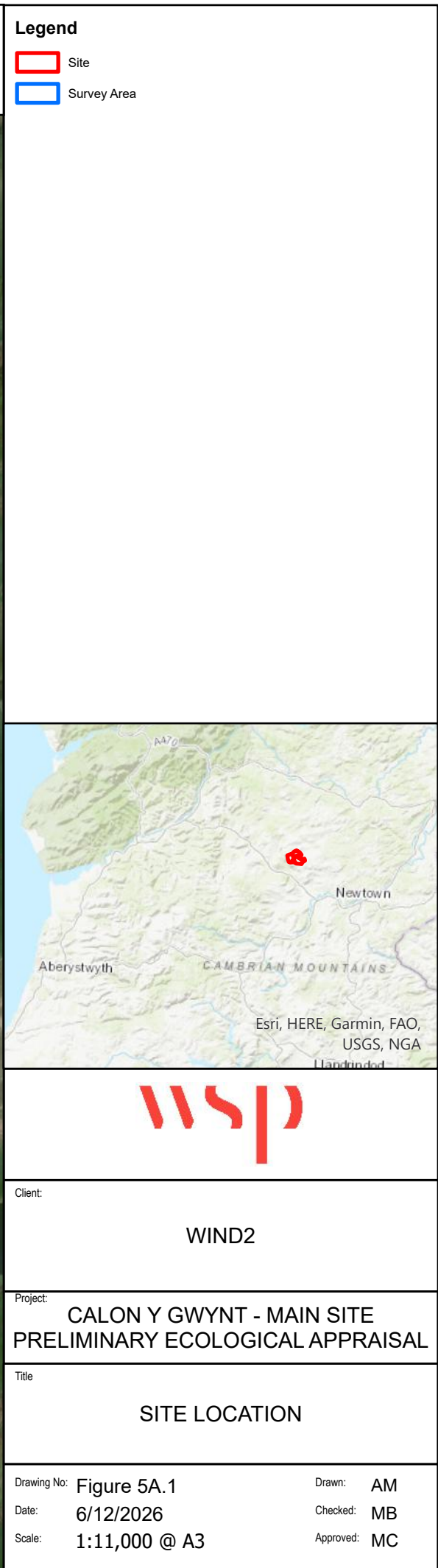
Figure 5A.6 – Priority Habitats and AWI Areas Identified within the Desk Study

Figure 5A.7 – Waterbodies within 500 m

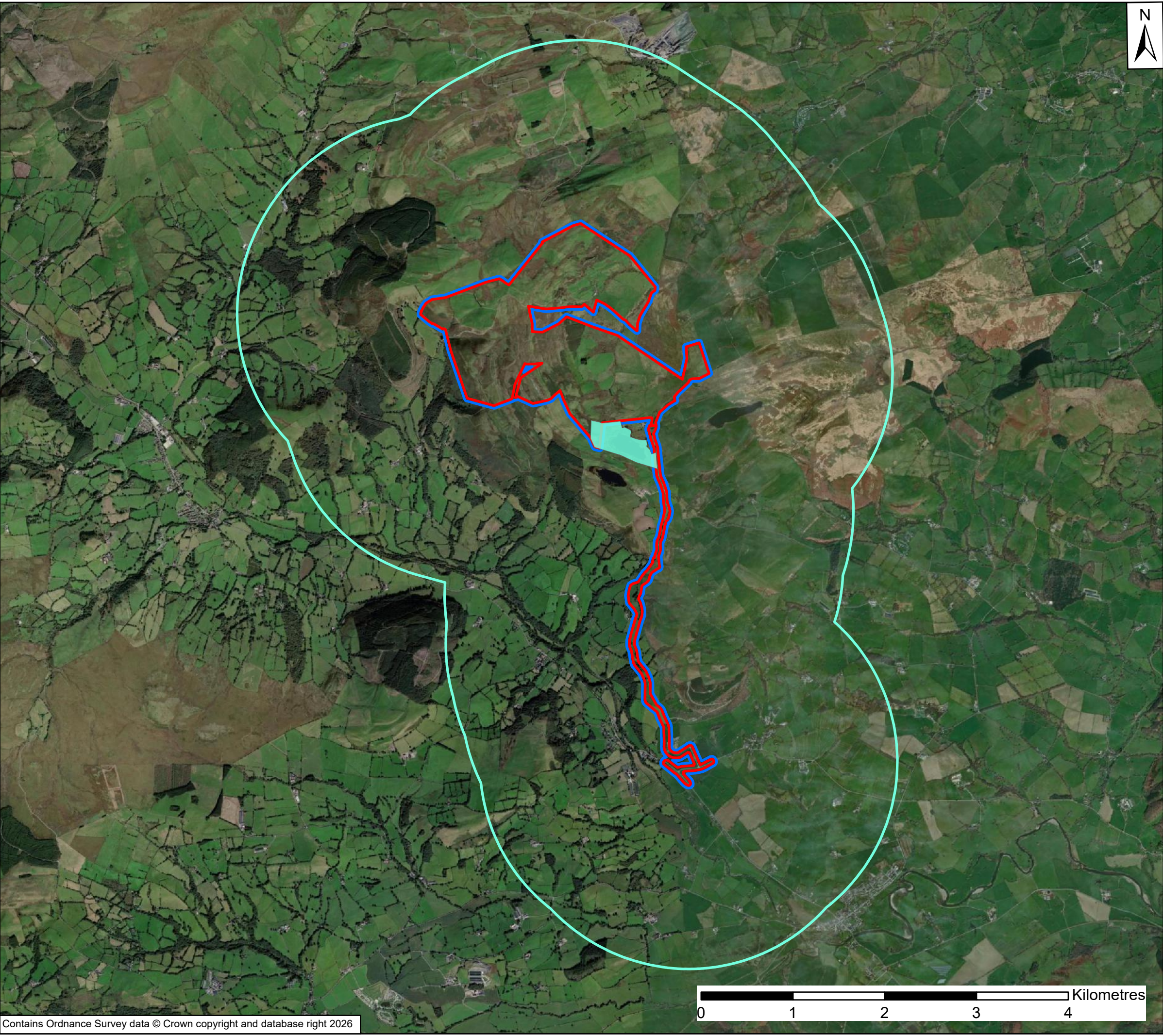
Figure 5A.8 – Phase 1 Habitat Map

Figure 5A.9 – Ecological Target Notes

Figure 5A.10 – Habitats of Conservation Importance



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Legend

-  Combined Site
-  Combined Survey Area
-  2km search area

Statutory designated sites within 2km

-  Llyn Mawr SSSI



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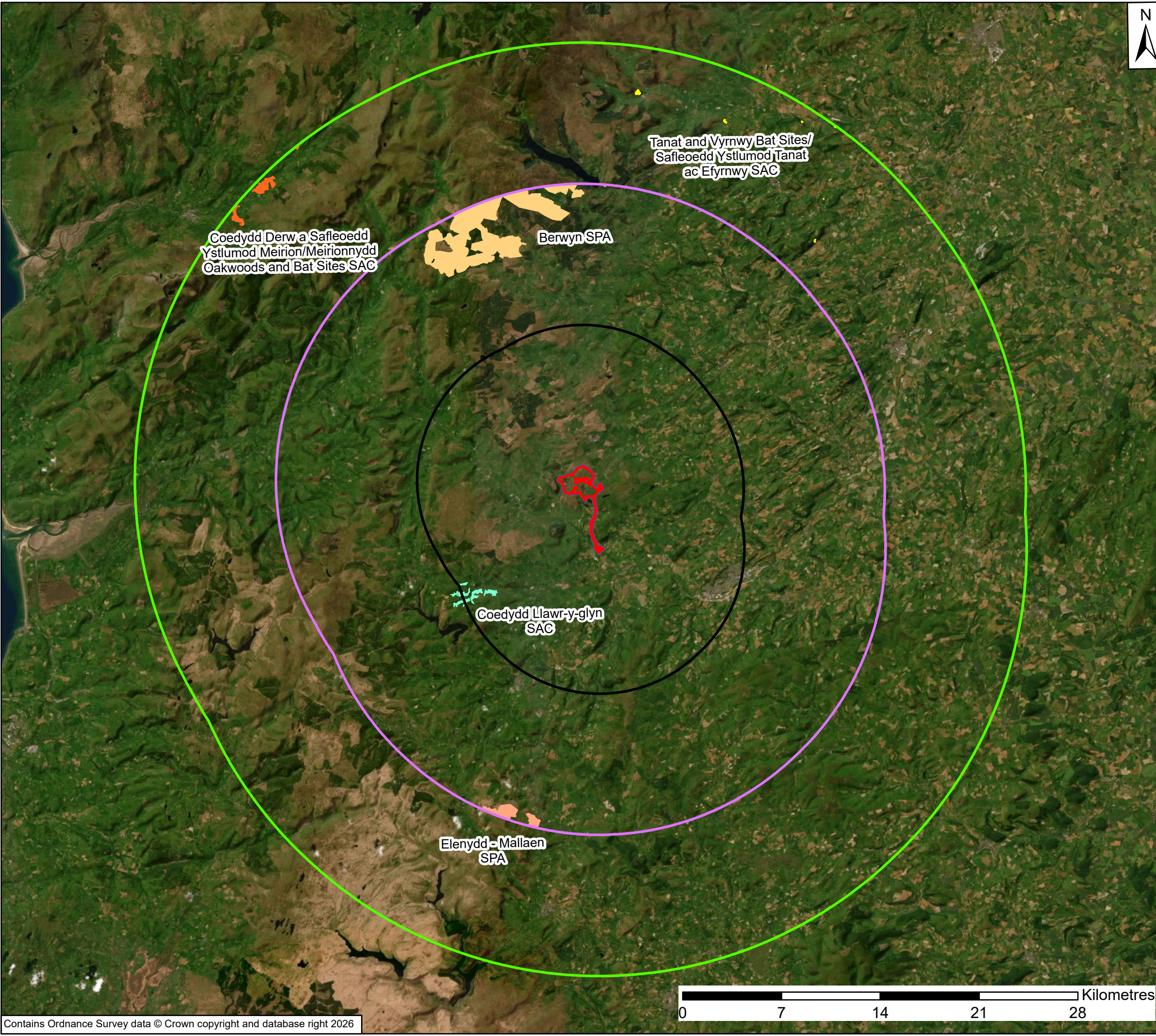
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PRELIMINARY ECOLOGICAL APPRAISAL

Title
STATUTORY DESIGNATED
SITES WITHIN 2KM

Drawing No: Figure 5A.2
Date: 5/25/2026
Scale: 1:40,000 @ A3

Drawn: AM
Checked: MB
Approved: MC

0 1 2 3 4 Kilometres



Legend

-  Combined Site
-  Combined Survey Area
-  10km search area
-  20km search area
-  30km search area

Special Protection Area (SPA) designated for birds within 20km

-  Berwyn
-  Elenydd - Mallaen

Statutory designated sites within 10km

-  Coedydd Llawr-y-glyn Special Area of Conservation (SAC)

SACs designated for bats within 30km

-  Coedydd Derw a Safleoedd Ystlumod Meirion/Meirionnydd Oakwoods and Bat Sites
-  Tanat and Vyrnwy Bat Sites/Safleoedd Ystlumod Tanat ac Efyrrwy



Client:
WIND2

Project:
CALON Y GWYNT - MAIN SITE
PRELIMINARY ECOLOGICAL APPRAISAL

Title
STATUTORY DESIGNATED SITES OF INTERNATIONAL IMPORTANCE WITHIN THE RELEVANT SEARCH AREAS OF THE SITE

Drawing No:	Figure 5A.3	Drawn:	AM
Date:	6/13/2026	Checked:	MB
Scale:	1:260,000 @ A3	Approved:	MC

