

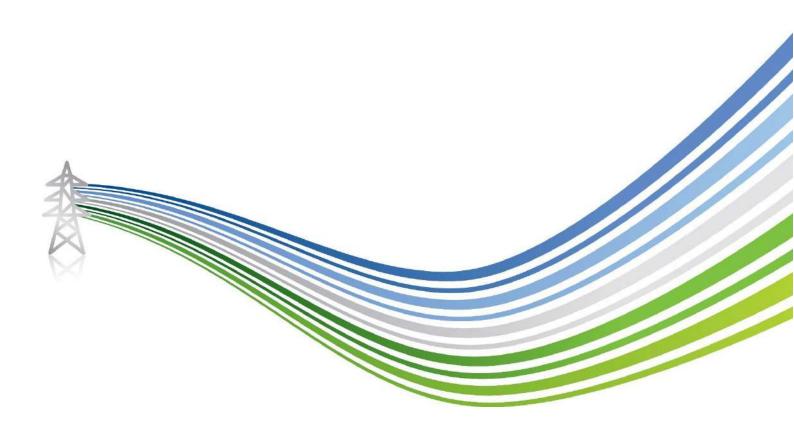
Glendye Wind Farm Overhead Line Grid

Connection

Appendix 7.6:

Outline Biodiversity Enhancement Plan

October 2025





CONTENTS

LIST OF A	BBREVIATIONS	3
1.	INTRODUCTION	4
1.1	The Proposals	4
1.2	Requirement for the Report	4
1.3	Terminology	5
1.4	Legislation, Policy and Guidance	5
1.5	Integration with the EIA Process	6
2.	METHODOLOGY	7
2.1	Desk-Based Assessment	7
2.2	Field Assessment	7
2.3	Approach to On-site Biodiversity Enhancement	8
2.4	Identification of Off-Site Biodiversity Enhancement Requirements	õ
3.	BIODIVERSITY ENHANCEMENT PRINCIPLES	11
3.1	Ecological Principles for Delivery of Biodiversity Enhancement	11
3.2	Principles for Delivery Mechanisms	12
3.3	Habitat Restoration and Enhancement	12
4.	SUMMARY OF BNG CALCULATIONS	14
5.	HABITAT RESTORATION AND BIODIVERSITY ENHANCEMENT	
	RECOMMENDATIONS	15
5.2	Protection of Existing Ecological Features	15
5.3	Peatland Restoration Opportunities	18
6.	ANNEX 1: BIODIVERSITY NET GAIN ASSESSMENT REPORT	21
6.1	Executive Summary	21
6.2	Introduction	21
6.3	Methodology	22
6.4	Results	22
6.5	Opportunities for Biodiversity Enhancement	24
6.6	Summary	24
APPENDIX	(A APPROACH TO BIODIVERSITY NET GAIN	25
	(B ASSIGNED UKHAB HABITAT DISTINCTIVENESS	29
APPENDIX	(C GOOD PRACTICE PRINCIPLES FOR BIODIVERSITY NET GAIN	130
APPENDIX	(D IRREPLACEABLE HABITAT SUPPLEMENT	32



LIST OF ABBREVIATIONS

AWI: Ancient Woodland Inventory

BEP: Biodiversity Enhancement Plan

BNG: Biodiversity Net Gain

BU: Biodiversity Units

EcIA: Ecological Impact Assessment

EIAR: Environmental Impact Assessment Report

H: Linear Hedgerow (H) Units

LA: Local Authority

LBAP: Local Biodiversity Action Plan

LDP: Local Development Plan

LNCS: Local Nature Conservation Site(s)

LOD: Limit of Deviation

LU: Linear Units

MAGIC: Multi-Agency Geographic Information for the Countryside

NBN Atlas: National Biodiversity Network Atlas

NESBiP: North-East Scotland Biodiversity Partnership

NESBReC: North-East Scotland Biodiversity Records Centre

NGO: Non-Governmental Organization
NPF4: National Planning Framework 4

NVC: National Vegetation Classification

OHL: Overhead Line

SBL: Scottish Biodiversity List

SUDS: Sustainable Drainage Systems

UKHab: UK Habitat Classification

W: Linear Watercourse (W) Units

1. INTRODUCTION

1.1 The Proposals

- 1.1.1 This appendix presents information relevant to the Glendye Wind Farm Overhead Line (OHL) Grid Connection. It should be read in conjunction with Chapter 7: Ecology and Chapter 3: The Proposed Development of the EIA Report (EIAR) for full details of the Proposed Development.
- 1.1.2 This appendix supports the Ecological Impact Assessment (EcIA) in addition to the following appendices:
 - Appendix 7.1: Ecological Desk Study;
 - Appendix 7.2: Habitats and NVC Survey Report;
 - Appendix 7.3: Confidential Badger Survey Report;
 - Appendix 7.4: Confidential Otter and Water Vole Survey Report; and
 - Appendix 7.5: Protected Species Survey Report.
- 1.1.3 This appendix is supported by the following:
 - Figures 7.2a 7.2b Habitat Survey Results; and
 - Annex 7.6.1: Biodiversity Net Gain Assessment Report.
- 1.1.4 In addition, this appendix should be read in conjunction with the following chapter appendices:
 - · Appendix 9.2: Peat Management Plan; and
 - Appendix 9.3: Peatland Condition Assessment

1.2 Requirement for the Report

- 1.2.1 The Applicant is committed to delivering 10% Biodiversity Net Gain (BNG) on all projects gaining consent¹. SLR was commissioned by the Applicant to develop an Outline Biodiversity Enhancement Plan (BEP) to deliver the requirements of National Planning Framework 4 (NPF4)² in relation to biodiversity, and to undertake an assessment of BNG using the SSEN Transmission Biodiversity Project Toolkit ('the Toolkit').
- 1.2.2 The purpose of the Outline BEP is to support the EclA presented in **Chapter 7: Ecology**, to demonstrate how the Applicant will meet the requirements of national and local planning policy and deliver enhancement of biodiversity in relation to the Proposed Development.
- 1.2.3 The BEP is supported by qualitative assessment of the habitats and species that will be affected by the Proposed Development and the associated mitigation, compensation and enhancement proposals. In addition, a quantitative assessment is presented in the BNG Assessment Report (Annex 7.6.1: Biodiversity Net Gain Assessment Report) in which the on-site baseline and post-works Biodiversity Units (BU) of the Proposed Development are calculated.
- 1.2.4 This Outline BEP includes:
 - An overview of national, local and SSEN Transmission policy specific to biodiversity enhancement, and how it integrates with the EIA process;
 - An outline of best practice and principles that guide delivery of BNG;
 - A description of the desk-based and field-based approaches that underpin the habitat baseline;
 - A description of the assumptions and parameters of the post-development target habitats and condition, needed for calculating the post-development BU;

¹ SSEN Transmission, 2024. Sustainability Strategy: Pathway to 2030. (Online) Available at: https://www.ssen-transmission.co.uk/about-us/sustainability/sustainability-strategy/ last accessed 08/10/2025).

² Scottish Government, 2023. National Planning Framework 4. (Online) Available at: https://www.gov.scot/publications/national-planning-framework-4/ (last Accessed 08/10/2025).



- A calculation of baseline BU for the Proposed Development following the guidance outlined within the Applicant's Biodiversity Net Gain Toolkit User Guide ('the User Guide'); and
- An outline of habitat creation or enhancement opportunities for delivery of biodiversity enhancement both on-site and off-site.

1.3 Terminology

- 1.3.1 The following terminology will be used throughout this report:
 - Proposed Development: Defined as the infrastructure, including poles, OHL conductors, access tracks, temporary working areas plus the Limit of Deviation (LOD) (Chapter 3: The Proposed Development, Figures 3.1a-e) for which Section 37 Consent (Electricity Act, 1989) is sought; see Chapter 3: The Proposed Development).
 - Survey Area: The area within the LoD, including relevant buffers (up to 250 m around the Proposed Development, and up to 50 m either side of all access tracks where access was granted (see Chapter 7 Ecology, Figures 7.2 7.3). Ecology surveys were undertaken in line with good practice guidelines for all ecological features surveyed.

1.4 Legislation, Policy and Guidance

National Policy and Guidance

- 1.4.1 Section 1 of the Nature Conservation (Scotland) Act 2004³ (as amended) places a duty on all public bodies and officeholders in Scotland to further the conservation of biodiversity when carrying out their functions in so far as is consistent with the proper exercise of those functions. This duty applies to the Energy Consents Unit and planning authorities in their functions as competent authorities, and to SSEN Transmission as a statutory undertaker. Section 3A of the Town & Country Planning (Scotland) Act 1997⁴ requires that an outcome of the National Planning Framework is securing positive effects for biodiversity.
- 1.4.2 National Planning Framework 4 (NPF4)⁵ requires biodiversity enhancements be provided in addition to any proposed mitigation. It states that 'Development proposals for national or major development that require an Environmental Impact Assessment will only be supported where it can be demonstrated that the proposal will conserve, restore and enhance biodiversity, including nature networks, so that they are in a demonstrably better state than without intervention. This will include future management. To inform this, best practice assessment methods should be used.' (Policy 3b).
- 1.4.3 The mitigation hierarchy, as presented in NPF4, has been applied to avoid impacts to biodiversity, where avoidance is not possible, these impacts have been minimised. This is aligned to the Scottish Government's NPF4⁵ Policy 3 for proposed developments to contribute to biodiversity enhancement.
 - Avoid by removing the impact at the outset
 - Minimise by reducing the impact
 - Restore by repairing damaged habitats
 - . Offset by compensating for the residual impact that remains, with preference to on-site over off-site measure

³ Scottish Government. Nature Conservation (Scotland) Act 2004. (Online) Available at: Nature Conservation (Scotland) Act 2004 (last accessed 08/10/2025)

⁴ Scottish Government. Town & Country Planning (Scotland) Act 1997. (Online) Available at: Town and Country Planning (Scotland) Act 1997 (last accessed 08/10/2025)

⁵ Scottish Government. 2023. National Planning Framework 4. (Online) Available at: National Planning Framework 4 - gov.scot (last accessed 08/10/2025)



1.4.4 The Scottish Biodiversity Strategy to 2045⁶ outlines the ambition for Scotland to become Nature Positive by 2030 and achieve full biodiversity restoration and regeneration across land, freshwater, and seas by 2045. The strategy states that Nature Networks across the landscape will underpin the resilience and health of species and habitats.

Local Policy and Guidance

- 1.4.5 The Proposed Development is covered by the Aberdeenshire LDP⁷. The key policy in relation to biodiversity is E1 Natural Heritage, which addresses 'Nature Conservation Sites', 'Protected Species', and 'Wider Biodiversity and Geodiversity'.
- 1.4.6 Aberdeenshire is covered by the North-East Scotland Biodiversity Partnership (NESBiP). The associated LBAP⁸ has defined a series of locations, habitats and species that are important for biodiversity in northeast Scotland. To contribute towards the LBAP, Aberdeenshire has identified a network of LNCS as part of the Aberdeenshire LDP⁷.

SSEN Transmission Policy and Guidance

- 1.4.7 SSEN Transmission is committed to protecting and enhancing the environment by minimising the potential impacts from their construction and operational activities. As part of this approach, SSEN Transmission has made commitments within its Sustainability Strategy⁹ to deliver 10% biodiversity net gain and leave a positive legacy for nature on all projects gaining consent.
- 1.4.8 The Applicant has developed the Toolkit as a BNG calculation tool that builds on the Defra Biodiversity Metric 3.1 with adaptations it to suit the Scottish context. To support this, a detailed User Guide¹⁰ supports the application of the Toolkit and provides guidance factors such as irreplaceable habitats.

1.5 Integration with the EIA Process

- 1.5.1 **Chapter 7: Ecology** assesses the potential impacts on important ecological features as a result of the Proposed Development in accordance with the requirements of EIA and guidance on ecological impacts assessment¹¹. It includes details of mitigation measures delivered in accordance with the mitigation hierarchy to avoid and minimise potential effects, as well as measures to compensate for habitat loss during construction through habitat restoration.
- 1.5.2 The assumptions and parameters of habitat loss and restoration presented in **Chapter 7: Ecology** form the foundation of the calculations presented in this Outline BEP which are a quantitative assessment; the Applicant's policy is for the delivery of 10% BNG on all projects, and this will be delivered through a combination of on-site habitat restoration and off-site biodiversity enhancement projects with partner organisations and landowners.
- 1.5.3 A qualitative assessment is also presented in this Outline BEP which addresses the potential for benefits as a result of changes to the habitat mosaic along the Proposed Development. The full details of off-site delivery are not confirmed at present; therefore, this Outline BEP presents the approach that will be taken to secure off-site enhancement, the principles that will underpin the identification partners and deliver off-site projects, and the biodiversity enhancement that will therefore be delivered.

⁶ Scottish Government, 2023. Scottish Biodiversity Strategy to 2045: Tackling the Nature Emergency in Scotland. (Online) Available at: https://www.gov.scot/publications/scottish-biodiversity-strategy-2045-tackling-nature-emergency-scotland-2/ (last accessed 08/10/2025)].

⁷ Aberdeenshire Council, 2023. Aberdeenshire Local Development Plan 2023. (Online) Available at: https://www.aberdeenshire.gov.uk/planning/plans-and-policies/ldp-2023 (last accessed 08/10/2025].

⁸ North-East Scotland Biodiversity Partnership, n.d. Biodiversity Information for Developers. (Online) Available at:

https://www.nesbiodiversity.org.uk/biodiversity-information-for-developers/ (last accessed 08/10/2025).

⁹ SSEN Transmission. 2024. Sustainability Strategy. (Online) Available at: https://www.ssen-transmission.co.uk/about-us/sustainability/sustainability-strategy/ (last accessed 08/10/2025)

¹⁰ SSEN Transmission, 2022. Biodiversity Net Gain Toolkit User Guide: TG-NET-ENV-526.

¹¹ CIEEM, 2024. Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine. Version 1.3. (Online) Available at: https://cieem.net/wp-content/uploads/2018/08/EcIA-Guidelines-v1.3-Sept-2024.pdf (last accessed 08/10/2025).



2. METHODOLOGY

- 2.1 Desk-Based AssessmentA desk study was undertaken to obtain historical ecological information relating to the Site and the surrounding habitats to identify any known sensitive habitats, protected species or statutory and non-statutory designated sites. An account of the method adopted, and findings, is provided in Appendix 7.1: Ecological Desk Study and Chapter 7: Ecology which also sets out the legislative provisions afforded to protected habitats.
- 2.1.2 Datasets that were consulted include:
 - NatureScot SiteLink website¹²;
 - Ancient Woodland Inventory (AWI)¹³;
 - Scotland's Environment Interactive Map¹⁴;
 - North-East Scotland Biodiversity Partnership⁸;
 - North-East Scotland Biodiversity Records Centre (NESBReC)¹⁵;
 - The Carbon and Peatland Map¹⁶; and
 - National Biodiversity Network (NBN) Atlas Scotland¹⁷.

2.2 Field Assessment

- 2.2.1 Field surveys were undertaken as part of the EcIA during the survey seasons of 2024 and 2025. Full details are available in Appendix 7.2: Habitats and NVC Survey Report, Appendix 7.3: Confidential Badger Survey Report, Appendix 7.4: Confidential Otter and Water Vole Survey Report and Appendix 7.5: Protected Species Survey Report.
- 2.2.2 Surveys that were carried out include:
 - UK Habitat (UKHab) Classification Survey¹⁸ between May to December 2024, and March 2025;
 - National Vegetation Classification (NVC) survey of potential habitats of conservation concern¹⁹ between September 2024, and April 2025;
 - Condition assessment of each habitat type between May to December 2024, and March 2025, using the relevant Habitat Condition Sheets published by Natural England²⁰; and
 - Range of protected species surveys between May to December 2024, April to October 2024, and March 2025.
- 2.2.3 The Proposed Development does not impact on any irreplaceable habitats; therefore, these habitats are not considered further at this stage. The Applicant considers irreplaceable habitats within their network to be Ancient Woodland (categories 1a & 2a of the AWI), ancient or veteran trees, and blanket bog or raised bog in Good or Moderate condition. This will be kept under review during development of the final detailed Biodiversity Enhancement Plan.

¹² NatureScot, 2025. Sitelink homepage. (online) Available at: https://sitelink.nature.scot/home (last accessed 08/10/2025)

¹³ NatureScot, 2000. Ancient Woodland Inventory. (online) Available at: https://opendata.nature.scot/datasets/ancient-woodland-inventory/explore. (last accessed 08/10/2025)

¹⁴ Scottish Government, 2025. Scotland's environment map. (online) Available at: https://map.environment.gov.scot/sewebmap/ (last accessed 08/10/2025)

¹⁵ North East Scotland Biodiversity Records Centre (NESBREC), 2025. (online) Available at: https://nesbrec.org.uk (last accessed 08/10/2025) 16 Scotland's Soils, 2016. Carbon and Peatland Map. (Online) Available at: https://soils.environment.gov.scot/maps/thematic-maps/carbon-and-peatland-2016-map/ (last accessed 08/102025).

¹⁷ National Biodiversity Network (NBN), 2025. NBN Atlas. (online) Available at: https://nbnatlas.org/ (last accessed 08/10/2025)

¹⁸ UKHab (2023) UK Habitat Classification. (online) Available at: https://www.ukhab.org/ (last accessed 08/10/2025)

¹⁹ Habitats of conservation concern include habitats considered conservation priorities in the Habitats Directive (Annex I habitats); habitats considered to indicate potential groundwater dependency; habitats included on the Scottish Biodiversity List; and habitats included in local biodiversity policy.

20 Panks, S. et al., 2022. Biodiversity Metric 3.1 Auditing and accounting for biodiversity - User Guide.



2.3 Approach to On-site Biodiversity Enhancement

Qualitative Assessment

2.3.1 The results of both the desk-based assessment and field surveys have been used to inform the development of this BEP, in conjunction with the calculations undertaken using the Toolkit (see below). The qualitative assessment seeks to demonstrate how the BEP delivers on legislation and policy, and that it satisfies the requirements of principles that underpin BNG best practice.

BNG Calculations

- 2.3.2 A BNG Assessment was undertaken for the Proposed Development. The BNG assessment was completed within the Toolkit following the User Guide. This method has been revised to align with Natural England Biodiversity Metric 3.1²⁰, adapted to reflect the requirements of Scottish habitats, to quantify losses and gains of biodiversity across habitat types. Data were collected on type, area, and condition of habitats within the Site, indicating the biodiversity present on-site before the work begins. The Toolkit was used to calculate the difference in BU resulting from the Proposed Development and on-site habitat creation after works. The outcomes have been used to ensure the biodiversity targets are being met for the Proposed Development.
- 2.3.3 The Toolkit assesses losses of area and linear habitat separately. The Toolkit produces a Unit score for three categories of habitat: Biodiversity Units, Linear Hedgerow (H) Units and Linear Watercourse (W) Units.
- 2.3.4 A full BNG assessment report that underpin the results presented in this appendix is provided in **Annex 7.6.1**: **Biodiversity Net Gain Assessment Report**.

Assumptions and Parameters

2.3.5 At this stage, a series of assumptions are required to facilitate calculation of both losses in BU as a consequence of habitat loss, and BU gains as a consequence of habitat restoration and creation on-site.

Assumptions Relating to Habitat Loss Calculations

2.3.6 Direct habitat loss is calculated as is direct loss to hardstanding associated with pole foundations, permanent tracks, and CSE hardstanding. Additional indirect habitat loss (land not directly developed on, however which may be lost/deteriorated by proximity to developed areas) is calculated by applying a 5 m buffer to habitat loss areas, or in the case of wetland habitats, this is extended to 10 m to allow for potential dewatering effects. Combining direct and indirect habitat loss adequately calculates the post development units required for future habitat creation. It is acknowledged that the amount of habitat loss may therefore be overestimated, however this is a worst-case scenario in order to calculate the post development units required.

Assumptions Related to the Permanence of Habitat Change

2.3.7 Elements of the Proposed Development vary in their permanence, including permanent elements (such as poles and permanent access tracks), and temporary elements (such as temporary working areas and temporary access tracks). The latter group of elements will be restored upon completion of the works. However, the word "temporary" has a specific definition in BNG calculations in that it applies only to situations in which the habitat impacted will be restored to the same habitat type and condition within *two years* of the initial disturbance. Where this is the case, the impacts can be excluded from the BNG calculations under the SSEN Transmission methodology. The habitats and associated timescales for return to target condition are defined by guidance²⁰. As the construction phase for the Proposed Development is anticipated to be 30 months, with additional time for habitat restoration required, there are no construction elements that are considered to be temporary.

Assumptions Related to Post-Development Habitat Restoration and Creation

- 2.3.8 A range of habitat restoration assumptions have been used to allow parameters to be standardised and applied to the BNG calculations:
 - Habitats impacted by temporary construction activities that last longer than two years will be restored to the same habitat type and condition. This will include restoration of hedgerows (see Table 7.6.1: below).



- Woodland and tree habitats that are removed to facilitate permanent infrastructure will not be reinstated within the permanent operational corridor. Where woodland is removed outwith this corridor, for example where conifers are felled to a windfirm edge in areas of plantation, the same habitat type and condition will be restored.
- Based on habitats observed during field surveys along existing OHLs, it is assumed that the permanent
 operational corridor in conifer plantation will develop into a form of scrub in enclosed lowland areas, and into a
 form of heathland in unenclosed upland areas (see Table 7.6.1 below).

Assumptions Related to the Target Condition of the Post-Development Habitat

- 2.3.9 The Toolkit requires the definition of the expected habitat target condition that the post-development habitats will achieve. The assumptions are designed at this stage to ensure a conservative assessment, and are based on observations made regarding the habitat types present within the Survey Area.
- 2.3.10 The habitat type and condition assumptions are summarised in **Table 7.6.1**: .

Table 7.6.1: Assumptions and Parameters Used to Inform the Post-Development On-Site BNG Calculations

Habitat Type	Assumption
Grassland Habitats	Return to the same habitat type and condition, with the exception of habitats within the operational corridor that will be permanently lost to infrastructure.
	Grassland outside operational corridor target condition:
	Modified grassland: Poor condition
	Neutral grassland: Moderate condition
	Acid grassland: Moderate condition
	NB: No Scottish Biodiversity List (SBL) grassland habitats are anticipated to be impacted.
Scrub, Heathland, Wetland Habitats	Develop into the same habitat type.
Habitats	Target condition:
	Scrub: Same baseline condition considered likely to be achievable.
	Heathland: Poor condition.
	Wetland: Poor condition.
Broadleaved & Mixed Woodland Habitats	Infrastructure felling (i.e. operational corridor is retained):
Tiabilats	Upland: Develop naturally into Upland heathland, target condition Poor.
	 Lowland: Develop naturally into Modified grassland, target condition Poor. Felling associated with temporary works:
	Within operational corridor: Treated as per infrastructure felling, no
	replanting, habitat and target condition dependent on upland or lowland context.
Coniferous Woodland Habitats	Infrastructure felling (i.e. operational corridor is retained):
	Upland: Develop naturally into Upland heathland, target condition Poor.
	Lowland: Develop naturally into Gorse scrub, target condition Poor.
	Felling associated with temporary works:
	 Within operational corridor: Treated as per infrastructure felling, no replanting, habitat and target condition dependent on upland or lowland context.
	Outside operational corridor: Baseline habitat type will be replanted, target condition Poor.
Linear Habitats	Watercourses: No losses anticipated.
	Hedgerows: No losses anticipated.
	Line of Trees: No losses anticipated.

2.4 Identification of Off-Site Biodiversity Enhancement Requirements



- 2.4.1 Off-site BNG opportunities are being explored at locations remote from the Site but within the Aberdeenshire Council area in line with the policy commitments of the Applicant and expected planning requirements.
- 2.4.2 Discussions are being advanced with potential BNG partners (site owners/project developers) regarding projects and sites are being evaluated based on their location, and their potential to provide biodiversity enhancements for the area.
- 2.4.3 The sites that are shortlisted for further assessment will be surveyed by environmental contractors using the Toolkit to measure their BNG potential. BNG partners will also be assessed, and due diligence will be undertaken of potential projects prior to the agreement of heads of terms with BNG partners. Contracts with partners will not be agreed however, until planning consent for the Proposed Development has been granted.
- 2.4.4 The chosen BNG sites will adhere to the Applicant's key BNG goals, namely, to compensate for losses through habitat creation and enhancement, to collaborate with landowners, partners and consultants and to positively impact the local Council area.



3. BIODIVERSITY ENHANCEMENT PRINCIPLES

3.1 Ecological Principles for Delivery of Biodiversity Enhancement

- 3.1.1 Principles have been developed to guide this Outline BEP and influence the delivery of detailed proposals for on-site and off-site biodiversity enhancement. The aims of these principles are to guide the Applicant's approach towards achieving biodiversity enhancement outcomes. The principles are split into two categories: ecological principles, centred on ecological science that inform the selection, design and management of biodiversity enhancement projects. The second category covers mechanism principles, which focus on the practical and administrative aspects of implementing biodiversity enhancement and BNG delivery.
- 3.1.2 The ecological principles aim to ensure that biodiversity enhancements align with the ecological needs of the local environment, promote species diversity, and enhance ecosystem resilience. They play a crucial role in designing biodiversity enhancement projects that not only meet biodiversity goals but also contribute to the overall health and sustainability of ecosystems impacted by development activities.
- 3.1.3 Biodiversity enhancement projects must contribute to the delivery of ecologically functional landscapes. To achieve nature recovery, landscapes need to be functional: the spatial pattern of the landscape needs to support the ecological processes required to maintain resilient populations.
- 3.1.4 The Toolkit acknowledges the need to contribute to ecologically functional landscapes by including a connectivity multiplier, which aims to reflect the exchange capabilities of local populations. Considering that habitat fragmentation significantly contributes to biodiversity loss, incorporating connectivity into design principles is essential. A qualitative approach, supported by visual tools such as maps, can be effective. For example, maps can illustrate how the proposed development could introduce new 'stepping stones' or linear features into the landscape, enhancing connectivity between existing habitat patches. Complementing these visual aids with basic statistics, such as the distances between habitat patches, can also facilitate understanding of the potential impact on ecological networks. It is important to note that these suggestions are not prescriptive. There are multiple ways to identify and assess connectivity in ecological studies, and the method chosen should be appropriate to the project and ecological context.
- 3.1.5 To achieve the overarching principle, the following Design Principles are proposed which apply to both on-site and off-site delivery of biodiversity enhancement measures, and which represent best practice in the field of BNG and ensure that biodiversity enhancement outcomes are delivered:
 - Prioritise the application of the mitigation hierarchy, particularly with regards to statutory designated sites and irreplaceable habitats;
 - Demonstrate additionality: BNG projects must not contribute to sites where biodiversity conservation or
 enhancement would occur independently of development activities (e.g., legally protected nature reserves,
 naturally restoring sites). As such, sites or projects where biodiversity gains are already planned, legally
 required, or would have happened naturally without the development's influence, should not be considered;
 - Prioritise proximity: Ensure biodiversity enhancement is delivered near the development site while aligning with broader strategic biodiversity objectives;
 - Maximize connectivity, recognising that habitat loss has a greater impact on biodiversity than fragmentation.
 While interconnected habitats are crucial, they must also sustain populations. Therefore, enhance connectivity alongside increasing habitat extent and quality, following the Bigger, Better, and More approach delivering "like for like or better" to create the same habitat as that affected by development, or a habitat of a higher biodiversity value;
 - Consider the heterogeneity of the landscape matrix: Recent research has indicated that metric multipliers serve
 to disincentivise destroying habitats that are difficult to restore or recreate but also can incentivise creation of
 habitats that deliver relatively easy gains in metric units²¹. The potential for homogenisation of habitat types is a

Glendye Wind Farm Overhead Line Grid Connection: EIA Report Appendix 7.6: Outline Biodiversity Enhancement Plan

²¹ Rampling, E., zu Ermgassen, S., Hawkins, I., & Bull, J. W., 2023. Improving the ecological outcomes of compensatory conservation by addressing governance gaps: a case study of Biodiversity Net Gain in England.



- concern, and ecological principles should therefore guide habitat delivery in ways that avoid homogeneity, and favour the creation of habitat mosaics of a sufficient size and connectedness; and
- Public access: Public access in the context of biodiversity enhancement projects in Scotland is subject to the
 right of responsible access, supported by the Scottish Outdoor Access Code²². As a result, the emphasis shifts
 from 'allowing' access to 'managing' access to protect sensitive habitats and species.

3.2 Principles for Delivery Mechanisms

3.2.1 The delivery mechanism principles outline practical strategies for implementing biodiversity enhancement and BNG delivery. They provide a framework for structuring biodiversity enhancement projects, ensuring transparent and efficient processes, and facilitating effective collaboration among stakeholders. Adhering to delivery mechanism principles ensures effective execution monitoring, and sustainability leading to quantifiable and lasting biodiversity enhancement in and development activities.

3.2.2 Principles are as follows:

Ensure stewardship and establish effective governance: The implementation of biodiversity enhancement should be collaborative, emphasizing the importance of partnerships that prioritise responsible stewardship. For biodiversity enhancement to be successful, it will need to be more than just the initial creation of high-quality habitats in the right place. A significant part of delivering biodiversity enhancement is ensuring that long-term, biodiversity-led management is in place. Strategies for ensuring effective stewardship include:

- Entering partnerships and building strong relationships with stakeholders who specialise in and have track records of delivering nature conservation activities;
- Seeking opportunities to work with new organisations or landowners to achieve mutual benefits on delivering biodiversity enhancement objectives;
- Incorporating a long-term perspective from the planning stages of biodiversity enhancement, making stewardship
 a central element of partnerships aimed at delivering BNG; and

Establishing clear governance procedures, including agreeing responsibilities for overseeing, managing, monitoring, and reporting.

- Monitoring: Regular monitoring ensures the effectiveness of management measures and compliance. Adaptive
 management is crucial to meet conservation objectives. Each site-specific BEP should include a timeline of
 habitat management and monitoring.
- Aspire for perpetuity: Partners should be prioritised who can ensure ongoing conservation and management.
- Proactive delivery: Deliver biodiversity enhancement before habitats loss, to demonstrate biodiversity gains
 early. The long-term vision of the Applicant is to develop a 'biodiversity bank' with available Biodiversity Units
 before any loss occurs.

3.3 Habitat Restoration and Enhancement

- 3.3.1 The following are principles which will be applied during the restoration and enhancement of habitats affected by the Proposed Development:
 - Watercourses will be retained. The design of watercourse crossings will minimise risk to in-stream habitats, including:
 - Use of bottomless arch or single span crossings wherever possible;
 - Retention/recreation of natural stream beds wherever possible;
 - Closed pipes used as a last resort; and

²² NatureScot, 2005. Scottish Outdoor Access Code. (online) Available at: https://www.outdooraccess-scotland.scot/doc/scottish-outdoor-access-code (last accessed 08/10/2025).



- Commitment to set any pipe culverts below the existing watercourse bed wherever possible and to make use of natural bed material.
- Habitats affected by temporary construction works will be restored to the same habitat type and condition.
- Woodland habitats within the permanent operational corridor will be replaced with new habitat types that
 maintain the required clearance and deliver biodiversity benefits. Opportunities for on-site woodland
 compensation and enhancement will be identified and considered (subject to landowner agreement).
 Compensation and enhancement of woodland habitats to achieve 10% BNG is expected to largely be delivered
 through off-site projects.
- Wider opportunities for habitat restoration within the Proposed Development, will be considered where these are
 identified on-site (subject to landowner agreement). Where habitat compensation and enhancement cannot be
 fully delivered on-site, off-site projects will be identified and developed that will deliver the outstanding
 requirements of 10% BNG, and these will be in accordance with the ecological and delivery mechanism
 principles of this Outline BEP.

1. SUMMARY OF BNG CALCULATIONS

4.1.2 The baseline Biodiversity Units of the Proposed Development are:

Area-Based Habitats: 197.95 BU.

4.1.3 The post-development Biodiversity Units are:

Area-Based Habitats: 149.47 BU.

4.1.4 The Proposed Development therefore delivers net change in biodiversity as follows:

Area-Based Habitats: -48.49 BU (net loss of -24%)

4.1.5 To ensure delivery of 10% BNG, the following Biodiversity Units are required to be delivered through on-site and off-

site projects:

Area-Based Habitats: 68.28 BU.



5. HABITAT RESTORATION AND BIODIVERSITY ENHANCEMENT RECOMMENDATIONS

- 5.1.1 Potential restoration and biodiversity enhancement opportunities to deliver ecological benefits could include:
 - The protection and enhancement of existing ecological features;
 - Peatland restoration and enhancement: Blocking artificial drains and removing encroaching scrub or conifers to support rewetting, sphagnum recovery, and restoration of hydrological function. Grazing and trampling pressure should be reduced where necessary to allow vegetation recovery.
 - Heathland restoration: Managing bracken and scrub encroachment through cutting or low-intensity grazing to
 promote structural diversity and native heathland species. Grazing and trampling pressure should be reduced
 where necessary to allow vegetation recovery.
 - Native woodland and hedgerow creation: Establishing native broadleaf woodland and hedgerows using locally
 appropriate species (e.g. birch, rowan, oak, Scot's pine), with gradual edge transitions and appropriate protection
 from grazing or browsing.
- 5.1.2 Such habitat enhancements could directly benefit pollinators, bats, farmland birds, and various mammals. New woodland edge habitats create important transitional zones (ecotones), supporting higher local biodiversity than closed canopy conifer blocks. Semi-natural habitats are more resilient to pressures such as climate change and support wider ecosystem services.
- 5.1.3 Additional enhancement measures that could be considered at this Site are the provision of bat, bird and habitat creation for fauna.

5.2 Protection of Existing Ecological Features

Designations

Ancient woodland

- 5.2.1 There is an area of Ancient woodland (Shoolbraid / Belhangie Woods AWI) listed under the ancient woodland inventory (AWI) which falls within the central portion of the Proposed Development and three other AWI sites within close proximity to the Proposed Development, these include Garrold Wood, Foumart Wood, and Paldyfair Wood. Shoolbraid and Belhangie Woods, listed on the AWI as Long-Established Plantation Origin (LEPO) categories 1b and 2b, are not considered 'irreplaceable habitats' in the context of this BNG assessment. However, biodiversity policy regarding woodland retention means that these sites are of local importance and are therefore subject to mitigation measures to minimise potential impacts.
- 5.2.2 Whilst the Proposed Development will result in the loss of approximately 9.96 ha of Shoolbraid / Belhangie Woods due to the construction of the OHL, the following mitigation measures shall be applied to the remaining retained woodland to minimise further impacts as far as possible.
- 5.2.3 Mitigation measures to protect AWI sites within the vicinity of the Proposed Development include:
 - The micro siting of works away from features (I.e. trees) wherever possible
 - Where works are to be carried out near or at any retained native trees or semi-natural woodland, root protection zones will be established to prevent damage to root systems in line with British Standards Institution (BIS) guidance outlined in: British Standard 5837 (2012) "Trees in Relation to Design, Demolition and Construction Recommendations" ²³. Root protection zones will be determined by a suitably qualified arboriculturist prior to works commencing.

²³ British Standards Institution (2012). Trees in relation to design, demolition and construction – Recommendations. BSI. (online) Available at: https://www.bathnes.gov.uk/sites/default/files/2020-01/BS5837%202012%20Trees.pdf (last accessed 08/10/2025)



- Pre-construction surveys to be undertaken by a suitably qualified Ecological Clerk of Works (ECoW) prior to any
 works to be undertaken within or near any AWI sites to check for Invasive Non-Native species (INNS). If any
 INNS are found within the works area, the ECoW will brief site staff on measures to be taken to prevent the
 spread of INNS.
- The presence of an ECoW during works in or near AWI sites to oversee construction/ felling/ vegetation clearance activities.

Strathfinella Local Nature Conservation Site (LNCS)

- 5.2.4 Strathfinella LNCS is intersected by the Proposed Development and whilst this site is designated largely for its geological and hydro-morphological significance, the Slack of Birnie and Glensaugh loch within the LNCS are noted for their important botanic and aquatic habitats and species. As such, the following measures will be followed in order to minimise potential impacts on the features of this site:
 - Pre-construction surveys will be carried out by a suitably qualified ecologist/ ECoW in order to inform the micro siting of infrastructure away from Important Ecological Features (IEFs);
 - The water quality protection measures outlined by SEPA²⁴ will be strictly adhered to.

Habitats

- 5.2.5 The Survey Area is predominantly comprised of heathland, blanket bog, coniferous woodland and a mixture of neutral, modified and acid grasslands. This includes several habitats listed on the SBL and LBAP and upland dry heath which is an Annex 1 habitat (for full details of the habitats within the Survey Area refer to **Chapter 7: Ecology**).
- 5.2.6 Due to a high presence of blanket bog within the western extent of the Proposed Development, measures such as the avoidance of areas of deep peat and areas of higher quality and condition (e.g. areas of peatland that have undergone restoration) are embedded into the design of the Proposed Development to minimise potential impacts (refer to **Chapter 7: Ecology** for further details of embedded design mitigation). Active drainage and historical muirburn is present across much of the Survey Area (Refer to **Appendix 10.3: Peatland Condition Assessment**).
- 5.2.7 The Proposed Development has also been designed to avoid Groundwater Dependant Terrestrial Ecosystems (GWDTEs); habitats of significant conservation value (e.g. Annex 1 habitats) and habitats with the potential to support protected species.
- 5.2.8 In order to further mitigate against potential impacts to the habitats present within the Survey Area, the following mitigation measures will be adhered to where practicable:
 - Construction will be micro sited away from sensitive habitats wherever possible and this will be informed by ground investigation works to be monitored by an ECoW prior to the commencement of works.
 - As defined in the mitigation measures set out for the protection of AWI sites, root protection zones will be
 established around areas of native woodland, hedgerows and trees on Site.
 - SEPA water quality protection measures will be adhered to when working near watercourses, waterbodies
 and GWDTEs and a minimum of 20m will be maintained between infrastructure/ construction activities and
 all watercourses.
 - A suitably qualified ECoW will carry out pre-construction checks of habitats on Site prior to the
 commencement of works to check for protected species and INNS and will advise Site staff on further
 actions should such species be identified within the works area.
 - The ECoW will be present during any works in or near sensitive habitats such as woodlands; GWDTEs; Annex 1/ priority habitats and habitats which have the potential to support protected species.

²⁴ SEPA (2017) Pollution prevention and control. Available at: https://www.sepa.gov.uk/regulations/pollution-prevention-and-control/



- For areas of peatland within the vicinity of the Proposed Development, NatureScot Guidance: Advising on peatland, carbon-rich soils and priority peatland habitats in development management²⁵ will be adhered to.
- Temporary fencing will be used to clearly demarcate the edge of work areas as required to protect these habitats.
- Existing areas of mire habitats will be retained where possible on site and deer fencing will be erected to exclude grazing in these areas.

Protected Species

5.2.9 Paragraphs 5.3.12 - 5.3.15 outlines the good practice measures that will be implemented to safeguard protected and notable species from significant effects arising from the Proposed Development. Species-specific measures for otter, water vole, badger, pine marten, red squirrel, wildcat, bats, herpetofauna, and nesting birds will be set out within Chapter 7: Ecology and Appendix 3.3: Species Protection Plan (SPP). The SPP will be agreed with key consultees prior to the commencement of construction and will include requirements for pre-construction surveys, as identified through baseline studies. Where necessary, the SPP will also detail further mitigation measures and any licensing procedures required.

General good practice guidelines

- 5.2.10 During the construction phase the following good practice measures endorsed by NatureScot²⁶ are to be applied:
 - Where practical, works will be undertaken during daylight hours;
 - Cover/fence-off any excavations, or provide escape ramps at the end of the working day to avoid animals becoming trapped (if an animal does become trapped, advice will be sought immediately from NatureScot);
 - Cap any temporarily exposed pipe systems out of work hours;
 - Clean fuel/chemical spillages immediately with spill kits and dispose of waste materials correctly; and
 - · Avoid unnecessary disturbance to habitats by minimising the extent of ground clearance, as far as possible.

Artificial lighting

5.2.11 Artificial lighting can often impact the foraging and commuting behaviour of nocturnal mammals. It is anticipated that neither the construction nor operational phases of the Proposed Development will require overnight lighting, however, in the event that works need to take place after dark, lighting will be directed to where it is needed and light spillage (whether direct and/or in-direct) will be avoided as far as practicable in line with the Bat Conservation Trust/IPL Guidance Note 08/23 'Bats and Artificial Lighting in the UK²⁷ and the ILP guidance note for the reduction of obtrusive light²⁸.

Existing Habitat Enhancement Opportunities

- 5.2.12 Areas of retained upland heathland and acid grassland within the Survey Area offer potential for enhancement. Due to the grazing pressures from deer and ongoing grouse moor management within the Survey Area, areas form mosaics with undefined borders that are heavily grazed and so lack species diversity and structure.
- 5.2.13 Management and restoration of habitats will:
 - Encourage the re-establishment of species diversity and improved condition in existing acid grassland and upland heath; and,

 $^{25 \} Nature Scot, 2023. \ (onlne) \ Available \ at: \ https://www.nature.scot/doc/advising-peatland-carbon-rich-soils-and-priority-peatland-habitats-development-management \#: \sim: text = The \%20 purpose \%20 of \%20 this \%20 guidance \%20 is \%20 to \%20 help, on \%20 peatland \%2C \%20 carbon-management \#: \sim: text = The \%20 purpose \%20 of \%20 this \%20 guidance \%20 is \%20 to \%20 help, on \%20 peatland \%2C \%20 carbon-management \#: \sim: text = The \%20 purpose \%20 of \%20 this \%20 guidance \%20 is \%20 to \%20 help, on \%20 peatland \%2C \%20 carbon-management \#: \sim: text = The \%20 purpose \%20 of \%20 this \%20 guidance \%20 is \%20 to \%20 help, on \%20 peatland \%2C \%20 carbon-management \#: \sim: text = The \%20 purpose \%20 of \%20 this \%20 guidance \%20 is \%20 to \%20 help, on \%20 peatland \%2C \%20 carbon-management \#: \sim: text = The \%20 purpose \%20 of \%20 this \%20 guidance \%20 is \%20 to \%20 help, on \%20 peatland \%2C \%20 carbon-management \#: \sim: text = The \%20 purpose \%20 of \%20 this \%20 purpose \%20 to \%20 this \%20 purpose \%20 to \%20 this \%20 purpose \%20 to \%20 this \%20 purpose \%20$

 $rich \% 20 soils \% 20 and \% 20 priority \% 20 peatland \% 20 habita \ (last accessed \ 08/10/2025)$

²⁶ NatureScot (2025).Developing with nature guidance.(online) available at: https://www.nature.scot/doc/developing-nature-guidance (last accessed 08/10/2025)

²⁷ Institution of Lighting Professionals and BCT (2023). Guidance Note GN08/23 Bats and Artificial Lighting at Night. (online) Available at:

https://theilp.org.uk/publication/guidance-note-8-bats-and-artificial-lighting/ (last accessed 08/10/2025)

²⁸ Institution of Lighting Professionals, 2020. Guidance Notes for the Reduction of Obtrusive Light. (online) Available at:

 $https://theilp.org.uk/publication/guidance-note-1-for-the-reduction-of-obtrusive-light-2020/\ (last\ accessed\ 08/10/2025)$



- Provide enhanced food sources and protected nesting habitat for ground nesting bird species.
- 5.2.14 Outline management prescriptions could consider, in agreement with landowners and occupiers of land:
 - Management of deer populations within habitat enhancement areas to prevent overgrazing and trampling. Deer
 fencing may initially be constructed around enhancement areas to allow habitats to recover from overgrazing.
 Heavily grazed woody species require significant time to reestablish. In particular species like heather typically
 require five years of minimal grazing to establish effectively;
 - Reduction of muirburn practices in enhancement areas to allow greater species diversity and structure;

5.3 Peatland Restoration Opportunities

- 5.3.1 The Applicant is committed to ensure that a greater extent of blanket bog is restored than the extent of Good or Moderate condition blanket bog lost.
- 5.3.2 This assessment calculated the area of blanket bog subject to direct (permanent and temporary) impacts to be 7.02 ha of blanket bog. The temporarily lost extent of 3.22 ha for Moderate condition bog would be restored in situ to at least Poor condition following completion of temporary impact. This will be based on the implementation of the Peat Management Plan (see **Appendix 10.2: Peat Management Plan**).
- 5.3.3 Based on the above, an estimated 3.8 ha of M19/M20 blanket bog would be permanently lost to the Proposed Development, including both direct and indirect loss (**Chapter 7: Ecology** of the EIA Report), therefore requiring compensation. A further offset restoration will be explored, with a biodiversity off-site strategy produced post consent.
- 5.3.4 A preliminary assessment calculating the area of potential blanket bog restoration within the vicinity of the Proposed Development has been carried out. The NVC survey identified approximately 447.20 ha of M19/M20 blanket bog within the Survey Area (Appendix 7.2: Habitat and NVC Survey Report). Following review of the NVC survey data and PCA (see Appendix 10.3: Peatland Condition Assessment) it can be ascertained that ample opportunities exist for peatland restoration within the vicinity of the Proposed Development that could be used as part of habitat enhancement proposals for this project, subject to landowner agreements. As an indication of this, Figure 7.6.2 illustrates c. 242.40 ha of peatland with potential for restoration.
- 5.3.5 The potential restoration area excludes:
 - · Historical drains that were not visible during field surveys or by aerial imagery;
 - Post development permanent infrastructure and an associated 10 m buffer to allow for potential drying effects of habitats adjacent to hardstanding;
 - Areas of peat and peaty soils less than 50 cm in depth. It should be noted that the Peatland Action eligibility criteria states that 'The majority of the peatland within a project area must have a peat depth of over 50 cm, but peat depths down to 30 cm will be considered for restoration if they form an intrinsic component of the peat hydrological unit'²⁹. Where connected to the wider peat body peaty soils over 30 cm may be included in the peatland restoration area within the detailed BEMP post consent; and
 - Areas outwith the PCA Study Area.

Outline Management Prescriptions

Drain Blocking

5.3.6 Peat areas within the Proposed Development Survey Area contain approximately 18.15 km of artificial drainage in the form of hill drains, these appear to be narrow (<0.5 m) and active. The aim of this work would be to move areas of drain blocking from actively eroding/drained gullies and haggs to a modified revegetated condition class. It would

²⁹ NatureScot (2024) Peatland ACTION – Guidance – Eligibility Criteria. Accessed August 2025. (online) Available at https://www.nature.scot/doc/peatland-action-guidance-eligibility-criteria (last accessed 08/10/2025)



- also remove artificial drainage pathways whilst helping to reduce peak flows and offsite transport of particulate and dissolved organic carbon (DOC) and encouraging sphagnum and other peatland vegetation to recolonise.
- 5.3.7 Exact locations would be determined during detailed peatland management and restoration planning. A selection of drain blocking methods are described below. The exact method at specific locations of the drain should be assessed by the peatland specialist contractor at the post planning / detailed design stages as this will depend on the vegetation of peatland around the drain, the dimensions of the drain and the substrate at the base of the drain.
 - · Wave Dams / Zippering
 - Peat Dams
 - Plastic Pile and Timber Dams
- 5.3.8 Based on the infilled nature of the drains and lack of large drains, it is considered that wave dams and zippering will be the likely technique however additional techniques e.g. peat dams, plastic and timber dams, may be needed at certain locations. This will be confirmed before the restoration is undertaken by the appointed specialist peatland contractor.
- 5.3.9 The habitat management prescriptions will be described in more detail while the detailed BEMP is being drafted and formerly agreed with relevant stakeholders.

Hag and Gully Reprofiling

- 5.3.10 Peat areas within the Survey Area contain approximately 1.41 km of bare peat gulleys with exposed bare peat on their base and sides. A further 2.8 km of gulleys and peat banks are hagged with a side face of exposed peat but with vegetated base reflecting active erosion and drainage. These areas are vulnerable to erosion and offsite transport.
- 5.3.11 The aim of this work would be to move areas of hagged gullies (gullies with bare peat sides) from actively eroding/drained (gully/hagg) condition to a modified revegetated condition class. This would stabilise existing gullies and prevent further erosion whilst helping to reduce peak flows and offsite transport of particulate and dissolved organic carbon (DOC). Exact locations and methods would be determined during detailed peatland management and restoration planning.

Micro-erosion Restoration

- 5.3.12 Micro-erosion complexes cover approximately 2.9 Ha of the Survey Area consisting of a mixture of bare peat and vegetated gulleys. Micro-erosion restoration will target the complex mosaics of peatland erosion that are present across the Proposed Development and represent areas of early development of larger erosion features such as gullies and peat pans. These without intervention will be susceptible to merging to form larger peat erosion features.
- 5.3.13 The aim of this work would be to move areas of micro-erosion from actively eroding/drained Gully/Hagg condition to a modified rewetted condition class. This would stabilise the bare peat, reducing erosion, oxidation and offsite transport of peat from the site and prevent micro-erosion features expanding further onsite. It would also facilitate the re-establishment of peatland vegetation and improve water retention within the peatland. Removing surface water pathways will also increase water residence times on site and reducing peak flows within downstream gullies as well as reducing offsite transport of particulate and dissolved organic carbon (DOC). Exact locations and methods would be determined during detailed peatland management and restoration planning

Timing of Works

- 5.3.14 It is recommended that the restoration is undertaken post construction, so that access using the new proposed access track can be made and the restoration is not disturbed by construction activities. Restoration measures should first be implemented in locations that will no longer be required as access routes for restoration in adjacent areas. Additionally, it is best practice that drain blocking is undertaken working downstream so the higher topographic areas will be worked first.
- 5.3.15 The management will then be ongoing for the life of the Proposed Development.



INANGATION

Grazing Management and Deer Pressure Management

5.3.16 Evidence of deer pressures was recorded on site. Outline management prescriptions detailed in Section 5.2.14 provide the basis for peatland restoration requirements. Exact locations and methods will be confirmed during detailed peatland management and restoration planning in agreement with relevant stakeholders.

Monitoring

- 5.3.17 Vegetation surveys undertaken by a SQE who will monitor the success of peatland restoration and highlight the need for any further management measures. Surveys will collect data on the structure and composition of the vegetation, and plant species abundance and diversity from permanent quadrats in the restored areas, as well as perform checks on the integrity of the peat dams along drainage channels.
- 5.3.18 Monitoring shall commence in summer of year 1 of the implementation of the final BEMP (during the first year of operation of the Proposed Development) and will be repeated during the operational life of the Proposed Development i.e. following initial baseline surveys in year 1, surveys will also occur in at least years 2, 3, 5, 7 and 10. The requirement for longer-term monitoring, e.g. in years 15, 20, 25 and beyond, will be subject to ongoing review of the results and agreement with stakeholders.
- 5.3.19 Monitoring of restoration activities, e.g. ditch/drainage blocking shall also be undertaken to record progress in the completion of the physical works to install, maintain and, where necessary, repair those features. This monitoring will be completed by windfarm operations staff over the course of the first five years of operation of the Proposed Development. Any faults or issues identified during this monitoring will be addressed as soon as possible.

6. ANNEX 1: BIODIVERSITY NET GAIN ASSESSMENT REPORT

6.1 Executive Summary

- 6.1.1 This Annex sets out the results of the Biodiversity Net Gain (BNG) calculations and the approach to delivering on SSEN Transmission's BNG commitments for the Project.
- 6.1.2 It details the BNG assessment undertaken for the Glendye Wind Farm Overhead Line Grid Connection (the Proposed Development).
- 6.1.3 This Annex includes:
 - A calculation of baseline Biodiversity Units (BU) for the Proposed Development following the guidance outlined within SSEN Transmission's Biodiversity Net Gain Toolkit User Guide;
 - A prediction of the post development on-site BU following successful implementation of a habitat management plan;
 - A qualitative assessment against the Biodiversity Net Gain Good Practice Principles; and
 - · Details of the habitat creation or enhancements required to achieve biodiversity enhancements
- 6.1.4 The report found that the baseline BU was 197.95, while the post development BU was 149.47. Overall, the Proposed Development has a -24% decrease of on-site biodiversity. On-site and off-site compensation is needed to ensure the Proposed Development has an overall 10% net gain in biodiversity.
- 6.1.5 Irreplaceable Habitats are habitats which are technically very difficult or impossible to restore, recreate, or replace once destroyed. SSEN Transmission consider Irreplaceable Habitats within their network are to be ancient woodland (categories 1a & 2a of the Ancient Woodland Inventory (AWI)), individual ancient or veteran trees, and blanket bog or raised bog in Good or Moderate condition. Any loss or deterioration of an Irreplaceable Habitat will be recorded by area (hectares) outwith the Toolkit to allow for bespoke compensation.

6.2 Introduction

Background of the Report

- 6.2.1 Scottish and Southern Electricity Networks Transmission (SSEN Transmission), operating under licence held by Scottish Hydro Electric Transmission plc, to operate and develop the high voltage electricity transmission system in the north of Scotland and remote islands, commissioned SLR Consulting Ltd. (SLR) to undertake a Biodiversity Net Gain (BNG) assessment for the Glendye Wind Farm Overhead Line Grid Connection (hereafter referred to as 'the Proposed Development') using the SSEN Transmission Biodiversity Project Toolkit Version 3.0 ('the Toolkit').
- 6.2.1 The Applicant is seeking Section 37 Consent from the Scottish Ministers for the Proposed Development. The application is supported by an EIA.

Scope of the study

6.2.2 This Annex sets out the results of the BNG assessment undertaken using SSEN Transmission's Biodiversity Project Toolkit and provides an outline of how SSEN Transmission's 10% BNG commitments will be achieved. Further details on mitigation, compensation, and restoration measures can be found in **Chapter 7: Ecology** of the EIA Report and its supporting appendices.

SSEN Transmission BNG Commitments

6.2.3 SSEN Transmission is committed to delivering a 10% net gain in biodiversity on all projects gaining consent. **Section 1.4** of **Technical Appendix 7.6: Outline Biodiversity Enhancement Plan** describes how these commitments integrate with national and local planning policy, and how BNG requirements align with other environmental assessments. This annex applies the same policy framework, including the mitigation hierarchy (avoid, minimise, restore, offset).



6.3 Methodology

Area and Surveys

Desk-Based Assessment

- 6.3.1 A detailed account of all desk-based activities (datasets, planning documents, site designations, etc.) is presented in **Section 2 of Technical Appendix 7.6: Outline Biodiversity Enhancement Plan.** Key datasets reviewed include:
 - Scotland's Environment Map (covering Ancient Woodland Inventory, National & Local Site Designations, and the Carbon and Peatland Map);
 - Local Biodiversity Action Plans (e.g. North-East Scotland); and
 - Relevant planning documents (e.g. Local Development Plans).

Field Assessment

6.3.2 Field surveys, including UK Hab Classification, National Vegetation Classification (NVC) for conservation-interest habitats, and protected species surveys, were carried out in 2024/2025 as detailed in Section 2.2 of Technical Appendix 7.6: Outline Biodiversity Enhancement Plan. Standard methods were followed, and any habitat translations are described in Technical Appendix 7.2: Habitat and Vegetation Survey Report. Specialist ecology teams performed all surveys in line with current guidance.

Evidence of Technical Competence

6.3.3 All fieldwork was carried out by suitably qualified ecologists with membership in relevant professional bodies (CIEEM). This is further detailed within **Chapter 7: Ecology**.

Limitations and Assumptions

Desk-Based

- The data sources listed in Section 2.1 of the Appendix 7.6: Outline Biodiversity Enhancement Plan may contain temporal or spatial gaps.
- Where full coverage was unavailable, professional judgment was applied.

Fieldwork

- Weather and seasonal constraints may influence survey findings such as additional survey requirements undertaken outside of the botanical season resulting in reduced species lists.
- Watercourses have been assigned default conditions in line with interim guidance (SSE Renewables User Guide for watercourses).

Project

- The BNG assessment is indicative at this stage, based on dominant habitat condition scores due to the large number of parcels, with potential changes expected as the final route is refined within the LoD.
- Construction duration and programme details are set out in Chapter 3: Project Description of the EIA Report.
- Temporary habitat losses are excluded from the BNG calculation if restoration to the same habitat type/condition occurs within two years.
- Retained habitats are excluded from the BNG calculation as per SSEN Transmission Methodology.
- Post-development habitat condition assumptions are summarised in Section 2.3 of the Technical Appendix
 7.6: Outline Biodiversity Enhancement Plan.

6.4 Results

Biodiversity Baseline

6.4.1 The baseline habitats impacted by the Proposed Development are shown in **Chapter 7: Ecology** (see **Figure 7.2a: UK Habitat Map**) and are summarised within this section:



- TRANSMISSION
 - The total baseline area units are 197.95 BU.
- 6.4.2 Baseline habitats have been summarised in the **Table 1** below.

Table 1: Summary of Baseline Habitats

Habitat Type and Condition	Condition	Total Habitat Area (ha)/Length (km) ³⁰	Baseline BU/LU (H/W)
Area-Base	ed Habitats (ha)		
Cropland - Cereal Crops	N/A - Agriculture	1.38	2.76
Wetland – Upland flushes, fens and swamps	Good	0.62	14.12
Grassland - Upland acid grassland	Moderate	1.35	19.60
Grassland – Bracken	N/A - Agriculture	0.05	0.20
Grassland – Other neutral grassland	Poor	0.39	2.57
Grassland - Modified grassland	Poor	3.92	7.84
Heathland and shrub - Upland Heathland	Moderate	2.97	45.08
Heathland and shrub - Gorse scrub	Poor	0.18	0.40
Woodland and forest - Other woodland; broadleaved	Poor	0.55	2.42
Woodland and forest - Other Scot's pine woodland	Poor	2.28	10.03
Woodland and forest - Other coniferous woodland	Poor	42.24	92.93
Grand Total (Area)		55.93	197.95

Temporary Impacts

6.4.3 Elements of the Proposed Development vary in their permanence, including permanent elements (such as poles and permanent access tracks), and temporary elements (such as temporary working areas and temporary access tracks). The latter group of elements will be restored upon completion of the works. However, the word "temporary" has a specific definition in BNG calculations in that it applies only to situations in which the habitat impacted will be restored to the same habitat type and condition within *two years* of the initial disturbance. Where this is the case, the impacts can be excluded from the BNG calculations. The habitats and associated timescales for return to target condition are defined by guidance²⁰. As the construction phase for the Proposed Development is anticipated to be 30 months, with additional time for habitat restoration required, it may not be possible to reinstate these areas to their baseline condition within two years. In reality the construction programme will be phased with specifics known at the detailed design stage. This would allow some habitats to be restored sooner, however, based on a precautionary stance for the purposes of this assessment, there are no construction elements that are considered to be temporary for the purposes of BNG. Reinstatement of habitats lost during the construction phase are included in the post-development units.

Post-Development Biodiversity Units

- 6.4.4 The post-development BU have been summarised here:
- 6.4.5 The total post-development area units are 149.47 BU.
- 6.4.6 This results in a total net change of -47.49 BU with an overall percentage net change of -24%.
- 6.4.7 The on-site habitat restoration described in **Section 2.3 of Technical Appendix 7.6: Outline Biodiversity Enhancement Plan** has not yet been quantified in these preliminary BNG calculations as discussions with

³⁰ Figures are rounded to two decimal places.

- landowners are ongoing; once these proposals and calculations are finalised, it will be determined whether on-site measures alone can achieve the 10% net gain target.
- 6.4.8 Given current assumptions, it is expected that off-site habitat creation or enhancement will be required. SSEN Transmission is actively assessing a pipeline of off-site projects, working with local stakeholders to identify suitable offsite habitat compensation.

6.5 Opportunities for Biodiversity Enhancement

- 6.5.1 On site opportunities for biodiversity enhancement are discussed in principle in **Section 5.2.11** and **Section 5.3**. These areas are not yet quantified within the preliminary BNG calculations as discussions with landowners are ongoing; once these proposals and calculations are finalised, it will be determined whether on-site measures alone can achieve the 10% net gain target.
- 6.5.2 Off-site habitat creation and enhancement is only required when all options for on-site BNG requirements have been considered. If no on-site opportunities can be implemented, off-site habitat creation and enhancement will be undertaken but kept, wherever possible, within the locale of the Proposed Development. Compensation is targeted at delivering biodiversity net gains that are ecologically equivalent in type and condition to the habitats lost, following the 'like for like or better' principle. The off-site habitat will be assessed using the Toolkit to take into consideration the existing biodiversity present and aims to maximise benefits for biodiversity in accordance with local and national strategies.
- 6.5.3 The amount of biodiversity units required to deliver 10% net gain is 68.28 BU. It is still to be determined how much of this will require off-site interventions. A pipeline of restoration and enhancement projects with local stakeholders is currently being evaluated. Once these off-site opportunities are confirmed, site-specific BNG calculations will be undertaken to ensure the 10% target is met for all affected habitats, in line with the relevant trading rules and the Applicant's commitment to leaving the natural environment in a demonstrably better state.

Additional Ecological Benefits

- 6.5.4 Opportunities will be identified to deliver additional ecological benefits as a result of habitat creation and enhancement on-site and off-site.
- 6.5.5 As part of this process, appropriate implementation, maintenance and monitoring procedures will be developed and agreed with stakeholders and embedded into the final detailed Biodiversity Enhancement Plan. These measures will ensure that habitat enhancements remain sustainable in the long-term.

6.6 Summary

6.6.1 The results of the baseline BNG provide an indicative target only at this stage. The total amount of biodiversity units required has been calculated as 10% of the total baseline biodiversity units plus the total biodiversity units expected to be lost. **Table 3** below presents a summary of the on-site BNG assessment. This figure should be reviewed and updated once detailed post-development habitat information becomes available.

Table 3: Summary of the on-site biodiversity units

	Baseline BU/LU	Post- Development BU/LU	Difference Change in Biodiversity Units	Net Change in BU/LU (%)	BU/LU Required
Area Units	197.95	149.47	-48.49	-24 %	68.28

Biodiversity Outcomes

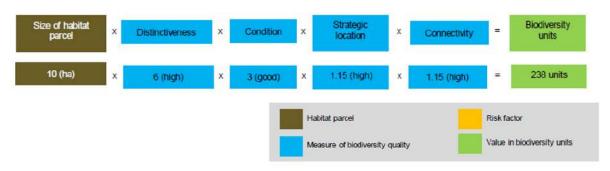
6.6.2 The additional biodiversity outcomes delivered by the Proposed Development will be confirmed in the final detailed Biodiversity Enhancement Plan and associated BNG reporting.

Appendix A Approach to Biodiversity Net Gain

6.7 Overview

- 6.7.1 A full BNG Assessment was undertaken for the Proposed Development to quantify the change in biodiversity. The BNG assessment was completed within the Toolkit following the SSEN Transmission Biodiversity Net Gain Toolkit User Guide³¹. This method has been revised to align with Natural England Biodiversity Metric 3.1³², adapted to reflect the requirements of Scottish habitats.
- 6.7.2 A habitat survey of the proposed site was undertaken between June to October 2023, and April to October 2024³³. The survey was based on the methods described within the UK Habitat Classification User Manual³⁴.
- 6.7.3 The baseline multiplication uses the following characteristics of the habitats:
 - Habitat area (hectares) or length (kilometres);
 - Distinctiveness;
 - Condition;
 - Connectivity; and
 - Strategic significance.

Figure A1: Pre-intervention biodiversity calculation



- 6.7.4 Habitat Distinctiveness for the habitats relevant to the project were assigned as per **Appendix C: Good Practice Principles for Biodiversity Net Gain**, and scored as
 - High = 6
 - Medium = 4
 - Low = 2
 - Very low = 0
- 6.7.5 Each habitat parcel recorded was assigned a condition score (Good, Moderate, Poor, or N/A) determined by the Natural England Biodiversity Metric 3.1 Habitat Condition Assessment sheets³⁵ which have been adopted into the Toolkit's methodology.
- 6.7.6 The following scores were assigned to conditions:
 - Good = 3

³¹ SSEN Transmission, 2023. TG-NET-ENV-526 Rev 2 - Biodiversity Net Gain Toolkit User Guide.

³² Natural England, 2022. Biodiversity Metric 3.1. (Online) Available at: https://publications.naturalengland.org.uk/publication/5850908674228224.(last accessed 08/10/2025)

³³ Some limited additional survey was undertaken in December 2024 and January 2025; this additional survey targeted some minor data gaps in areas dominated by farmland with only limited extents of potentially sensitive habitats.

³⁴ UKHab Ltd, 2023. UK Habitat Classification Version 2.0. (Online) Available at: https://ukhab.org/. (last accessed 08/10/2025)

³⁵ Natural England, 2022. Biodiversity Metric 3.1 Habitat Condition Sheets with Instructions. (Online) Available at:

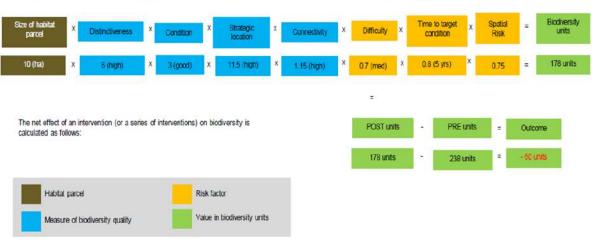
 $https://publications.natural england.org.uk/publication/5850908674228224. (last\ accessed\ 08/10/2025)$



- Fairly Good = 2.5
- Moderate = 2
- Fairly Poor = 1.5
- Poor = 1
- N/A Agriculture = 1
- N/A No biodiversity value = 0
- 6.7.7 The SSEN Transmission User Guide is awaiting the Scottish Biodiversity Metric to propose a watercourse condition assessment. In this interim period, SSEN Transmission has adopted the SSE Renewables User Guide³⁶ approach to watercourse condition assessments. This approach recommends that the condition is related to distinctiveness of the habitat, i.e.:
 - High distinctiveness = Good condition
 - Medium distinctiveness = Moderate condition
 - Low distinctiveness = Poor condition
- 6.7.8 The SSEN Transmission User Guide has adopted the Natural England Beta Biodiversity Metric 2.0 method of assigning connectivity. The connectivity of a habitat parcel is determined based on the distinctiveness of the habitat. High distinctiveness habitats are assigned with a Moderate connectivity multiplier, whereas Moderate and Low distinctiveness habitats are assigned a Low connectivity.
- 6.7.9 The following scores were assigned for connectivity:
 - High = 1.15
 - Moderate = 1.1
 - Low = 1
- 6.7.10 Strategic significance scores have been based on formal policies including NPF4, the Scottish Biodiversity List (SLB), and local policies. These are assigned as follows, based on habitats identified to be of local importance:
 - High = Formally identified in local strategy, plan or policy = 1.15
 - Medium = Location ecologically desirable but not identified in a local strategy, plan or policy = 1.1
 - Low = Not identified in a local strategy, plan or policy or no strategy or plan is in place in the area = 1

Figure A2: Post-intervention biodiversity calculation

POST-intervention biodiversity calculation (for newly created habitat)



36 SSE Renewables. 2024. SSER Biodiversity Net Gain Toolkit User Guide V2.2 (Online) Available at: https://www.sserenewables.com/media/iz2jbehn/sser-bng-toolkit-user-guide_v2-2.pdf. (last accessed 08/10/2025)

- 6.7.11 The creation and enhancement of habitats has a delivery risk multiplier assigned to each habitat to represent the difficulty in creating or restoring that habitat. The delivery risk multipliers are taken from the Biodiversity Metric 3.1 Technical Supplement:
 - Very High = 0.1
 - High = 0.33
 - Medium = 0.67
 - Low = 1
- 6.7.12 Time to target condition scores were assigned based on the Biodiversity Metric 3.1 Technical Supplement³⁷, which provides tables with estimated time to target for habitat creating and enhancement. The delay to creation and/or enhancement is added on to the time to target found in the Technical Supplement to account for the Proposed Development timeline.

Table A1: Time To Target Condition multiplier

Time to Target Condition				
Time (years)	Multiplier	Time (years)	Multiplier	
0	1	17	0.546	
1	0.965	18	0.527	
2	0.931	19	0.508	
3	0.899	20	0.490	
4	0.867	21	0.473	
5	0.837	22	0.457	
6	0.808	23	0.441	
7	0.779	24	0.425	
8	0.752	25	0.410	
9	0.726	26	0.396	
10	0.700	27	0.382	
11	0.676	28	0.369	
12	0.652	29	0.356	
13	0.629	30	0.343	
14	0.607	31	0.331	
15	0.586	32+	0.320	
16	0.566			

6.7.13 Off-site habitat creation and enhancement is only required when all options for on-site BNG requirements have been considered. If no on-site opportunities can be identified, off-site habitat creation and enhancement will be undertaken. The Toolkit has a spatial risk multiplier to encourage off-site compensation work to occur in the locale of the Proposed Development, with reference to Local Authority (LA) or National Park Authority boundary. The Spatial Risk Categories are displayed below:

³⁷ Natural England. 2022. Biodiversity Metric 3.1 Technical Supplement. (Online) Available at: https://publications.naturalengland.org.uk/publication/5850908674228224.(last accessed 08/10/2025)



- Habitat provides compensation within the local LPA area = 1
- Habitat provides compensation outwith the local LPA but within neighbouring LPA = 0.75
- Habitat provides compensation outwith the local LPA and neighbouring LPAs = 0.5
- 6.7.14 The same Toolkit was used to calculate the net biodiversity change between the baseline habitats and the postdevelopment habitats.
- 6.7.15 An impact to a habitat which is reversible and can return to same extent and ecological condition or better within two years of the initial impact, can be considered a temporary impact. Temporary impacts have not been included in the Toolkit calculations as there are no permanent adverse impacts.
- 6.7.16 Retained habitat are also excluded from the Toolkit as there is no recordable impact.
- 6.7.17 The Toolkit assesses both the area and linear habitat separately within the same Toolkit. The Toolkit produces a Biodiversity Unit value for the three categories of habitat type: Area Biodiversity Units (BU), Linear Hedgerow Biodiversity Units (H BU) and Linear Watercourse Biodiversity Units (W BU). These units are not interchangeable.



Appendix B

Assigned UKHab Habitat Distinctiveness

Cropland - Cereal Crops	Low
Grassland - Bracken	Medium
Grassland - Other neutral grassland	High
Grassland - Upland acid grassland	High
Grassland - Modified grassland	Low
Urban - Artificial unvegetated, unsealed surface	Very Low
Urban - Developed land; sealed surface	Very Low

Heathland and shrub - Gorse scrub	Low
Heathland and shrub - Upland Heathland	High
Woodland and forest - Other woodland; broadleaved	Medium
Woodland and forest - Other Scot's Pine woodland	Medium
Woodland and forest - Other coniferous woodland	Low
Wetland - Upland flushes, fens and swamps	High



Appendix C Good Practice Principles for Biodiversity Net Gain

6.8.1 The Proposed Development has applied the UK good practice principles for BNG³⁸ below:

Table C1: Good Practice Principles for Biodiversity Net Gain

Principle	Summary of Proposed Development actions
Apply the mitigation hierarchy	The route alignment and site layout were designed to avoid sensitive habitats wherever feasible. Minimisation, restoration, and compensation measures have been integrated to reduce residual impacts, and off-site partnerships will compensate for any remaining losses.
Avoid losing biodiversity that cannot be offset elsewhere	Irreplaceable habitats (e.g. ancient woodland or high-value peatland) have been carefully avoided through route selection and design refinements. No such habitats are impacted, negating the need for bespoke compensation in this instance.
Be inclusive and equitable	Local landowners, community groups, and NGOs were engaged during project development. This ensures long-term stakeholder support for on-site restoration and off-site enhancement projects, with an aim to benefit both wildlife and the surrounding communities.
Address risk	Conservative assumptions were used in BNG calculations to account for uncertainties in restoration success (see Section 2.3 of, Technical Appendix 7.6: Outline Biodiversity Enhancement Plan). Contingency measures (e.g. additional off-site habitat creation) have been identified in case on-site restoration cannot fully meet the 10% target.
Make a measurable net gain contribution	The SSEN Transmission Biodiversity Toolkit is being used to quantify baseline habitats, likely on-site gains, and any required off-site offsets, ensuring a robust metric-based assessment that targets at least 10% net gain in area units.
Achieve the best outcomes for biodiversity	Habitat selection and design (e.g. converting conifer blocks to scrub/heath) focus on enhanced ecological value over pure like-for-like replacement, integrating climate resilience and local conservation priorities (e.g. farmland birds, pollinators, and woodland edges).
Be additional	BNG actions exceed standard mitigation requirements and are designed to provide habitat enhancements beyond mere legal compliance, leveraging both on- and off-site improvements.
Create a net gain legacy	Long-term habitat management plans, in conjunction with committed partnerships, will ensure that enhanced and newly created habitats remain viable beyond construction and into operation, delivering lasting biodiversity improvements across the region.
Optimise sustainability	The Proposed Development aligns with SSEN Transmission's wider sustainability goals and integrates with landscape mitigation measures (see Landscape Mitigation Design Guide) to provide both ecological and visual benefits at a landscape scale.

³⁸ CIEEM, CIRIA, IEMA. 2020. C776a. Biodiversity Net Gain: Good Practice Principles for Development, A Practical Guide. (Online) Available at: https://cieem.net/resource/biodiversity-net-gain-good-practice-principles-for-development-a-practical-guide/. (last accessed 08/10/2025)



Principle	Summary of Proposed Development actions
Be transparent	All BNG data, including methodology, assumptions, and final calculations, are disclosed in the EIA and supporting appendices. Ongoing progress will be reported through stakeholder engagements and post-construction monitoring updates.



Appendix D Irreplaceable Habitat Supplement

6.9 Introduction

6.9.1 Irreplaceable Habitats are habitats which are technically very difficult or impossible to restore, recreate, or replace once destroyed. SSEN Transmission consider Irreplaceable Habitats within their network to be ancient woodland (categories 1a & 2a of the Ancient Woodland Inventory (AWI)), individual ancient or veteran trees, and blanket bog or raised bog in good or moderate condition.

6.10 Irreplaceable Habitat Methodology

- 6.10.1 The BNG assessment assesses the effect of the Proposed Development on Irreplaceable Habitats separately from Non-Irreplaceable Habitats. The loss and deterioration of Irreplaceable Habitats have been avoided as far as possible, where avoidance was not possible, mitigation has been applied to reduce the effect. Where Irreplaceable Habitats are present on site, the effect of the Proposed Development on Irreplaceable Habitats has not been calculated using the Toolkit as bespoke compensation must be provided for the loss or deterioration of an Irreplaceable Habitat. Therefore, Irreplaceable Habitat losses and deteriorations have been quantified by area in hectares, or number of ancient/veteran trees so the changes can be fully understood, and more habitats can be replaced than was lost to Proposed Development, in accordance with SSEN Transmission's commitments towards Irreplaceable Habitats.
- 6.10.2 SSEN Transmission's commitments to Irreplaceable Habitats are to:
 - Rigorously follow the mitigation hierarchy and seek to avoid Irreplaceable Habitats wherever possible by recognising these areas as a key environment constraint.
 - Ensure all projects record and report on the measures taken to avoid Irreplaceable Habitats.
 - Have internal governance procedures in place requiring senior level sign off if projects have an impact on Irreplaceable Habitats.
 - Ensure that more Irreplaceable Habitat is restored than is lost.
 - Support Irreplaceable Habitat restoration schemes in preference to new habitat creation.

6.11 Results

Baseline Irreplaceable Habitats

- 6.11.1 Blanket bog habitats recorded in the western section of the Survey Area were mostly confined to the south-western section. These habitats were classified under the UKHab classification system as blanket bog due to the presence of peat-forming *Sphagnum* species, categorised to a "Level 4", in moderate condition under the UKHAB methodology. Efforts to accurately categorise to Level 5 were constrained by evident historical and active management practices, with pressures within the Survey Area affecting peat conditions. Whilst peat forming *Sphagnum* species were identified within the Survey Area, classifications to Annex I are made where bog is observed to support "significant" areas of vegetation that are peat-forming and therefore categorised as 'active', according to Joint Nature Conservation Committee (JNCC) criteria (JNCC, 2013)³⁹. While the blanket bog found in this part of the Survey Area may at least partly align with the description for Annex 1 habitat, it is apparent that there is wide-spread degradation of the peatland as a result of management practices evidenced through areas of muirburn and drainage practices (i.e. grips and ditches), leading to large areas being hydrologically impaired.
- 6.11.2 Blanket bog habitat with the Survey Area was not associated with any Statutory Nature Conservation Designations.

³⁹ JNCC (2019). European Community Directive on the Conservation of Natural Habitats and of Wild Fauna and Flora (92/43/EEC). Fourth Report by the United Kingdom under Article 17 on the implementation of the Directive from January 2013 to December 2019. Conservation status assessment for the habitat: H7130 - Blanket bogs. United Kingdom. Scotland. Joint Nature Conservation Committee, Peterborough.



Temporary Impacts to Irreplaceable Habitats

- 6.11.3 Loss or deterioration to any habitats which are reversible and can return to same extent and ecological condition within two years of the initial impact, can be considered temporary.
- 6.11.4 Elements of the Proposed Development vary in their permanence, including permanent elements (such as poles and permanent access tracks), and temporary elements (such as temporary working areas and temporary access tracks). Several temporary tracks will be removed post-construction and original habitats reinstated. As the construction phase for the Proposed Development is anticipated to be 30 months, with additional time for habitat restoration required, it is not be possible to reinstate these areas to their baseline condition within two years. In reality the construction programme will be phased with specifics known at the detailed design stage. This would allow some habitats to be restored sooner, however, based on a precautionary stance for the purposes of this assessment, there are no construction elements that are considered to be temporary for the purposes of BNG. Reinstatement of habitats lost during the construction phase are included in the post-development units.

Retained Irreplaceable Habitats

6.11.5 The Proposed Development will remove all Irreplaceable Habitats within the proposed site. No Irreplaceable Habitats are to be retained by the Proposed Development

Post-Development Impacts to Irreplaceable Habitats

6.11.6 The effect of the footprint of the Proposed Development on Irreplaceable Habitats has been summarised below:

Table A1: Summary of the loss or deterioration to Irreplaceable Habitats on site.

Location/Tree identification code and Habitat Type	Loss or deterioration	Baseline area (ha)	Area (ha) of Irreplaceable Habitat lost or deteriorated by the Proposed Development
	Permanent Loss (direct and indirect)		
Blanket Bog			
(moderate condition)	Short term loss and reinstatement of areas lost during construction phase	7.02 ha	3.8 ha

The total area of blanket bog lost or deteriorated by the Proposed Development is 3.8 ha. A total of 0.45 ha of this loss is direct loss to hardstanding associated with pole foundations, permanent tracks, and CSE hardstanding. Additional indirect loss is calculated using a 10m buffer around proposed infrastructure to infer habitat area subject to dewatering effects. The remaining 3.35 ha is calculated as indirect loss via potential dewatering associated with permanent infrastructure. This area will not be replaced by hardstanding however is unlikely to continue functioning as blanket bog habitat. It is assumed that these fringe areas will likely deteriorate to acid grassland and/or bare ground.

Irreplaceable Habitat Compensation

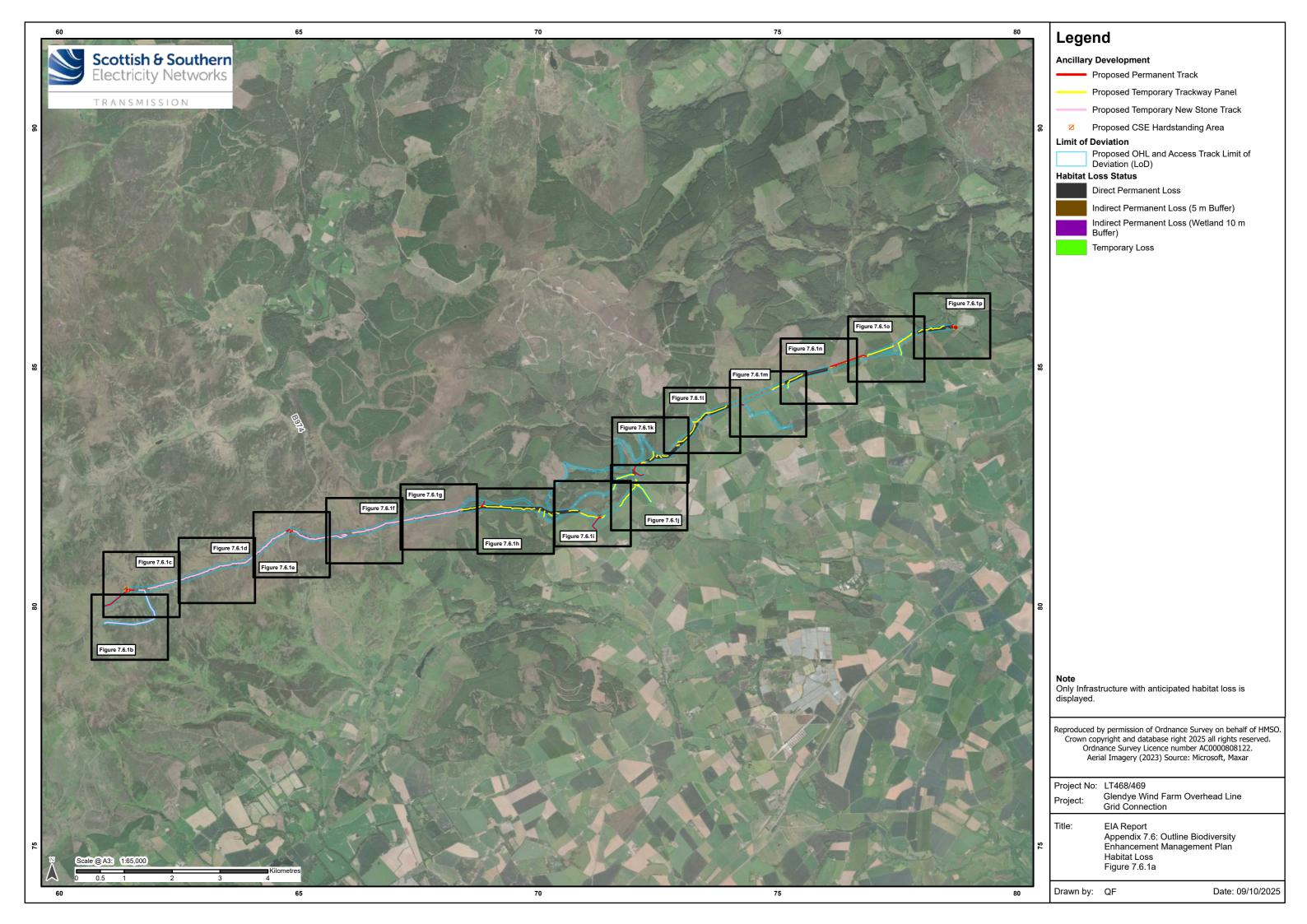
- 6.11.7 Off-site bespoke compensation is only required when all options for on-site bespoke biodiversity restoration provision has been explored. If no on-site opportunities can be identified, off-site habitat restoration will be undertaken but kept within the locale of the Proposed Development. Bespoke compensation is targeted at delivering enhancements that ensure that the same Irreplaceable Habitats lost or deteriorated, are appropriately compensated in line with relevant standing advice.
- 6.11.8 The Applicant will find and secure appropriate site for off-site bespoke compensation.
- 6.11.9 An assessment calculating the area of potential blanket bog restoration has been carried out. The NVC survey identified approximately 447.20 ha of M19/M20 blanket bog within the Survey Area (**Technical Appendix 7.2: Habitat and NVC Survey Report**). A minimum post development area of peatland restoration of c.242.40 ha has been identified within the PCA Study Area that may be used to aid the achievement of BNG subject to landowner

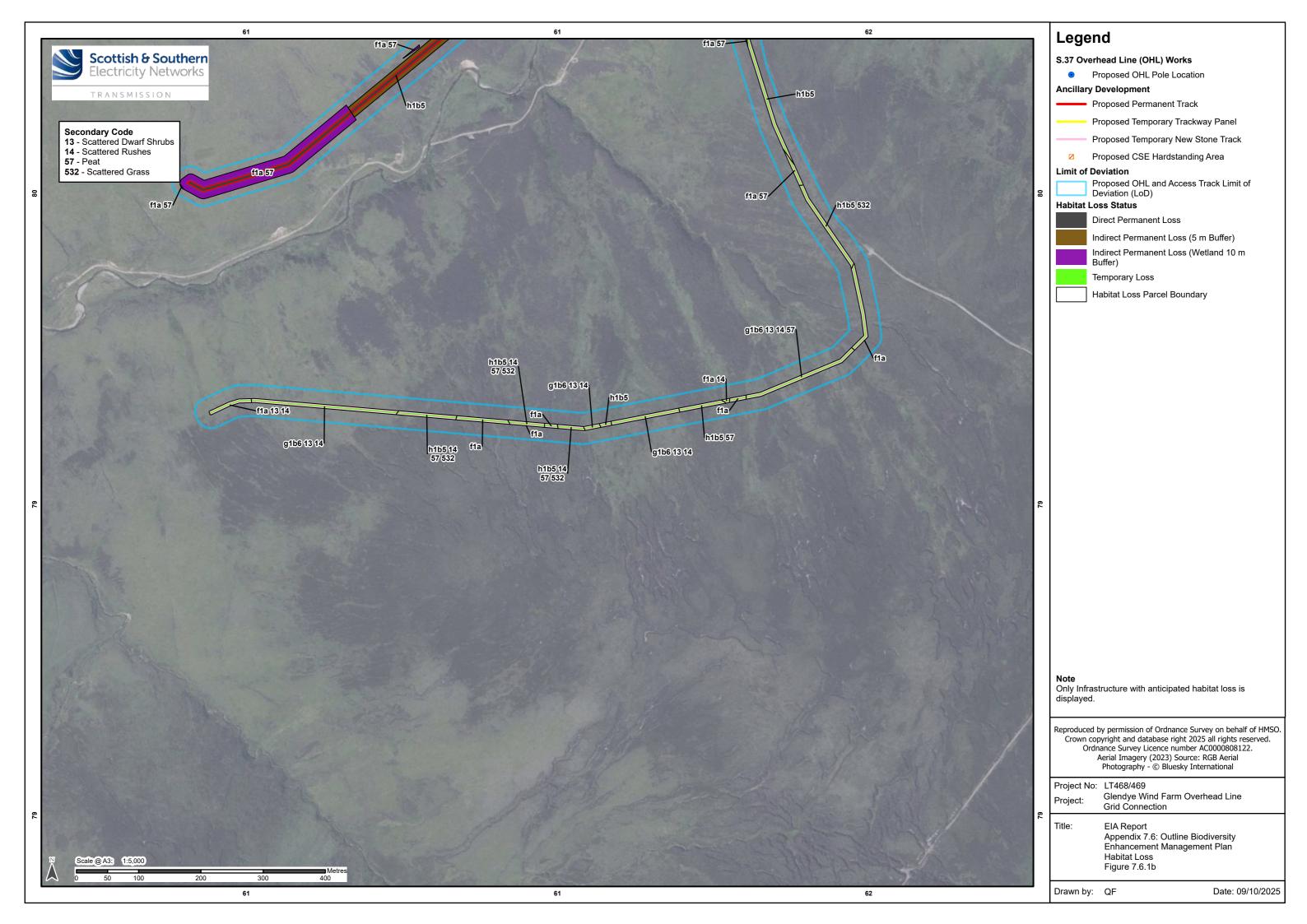


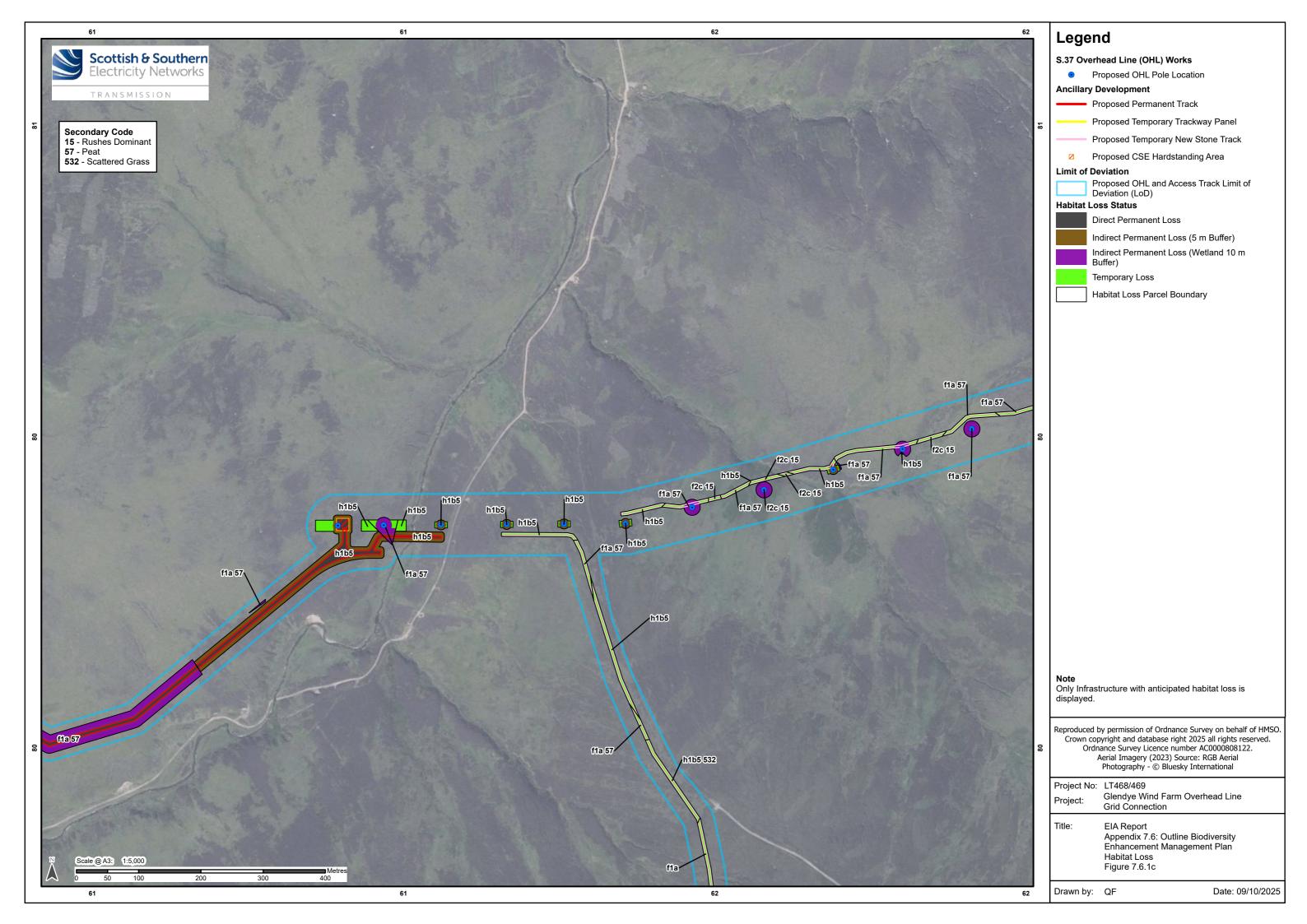
agreement provisions. The potential restoration area has been calculated using the results of the PCA (**Technical Appendix 10.3: Peatland Condition Assessment**) and is presented in **Figure 7.6.2**.

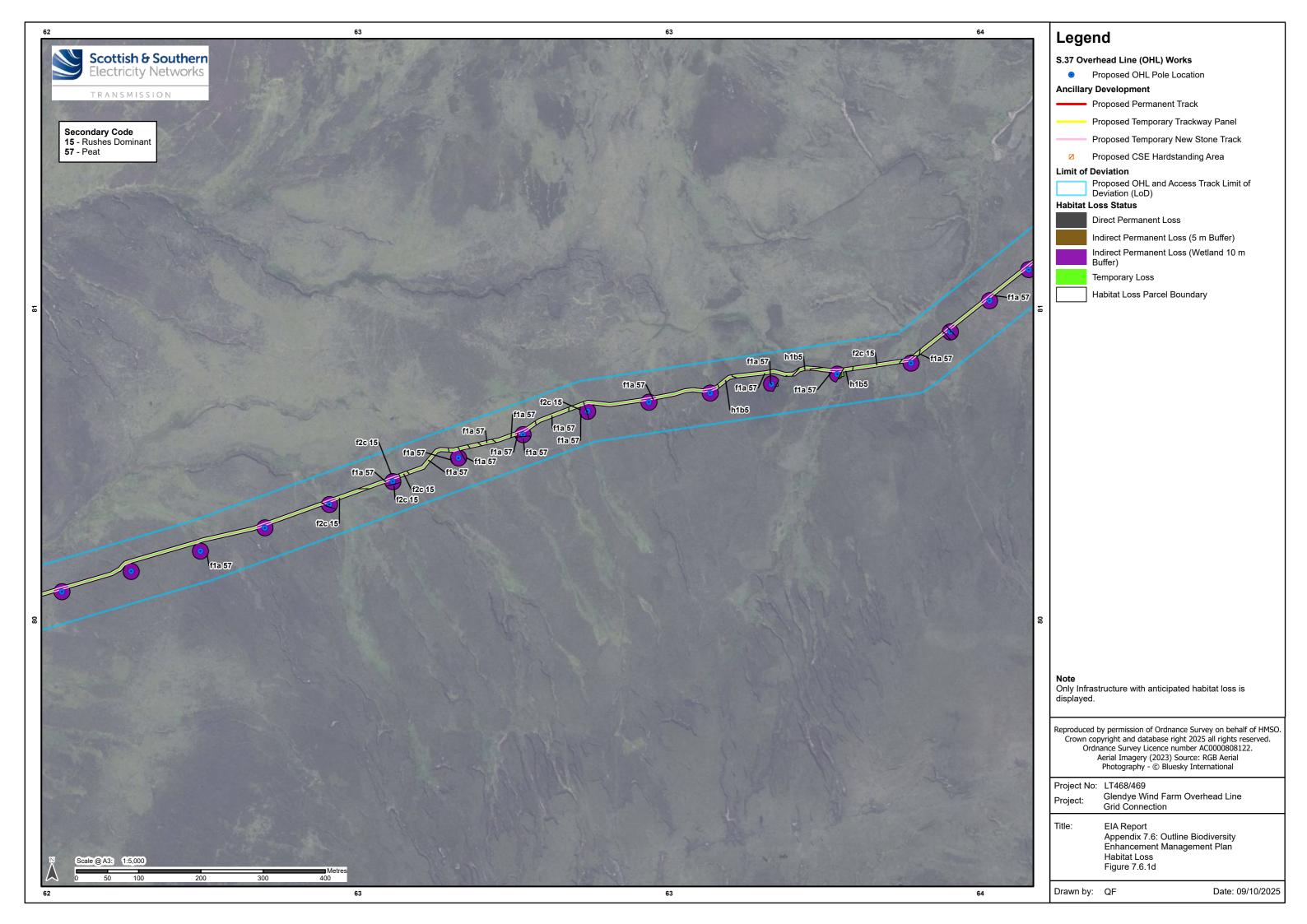
Irreplaceable Habitat Supplement Summary

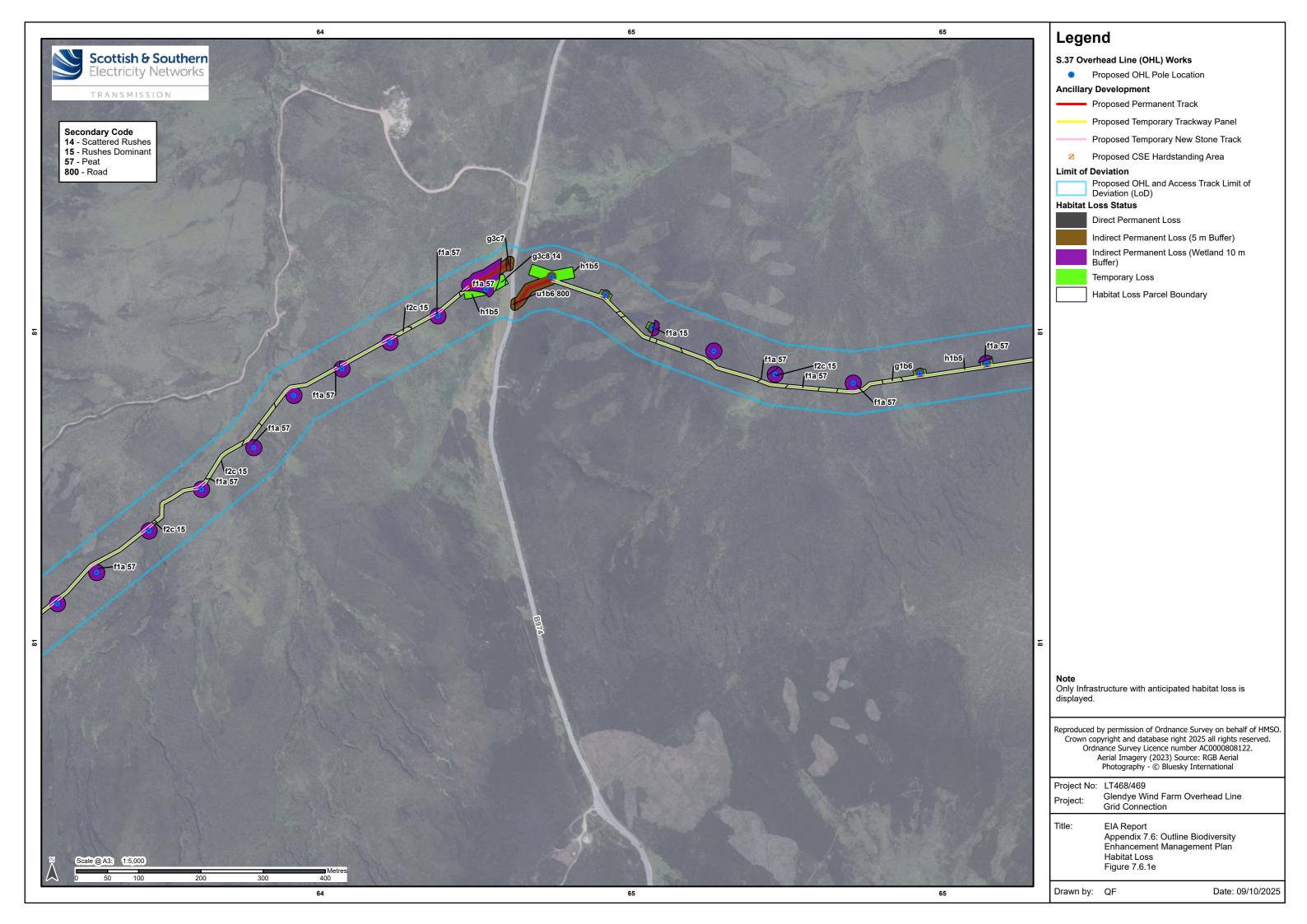
- 6.11.10 The total area of blanket bog in moderate condition to be permanently lost due to the Proposed Development is 3.8 ha.
- 6.11.11 The total area of blanket bog in moderate condition to be lost on a short-term basis and reinstated following the construction phase due to the Proposed Development is 3.22 ha.

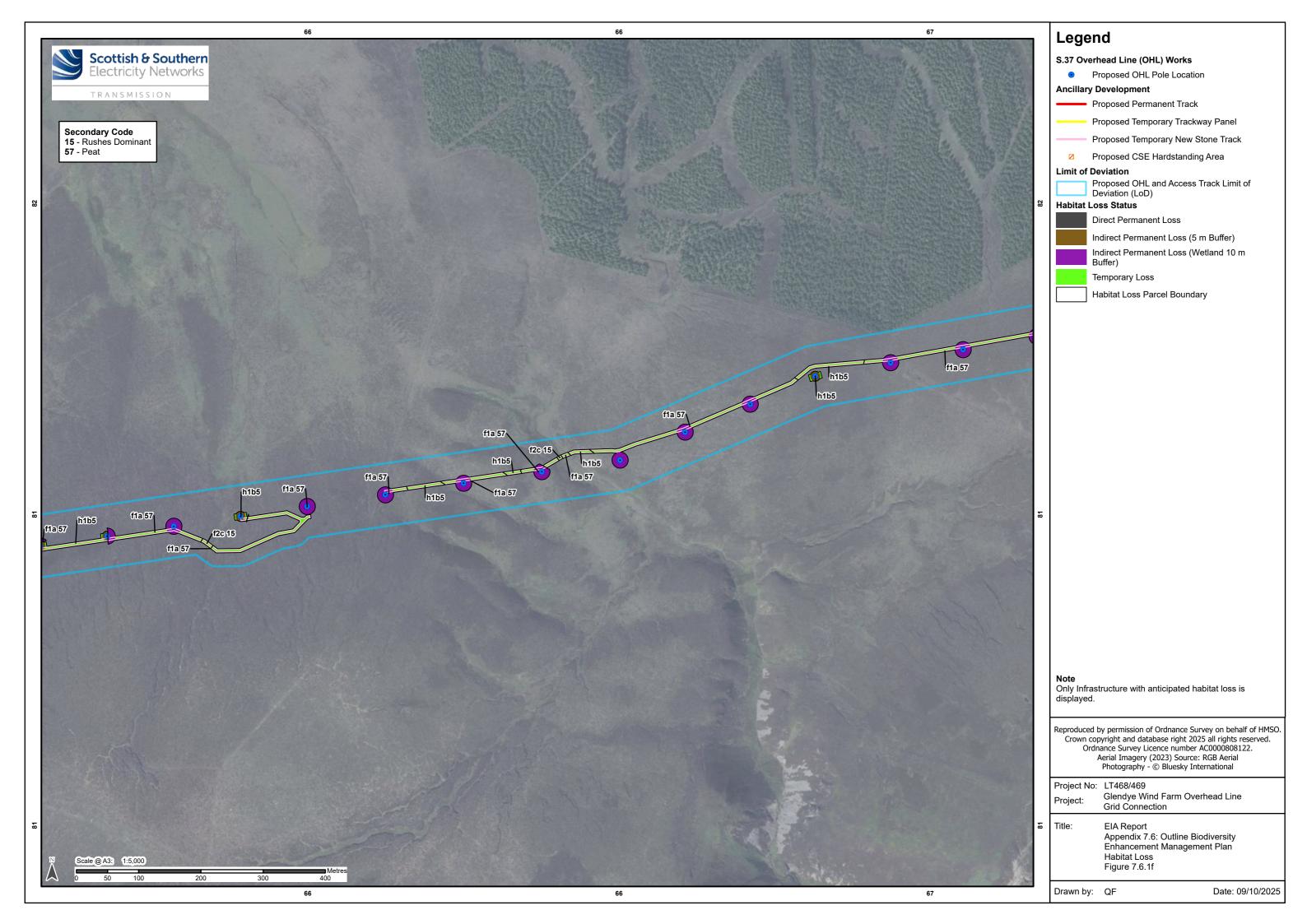


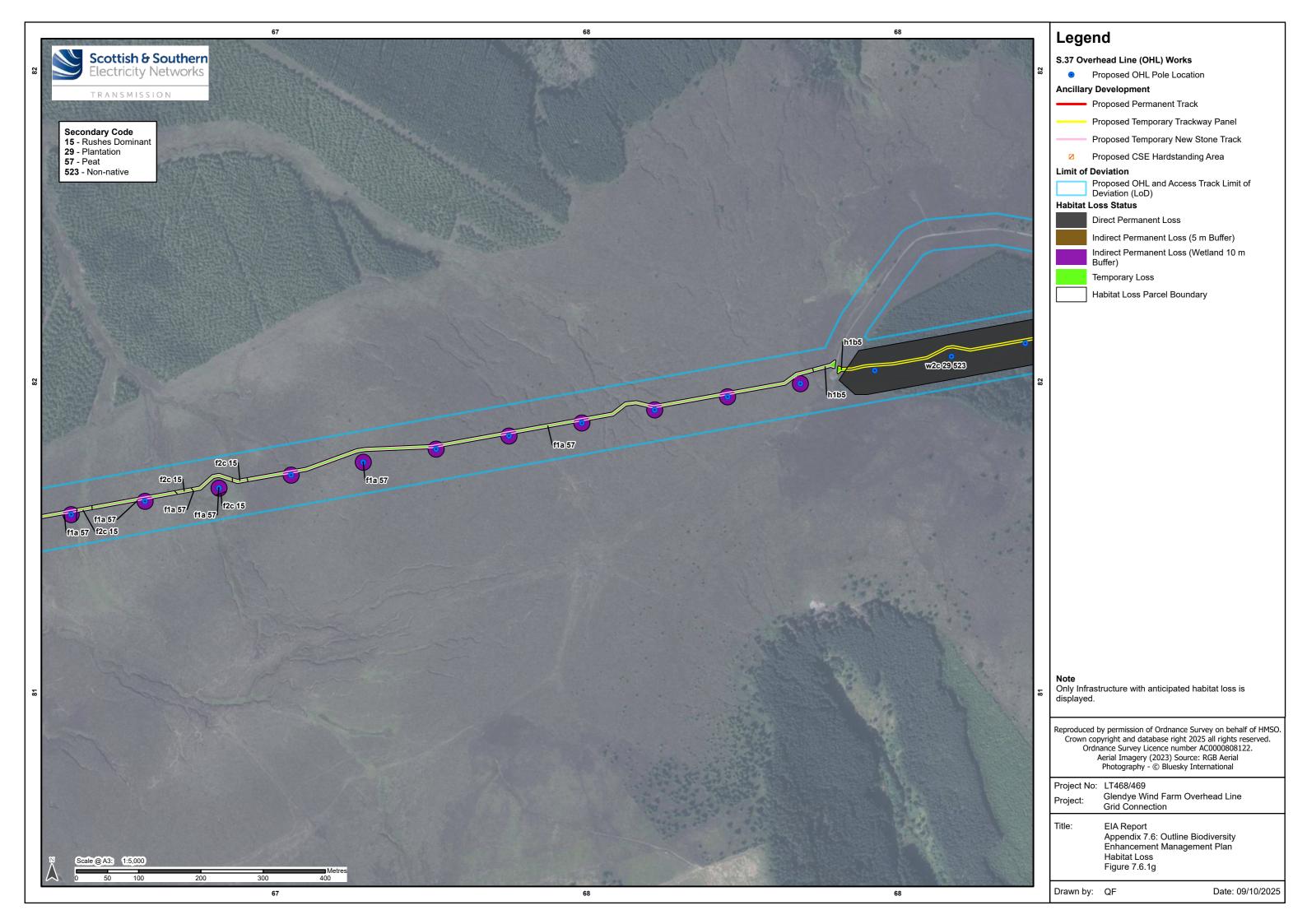


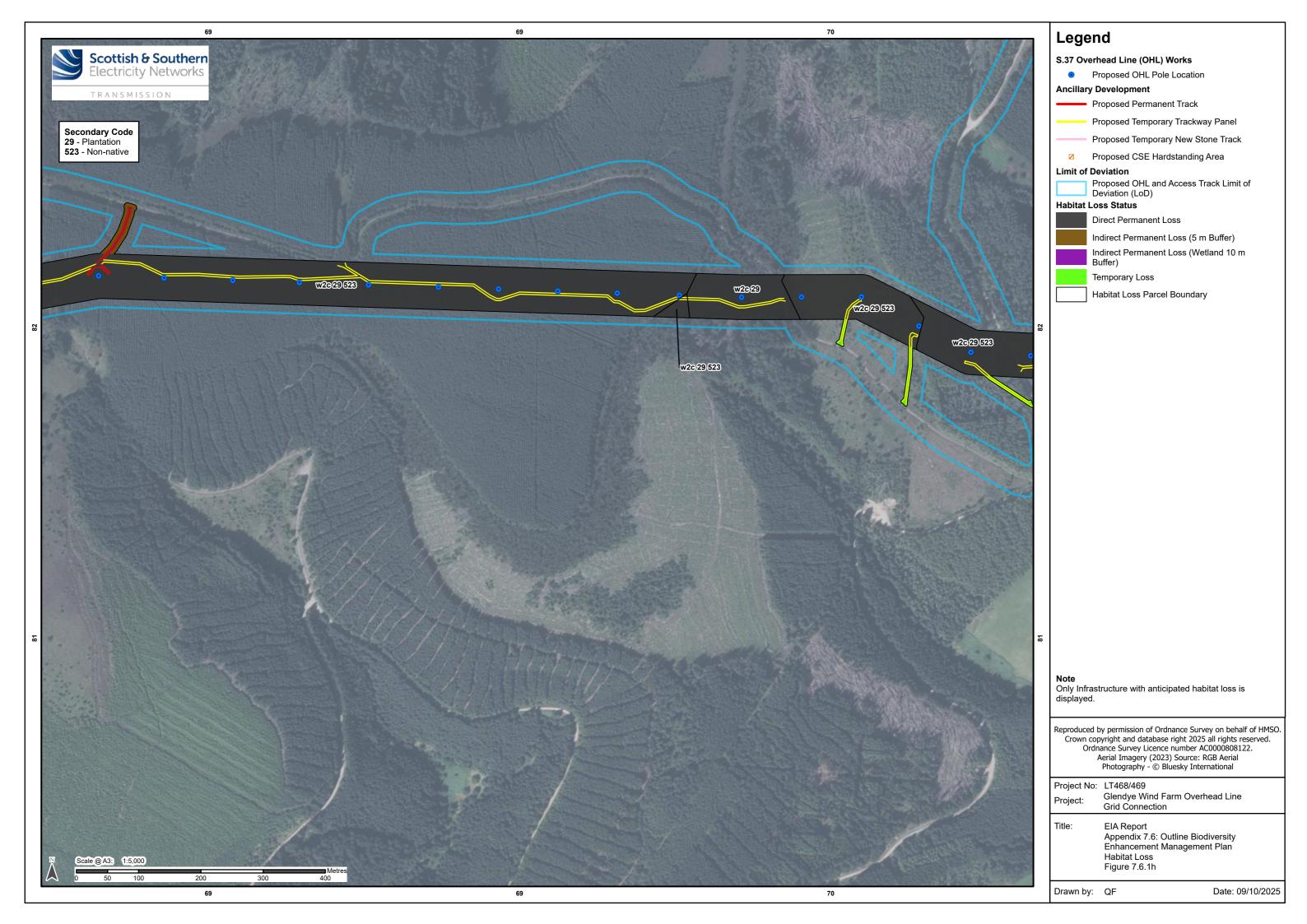


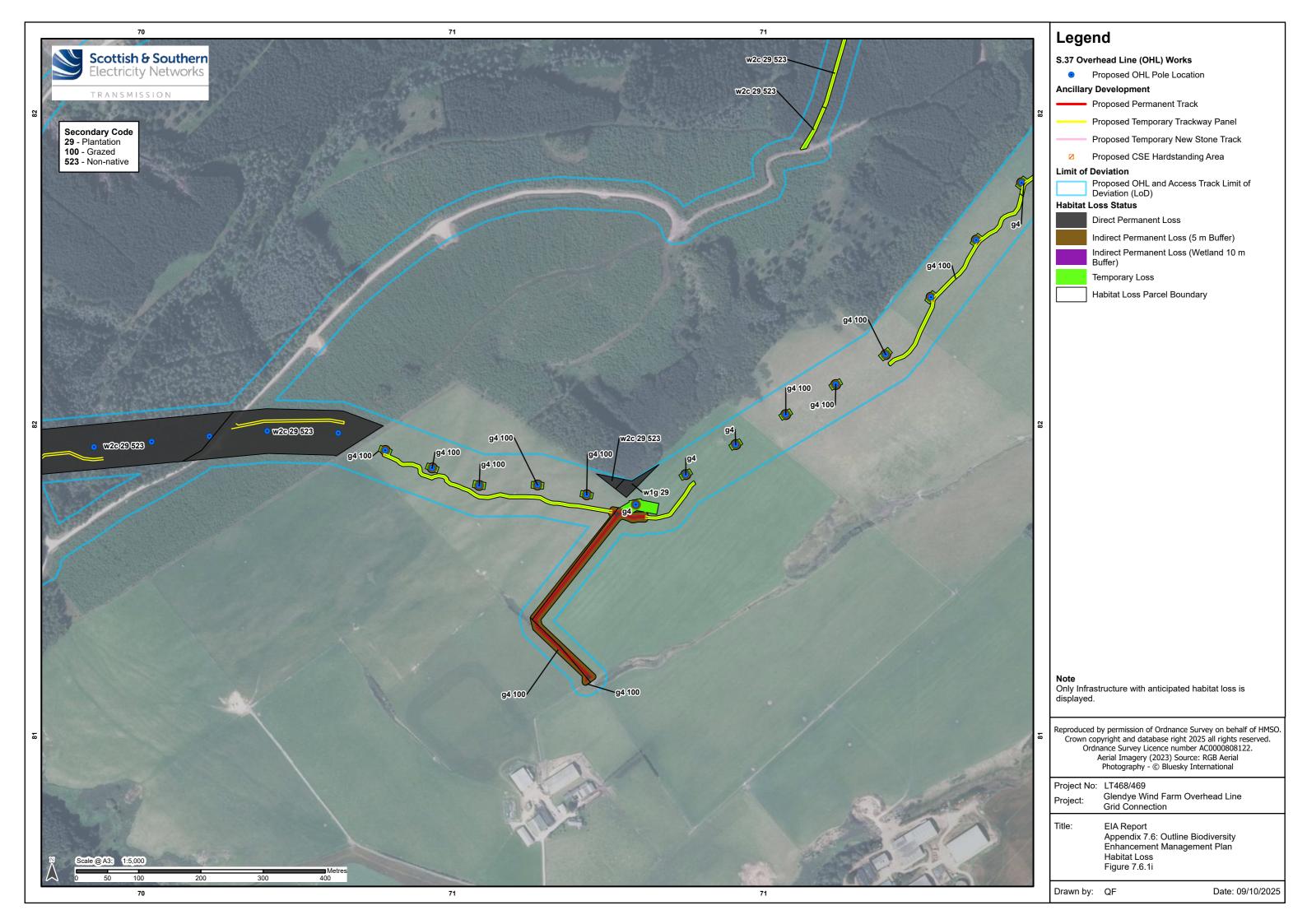


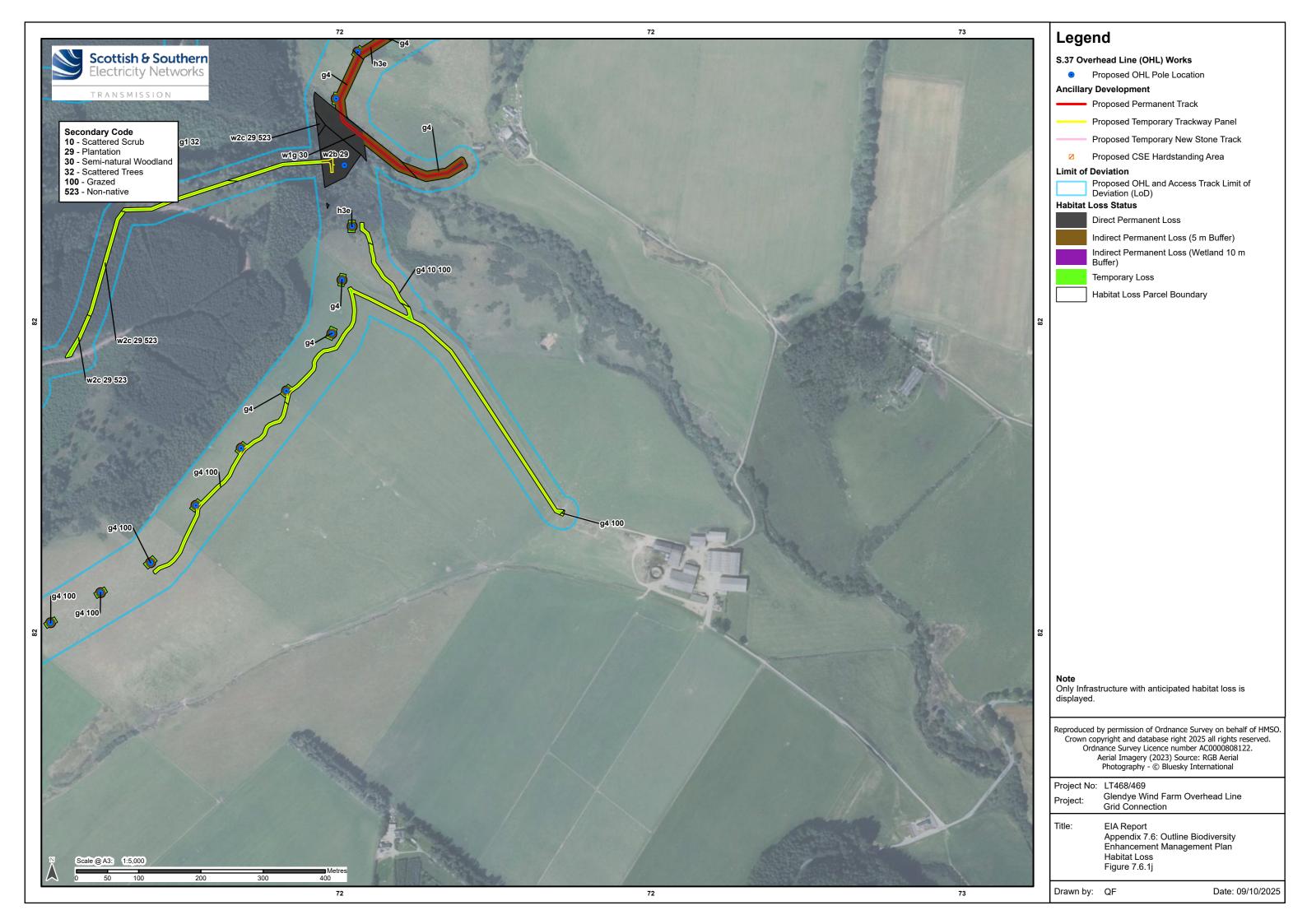


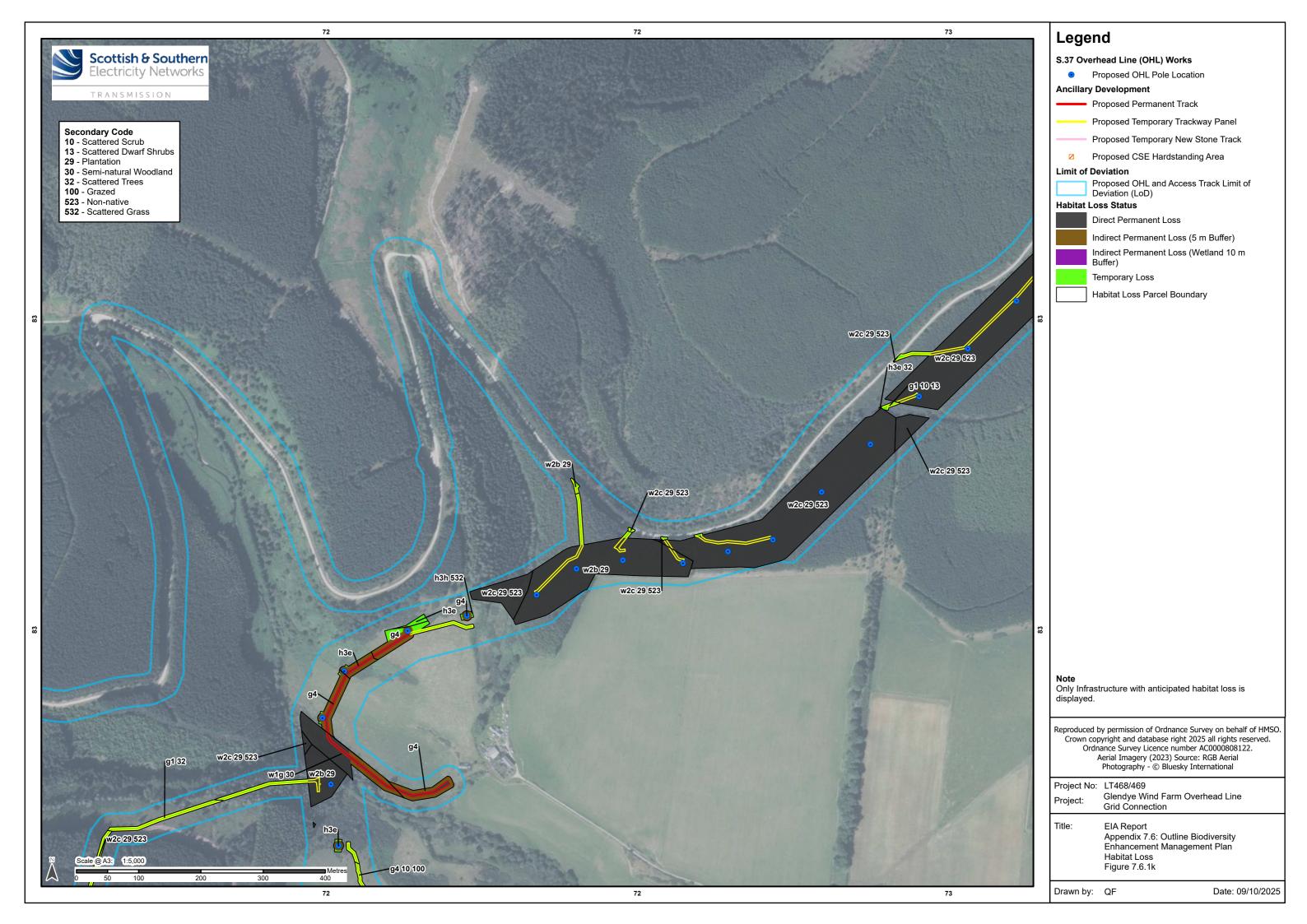


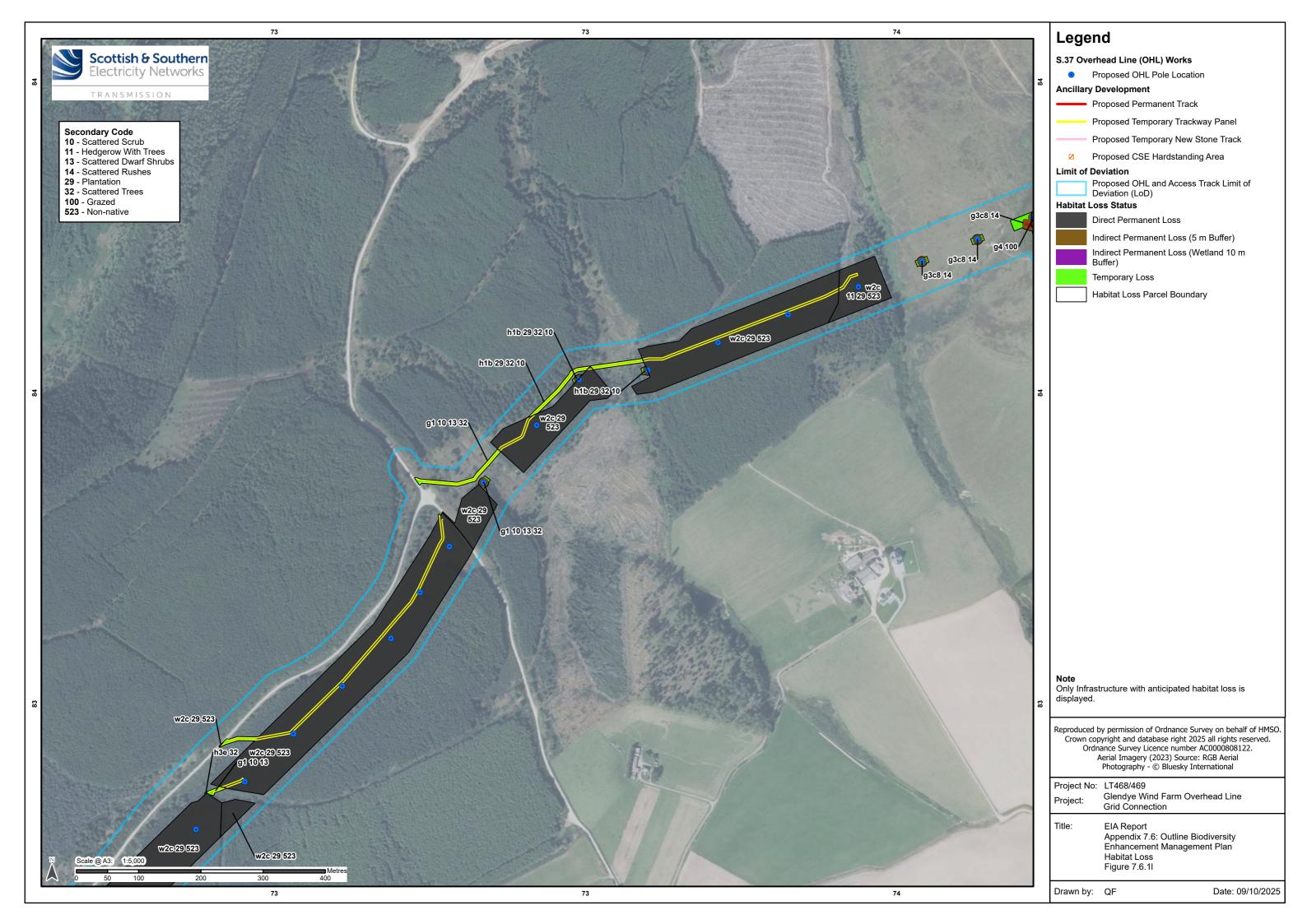


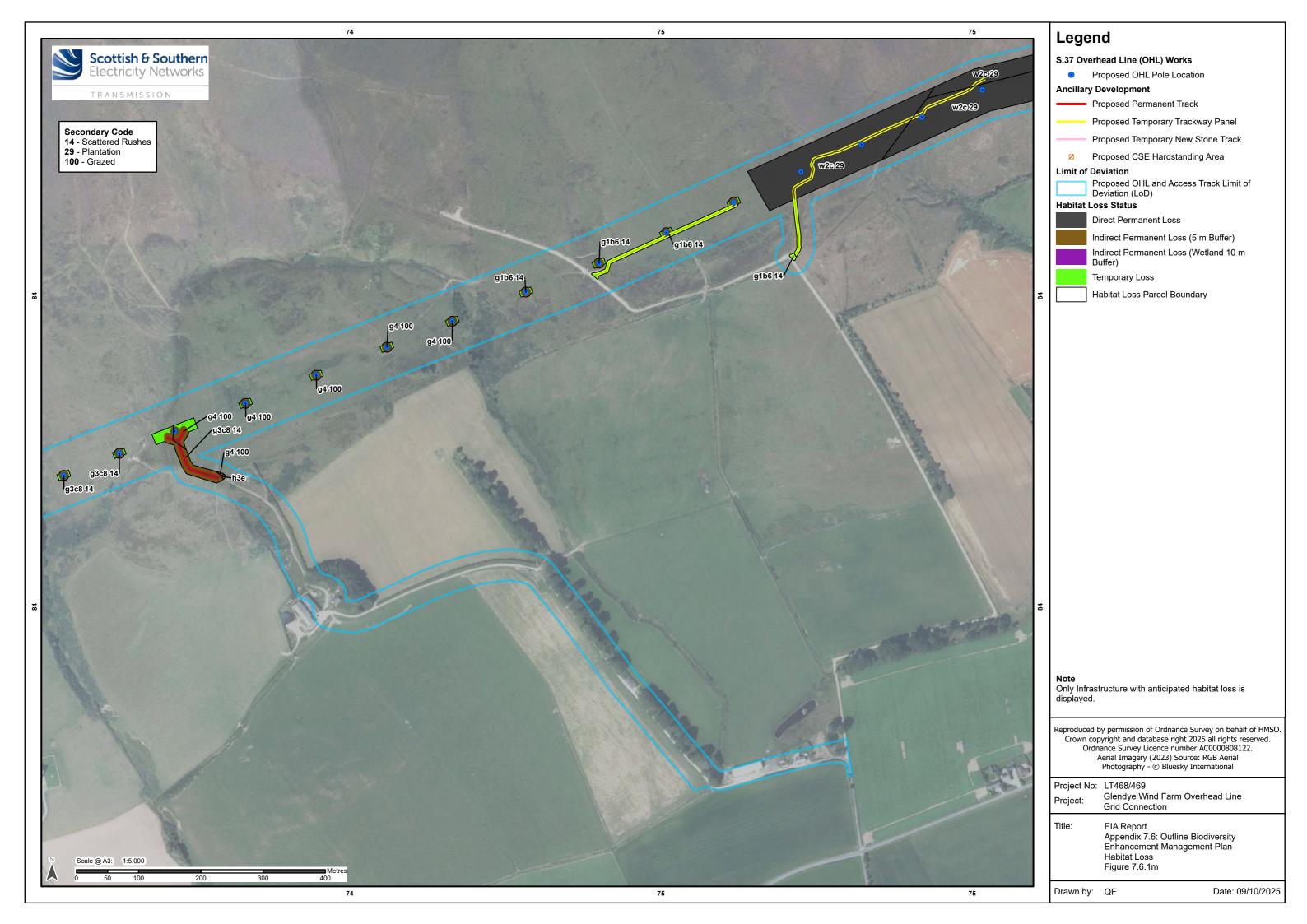




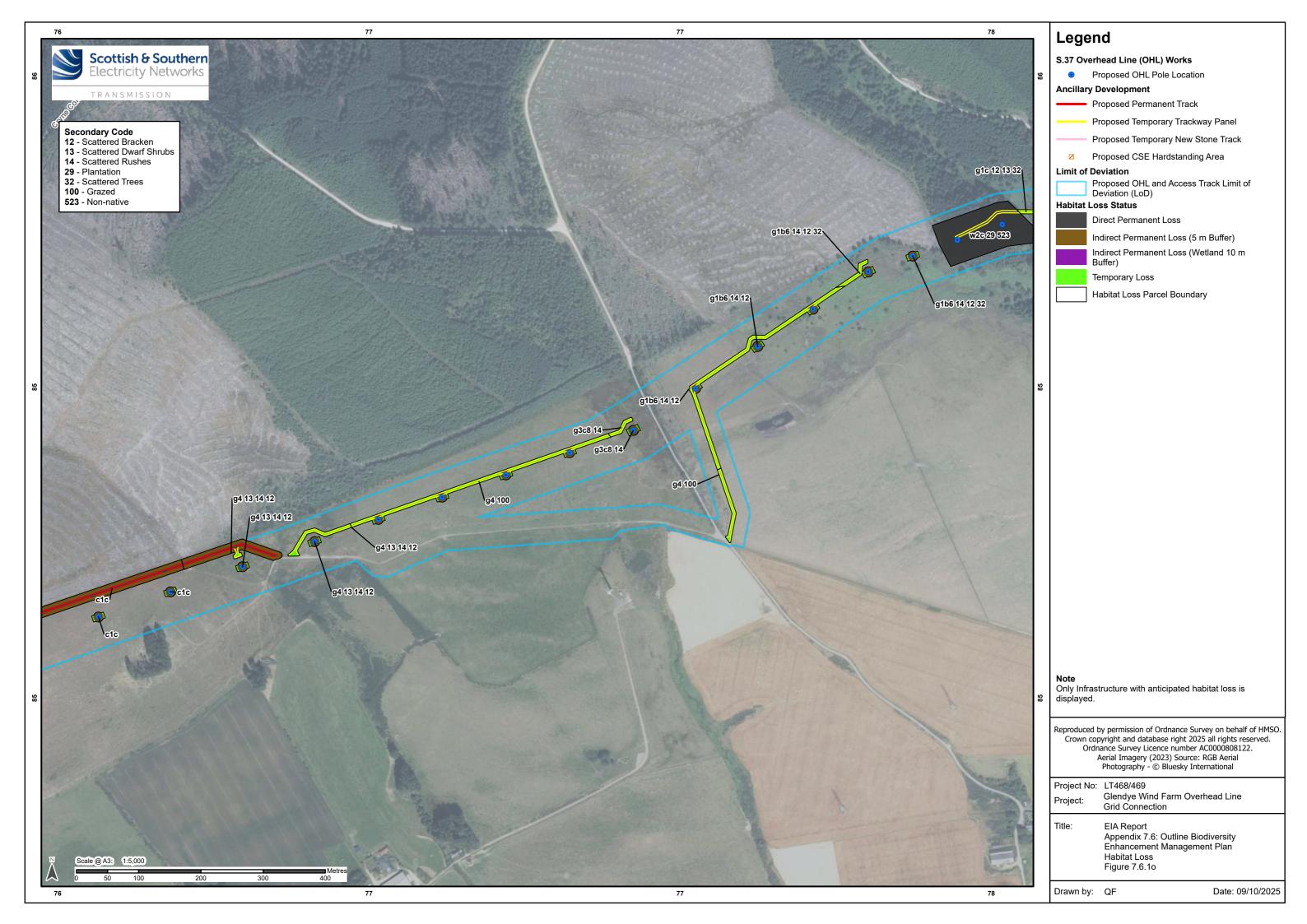




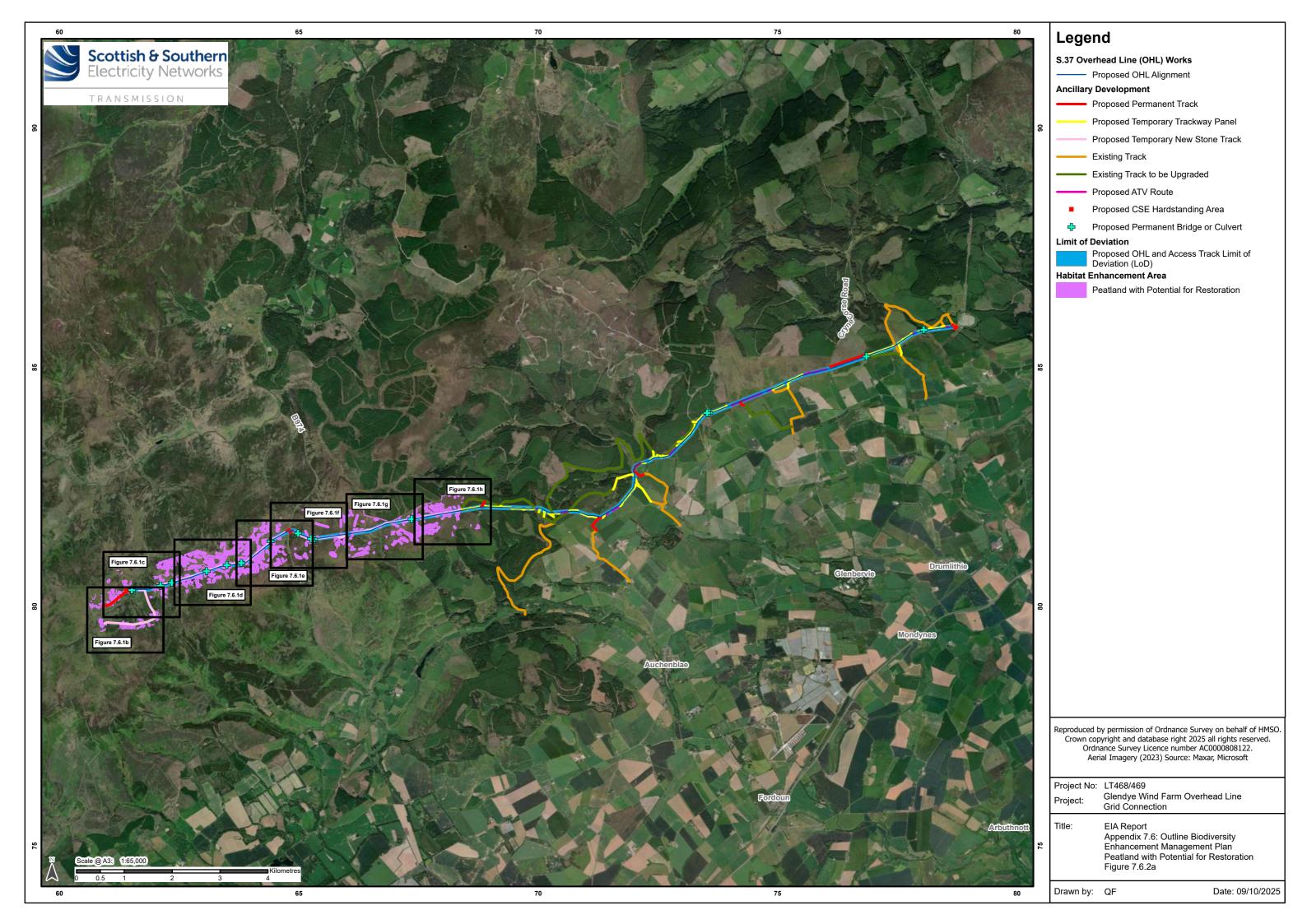


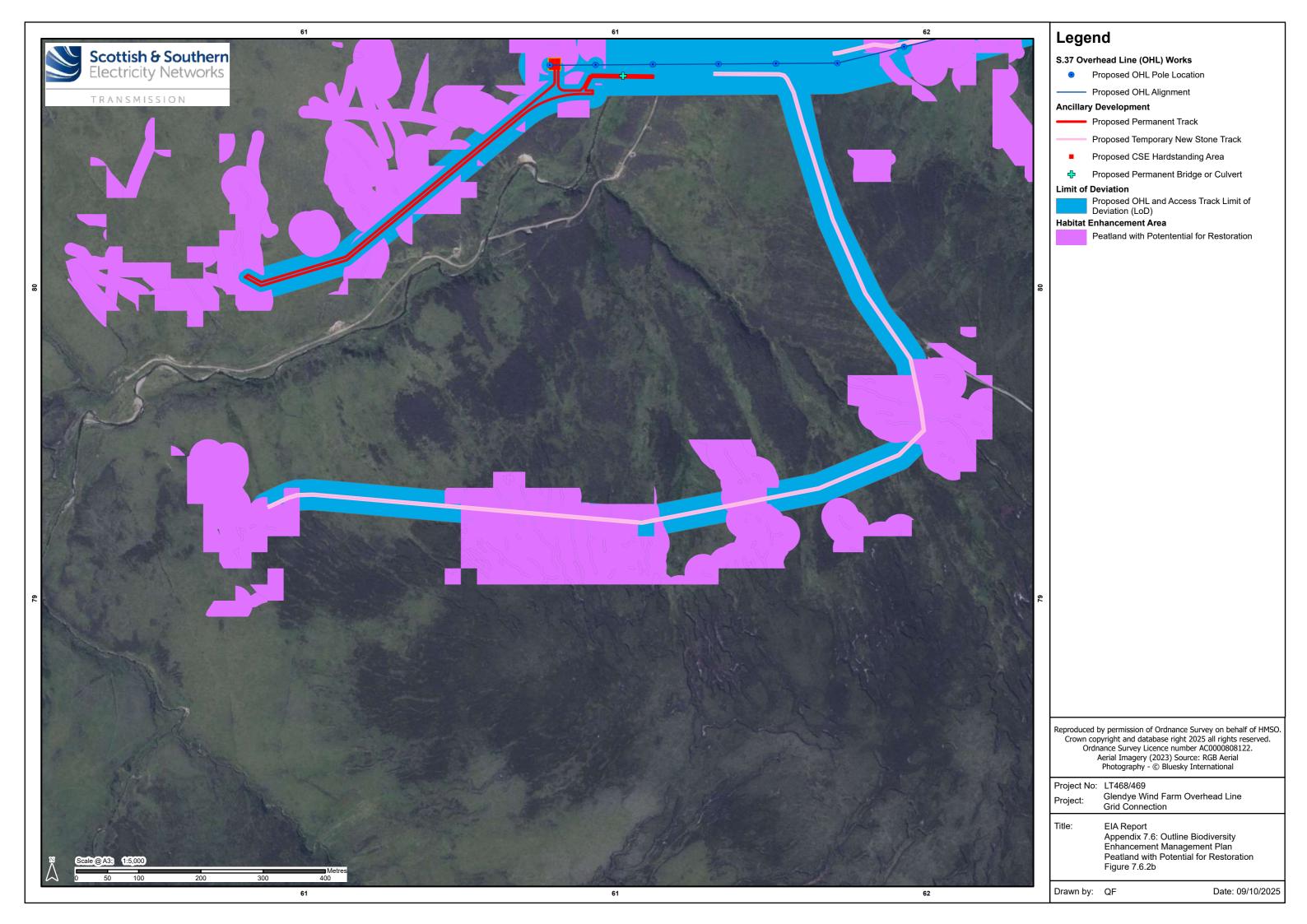


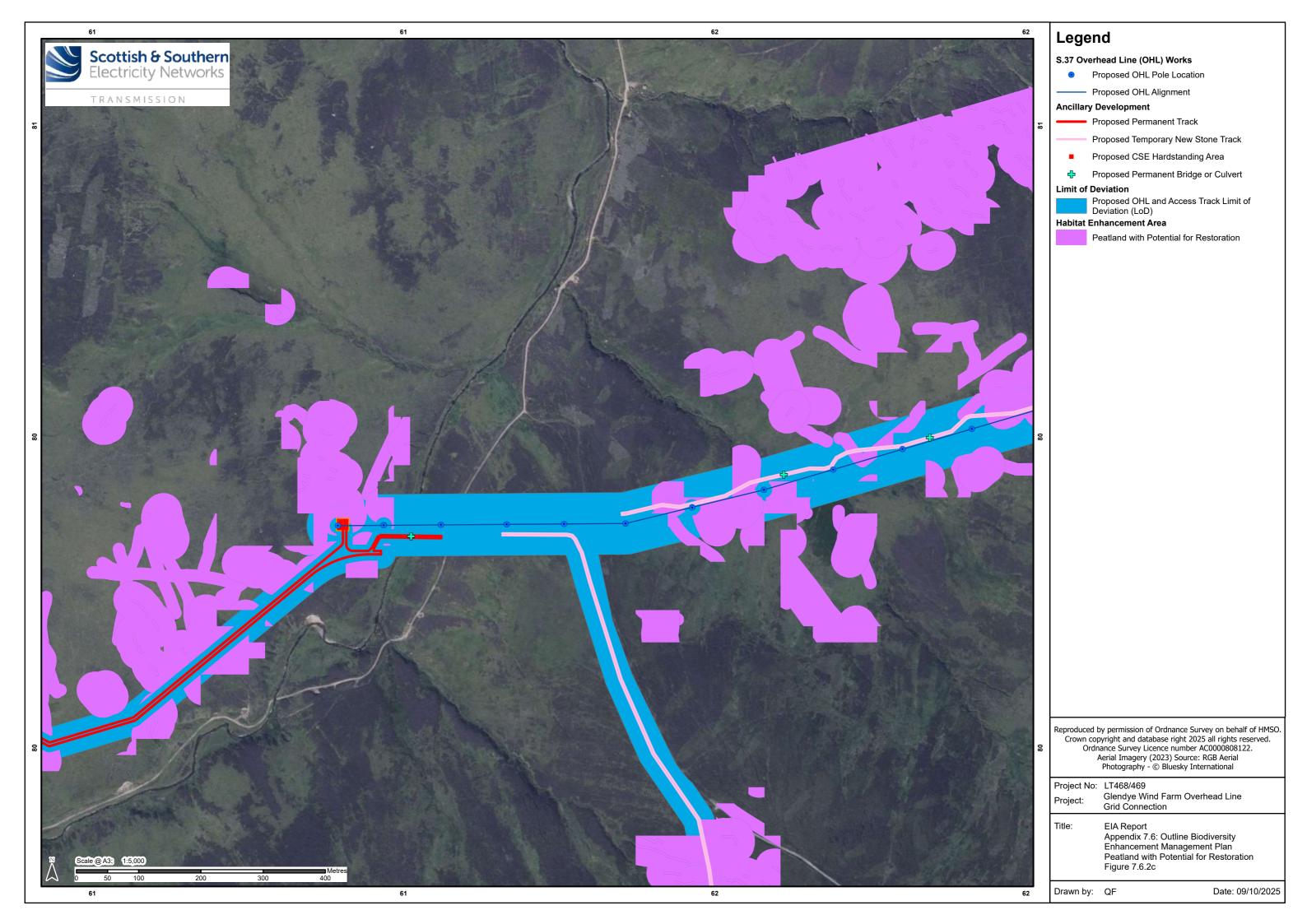


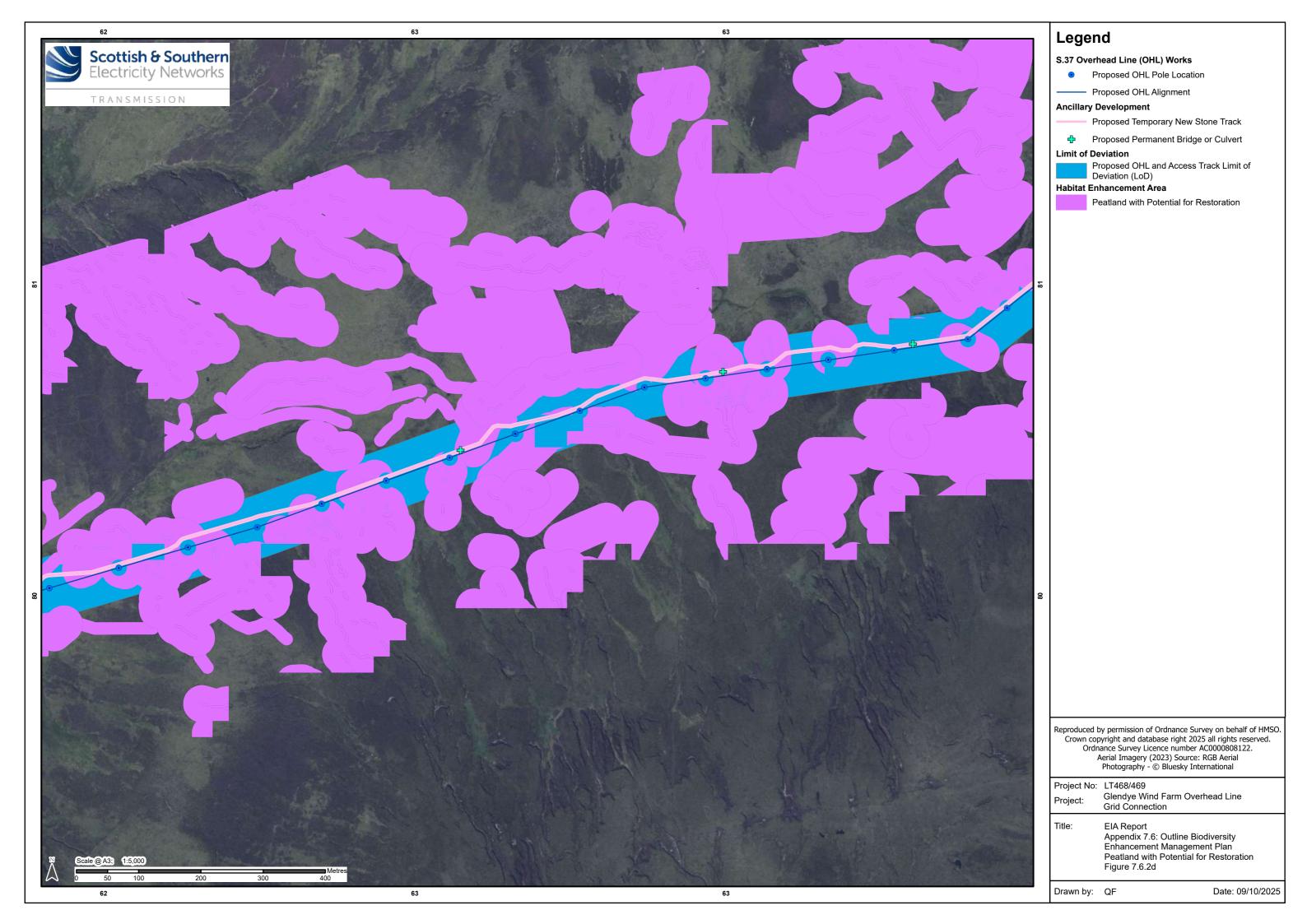


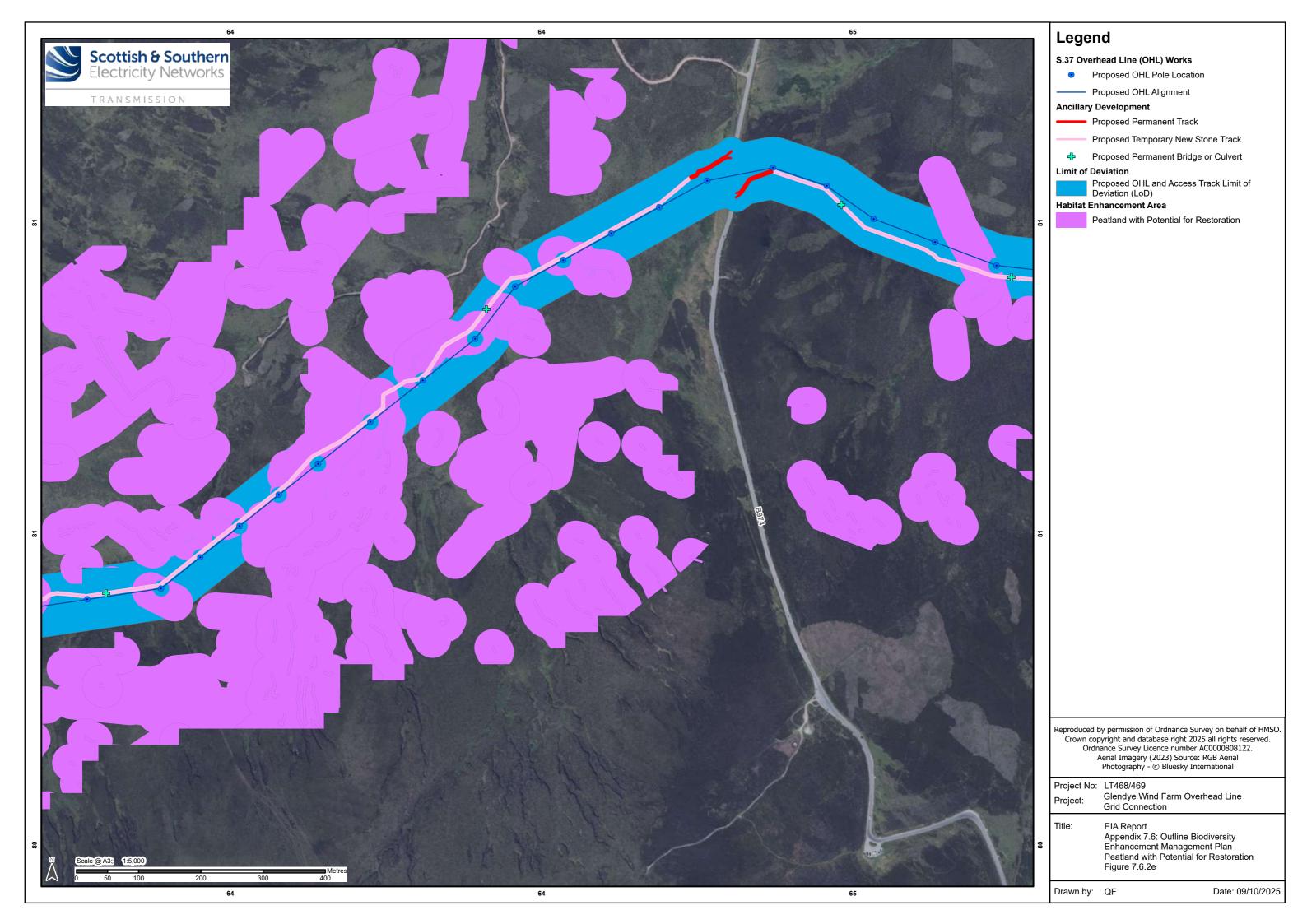


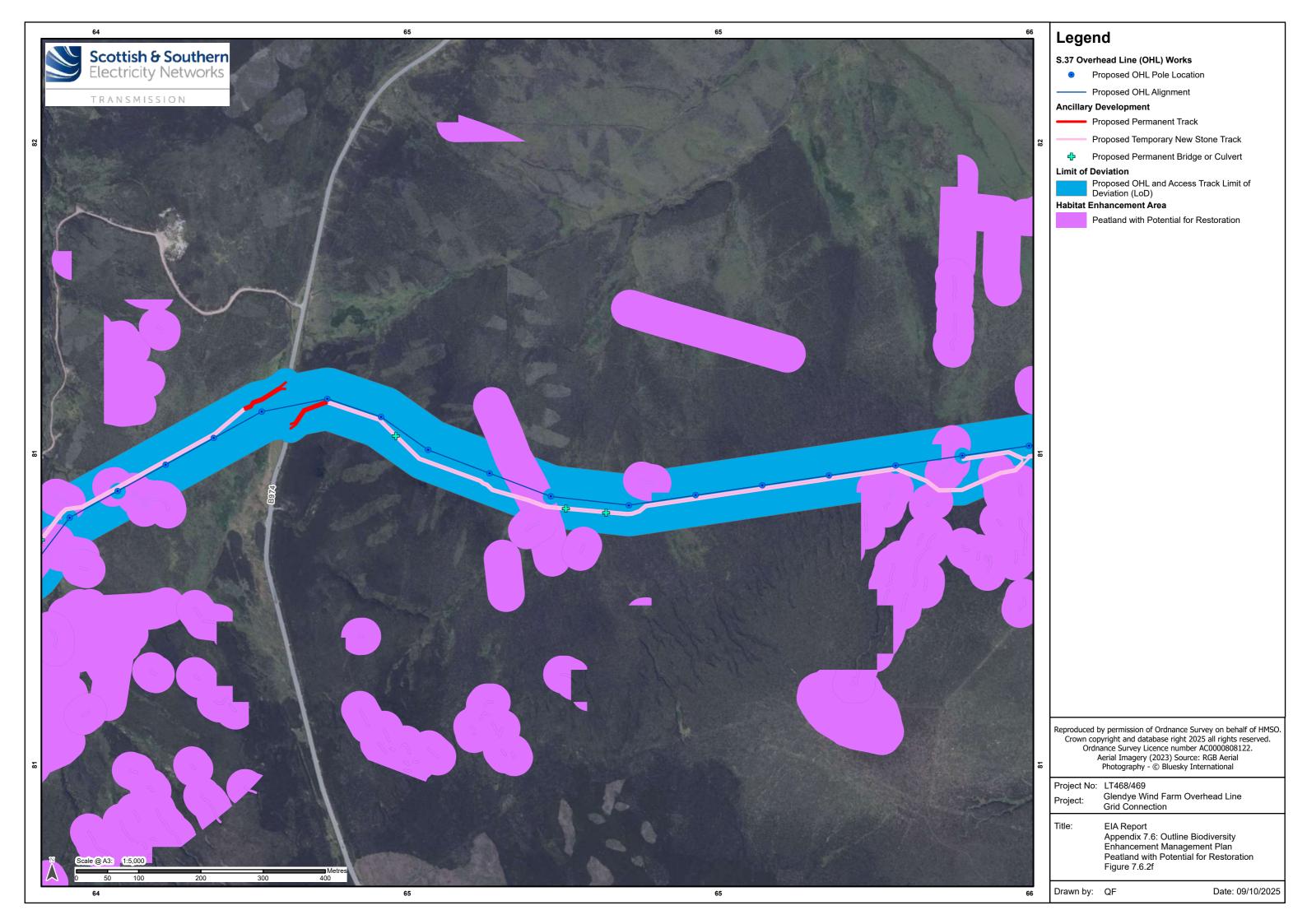


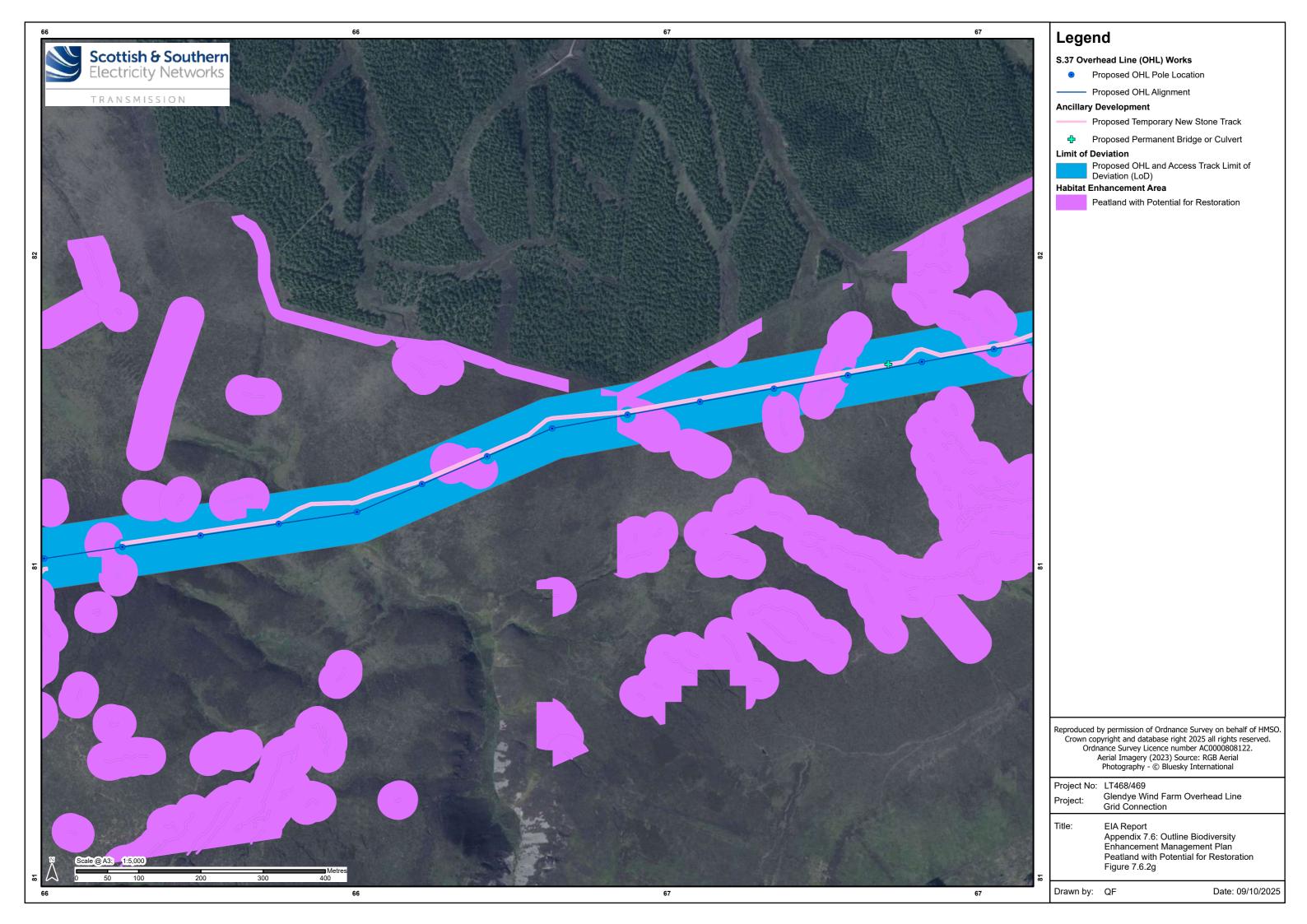


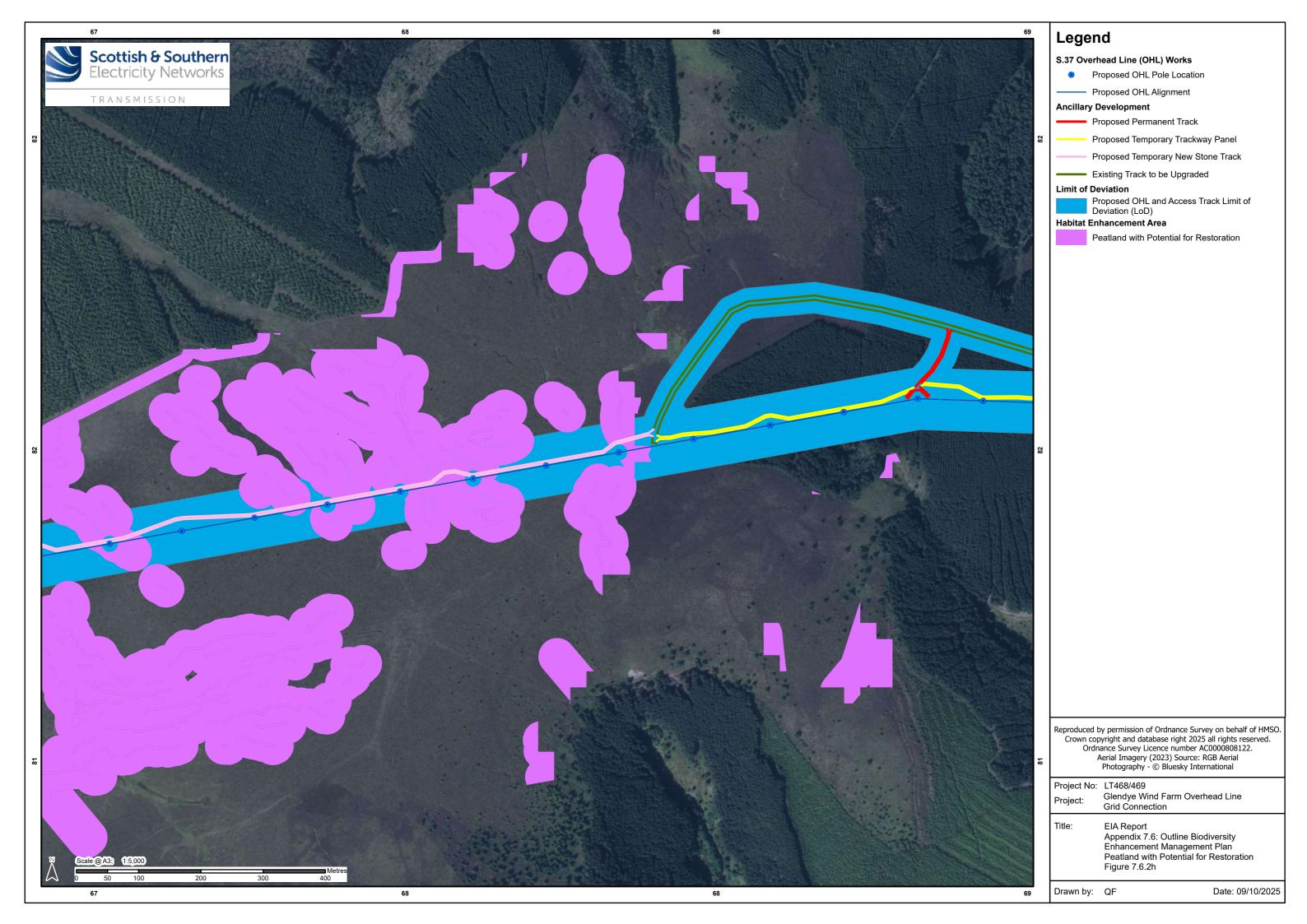














Biodiversity Project Toolkit



Project title	Glendye WF OHL Grid Connection									
Project lead	KWB									
Project reference number										
Toolkit lead	MT									
Toolkit approver	AH									
Habitat classification system	UKHab	Site type	Development site							
Date toolkit completed or updated	4 September 2025	Type of project	Linear							
Location start (grid reference)		Location end (grid reference)								

Brief description of works

Scottish and Southern Electricity Networks Transmission (SSEN Transmission), commissioned SLR Consulting Ltd. (SLR) to undertake a Biodiversity Net Gain (BNG) assessment for Glendye Wind Farm Overhead Line Grid Connection.



Biodiversity Project Toolkit



Biodiversity Unit Calculation

Calculate biodiversity and linear (hedeerow (H) and watercourses (WI) units of your site by: (1) establishing the habitat: (2) identifying the condition, connectivity and strategic significance of that habitat: and: (3) entering the hectares (ha) or linear metres (m).

			В	efore works (Baseline)									Action (During Work	is)							After work action						P	ost developmer	t		Net change	
Calculation Units		Area or Lengt of Habitat	h Distinctivene	ss Condition	Connectivit	Strategic significance		Units		Area or I	ength of Habitat	Biodive	rsity Units	Linear Units (H)	Linea	ar Units (W)	After work		Area or Le	Length Distinctivens	_		Strategic significance		Time to target condition		Po	st development ur	its	h	let change in units	
Ref (Area / Linear (H/W))	UK Habitats		Band	Rating	Rating	Rating	Biodiversi (Area)	Linear (H)	Linear (1	W) Retained	Removed	l Retained	Removed	Retained Remo	ved Retained	d Removed	action	UK Habitats		im) Band				Difficulty	(Years)	Spatial	Biodiversity (Area)	Linear (H)	Linear (W)	Biodiversity (Area)	Linear (H) Linear (W)	Notes
Project Total								0.00	0.00					0.00 0.0	0.00	0.00	Project To											0.00	0.00	-25.73	0.00 0.00	
1 UKHab_Area	Cropland - Cereal Crops	1.38	Low	N/A - Agriculture	e Low	Low	2.76 TBC		TBC	0.00	_		2.76 TBC	TBC TBC	- TBC	TBC	Creation	Cropland - Cereal Crops Urban - Artificial unwegetated, unsealer		7 Low	N/A - Agriculture	Low	Low	Low	4		0.29	-	-	-2.47		
3 UKHab_Area	Wetland - Upland flushes, fens and swamps	0.62		Good	Moderate		14.12	-	-	0.00	0.62	0.00	14.12		-	-	Creation	Wetland - Upland flushes, fens and sws	-	_		Moderate	High	High	12		0.69	-	-	-13.43		Strategic Significance Plating Justification - SRL Habitat
4 UKHab_Area 5 UKHab_Area	Grassland - Upland acid grassland Grassland - Bracken	1.35		Moderate N/A - Agriculture	Moderate e Low		19.60	_		0.00		0.00	19.60		-	-	Creation	Grassland - Upland acid grassland Grassland - Bracken	1.15			Moderate Low	Medium	Medium	10 5		7.83	-	•	-11.77 -0.07		
6 UKHab_Area	Grassland - Other neutral grassland	0.39	_	Poor	Moderate		2.57	_		0.00	_	0.00					Creation	Grassland - Other neutral grassland	0.12	_	Moderate	Moderate	Low	tow	7		1.23	-	-	-1.34		
7 UKHab_Area	Grassland - Modified grassland	3.92 nd 2.97	_	Poor	Low	Low	7.84		-	0.00	3.92		7.84		-	-	Creation	Grassland - Modified grassland	1.89	_	Poor	Low	Low	Low	4		3.28	-	-	4.56		baseline updated Strategic Significance Ruting Autilification - 560 Habitat
9 UKHab_Area	Heathland and shrub - Upland Heathland Heathland and shrub - Gorse scrub	0.18	_	Moderate Poor	Moderate Low	High Medium	45.08 0.40			0.00		0.00	45.08		-	-	Creation	Heathland and shrub - Upland Heathlan Heathland and shrub - Gorse scrub	nd 1.58 0.06		Poor	Moderate Low	High Medium	Medium	30 5		5.62 0.11	-	-	-39.46 -0.29		STREEBE SAMMERON MIND ADMINISTRATION - SHE FRANKE
10 UKHab_Area	Woodland and forest - Other woodland; broadleaved Woodland and forest - Other Scot's Pine	0.55	-	Poor	Low	Medium	2.42	_		0.00		0.00				-	Creation	Heathland and shrub - Upland Heathlan		_	Poor	Moderate	High	Medium	30		1.10	-	-	-1.32		Assumes areas felled within the operational corridor with reinstate to heathland; Strategic Significance Rating Justification - Policy 6 of NPF4 (fic
11 UKHab_Area 12 UKHab_Area	woodland and forest - Other Scot s Pine woodland Woodland and forest - Other coniferous woodland	2.28	_	Poor	Low	Medium	10.03 92.93		-	0.00	_	0.00	10.03 92.93			-	Creation	Heathland and shrub - Upland Heathlan Heathland and shrub - Upland Heathlan	_	_	Poor	Moderate Moderate	High	Medium	30		7.76	-	-	-2.27 51.24		Assumes areas felled within the operational corridor with reinstate to heathland; Strategic Significance Rating Justification - Policy 6 of NPF4 (from Assumes areas felled within the operational corridor with reinstate to heathland; Strategic Significance Rating Justification - Policy 6 of NPF4 (from Assumes areas felled within the operational corridor with reinstate to heathland; Strategic Significance Rating Justification - Policy 6 of NPF4 (from Assumes areas felled within the operational corridor with reinstate to heathland; Strategic Significance Rating Justification - Policy 6 of NPF4 (from Assumes areas felled within the operational corridor with reinstate to heathland; Strategic Significance Rating Justification - Policy 6 of NPF4 (from Assumes areas felled within the operational corridor with reinstate to heathland; Strategic Significance Rating Justification - Policy 6 of NPF4 (from Assumes areas felled within the operational corridor with reinstate to heathland; Strategic Significance Rating Justification - Policy 6 of NPF4 (from Assumes areas felled within the operational corridor with reinstate to heathland; Strategic Significance Rating Justification - Policy 6 of NPF4 (from Assumes areas felled within the operational corridor with reinstate to heathland; Strategic Significance Rating Justification - Policy 6 of NPF4 (from Assumes areas felled within the operational corridor with reinstate to heathland; Strategic Significance Rating Justification - Policy 6 of NPF4 (from Assumes areas felled within the operational corridor with reinstate to heathland; Strategic Significance Rating Justification - Policy 6 of NPF4 (from Assumes areas felled within the operational corridor within the operational corridor within the operational corridor within the operational correction of the operation of the opera
13 UKHab_Area	Urban - Artificial unvegetated, unsealed surface	0.00	Very Law	N/A - No biodivers value	uity Low	Low	0.00		-	0.00		0.00	0.00		-	-	Creation	Urban - Developed land; sealed surface	7.51	1 Very Low	N/A - No biodiversit value	by Low	Low	Low	0		0.00	-	-	0.00		
14							TBC TBC		TBC		TBC	TBC	TBC	TBC TBC								+					TBC	TBC	TBC	TBC	TBC TBC	
16							TBC		TBC		_	TBC		TBC TBC													TBC	TBC	TBC	TBC	TBC TBC	
17							TBC TBC		TBC TBC		_	TBC TBC		TBC TBC			-		_								TBC	TBC	TBC TBC	TBC	TBC TBC	
19							TBC	_	TBC			TBC		TBC TBC		_											TBC	TBC	TBC	TBC	TBC TBC	
20							TBC							TBC TBC													TBC	TBC	TBC	TBC	TBC TBC	
22							TBC TBC	TBC	TBC		TBC TBC	TBC	_	TBC TBC													TBC	TBC	TBC	TBC	TBC TBC	
23							TBC	TBC	TBC		TBC	TBC	TBC	TBC TBC	TBC	TBC											TBC	TBC	TBC	TBC	TBC TBC	
25							TBC TBC		TBC TBC			TBC		TBC TBC													TBC TBC	TBC TBC	TBC TBC	TBC	TBC TBC	
26							TBC	_	TBC		TBC	TBC	TBC	TBC TBC	твс	TBC											TBC	TBC	TBC	TBC	TBC TBC	
27							TBC	_	TBC					TBC TBC		_											TBC	TBC	TBC	TBC	TBC TBC	
29							TBC		TBC	_		TBC		TBC TBC													TBC	TBC	TBC	TBC TBC	TBC TBC	
30							ТВС	TBC	TBC		TBC	_		TBC TBC		_											TBC	TBC	TBC	TBC	TBC TBC	
31 32							TBC TBC	TBC	TBC		TBC TBC	TBC	TBC	TBC TBC													TBC TBC	TBC	TBC	TBC TBC	TBC TBC	
33							TBC		TBC			TBC	TBC	TBC TBC	твс	TBC											TBC	TBC	TBC	TBC	TBC TBC	
34							TBC TBC	TBC TBC	TBC TBC			TBC	_	TBC TBC		_	-										TBC TBC	TBC TBC	TBC	TBC	TBC TBC	
36							TBC	_	TBC			TBC	_	TBC TBC	_	_											TBC	TBC	TBC	TBC	TBC TBC	
57							TBC	TBC	TBC		_	TBC		TBC TBC													TBC	TBC	TBC	TBC	TBC TBC	
32							TBC TBC	TBC TBC	TBC		TBC	_	TBC	TBC TBC	_	_	-					+					TBC	TBC	TBC TBC	TBC	TBC TBC	
40							TBC	ТВС	TBC		TBC			TBC TBC													TBC	TBC	TBC	TBC	TBC TBC	
41 42							TBC TBC		TBC		TBC	TBC	TBC	TBC TBC	TBC TBC		-		+			+					TBC TBC	TBC	TBC	TBC	TBC TBC	
43							TBC	TBC	TBC			TBC		TBC TBC													TBC	TBC	TBC	TBC	TBC TBC	
45							TBC TBC	TBC	TBC TBC			TBC	_	TBC TBC	_	_						-					TBC	TBC	TBC TBC	TBC	TBC TBC	
46							TBC	TBC	TBC			TBC			TBC	_											TBC	TBC	TBC	TBC	TBC TBC	
47							TBC		TBC	_	_	TBC	_	TBC TBC													TBC	TBC	TBC	TBC	TBC TBC	
49							TBC TBC	TBC	TBC		TBC TBC		TBC	TBC TBC		_	-										TBC	TBC	TBC	TBC TBC	TBC TBC	
50							ТВС	_	TBC		TBC			TBC TBC													TBC	TBC	TBC	TBC	TBC TBC	
52							TBC TBC		TBC		_	TBC		TBC TBC			-		+			+					TBC	TBC	TBC	TBC	TBC TBC	
53							TBC	TBC	TBC		TBC			TBC TBC													TBC	TBC	TBC	TBC	TBC TBC	
55							TBC TBC	_	_					TBC TBC			-					+					TBC TBC	TBC	TBC TBC	TBC		
56							TBC	TBC	TBC		TBC	TBC	TBC	TBC TBC	TBC	TBC											TBC	TBC	TBC	TBC	TBC TBC	
57							TBC					TBC		TBC TBC													TBC	TBC	TBC	TBC	TBC TBC	
59							TBC	TBC	TBC		TBC	TBC	TBC	TBC TBC	TBC	TBC											TBC		TBC	TBC TBC		
60											TBC	TBC	TBC	TBC TBC	TBC	TBC											TOC	TOC	TBC		TBC TBC	
62							TBC	TBC TBC TBC	TBC		TBC	TBC	TBC	TBC TBC	TBC	TBC											TBC	TBC TBC	TBC TBC	TBC	TBC TBC	
63							ТВС	TBC	TBC		TRC	TRC	TRC	TRC TRC	TRC	TRC											TBC TBC	TBC	TBC TBC	TBC TBC		
64							TBC TBC	TBC	TBC					TBC TBC													TBC TBC	TBC TBC	TBC TBC			
66							TBC	TBC	TBC		TBC	TBC	TBC	твс твс	твс	TBC											TBC	TBC	TBC	TBC	твс твс	
67							TBC	TBC TBC	TBC					TBC TBC													TBC TBC	TBC	TBC TBC	TBC TBC	TBC TBC	
69											TBC	TBC	TBC	TBC TBC	TBC	TBC												TBC	TBC	TBC	TBC TBC	
70							TBC				TBC	TBC	TBC	TBC TBC	TBC	TBC											TBC TBC	TBC	TBC	TBC	TBC TBC	
72							TBC				TRC	TRC	TBC	TRC TRC	TRC	TRC											TBC TBC	TBC	TBC	TBC	TBC TBC	
73							TBC	TBC	TBC		TBC	TBC	TBC	твс твс	твс	TBC											TBC	TBC	TBC TBC TBC	TBC	TBC	
75							TBC TBC	IBC			TBC	TBC	TBC	TBC TBC	TBC	TBC											TBC TBC	TBC TBC	TBC	TBC		
76							TBC	TBC	TBC		TBC	TBC	TBC	TBC TBC	TBC	TBC											TOC		TBC	TBC	TBC TBC	
77							TBC	TBC	TBC		TBC	TBC	TBC	TBC TBC	TBC	TBC											TBC TBC	TBC	TBC TBC	TBC		
79							TBC	TBC	TBC		TBC	TBC	TBC	TBC TBC	TBC	TBC											TBC	TBC	TBC	TBC	TBC TBC TBC TBC TBC TBC	
80							ТВС	TBC TBC	TBC		TBC	TBC	TBC	TBC TBC	TBC	TBC											TBC	TBC	TBC TBC	TBC	TBC TBC	
82							TBC TBC	TBC	TBC		TBC	TBC	TBC	TBC TBC	TBC	TBC											TBC TBC	TBC	TBC	TBC TBC	TBC TBC	
83							TBC	TBC	TBC		TBC	TBC	TBC	TBC TBC	TBC	TBC											TBC	TBC	TBC	TBC	TBC TBC	
85							TBC TBC	TBC TBC	TBC TBC		TBC	TBC	TBC	TBC TBC	TBC	TBC											TBC TBC	TBC TBC	TBC TBC	TBC TBC	TBC TBC	
86							TBC	TBC	TBC		TBC	TBC	TBC	TBC TBC	TBC	TBC											TBC	TBC	TBC	TBC	TBC TBC	
87							TBC	TBC	TBC		TBC	TBC	TBC	TBC TBC	TBC	TBC											TBC	TBC TBC	TBC		TBC TBC	
85							TBC	TBC	TBC		TBC	TBC	TBC	TBC TBC	TBC	TBC											TBC	TÉC	TBC	TÉC	TBC TBC	

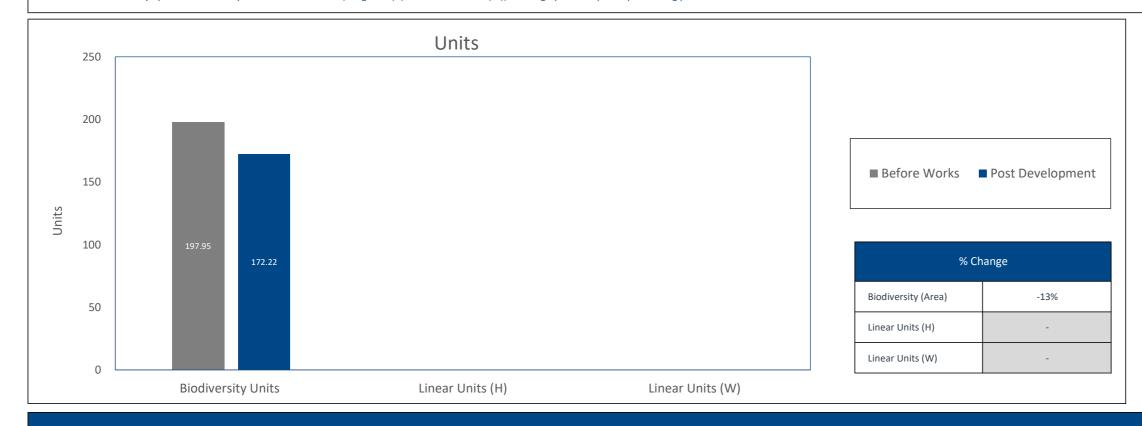


Biodiversity Project Toolkit



Summary outputs

Review the automatically updated biodiversity unit and linear habitat (hedgerow (H) and water courses (W)) results graphs to help the optioneering process and site selection.



Before Works	Units
Biodiversity (Area)	197.95
Linear Units (H)	0.00
Linear Units (W)	0.00

Post Development	Units
Biodiversity (Area)	172.22
Linear Units (H)	0.00
Linear Units (W)	0.00

Net Change	Units
Biodiversity (Area)	-25.73
Linear Units (H)	0.00
Linear Units (W)	0.00

