Scottish & Southern Electricity Networks

TRANSMISSION

Netherton Hub

Environmental Impact Assessment Report

Volume 4

Appendix 9.4 – Biodiversity Net Gain Assessment

September 2024

Scottish & Southern Electricity Networks
TRANSMISSION

CONTENTS

EXECUTIVE SUMMARY

Scottish and Southern Electricity Networks Transmission (hereafter referred to as 'SSEN Transmission'), operating under licence as Scottish Hydro Electric Transmission plc, is proposing the construction of a new strategic transmission hub (hereafter the 'Proposed Development'). This would be located on land (hereafter the 'Site') south of Flushing, Peterhead; National Grid Reference at centre NK 052 460.

This Biodiversity Net Gain (BNG) assessment has been prepared by WSP UK Ltd. on behalf of SSEN Transmission.

This report includes:

- A BNG assessment of the Proposed Development following the guidance outlined within SSEN Transmission's Biodiversity Net Gain Toolkit User Guide and the SSEN Transmission Assessment Methodology & Associated Guidance; and
- A qualitative assessment against the BNG Good Practice Principles.

Generally, the Site comprised modified grassland and cropland, with built features/developed land associated with Netherton Farm and Inverveddie Farm. Minor areas of broadleaved woodland were mapped by Inverveddie Farm and near Longleys. Species-poor, rush-dominated neutral grassland was recorded in low lying areas in the centre, southeast and west. The Burn of Faichfield (north) and Burn of Ludquharn (west), and ditches extend through the Site. Other linear habitat features that were recorded include hedgerows and lines of trees, as well as scrub along field boundaries.

A summary of the baseline and post development area-based Biodiversity Units (BU), Linear Hedgerow Units (LU-H) and Linear Watercourse Units (LU-W) for the Proposed Development are detailed in **Table 1** below with a summary of overall BU, LU-H and LU-W change. No irreplaceable habitats are present within the Site.

Table 1: Summary of Biodiversity Net Gain Assessment

Development	Area (ha)/ Length (km)	Units (BU)		
		Baseline Units	Post Development Units	Change in Units
Biodiversity Units (BU)	215.74	812.65	1097.85	+285.19 (+ 35 %)
Linear Units – Hedgerow (LU-H)	7.68	24.27	27.32	+ 3.05 (+ 13 %)
Linear Units – Watercourse (LU-W)	0.52	3.43	3.67	+ 5.32 (+ 7 %)
Only habitats affected have been included. Habitats anticipated to return to existing habitat type and condition within 2 years of the date of impact have been excluded from the toolkit and BNG assessment.				

The Proposed Development and associated Illustrative Landscape Masterplan **(Volume 3, Figure 8.5: Illustrative Landscape Masterplan)** demonstrate the Proposed Development would be able to achieve a significant enhancement to biodiversity on Site. The Applicant is committed to providing a 10% net gain and the BNG assessment of the Illustrative Landscape Masterplan demonstrates how this should be comfortably achieved, with the assessment predicting 35 % Net Gain (NG) in BU, a 13 % NG in LU-H and 7 % NG in LU-W.

1. INTRODUCTION

1.1 Background Information

1.1.1 This Biodiversity Net Gain (BNG) assessment has been prepared by WSP UK Limited (hereafter referred to as WSP) on behalf of Scottish Hydro Electric Transmission plc ("the Applicant") who, operating and known as Scottish and Southern Electricity Networks Transmission ("SSEN Transmission"), own, operate and develop the high voltage electricity transmission system in the north of Scotland and remote islands. This report describes the BNG assessment of the design of the proposed strategic transmission hub referred to and described as the Netherton Hub (hereafter known as the "Proposed Development").

1.1.2 The Proposed Development would be located in Aberdeenshire, approximately 7.5 kilometres (km) to the west of Peterhead, 1 km to the southeast of Longside, and adjacent to Flushing on the A950 road (National Grid Reference NK 052 460) and hereafter referred to as 'the Site'. The location of the Site is shown on **Volume 3, Figure 1.1: Location Plan** and the layout of the Proposed Development is shown on **Volume 3, Figure 3.1: Proposed Development**; both included in Volume 3 of the Environmental Impact Assessment (EIA) Report. For full details of the Proposed Development, please refer to **Volume 2, Chapter 3: Description of the Proposed Development** of the EIA Report. SSEN Transmission is seeking consent under the *Town and Country Planning (Scotland) Act 1997 (as amended)*[1], from Aberdeenshire Council for the Proposed Development which comprises the following:

- 400 kV Substation;
- 132 kV Substation;
- High Voltage Direct Current (HVDC) Switching Station;
- Spittal to Netherton HVDC Link Converter Station;
- Eastern HVDC Green Link 3 (EGL3) Converter Station;
- Operations Depot and Spares Buildings;

1.1.3 The Proposed Development would also include the following ancillary works: site clearance, temporary construction compounds and laydown areas, earthworks (including landscaping), permanent access from the public road network and relevant public road improvements, formation of internal access roads, underground cables connecting the components on the Site, drainage, permanent water supply, lighting, security fencing, biodiversity enhancement measures and the demolition of existing buildings within the Site.

1.2 Scope of Study

1.2.1 WSP was commissioned by SSEN Transmission to undertake a BNG assessment to quantify the biodiversity value of the Site and the predicted post-construction biodiversity value of the Site. Post-construction habitats are shown in **Volume 3, Figure 8.5: Illustrative Landscape Masterplan**. The BNG assessment was undertaken in line with *SSEN Transmission's Biodiversity Net Gain Toolkit User Guide*[2] (herein referred to as the SSEN Transmission Guidance). The BNG assessment also informs **Volume 2, Chapter 9: Ecology, Nature Conservation and Ornithology** of the EIA Report.

1 Town and Country Planning (Scotland Act) 1997. Available at: https://www.legislation.gov.uk/ukpga/1997/8/contents [Accessed: January 2024].

2 SSEN Transmission (2023). Biodiversity Net Gain Toolkit User Guide. SSEN Transmission, Perth.

1.2.2 The assessment was based upon the findings of a UK Habitat Classification ('UKHab') survey, which was undertaken in December 2022 to inform the Proposed Development's Stage 2: Detailed Site Selection and updated following a survey in January 2024, full details are provided in **Volume 4, Appendix 9.1 – Habitats Baseline** of the EIA Report. Habitat Condition Assessment (HCA) data were also gathered during the Site surveys. The biodiversity baseline value for the Proposed Development has been quantified using the *SSEN Transmission's Biodiversity Site Project Toolkit (V3.1*[3] (herein referred to as the "toolkit").

1.2.3 Recommendations have been provided in line with the Construction Industry Research and Information Association (CIRIA), Chartered Institute of Ecology and Environmental Management (CIEEM) and Institute of Environmental Management and Assessment (IEMA) *BNG Good Practice Principles*[4] (hereafter referred to as 'Good Practice Principles') and the published UK guidance[5].

1.3 Policy and Legislation

1.3.1 All councils have a duty under the *Nature Conservation (Scotland) Act 2004*[6] to further the conservation of biodiversity and to report back on their biodiversity targets.

1.3.2 The Planning (Scotland) Act 2019 requires the *National Planning Framework 4* (NPF4)[7] to protect biodiversity from development, reverse biodiversity loss, deliver positive effects from development and strengthen nature networks. Policy 3 of NPF4 states:

"*Development proposals for national or major development, or for development that requires 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 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*."

1.3.3 SSEN Transmission uses their BNG approach as a valid method to demonstrate positive effects for biodiversity via the new NPF4.

1.3.4 The *Aberdeenshire Local Development Plan 2023*[8] sets the requirement for biodiversity enhancements and compensation; see Policy P1.7 on Biodiversity:

"Measures require to be identified to enhance biodiversity in proportion to the opportunities available and the scale of the development opportunity. In very rare circumstances, when it is not practical to meet biodiversity net gain within a development site, we may require off-site contributions towards biodiversity enhancement within the settlement or near to the Site. These obligations may be controlled by conditions."

3 SSEN Transmission (2019). Biodiversity Toolkit V1.0. SSEN Transmission, Perth.

4 CIEEM, CIRIA, IEMA (2016). Biodiversity Net Gain – Good practice principles for development. Available: https://cieem.net/resource/biodiversity-net-gain-good-practice-principles-for-development/ [Accessed: January 2024]

5 CIEEM, CIRIA, IEMA (2019). Biodiversity Net Gain – Good practice principles for development. A Practical Guide. Available: http://cieem.net/resource/biodiversity-net-gain-good-practice-principles-for-development-a-practical-guide/ [Accessed: January 2024]

6 Scottish Government (2004). Nature Conservation (Scotland) Act 2004. Available at: https://www.legislation.gov.uk/asp/2004/6/contents [Accessed: January 2024]

7 National Planning Framework 4: Revised Draft. Available: https://www.gov.scot/binaries/content/documents/govscot/publications/advice-and-guidance/2022/11/national-planning-framework-4-revised-draft/documents/national-planning-framework-4-revised-draft/national-planning-framework-4-revised-draft/govscot%3Adocument/national-planning-framework-4-revised-draft.pdf [Accessed: January 2024]

8 Aberdeenshire Council (2023). Aberdeenshire Local Development Plan 2023. Available: https://online.aberdeenshire.gov.uk/ldpmedia/LDP2021/AberdeenshireLocalDevelopmentPlan2023IntroductionAndPolicies.pdf [Accessed January 2023]

1.4 SSEN Transmission's Biodiversity Ambition

1.4.1 SSEN Transmission is committed to protecting and enhancing the environment by minimising the potential impacts from their construction and operational activities. The Applicant is committed to deliver 10 % Net Gain, which adds onto their previous *Sustainability Strategy (2018)*[9] for new infrastructure projects, committing to:

- Ensure natural environment considerations are included in decision making at each stage of a project's development;
- Utilise the mitigation hierarchy to avoid impacts by consideration of biodiversity in project design;
- Positively contribute to the United Nations and Scottish Government biodiversity strategies by achieving an overall net gain on new infrastructure projects gaining consent;
- Work with their supply chain to gain the maximum benefit during asset replacement and upgrades;
- Avoid all impacts on irreplaceable habitats, wherever possible. Where there is an unavoidable impact SSEN Transmission commits to mitigate, restore more than what is lost, and enhance to support greater biodiversity growth in the long term; and
- No Net Loss (NNL) of woodland cover with tree loss only considered as a last resort. Where unavoidable, compensatory planting of native species mitigates any woodland loss to enhance local ecosystems and create a biodiversity net gain.

9 Delivering a smart, sustainable energy future: The Scottish Hydro Electric Transmission Sustainability Strategy (2018).

2. METHODOLOGY

2.1.1 A summary of the BNG assessment methodology and specific data sources, assessment limitations and assumptions are provided in this methodology section.

2.2 Desk Study

2.2.1 Freely downloadable datasets were searched for information on statutory and non-statutory designated sites within 2 km of the Site. The search results were restricted to those designated sites with qualifying ecological/ biological interest (i.e., not solely geological). Designated sites of interest are as follows:

- Local Nature Conservation Sites (LNCS);
- Local Nature Reserves (LNR);
- National Nature Reserves (NNR);
- Sites of Special Scientific Interest (SSSI);
- Special Areas of Conservation (SAC);
- Special Protection Areas (SPA), and
- Ramsar sites.

2.2.2 Qualifying features of the designated sites were obtained from the NatureScot Site Link[10]. Where measurements are presented in the findings, these provide the distance of the designated site from the closest point of the Proposed Development.

2.2.3 Publicly available Native Woodland Survey of Scotland[11] data and Ancient Woodland Inventory (AWI)[12] were reviewed to identify the presence of Ancient Woodland within 1 km of the Proposed Development. Also, 1st Edition maps (1843-1882) were reviewed on Past Map[13]. The Native Woodland Survey of Scotland[13] was further examined to acquire details on woodland habitat composition and connectivity.

2.2.4 Information from Aberdeenshire Council[14,15] was also obtained to assess the strategic significance scores, these have been assigned as follows, based on habitats identified of local importance:

- woodlands (including ancient and long established of plantation origin PAWS), lowland raised bogs, sand dunes, upland heathland, lochs, grasslands (except modified grassland), wetlands and hedgerows have high strategic significance;
- all habitats which are not formally identified but ecologically desirable such as scrub, have medium strategic significance; and
- habitats which are neither formally identified nor ecologically desirable such as urban, cropland, and modified grassland have low strategic significance.

10 NatureScot (online). Site Link. Available: https://sitelink.nature.scot/map [Accessed January 2024]
11 Scottish Forestry (2014). Native Woodland Survey of Scotland. Available: https://forestry.gov.scot/forests-environment/biodiversity/native-woodlands/native-woodland-survey-of-scotland-nwss [Accessed: July 2024].
12 Scottish Government (2024). Ancient Woodland Inventory (Scotland) Available: https://www.data.gov.uk/dataset/c2f57ed9-5601-4864-af5f-a6e73e977f54/ancient-woodland-inventory-scotland [Accessed: January 2024]
13 Past Map. 1st Edition maps (1843-1882). Available: https://pastmap.org.uk/map [Accessed: January 2024].
14 Aberdeenshire Council (online). Nature Conservation – Habitats. Available: https://www.aberdeenshire.gov.uk/environment/natural-heritage/biodiversity/ [accessed: June 2024].
15 Aberdeenshire Council (2023). Aberdeenshire Forestry and Woodland Strategy: Planning Advice PA2023-01. Available: http://publications.aberdeenshire.gov.uk/dataset/0ceb7c55-b43d-45c4-a311-798f4bc9fa75/resource/0dc09e1e-a83c-4bfb-bd10-72b7128dbd29/download/pa2023-01---planning-advice---aberdeenshire-forest-and-woodland-strategy-2021.pdf [Accessed: April 2024]

2.3 Field Survey

2.3.1 An initial UKHab and HCA survey of the Site was undertaken during the site selection stage between 6-9 December 2022 and updated between 11-12 January 2024. Surveys covered the full extent of the Site. All habitats were assigned UKHab Primary Habitats in line with *UKHab Classification User Manual (Version 1.1)*[16]. Full UKHab methodology and survey data are reported separately **Volume 4, Appendix 9.1 – Habitats Baseline**. HCA surveys were conducted following the system presented in *Natural England Biodiversity Metric V3.1*[17]. All habitat mapping was undertaken using Arc Map Version 10.8.1.

2.4 Biodiversity Calculations

2.4.1 The biodiversity values of the habitats were quantified in terms of area-based Biodiversity Units (BU), and Linear Units for hedgerows and lines of trees (LU-H) and watercourses (LU-W). The calculations were completed using the toolkit, following the methodology outlined in the *SSEN Transmission BNG Toolkit User Guide*[18] with data obtained through the desk-based review and UKHab and HCA survey to determine condition and strategic significance. The toolkit auto-populates habitat distinctiveness based on the *SSEN Transmission Guidance*.

2.4.2 Connectivity followed *2019 Natural England Guidance*[19] meaning all habitats of high distinctiveness were assumed to be of moderate connectivity; and all others assumed to be low. The methodology used for calculating strategic significance follows the *SSEN Transmission Guidance*.

2.4.3 Difficulty and Time to Target Condition (TTTC) values have been assigned as per the values given in *Metric 3.1*[20].

2.5 Irreplaceable Habitats

2.5.1 To aid understanding of the value of the irreplaceable habitats, where present these are quantified in terms of BU within a separate toolkit. Woodland listed on the AWI as categories 1a and 2a[21] and raised and blanket bog in moderate condition or above and ancient or veteran trees are classed as irreplaceable habitats[22]. In these situations, the *SSEN Transmission Guidance* dictates that any compensation offered to address impacts on irreplaceable habitats should be agreed directly with NatureScot or local authority Aberdeenshire Council.

2.6 Limitations and Assumptions

2.6.1 Field surveys were undertaken in December and January which is a sub-optimal time of year for botanical survey. However, based upon the desk study and field data collected, the experience of the surveyors, and the dominant land-use (e.g., modified grassland for grazing, cropland) it is considered that the data were robust and provided a sufficiently accurate reflection of the habitats present and their condition with respect to BNG. A precautionary approach was taken when assessing condition, whereby criteria would be passed if unknown due to seasonality and a pass would be plausible under the continued land-use practices.

16 UKHab Ltd. (2020). UK Habitat Classification, Version 1.1. Available: https://www.ukhab.org. [Accessed January 2024]
17 Natural England (2023). Biodiversity Metric 3.1 (JP039). Habitat Condition Assessment Sheets and Methodology. Available at: https://publications.naturalengland.org.uk/publication/5850908674228224 [Accessed June 2024]
18 SSEN Transmission (2022). Biodiversity Net Gain Toolkit User Guide. SSEN, Perth.
19 Biodiversity metric 2.0 User Guide - Beta Test Final (1).pdf. Available: https://publications.naturalengland.org.uk/publication/5850908674228224 [Accessed June 2024]
20 Natural England (2022). Biodiversity Metric 3.1 (JP039). Technical Supplement. Available at: Available: https://publications.naturalengland.org.uk/publication/5850908674228224 [Accessed June 2024]
21 SSEN Transmission (2023). Ancient Woodland - Approach to Assessment and Reporting.
22 SSEN does not consider woodland classed on the AWI as Long-Established Plantation Origin as irreplaceable habitat.

2.6.2 The following assumptions have been made for the baseline BU calculations for the Site.

- The BNG Assessment Boundary encompasses the main area of the Site and the indicative pipeline routes for drainage to the north and west. The pipeline routes may be subject to change at detailed design (within the limits of the Site boundary). The habitats across the land adjacent to the pipeline routes within the Site boundary would be comparable, such that there would unlikely be substantial changes in Biodiversity Units affected.
- Area calculations are based on areas being rounded to two decimal places before being entered into the biodiversity toolkit. Therefore, there may be a difference of 0.01 hectares (ha) between the Site area and total baseline habitat area based on rounding up or down of values. Additionally, areas smaller than 0.01 appear as 0.00 in the toolkit. The BU achieved from these small areas is negligible and therefore this does not affect the BNG calculations.
- Indicative programme development indicates that the construction period would be between five and eight years. TTTC for all habitats has been calculated by using the Metric 3.1 standard TTTC plus eight years as a worst-case scenario e.g., TTTC for other neutral grassland in moderate condition is five years, therefore final TTTC input into the toolkit as 13 years.
- Following reprofiling of the Site, the Proposed Development includes the reinstatement and naturalisation of a small watercourse in the northwest section. This individual watercourse has been included as part of the BNG assessment and assumed to be of medium distinctiveness following *SSEN Transmission Guidance* and planting/ naturalisation proposals as part of the Illustrative Landscape Masterplan **Volume 3, Figure 8.5: Illustrative Landscape Masterplan**. TTTC has been set at in accordance with the Metric 3.1
- All other minor watercourses and/ or drainage ditches have been excluded from BNG assessment at this stage as they will form part of a network of swales both above and below ground. SSEN Transmission Guidance and the toolkit includes swales as an area-based habitat and watercourses are included as a linear habitat. In order to include the remaining watercourses in the toolkit, the baseline watercourses would be incorporated in LU-W and the replacement swales would be included as BU. In terms of the toolkit, this would result in a large loss of LU-W and a gain in BU which does not accurately reflect the ecological and biodiversity changes within the Site and in order to avoid misrepresentation and artificial change in BU/LU-W, watercourses and swales have been removed from the BNG assessment at this stage.
- Outfalls are anticipated to be constructed on the Burn of Ludquaharn and Burn of Faichfield as part of the Proposed Development's drainage strategy. These design elements have not been included as part of the BNG assessment at this stage (outline design) because sufficient information on areas to be lost was unavailable. This would be assessed at the detailed design stage.
- Post-development habitats have been classified based on the various seed mixes and habitat descriptions identified as part of the Illustrative Landscape Masterplan **Volume 3, Figure 8.5: Illustrative Landscape Masterplan**:
  - Acid grassland of Scotia Seeds highland grassland mix[23] or similar has been classified as UKHab Primary Habitat 'other upland acid grassland' (g1b6).
  - The vegetation within the detention basins and wet grassland have been classified as UKHab Primary Habitat 'other neutral grassland' (g3c). These habitats will be allowed to naturally regenerate, and no seeding or planting is proposed.
  - Scrub has been classified as UKHab Primary Habitat 'mixed scrub' (h3h).

23 Scotia Seeds (online). Highland Grassland Mix. Available at: https://www.scotiaseeds.co.uk/shop/highland-grassland-mix/ [Accessed July 2024]

- Broadleaved woodland has been classified as UKHab Primary Habitat ‘other woodland; broadleaved’ (w1g).
- Mixed woodland has been classified as UKHab Primary Habitat ‘other woodland; mixed’ (w1h).
- Native wet riparian woodland has been classified as UKHab Primary Habitat ‘wet woodland’ (w1d).
- Native hedgerow with tree has been classified as UKHab Primary Habitat ‘hedgerow (priority habitat)’ (h2a) to match the existing baseline hedgerow UKHab Primary Habitat recorded during survey.

3. RESULTS AND DISCUSSION

3.1.1 The biodiversity baseline for the Proposed Development is presented below.

3.1.2 No irreplaceable habitats or designated sites were identified within the Site.

3.2 Temporary Impacts

3.2.1 Habitats subject to temporary loss would be reinstated to baseline habitat type and condition within two years from the date of impact and have been excluded from the BNG toolkit.

3.2.2 The Proposed Development includes the following temporary impacts on habitats.

- Construction methods of the proposed pipelines extending north and west of the Site as part of the drainage strategy would include cutting of vegetation to ground level and removal of turves for grassland habitats, for suitable storage locally. The proposed construction programme commits to the reinstatement of grass turves within two years of removal at these locations. Therefore, these works have been excluded from BNG assessment.
- The Proposed Development includes the construction of a deer fence line surrounding the Site and security fencing surrounding the primary infrastructure (See **Volume 3, Figure 8.6: Illustrative Landscape Masterplan**) which would result in no habitat loss and has been excluded from the BNG assessment.

3.3 Baseline Biodiversity Value

3.3.1 The Proposed Development is dominated by modified grassland (UKHab Primary Habitat g4) in both moderate and good condition, cereal and non-cereal cropland, including winter stubble (UKHab Primary Habitats c1c, c1c5 and c1d) of no biodiversity value, with smaller areas of other neutral grassland (UKHab Primary Habitat g3c) in moderate condition, *Holcus – Juncus* neutral grassland (UKHab Primary Habitat g3c8) in good condition, mixed and gorse scrub (UKHab Primary Habitat h3h and h3e) both in moderate condition, and other woodland; broadleaved habitat (UKHab Primary Habitat w1g) in moderate and poor condition. Further habitats recorded in small areas of the Site included various urban habitats (UKHab Primary Habitat u1) as shown in **Figure 9.4.1: Biodiversity Net Gain Baseline Habitats (Annex A)**.

3.3.2 The total BU baseline value for the Proposed Development is 812.65, which comprises 3.6 % high distinctiveness habitats, 0.4 % medium distinctiveness habitats and 96 % low and very low distinctiveness habitats within the toolkit.

3.3.3 The Proposed Development contains linear habitats in the form of native species-rich hedgerow (priority habitat) (UKHab classification h2a) in moderate and good condition and lines of trees (UKHab classification w1g6) in moderate and poor condition as shown in **Figure 9.4.1: Biodiversity Net Gain Baseline Habitats (Annex A)**.

3.3.4 The total LU-H baseline value for the Proposed Development is 24.27, all of medium distinctiveness within the toolkit. The total LU-W baseline value for the Proposed Development is 3.43 of medium distinctiveness within the toolkit.

3.3.5 The average BU per one hectare of habitat can range between 2 BU/ha (low biodiversity value) and 18 BU/ha (very high biodiversity value), as such the habitats present within the Proposed Development are of low biodiversity value (3.8 BU/ha).

3.4 Post Development Biodiversity Value

3.4.1 The Proposed Development post development area-based habitats would consist of urban developed habitats (UKHab Primary Habitat u1b, u1c, u1d, u1e) of no biodiversity value, cropland (UKHab Primary Habitat c1) of no biodiversity value, other upland acid grassland (UKHab Primary Habitat g1b6) in moderate condition, neutral grasslands (UKHab Primary Habitats g3c and g3c8) in moderate condition, other woodland; broadleaved habitat (UKHab Primary Habitat w1g) in moderate condition where retained or created, and in poor condition where reinstated[24], other woodland; mixed, (UKHab Primary Habitat w1h) in moderate condition, wet woodland (UKHab Primary Habitat w1d) in moderate condition, mixed scrub (UKHab Primary Habitats h3h) in moderate condition, modified grassland (UKHab Primary Habitat g4) in both moderate and good condition, as shown in **Figure 9.4.2: Biodiversity Net Gain Post Development Habitats (Annex A)**.

3.4.2 The total post development BU value for the Proposed Development would be 1097.85, which would comprise 55.6 % high distinctiveness habitats, 16.7 % medium distinctiveness habitats and 27.7 % low distinctiveness habitats within the toolkit.

3.4.3 The Proposed Development post development linear hedgerow habitats would consist of a combination of retained, reinstated and created hedgerows (UKHab Primary Habitat h2a) in moderate condition and retained and reinstated line of trees (UKHab Primary Habitat w1g6) in moderate condition. The total LU-H post development value for the Proposed Development would be 27.32.

3.4.4 The Proposed Development post development linear watercourse habitats would consist of a combination of retained and created watercourses (UKHab Primary Habitat r2b) (See limitations and assumptions **Section 2.6**) The recreated and naturalised watercourse is anticipated to be of high distinctiveness and moderate condition. The total LU-W post development value for the Proposed Development would be 8.76.

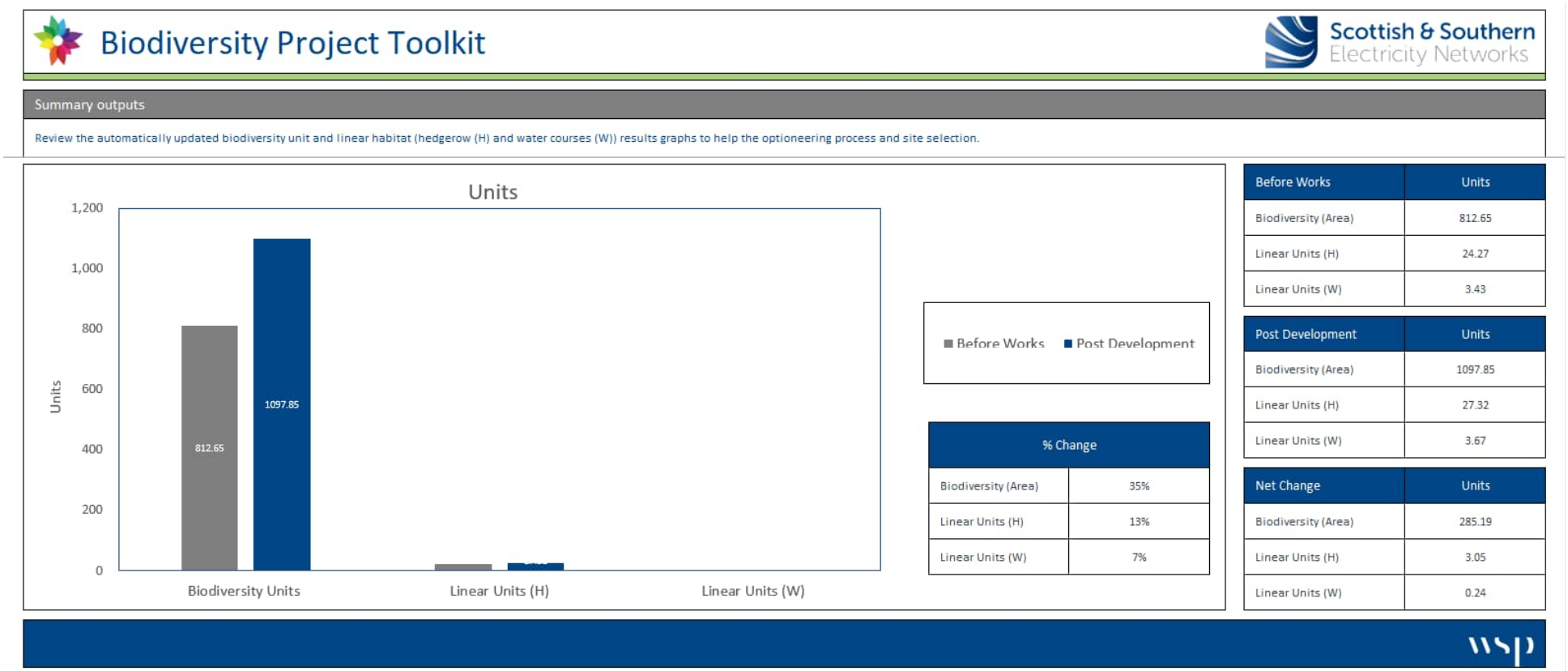
3.4.5 The average BU per one hectare of habitat can range between 2 BU/ha (low biodiversity) and 18 BU/ha (very high biodiversity), as such the post development habitats present within the Proposed Development would be of relatively low biodiversity value (5.1 BU/ha).

3.4.6 Based on this assessment, it is predicted that that the Proposed Development would comfortably achieve the Applicant's committed target of a 10% net gain and thus delivery of a significant biodiversity enhancement. The assessed Proposed Development and associated Illustrative Landscape Masterplan **(Volume 3, Figure 8.5: Illustrative Landscape Masterplan)** are predicted to achieve an increase of **285.19** BU (35 % Net Gain), **3.05** LU-H (13 % Net Gain) and **3.67** LU-W (7 % Net Gain).

3.4.7 **Plate 3.1** overleaf summarises the predicted changes in BU, LU-H and LU-W that would be anticipated from the Proposed Development.

24 Where baseline condition is poor.

Plate 3.1: Proposed Development Summary Dashboard



4. GOOD PRACTICE PRINCIPLES FOR BIODIVERSITY NET GAIN

4.1.1 **Table 4-1** sets out the review of the Proposed Development against the Good Practice Principles. This review has identified that five of the Good Practice Principles have been achieved and five are on-target to be achieved following construction and when the proposed habitat creation areas reach target habitat type and condition.

Table 4-1: Recommendations for Achieving Good Practice Principles

Principle	Outcomes	Progress
1. Apply the mitigation hierarchy	The mitigation hierarchy has been followed through the design development and EIA undertaken as part of the planning application.	Achieved
2. Avoid losing biodiversity that cannot be offset by gains elsewhere	No irreplaceable habitat would be lost as part of the Proposed Development. No designated Sites would be directly impacted within the Site.	Achieved
3. Be inclusive and equitable	Through the EIA process, discussions have been held with statutory bodies and stakeholders to explore and agree approaches for biodiversity.	Achieved
4. Address risks	The habitat reinstatement in the areas of temporary loss would follow recognised best practice techniques to minimise the risk of damage to the soils and aid recovering habitats. A Landscape and Habitat Management Plan (LHMP) would be produced for the Proposed Development, which would include details on monitoring requirement, to determine if the habitats are on track to reach their targeted condition. Should habitat reinstatement or enhancement be unsuccessful in any location, the LHMP would include a feedback loop, to ensure that active management is undertaken, and remedial measures are implemented.	On-target
5. Make a measurable NG contribution	The Proposed Development is predicted to comfortably achieve the Applicant's commitment to delivering a significant biodiversity enhancement of 10 % NG, with no additional off-site habitat creation or enhancement measures required.	On-target
6. Achieve the best outcomes for biodiversity	The Illustrative Landscape Masterplan **Volume 3, Figure 8.5: Illustrative Landscape Masterplan** sets out to create grassland, woodland and scrub habitats within the Site. An area of 29 ha of mixed woodland, 7 ha of broadleaved woodland and 1.5 ha of wet woodland would be created as part of the Illustrative Landscape Masterplan **Volume 3, Figure 8.5: Illustrative Landscape Masterplan** in addition to the creation of 1.2 ha of scrub, all of which would provide benefits to breeding and foraging birds, mammals, and invertebrates. Wet woodland is a priority habitat, listed within the Scottish Biodiversity List[25] and both wet and mixed woodland are priority habitats identified by the North East Scotland Biodiversity Partnership[26]. 100 ha of upland acid grassland, 18.3 ha of other neutral grassland and 1.4 ha of modified grassland will be created as shown on the Illustrative Landscape Masterplan **Volume 3, Figure**	On-target

25 Scottish Ministers (2012). Scottish Biodiversity List. Online at: https://www.nature.scot/doc/scottish-biodiversity-list.

26 NESBiP (online). Important Habitats for Biodiversity. [Online] Available at: https://www.nesbiodiversity.org.uk/biodiversity-information-for-developers/important-habitats-for-biodiversity-in-the-north-east-of-scotland/ [Accessed June 2024]

Principle	Outcomes	Progress
	8.5: Illustrative Landscape Masterplan and provide valuable habitat for pollinators and birds. These habitat restoration and creation measures are in line with local and national targets. Implementation of a LHMP and Construction Environmental Management Plan (CEMP) would ensure that proposed landscaping is successfully implemented.	
7. Be additional	The BNG Assessment of the Proposed Development demonstrates that additional positive outcomes would be achieved for biodiversity through exceeding the minimum requirement of a 10 % NG for area-based habitats. This is anticipated to be achieved through the creation of high distinctiveness grassland, high distinctiveness woodland and medium distinctiveness woodland. The BNG Assessment of the Proposed Development demonstrates a predicted overall 13 % NG of LU-H and 7 % NG in LU-W through the creation of medium distinctiveness hedgerows and a high distinctiveness non-priority watercourse.	On-target
8. Create a Net Gain Legacy	The habitat creation as part of the Proposed Development would provide long-term benefits by adaptive management planning and dedicated funding for long-term management. Additionally, biodiversity benefits would extend beyond the Site by providing suitable foraging, resting, breeding habitats for notable or protected species within the wider landscape and provides higher distinctiveness habitats than the baseline Site.	On-target
9. Optimise sustainability	BNG has been integrated from the start of the initial development design stages with input across multiple disciplines to optimise the sustainability of the final Proposed Development.	Achieved
10. Be transparent	SSEN Transmission is keen to ensure that approaches following on from this project are shared to ensure that any lessons learnt through BNG assessment, habitat enhancement/ creation and habitat management can be factored into future projects. Opportunities to share information on the Proposed Development and its approach will be sought.	Achieved

5. RECOMMENDATIONS AND CONCLUSIONS

5.1.1 The Site comprised agricultural modified grassland, cropland, other neutral grassland, scrub and other broadleaved woodland.

5.1.2 The biodiversity baseline value for the Proposed Development was 812.65 BU, 24.27 LU-H and 3.43 LU-W. Based on the assumptions made with respect to habitat reinstatement and the Illustrative Landscape Masterplan **Volume 3, Figure 8.5: Illustrative Landscape Masterplan**, the post construction BU value is predicted to be 1097.85 BU, 27.32 LU-H and 8.76 LU-W, a predicted increase of 285.19 BU, 3.05 LU-H and 4.16 LU-W. Overall this would equate to a predicted **35 % NG** in BU, **13 % NG** in LU-H and **7 % NG** in LU-W. This demonstrates that this 10% commitment should be comfortably achieved onsite following detailed design.

5.1.3 Taking the above into account it is considered that the Proposed Development would meet with the requirements of NPF4 Policy 3(b)(iv), as follows:

- *Provides significant biodiversity enhancements:* Based on this assessment of the Illustrative Landscape Masterplan, it can be confidently determined that the final design would achieve the Applicant's commitment to provide a 10 % net gain. This has been clearly evidenced through the anticipated 35 % gain for area-based habitats, 13 % gain for linear hedgerow habitats and 7 % gain for linear watercourse habitats within the toolkit, and wider biodiversity benefits for protected and/ or notable species via the creation of suitable resting, foraging, or breeding habitats.
- *Measures should include nature networks, linking to and strengthen habitat connectivity*: The creation of woodland, other neutral grassland, and other upland acid grassland increases the quality of the habitat within the Site and provides a hotspot of high and medium distinctiveness habitats within the wider landscape which is dominated by intensively managed and low distinctiveness agricultural habitats.
- *Management arrangements for long term retention and monitoring:* Management and monitoring would be set out within the LHMP and CEMP and would ensure the success of the habitat creation to be tracked against the predicted BNG values.

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TRANSMISSION

ANNEX A - FIGURES

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TRANSMISSION

Cairngall
Cairnfield
Woodend
Quarry (dis)
Monyruy
Hillhead
Bridge of Buthlaw
Flushing
Sch
Chapel Well
Burn of Cairngall
MS
34
27
05
47
30
32
Faichfield House
Dovecote (rems of)
35
North Linshart
Spr
40
Mill of Tiffery
45
50
Longleys
06
South Linshart
Parkhill
04
Tiffery
Netherton
Inverveddie
05
42
62
Mains of Ludquharn
Nether Kinmundy
The Row
65
Nether Kinmundy Farm
West Toddlehil
51
Parkhill
Toddle
Cotta
Bridge
Faichfie
Buchan
Peterhea
846000m N
405000m E
N
Scale @ A3: 1:10,000
0 0.05 0.1 0.2 0.3 0.4 0.5 km

Legend

BNG Assessment Boundary

UKHab Primary Habitat (Linear)

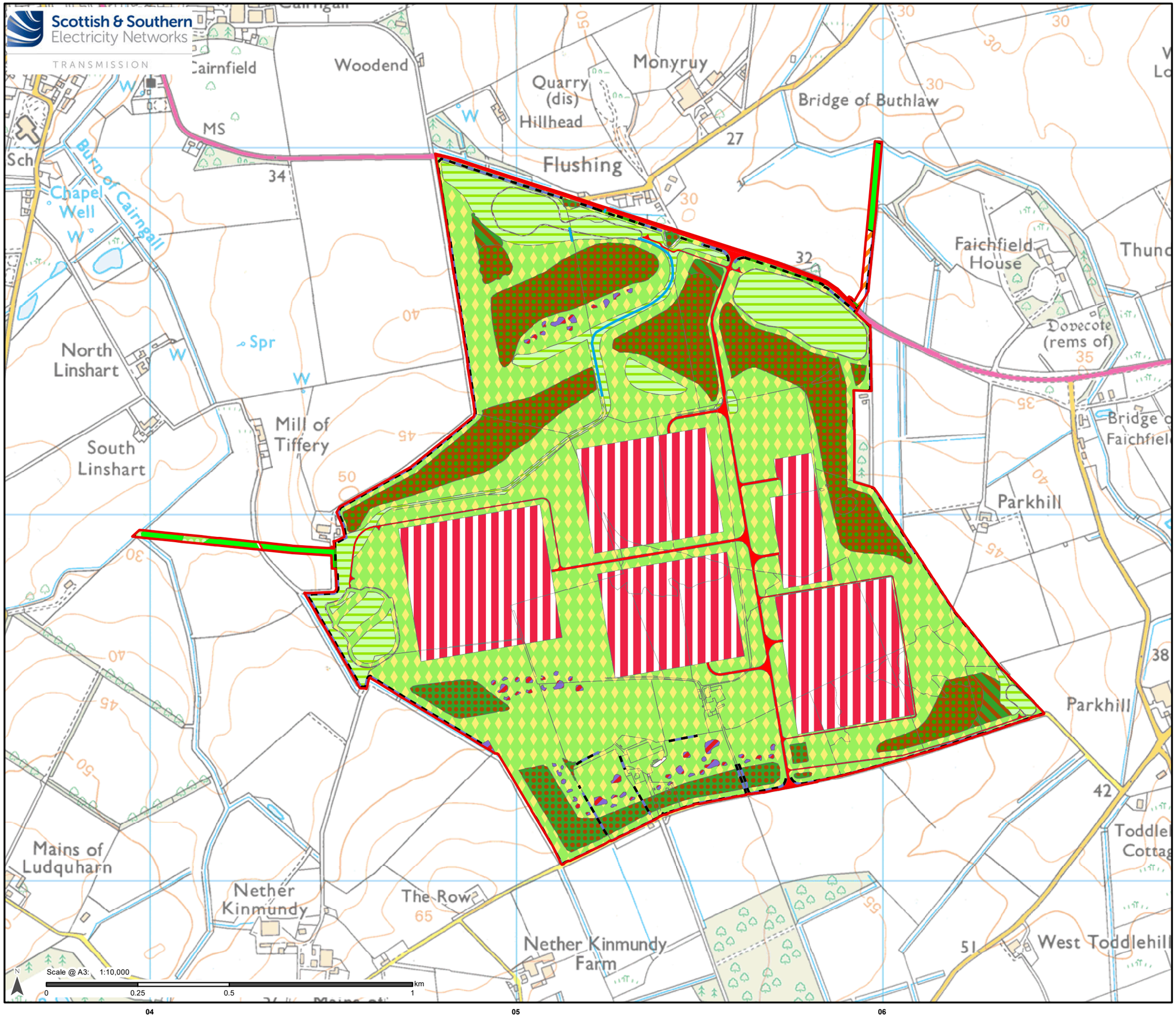
- h2a - priority hedgerow
- r2b - other rivers and streams
- w1g6 - line of trees

UKHab Primary Habitat (Area)

- c1 - arable and horticulture
- c1c5 - winter stubble
- c1d - non-cereal crops
- g3c - other neutral grassland
- g3c8 - Holcus-Juncus neutral grassland
- g4 - modified grassland
- h3e - gorse scrub
- u1b5 - buildings
- u1b6 - other developed land
- u1c - artificial unvegetated unsealed surface
- u1d - suburban mosaic of developed/natural surfaces
- u1e - built linear features
- w1g - other woodland, broadleaved

Project No:	LT000052
Project:	Netherton Hub
Title:	Figure 9.4.1: Biodiversity Net Gain Baseline Habitats
Drawn by:	NB
Date:	18/07/2024
Drawing:	LT000052 _WSP_053

Scottish & Southern Electricity Networks
TRANSMISSION



Legend

- BNG Assessment Boundary

UKHab Primary Habitat (Linear)

- h2a - hedgerows (priority habitats)
- r2b - other rivers and streams
- w1g6 - line of trees

UKHab Primary Habitat (Area)

- c1 - arable and horticulture
- g1b6 - other upland acid grassland
- g3c - other neutral grassland
- g3c8 - Holcus-Juncus neutral grassland
- g4 - modified grassland
- h3h - mixed scrub
- u1b - developed land, sealed surface
- u1c - artificial unvegetated unsealed surface
- u1d - suburban mosaic of developed/natural surfaces
- u1e - built linear features
- w1d - wet woodland
- w1g - other woodland, broadleaved
- w1h - other woodland, mixed

Project No:	LT000052
Project:	Netherton Hub
Title:	Figure 9.4.2: Biodiversity Net Gain Post Development Habitats
Drawn by:	NB
Date:	18/07/2024
Drawing:	LT000052 _WSP_054