TRANSPORT AND WORKS ACT 1992

TRANSPORT AND WORKS (INQUIRIES PROCEDURES) RULES 2004

NETWORK RAIL (STALYBRIDGE TO DIGGLE (SADDLEWORTH) ENHANCEMENTS) ORDER

Biodiversity Net Gain Technical Note

INQ-20

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1. INTRODUCTION

1.1 Purpose of the Document

1.1.1 The purpose of this document is to summarise Network Rail's rationale and progress towards achieving 10% Biodiversity Net Gain (BNG) in relation to the Order Scheme, as part of the wider TransPennine Route Upgrade.

2. BIODIVERSITY NET GAIN LEGISLATION AND COMMITMENT

2.1 Legislative Context

2.1.1 The deemed planning permission sought for the development to be authorised by the Order is deemed to be granted by the Secretary of State under section 90(2A) of the Town and Country Planning Act 1990 ("the 1990 Act") (**NR58**). The statutory BNG planning condition imposed by the Environment Act 2021 on planning applications granted on application under Part 3 of the 1990 Act does not currently apply to deemed planning permission granted by the Secretary of State under section 90(2A) of the 1990 Act as such permissions are not granted on application made under Part 3 of the 1990 Act. Therefore, the Planning Direction (**NR11**) sought for the Order Scheme is not subject to the statutory BNG planning condition. This position is confirmed in the Planning Policy Guidance for BNG.

2.1.2 However, Network Rail is committed to delivering 10% BNG for the overall TRU programme, through compensation both within and outside the Order footprint..

2.2 BNG Commitment

2.2.1 Network Rail have proposed that the delivery of BNG for the Order Scheme will be secured by way of a voluntary planning condition, Planning Condition 9 in (see Appendix 2 to **NR11** as updated by **NR147**)

2.2.2 A Landscape and Ecological Management Plan (LEMP) will be conditioned through draft Condition 5 in **NR11**. The LEMP will reflect the retention of habitats, landscape effects and associated enhancements. Section 5 b ii and iii of NR11 respectively, states the requirement of, "a plan identifying how ecological assets will be protected" and "a plan of ecological mitigation details including areas of new planting and details of any habitats created or enhanced".

2.2.3 There may be opportunities to incorporate BNG into the delivery of the LEMPs but this would be subject to agreement with the relevant landowner in compliance with BNG requirements whilst ensuring the LEMPs retain their primary landscaping purpose.

3. CURRENT PROGRESS

3.1 Biodiversity Net Gain Feasibility Report

Methodology

3.1.1 A BNG feasibility report covering the Order scheme was produced in August 2025. The BNG assessment used a desk study undertaken in October 2024, and field surveys undertaken between May 2024 and June 2025. AtkinsRéalis' Preliminary Habitat Identification Tool was used to supplement habitat data collected during the field surveys. MoRPh5 watercourse surveys were undertaken in February and March 2025.

3.1.2 Biodiversity Metric 3.0 ("the Metric") (3.0 User Guide core document **NR140**, 3.0 calculation tool core document **NR138**) was adopted for the BNG assessment. This allows TRU wide comparison across different Orders.

3.1.3 The approach to the BNG hierarchy followed by the TRU Programme Wide Biodiversity Net Gain Plan (Infrastructure) issue 22/02/224 (Appendix A to this note)and Technical Note on "Further guidance on how TRU should apply Biodiversity Gain Hierarchy[1]" (Appendix B to this note). Both guidance documents note that habitat gain should:

- Be local to any impacts;
- Support more, bigger, better and more joined up ecological networks; and
- Provide wider Ecosystem Service benefits.

3.1.4 In addition both guidance documents identify the hierarchy that should be followed in implementing BNG requirements that eventually will result in offset and 10% gain in habitat value. This can be seen in Appendix B: BNG guidance note in section 2: BNG Hierarchy.

3.1.5 Table 1 reproduces the BNG hierarchy from the TRU guidance note in Appendix B and identifies how this translates to action on the Order Scheme.

Table 1: Biodiversity Net Gain Hierarchy

TRU hierarchy of mitigation (from Appendix B, section 2)	**Order Scheme Application**
Avoid adverse effects	E.g.1 Plevins compound protection of boundary trees.

[1] Network Rail (2024) "Further guidance on how TRU should apply Biodiversity Gain Hierarchy", Rev 001

	E.g.2 Oaklands compound (plot 12-32b) designated for "Environmental Mitigation Works". E.g.3 Brookfields design innovation to remove utilities work and construction requirements through Brookfields.
Mitigate adverse effects	Landscape and Ecological Management Plans required by condition 5 (indicative areas shown in ER Volume 2 Figures 7.3.1 to 7.3.20)
On site (NR owned land) habitat enhancement and creation	Future works e.g. TRU project W1 Fairfield project
Offsite (3rd party owned land) BNG	Future works e.g. TRU project W3 woodland enhancement in Riddings Wood, Deighton.
Purchase of biodiversity credits	Available to utilise, not previously required by NR

3.1.6 The Appendix B guidance note highlights the requirement to exhaust each level of the hierarchy before reaching the last option "Purchase of biodiversity credits".

3.1.7 BNG delivery of 10% net gain is secured by the very wording of draft condition 9 that is must be achieved. It would be in NR's interests to achieve this without resorting to the purchase of biodiversity credits, but the option remains available should it simply not be possible to achieve it with the steps outlined in Table 1 in advance of purchasing credits.

3.1.8 Noting the estimated unit recovery requirement for the Order Scheme described in section 3.1.9, the Order scheme Huddersfield to Westtown (Dewsbury) is addressing a deficit of over 200 units that is projected to be made up of the use of LEMPs on the scheme, Network Rail opportunities and agreements with Kirklees Council, principally woodland upgrade at Riddings Wood, Deighton is being targeted. There will be no requirement to purchase biodiversity credits, though as described in section 3.1.7, open to NR should it need to do so.

Headline Results

3.1.9 Using the Metric, the Order Scheme has the following pre-development biodiversity unit values:

- Habitat units: 65.25;

- Hedgerow units: 5.38; and
- Watercourse units: 8.62.

3.1.10 These unit values were calculated prior the reduction of de-vegetation at Brookfields (see **NR148**) and are likely to reduce further once design is finalised.

3.1.11 No irreplaceable habitats or 'Very High' distinctiveness habitats were present within the limits of the Order Scheme. Two priority habitats as listed under Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006 (as amended) were identified within the limits of the Order Scheme; lowland mixed deciduous woodland and lowland heathland.

Post-development Recommendations

3.1.12 In order to satisfy the trading rules and achieve the 10% BNG target, the general recommendations include:

- Replace existing habitats with 'like for like' and improve condition scores where appropriate;
- Provide new native species planting typical of the surrounding local species and structure and implement an appropriate management regime;
- Reinforce connectivity between existing habitat features of value, for example, gapping up existing hedgerows and new planting to connect hedgerows and woodland blocks;
- Increase biodiversity value of the grassland habitats by planting flower-rich native grassland mixes that will be appropriately managed;
- Introduction of deadwood, such as standing and fallen deadwood, large dead branches and or stems, branch stubs and stumps, or an abundance of small cavities, to increase the biodiversity value of scrub and woodland habitats;
- Man-made veteranisation of trees to increase the biodiversity value of woodland habitats.
- Control the spread of invasive non-native plant species (INNPS) through removal of known stands of Himalayan balsam and Japanese knotweed and other INNPS, as listed on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended), and treatment to prevent reoccurrence;
- Replace removed riparian vegetation with improved riparian planting adjacent to watercourses, enhancing complexity of the types of plants present and improving cover for species utilising the riparian corridor;
- Consider availability of opportunity areas within the Site Boundary / adjacent to the Site Boundary where possibly river restoration or enhancement may be undertaken (for example, re-meandering, creation

of wetlands, creation of ponds, creation of in-channel morphological features);

- Consider availability of opportunity areas along watercourses where existing manmade physical modifications may be removed from the watercourse and/or softened (for example, weir removal, bypass channels, revetment removal, reinforced bed removal); and
- Consider opportunities for culvert daylighting / culvert removal.

3.2 Approach to Post-development

3.2.1 The post-development detail will be finalised in the delivery of the BNG condition 9. This will ensure that the proposed habitat creation/enhancement matches the requirement of the actual loss incurred, rather than under or over committing BNG at too early a stage. This is considered a sustainable approach.

3.2.2 The approach to post development and ultimately achieving net gain across the Order Scheme will follow the below approach sequentially. This is actioned through Network Rail's internal clearing processes, value engineering to refine habitat loss assumptions, and early engagement with local authorities to explore off-site compensation opportunities.

3.2.3 Resultantly, two sites, both outside of the Order Scheme and therefore considered 'off-site', have been identified within the BNG report through Network Rail's "clearing" process. This is an active, ongoing process and additional sites will be reviewed when applicable for example, land surrounding Uppermill Viaduct and land at Brookfields.

Off-site Gain

Brownhill Complex (west and east)[2]

3.2.4 This site comprises of approximately 1.29 ha of other woodland; broadleaved and 0.19 ha of acid grassland. Post-development enhancement assumptions are that the enhancement condition is good, and strategic significance is low. There is a 3-year delay in starting enhancement and the spatial risk score is 1.

3.2.5 Baseline other broadleaved woodland delivers 10.32 units, and enhancement would deliver 13.57 units. This is an uplift of 3.25 units.

3.2.6 Pre- development, baseline, other lowland acid grassland delivers 1.52 units, and enhancement would deliver 2.00 units. This is an uplift of 0.48 units.

[2] Land located near Den Lane, Uppermill. Central Ordnance Survey National Grid reference: SD 99526 06049

3.2.7 All off-site BNG schemes including Brownhill Complex, require an environmental agreement or covenant to be agreed between Network Rail and the landowner. This secures BNG in the detail and then counts towards offset and enhancement.

Unnamed Land near Ward Lane and Wool Road[3]

3.2.8 This habitat parcel is approximately 1.434 ha in area and comprises mixed scrub habitat. This parcel of land is also mapped on the Greater Manchester Local Nature Recovery Strategy (LNRS) opportunity map[4] that guides where and how biodiversity improvements should be delivered. Post- development enhancement assumptions are the enhancement condition is good, strategic significance is low, there is a 3-year delay in starting enhancement and the spatial risk score is 1.

3.2.9 Pre- development, mixed scrub delivers 11.47 units and post development enhancement delivers 16.10 units. This is an uplift of 4.63 units.

3.2.10 Both sites will be subject to ground truthing to identify and map habitats and their condition. The results of the walkover survey will be used to identify any potential ecological constraints associated with the utilisation of the land for off-site BNG compensation and inform the offsite BNG baseline and post development modules of the Metric.

3.2.11 The off-site post development module will be completed based on practical enhancement/ creation interventions that can be achieved within each of the two sites to achieve no net loss for the Order and 10 % net gain. The method and results will be written up in an updated BNG report.

<u>Engagement with Local Authorities</u>

3.2.12 In parallel to surveying Network Rail owned sites, the Greater Manchester Combined Authority and associated guidance will be consulted to:

- Identify LNRS opportunity sites owned by the LPA, suitable for off-site biodiversity compensation;
- Prioritise council owned land parcels located as close as possible to the project area;

[3] Land located within the area of Saddleworth between Ordnance Survey National Grid Reference: SE 00290753 (Ward Lane to the north) and SD99600643 (Wool Road to the South).

[4] Greater Manchester Record Centre (2026) Local Nature Recovery Strategy, available at https://gmlrc.org/local_nature_recovery_strategy/, accessed 19/06/2026

- Assess sites capable of delivering wider natural capital benefits such as parkland enhancement, recreation opportunities, flood alleviation, and community value; and
- Judge their suitability in achieving the required biodiversity units as part of a desk-based appraisal. Apply assumptions on habitat type and condition to determine if the Site is suitable to deliver biodiversity unit deficits and the 10% net gain.

Evidence of Previous Successful Engagement – TRU wide

3.2.13 Network Rail have evidenced successful engagement with local authorities across the TRU-wide scheme. Kirklees Metropolitan Borough Council has been engaged with on the delivery of BNG for the TRU W3 project between Huddersfield and Westtown (Dewsbury) , specifically woodland projects, namely Ridings Wood near Deighton. This will reduce or avoid the requirement to purchase units from habitat banks or land managers. A similar approach will be undertaken across the Order Scheme.

Off-site Biodiversity Units

3.2.14 The purchase of off-site biodiversity units will only be considered if 10% gain cannot be achieved on-site, within Network Rail assets, or within areas identified through engagement with the local authorities. Any residual unit deficit can be purchased through habitat banks or land managers such as farmers, conservation organisations, or local authorities who create or enhance habitats on their land and quantify the resulting uplift. For context, Gaia[5], the UK's largest platform for BNG, currently offers area habitat units for 18 sites in the north-west of England[6] with a cumulative total availability of 2,364.43 units. This option is unlikely considering the alterative, preferred options for the Order and is not favoured by Network Rail.

3.2.15 Statutory biodiversity credits purchased through Defraare enshrined in the Environment Act 2021 and so therefore exist only for use on projects subject to the statutory BNG regime and so will not be available for purchase for the purposes of the BNG strategy for the Order Scheme.

[5] Gaia (2026) Purchase biodiversity units, available at https://marketplace.gaiacompany.io/hub/marketplace?region=North+West&unitType=Area&show_neighbour_lpas=true&show_neighbour_ncas=true, accessed 19/06/2026

[6] Correct as of 19/06/2026

Update to BNG Assessment

3.2.16 Once all the necessary data has been collected the post-development biodiversity units will be calculated using the offsite module and the BNG assessment updated accordingly.

4. SUMMARY

4.1.1 Despite BNG not being mandatory for the Order Scheme, Network Rail is separately committing to delivering 10% BNG across the Order Scheme which will be secured through Condition 9 per. The requirement for BNG and associated percentage uplift will be mandated by the planning condition.

4.1.2 Network Rail are confident that achieving 10% is feasible and achievable, given the current post-development progress and evidence of success elsewhere on the wider TRU scheme.

4.1.3 A baseline feasibility report has been produced and post-development recommendations considered in order to achieve BNG. Two Network Rail owned sites will undergo investigation for targeted net gain and further Network Rail sites will be identified once design and exact unit deficits are finalised. Further off-site opportunities are being explored. If a residual deficit remains, residual units will be purchased through habitat banks or land managers. This is the ultimate fall-back if units cannot otherwise be secured.

APPENDIX A

TRANSPENNINE ROUTE UPGRADE

ON TRACK TO BETTER

Programme Wide

Biodiversity Net Gain Plan (Infrastructure)

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Approval and Authorisation

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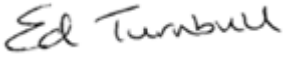
Approved By:	Ed Turnbull	TRU Sustainability Advisor	
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2	02/08/2019	Table 3.4 – New row 7 around offset monitoring and maintenance; Additional detail added to Section 4.4 stating that ongoing management plan must be provided by the delivery partner.	Michael Bradburn
3 – P3.1 (PW – PO4.1)	15/06/2020	Major update to reflect change to 110% Defra 2.0 and CEEQUAL v6	Ian Heard
4 (PW – PO5.1)	22/02/2024	Major update to the whole document to improve the aims, objectives and tasks required for each BNG deliverable.	Nicholas Westerman

Implementation

The latest version of this document shall supersede any previous versions.

Compliance

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All references made within this document were considered correct at time of approval.

Supply

Copies of this document are available electronically via the Common Data Environment but shall be deemed uncontrolled once printed.

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1. INTRODUCTION

This document sets out the Biodiversity Net Gain (BNG) Plan for Transpennine Route Upgrade (TRU) ("the Project"). The TRU BNG Plan (and the resultant requirements) shall apply to all projects delivered by the TRU programme unless otherwise approved by the TRU Sustainability and Social Value Lead including:

- Core Route 'Option F' Projects;
- Stations;
- Depots and Stabling Facilities;
- Northern Powerhouse Rail (NPR) facilitation scope ('Option G' Projects); and
- Additional works/ projects unless a specific derogation/ departure is agreed and formally approved by the TRU Head of Sustainability and Social Value*

**In the event of an agreed derogation from the requirements of this plan, the biodiversity requirements set out in NR/L2/ENV/015 and NR/L2/ENV/122 shall still apply in full.*

This TRU BNG Plan covers the whole project lifecycle from options selection and preferred option design development to the long-term management and monitoring requirements to achieve BNG targets.

This TRU BNG Plan should be read in conjunction with the following TRU and Network Rail (NR) Sustainability documents:

- TRU Sustainability Plan [151671-NWR-00-TRU-STR-W-SD-000004]
- TRU Sustainability Certification Plan [151671-NWR-00-TRU-PLN-W-SD-000001]
- TRU Carbon Reduction Plan [151671-NWR-t00-TRU-STR-W-SD-000006]
- TRU Social Value Plan [151671-NWR-00-TRU-GUN-W-HSQ-000001]
- TRU Skills and Employment Plan [151671-NWR-00-TRU-STR-W-HSQ-000004]
- TRU Weather Resilience and Climate Change Adaptation Plan [151671-NWR-00-TRU-PLN-W-SD-000038]
- TRU Inclusive Infrastructure Plan [151671-NWR-00-TRU-STR-S-SD-000007]
- Environment and Social Minimum Requirements NR/L2/ENV/015
- Biodiversity: Management of Biodiversity NR/L2/ENV/122

1.1 Biodiversity Net Gain

BNG is a development approach that leaves biodiversity in a better state than before. The approach is underpinned by a set of rules and principles, as defined in the Natural England Biodiversity Metric User Guide.

Achieving BNG is more than simply outweighing losses with gains. Firstly it requires doing everything possible through good design to avoid losing or minimising impacts on biodiversity in the first place. BNG should help inform option selection and design development to improve the environmental outcomes of the Project. This approach if done well will be key to the good design and delivery of the project. Finally, BNG should achieve long-lasting and meaningful benefits for our environment, society and economy.

1.1.1 BNG within the context of Environmental Net Gain and Social Value

Alongside biodiversity gains, BNG presents an opportunity to create or enhance existing greenspaces. By doing this we can create more attractive places to live, work and do business, contributing to place-making and the local economy, whilst also improving our general health and wellbeing. Habitat creation and nature-based solutions can also help us mitigate and adapt to climate change and improve air and water quality.

1.2 Aims and Objectives

BNG is a requirement and key performance indicator for the TRU programme, with a specific target to deliver a minimum 10% net gain on habitats, hedgerows, and watercourses across the programme.

The aim of this plan is to provide a framework to:

- Assess, avoid and reduce biodiversity impacts throughout design selection and development stages, as part of a collaborative design process.
- Identify and secure the best outcomes for biodiversity and provide wider environmental benefits throughout design selection and development stages, as part of a collaborative design process.
- Meet and where possible exceed the 10% BNG target, onsite and across the Network Rail estate. Where this is not feasible, off-site areas shall be identified and secured to meet any shortfalls.
- Work with Network Rail, lineside neighbours, and other stakeholders to help support their priorities for nature conservation.
- Ensure the appropriate funding and legal agreements are secured for the creation, establishment, management, monitoring and any remedial measures required for BNG.

This plan will set out requirements that shall be followed by the delivery partners and recommendations to help achieve best practices.

Note: Where requirements set out below refer to ‘Delivery Partners’ or ‘Delivery Partner’, these requirements shall also apply to other delivery partners appointed Network Rail where applicable (i.e. where the works covered by the scope of this plan are not delivered by a Delivery Partner).

2. BNG LEGAL, POLICY AND OTHER DRIVERS

UK Government's 25 Year Environment Plan (25YEP) - sets out the Governments ambitions to halt biodiversity loss and achieve a growing and resilient network of land, water and sea that is richer in plants and wildlife. BNG is the government's strategy to develop land and contribute to the recovery of nature. This plan also aims to strengthen the requirements for Environmental Net Gains (ENG) by expanding the net gain approach used for biodiversity. This will include wider environmental and natural capital benefits, such as flood protection, recreation and improved water and air quality. As one of the country's largest public landowners and major developers Network Rail has a pivotal role in this plan.

- Environmental Improvement Plan 2023 (EIP 2023) – The EIP 2023 includes key highlights of the delivery against the 25YEP goals since 2018, and key actions to deliver these goals up until 2043. The apex goal has been set to improving nature with thriving plants and wildlife. All other goals such as improving environmental quality, improving use of resources, improving mitigation of climate change, improving biosecurity and enhanced beauty, heritage and engagement with the natural environment will help the apex goal to be achieved.

- Environment Act 2021 – introduces a mandatory BNG requirement for new development along with Local Nature Recovery Strategies (LNRS) to target the best places for nature recovery and wider environmental benefits. The mandatory requirement applies to Town & Country Planning Act (January 2024) and Nationally Significant Infrastructure Project (expected November 2025) applications. Any exemption from mandatory biodiversity net gain would not prevent planning authorities requiring biodiversity gains to be delivered by exempted developments in line with local or nationally set planning policy (see below).
  The Act states developments should deliver a minimum of 10% biodiversity gain calculated using biodiversity metrics and approval of a BNG plan and secure habitats for a minimum of 30 years via obligations/conservation covenants. The Act includes provision for secondary legislation including details around phased development, which may be relevant to the Project. The secondary legislation is due to be issued from January 2024.

- Natural Environment and Rural Communities Act 2006 - Section 40 of the NERC Act 2006 places a duty on public authorities in England to conserve biodiversity. It requires local authorities and government departments to have regard to the purposes of conserving biodiversity in a manner that is consistent with the exercise of their normal functions such as policy and decision-making. The Environment Act 2021 has revised the NERC Act 2006 to extend the biodiversity duty on public authorities to now include the enhancement of biodiversity alongside conservation. This fits in with the increasing policy and legal narrative on nature recovery.

- National Planning Policy Framework - securing measurable net gains for biodiversity within local plans, policies and planning decisions is embedded throughout the framework.

- Local Planning Policies – the TRU route passes through eight local planning authority areas. A locally specific BNG policy is included in most Local Plans.

- Transpennine Route Upgrade (TRU) Sustainable Development Strategy - sets out a public commitment to deliver a minimum 10% Biodiversity Net Gain (BNG) across the programme. The requirement for BNG derives from UK Government Legislation and Policy drivers.

- The Network Rail Vegetation Management Review (Varley Review) – In 2018, the Department for Transport (DfT) commissioned an independent review of Network Rails approach to vegetation management. This was required due to concerns around vegetation management practices being focused on the safe running of the railway and vegetation being a liability, rather than being managed as an important natural capital asset for the country.
  The review lists a number of issues around culture and current practices that needed to be resolved and set a number of recommendations to deliver change. This need for change is relevant to all Network Rails developments and operations.

  Some of the key issues which were highlighted were around a lack of capacity, capability and funding to effectively manage and monitor Network Rail land and poor communications with lineside neighbours. This was rooted in a culture where vegetation management and biodiversity were not considered to be a priority.

- Rail Environment Policy Statement - sets a clear direction for the rail industry on environmental sustainability and to outline policy priorities for Network Rails Environmental Sustainability Strategy. The mission is to make the railway the "*backbone of a cleaner, greener public transport network*". In terms of Network Rail's land use the document states that "*the extensive estate can be used more effectively to reduce the UK's net greenhouse gas emissions* (through habitat creation and tree planting) *and improve biodiversity. A sustainable, long-term approach to land management on the network will support biodiversity*."

- Network Rail Environmental Sustainability Strategy – sets out the vision for delivering a sustainable railway. Four core priorities have been set in order deliver the vision, one of which is improved biodiversity. The ambition is to look after nature and protect, maintain and enhance biodiversity across the railway landscape by 2035. Alongside the Project BNG requirements, TRU can help support Network Rail and other stakeholders and organisations in meeting their own sustainability targets.

- Network Rail Biodiversity Action Plan - sets out the approach to achieving no-net biodiversity loss by 2024 and biodiversity net gain by 2035. The plan responds to each of the Varley recommendations and was developed in line with Defra's 25-Year Environment Plan Network. One of the key objectives is to deliver a Network Rail estate that connects and supports biodiversity across Britain by working in partnership with neighbours and stakeholders.

  BNG on TRU presents an important opportunity to: -

  - Design and build lineside estate that can be effectively managed more sustainably and provide greater biodiversity and wider environmental benefits.
  - Inform and update the asset database of habitat and biodiversity across the Network Rail estate.
  - Help develop and inform route specific Habitat Management Plans.
  - Provide long term funding for habitat management and monitoring across the wider Network Rail estate.
  - Work more collaboratively with stakeholders including local communities and landowners to help improve relations and achieve mutual benefits through habitat creation and enhancements.

- Network Rail Environment and Social Standard (NR/L2/ENV/015) – This document is to clarify the deliverables required during the design process to comply with NR/L2/ENV/015. The guidance note requires that the Designer will identify opportunities to deliver a Net Gain of biodiversity either on site (i.e. enhancements on NR land) or near the site (i.e. offsetting on 3rd party land). These will be recorded in the Opportunities Register (or equivalent) and discussed with the Client.

- Network Rail Management of Biodiversity Standard (NR/L2/ENV/122) – This document defines the requirements for Network Rail and its contractors to meet legislation and other compliance obligations to sustainably manage land and activities for biodiversity. This includes requirements for Biodiversity Metric calculations and habitat management and monitoring.
  It also highlights the range of benefits of taking biodiversity into account when planning, designing and implementing rail infrastructure works including:
    - reduced risk of delays and unplanned costs from unforeseen / inadequately considered ecological constraints;
    - use of green infrastructure solutions to improve resilience of the network (flood resilience, carbon capture and storage, etc.);
    - recognition and enhanced reputation for contribution to national biodiversity goals;
    - increased regulator confidence where infrastructure works demonstrate responsible sustainability behaviours;
    - increased stakeholder confidence where infrastructure has proven sustainability credentials;
    - obligations to enhance biodiversity and improves stakeholder relations.

- Railway Sustainability Design Guide – This document provides an overview of habitat types found along the lineside. It provides aids, templates and proformas that help with informing preferred habitat management objectives and deciding appropriate habitat interventions.

- Network Rail – Our Principles of Good Design – This sets out the ten core principles which should be analysed, defined and responded to in the development of any Network Rail asset as part of a planned process. There are direct parallels between these principles and the BNG Best Practice Principles (see Section 3.3)

  BNG on TRU presents an important opportunity to: -
    - Add value to the network as well as the local community;
    - Add value to the passenger and user experience;
    - Emphasise a sense of place and enhance the local aesthetics;
    - Capture the greatest benefit from the investment;
    - Create a healthy environment;
    - Create a reliable service that is resilient to climate change; and
    - Improve local biodiversity of plants and wildlife.

3. BIODIVERSITY METRICS

A key element of the BNG legislation and policy is that changes should be measurable. As a result, the Natural England Biodiversity Metric has been developed to allow losses and gains in biodiversity to be measured in an objective and repeatable manner. The metric uses habitat as a proxy for wider biodiversity with different habitat types scored according to their relative biodiversity value.

The Biodiversity Metric generates a value measured in units for the scheme before development commences and after development is completed, allowing the difference (positive or negative) to be measured. Net gains in biodiversity can be achieved by retaining or minimising impacts on ecologically important habitats and creating new and enhancing existing habitats.

The programme will use **Defra's Biodiversity Metric 3.0** Calculation Tool and User Guide. This is the version that the early projects have used and for consistency across the programme it is important the same version is used as other versions of the metrics will generate different values.

3.1 Metric Rules

The Biodiversity Metric has a set of 4 rules that must be followed in applying the metric. If these rules are not followed, then a project cannot claim to have achieved a gain in biodiversity. These rules are listed below. Delivery Partners shall ensure the 4 rules are followed.

- **Rule 1** – The trading rules of this metric must be followed. This is automatically applied by the metric and sets minimum habitat creation and enhancement requirements to compensate for specific habitat losses. This is required to ensure habitats are replaced by the same or higher distinctiveness band habitat.
- **Rule 2** – Biodiversity unit outputs are unique to this metric. The results of other metrics, including previous versions of this metric, are not comparable to those of this metric. The three types of biodiversity units generated by this metric (area, hedgerow and watercourse) cannot be summed, traded, or converted between modules.
- **Rule 3** - To accurately apply the biodiversity metric formula, the biodiversity metric calculation tool must be used. The tools remove the need for a user to manually calculate the change in biodiversity value. The tool will summarise the results of the calculation and inform a user whether the BNG objective has been met.
- **Rule 4** – In exceptional ecological circumstances, deviation from this metric methodology may be permitted by the relevant consenting body or planning authority. Any deviation must be fully justified and evidenced.

3.2 Metric Principles

The Biodiversity Metric has a set of 9 principles that inform the use of the metric. These principles are listed below. The Delivery Partners shall ensure the 9 principles are applied when using the metric.

- **Principle 1** – The metric assessment should be completed by a competent person (see Section 4).
- **Principle 2** - This metric does not change existing biodiversity protections, statutory obligations, or policy requirements. The use of this metric does not override the ecological mitigation hierarchy and other requirements (such as consenting or licensing processes, for example woodlands).
- **Principle 3** – This metric should be used in accordance with established good practice guidance and professional codes.

- **Principle 4** – This metric is not a complex or comprehensive ecological model and is not a substitute for expert ecological advice.
- **Principle 5** – Biodiversity units are a proxy for biodiversity and should be treated as relative values.
- **Principle 6** – This metric is designed to inform decisions in conjunction with locally relevant evidence, expert input, or guidance.
- **Principle 7** – Habitat interventions need to be realistic and deliverable within a relevant project timeframe.
- **Principle 8** – Created and enhanced habitats should seek, where practical and reasonable, to be local to any impact and deliver strategically important outcomes for nature conservation.
- **Principle 9** - The metric does not enforce a minimum habitat size ratio for compensation of losses. However, proposals should aim to maintain habitat extent (supporting more, bigger, better and more joined up ecological networks) and ensure that proposed or retained habitat parcels are of sufficient size for ecological function.

3.3 BNG Best Practice Principles

The Biodiversity Net Gain: Good Practice Principles provides a framework for achieving BNG. In order for the development to achieve the best outcomes, these must be applied all together, as one approach. Delivery Partners shall therefore apply the following principles when delivering the TRU BNG requirements:

- **Apply the Mitigation Hierarchy** - Do everything possible to avoid then minimise impacts.
- **Avoid losing biodiversity that cannot be replaced** - Avoid impacts on irreplaceable habitats.
- **Be inclusive and equitable** - Engage stakeholders early and involve them in the design and implementation.
- **Address risks** - Mitigate difficulty, uncertainty, and other risks.
- **Make a measurable Net Gain contribution** - Achieve a measurable net gain that contributes to local priorities.
- **Achieve the best outcomes for biodiversity** - Use evidence and local knowledge to make clearly justified choices.
- **Be additional** - Do not count something that would have occurred anyway.
- **Create a Net Gain legacy** - Ensure net gain generates long term benefits.
- **Optimise sustainability** - Optimise the wider environmental benefits for a sustainable society and economy.
- **Be transparent** - Communicate all activities in a transparent and timely manner, sharing learning with all stakeholders.

The reporting requirements set out in Section 4 aim to apply and integrate the good practice principles across the TRU programme.

3.4 Defining the BNG Baseline Area

A site is deemed to have achieved BNG if there is a greater than 10% increase in the number of Biodiversity Units compared to the baseline biodiversity value. So, the habitats, hedgerows and

watercourses within the baseline area defines the BNG target for the project. For consistency, it is important that the baseline area is defined in the same manner across all Network Rail projects including TRU.

In the Biodiversity Metric User Guide, the BNG baseline is defined as all land within the boundary of the project. In a planning context this would usually mean within the redline boundary of a planning application.

TRU is a mix of permitted developments, Town and Country planning and Transport & Works Act Order (TWAO) projects. The approach to defining the baseline area for these three types of developments is detail below.

3.4.1 Permitted Developments

Network Rail as a statutory undertaker acting under permitted development rights would not typically produce a redline boundary, as such a BNG baseline boundary needs to be defined and produced for permitted developments. The TRU BNG baseline area is therefore defined as:-

- All permanent and temporary impacts on habitats, hedgerows and watercourses;
    - Watercourses are included if the feature itself is impacted or if the riparian zone is impacted. The riparian zone is defined as within 10m from the top of each bank of a river, stream or canal or within 5m from the top of each bank of a ditch.
- All access routes (land required for access to the site from a public highway) including visibility splays; and
- Any habitat, hedgerow and/or watercourse creation or enhancement within or directly adjacent the areas listed above.

3.4.2 Town and Country Planning and Transport & Works Act Order (TWAO)

A planning application boundary is produced for works under Town and Country Planning and a TWAO. In most instances the planning application boundary should be used to define the BNG Baseline Area.

In some instances, the planning application boundary may run along the Network Rail land ownership boundary, which can include long stretches of lineside estate which are not be directly impacted by the project. Similarly on rare occasions 3rd party land maybe included for instance where a pipeline runs under the land parcel of electricity pylon over the land parcel, which again is not directly impacted by the project.

In these instances, it may be acceptable to exclude the retained area of lineside estate or 3rd party land, as including these areas could overinflate the BNG baseline - compared to a typical planning boundary where the majority of the BNG baseline is made up of areas which are directly impacted by the development.

It is important to note that the lineside estate and 3rd party land will often present opportunities for habitat creation or enhancement. Where there are opportunities for habitat creation or enhancement in this area and within the TWAO boundary, these areas should be included in the baseline area and the creation or enhancement should be implemented. This area should only be excluded from the baseline, where justification has been provided to demonstrate that it is not possible or feasible to creation or enhance the habitats in these locations. Any deviation from the industry standard methodology should be agreed with the TRU Biodiversity Manager and the Local Planning Authority. It is important that this approach is taken otherwise the opportunities for BNG will be significantly reduced and the project is unlikely to support Network Rail in achieving its wider strategic target of enhancing biodiversity across the railway landscape by 2035.

An example of where habitat creation or enhancement for the purpose of BNG is not feasible would be where vegetation management is part of an ongoing regular maintenance activities

and/or the safe operation of the railway is carried out. These operations shall be managed/co-ordinated by Network Rail in accordance with their current standards. In this instance these areas will be excluded from the baseline due to the additionality principle, i.e. do not count something that would have occurred anyway.

3.4.3 Defining Onsite and Offsite

All areas included in the BNG baseline, as defined above, should be included in the metric on-site tabs. Any habitat, hedgerow and/or watercourse creation or enhancement outside of these areas should be added to the metric off-site tabs.

3.4.4 Network Rail Asset Plan

Any habitat, hedgerow and/or watercourse creation or enhancement within Network Rail's ownership should be added to Network Rail asset plan.

The asset plan will keep a central record of the target habitat, hedgerow and/or watercourse type and condition and any management and monitoring requirements for each land parcel for a minimum of 30 years. This is to ensure the same parcel of land is not used again for BNG.

In the unlikely event that any future development works impact these areas, the development will need to compensate for any losses based on the target habitat type/condition rather than its type/condition at the time of the proposed development.

Network Rail are still developing a new integrated and data-driven approach to managing vegetation assets.

3.4.5 Natural England's BNG digital service

Any off-site gains should be added to the Government Biodiversity Gain Site Register.

Natural England is developing a land register for off-site biodiversity gain. The register will be publicly accessible and detail the baseline biodiversity value of the delivery site and the expected future biodiversity value of that site. The register will also contain information about who owns the site, and it will enable such sites to be traced back to the individual development whose BNG requirement they are helping to fulfil.

The register will play a key role in minimising the risk of 'gaming' the BNG system by ensuring that the same parcel of land cannot be claimed as the means for delivering BNG by multiple developments. It will also ensure that there is a transparent, public record setting out what existed on the site before its use to deliver BNG and what the biodiversity outcome of the site is supposed to deliver. This will help reduce the risk of fraudulent or misleading claims.

4. RESOURCING REQUIREMENT

Biodiversity Net Gain is an important aspect of programme delivery. Therefore, Delivery Partners shall ensure adequate staffing and resources are in place to deliver the TRU BNG reporting requirements (See Section 5). This shall include a dedicated BNG role which is a suitably qualified point of contact to manage and deliver all BNG related reporting, accounting and targets.

A suitably qualified Terrestrial BNG Specialist is defined in accordance with the following criteria:

- Holds a degree or equivalent qualification (such as N/SVQ level 5) in ecology or a related subject.
- Is a practising ecologist with a minimum of three years of relevant experience (within the last five years). Such experience shall clearly demonstrate a practical understanding of factors affecting ecology in relation to construction and the built environment including acting in an advisory capacity to provide recommendations for ecological protection, enhancement, and mitigation measures.
- Is covered by a professional code of conduct and subject to peer review. Full members of the following organisations, who meet the above criteria, are deemed suitably qualified:
    - Chartered Institute of Ecology and Environmental Management (CIEEM).
    - Chartered Institution of Water and Environmental Management (CIWEM).
    - Institute of Environmental Management and Assessment (IEMA).
    - Landscape Institute (LI).
    - The Institution of Environmental Sciences (IES).
- Is competent* in and has a good working knowledge and experience of the BNG process and metric.

Where watercourses are included in the BNG baseline (See Section 3.4), a suitably qualified Watercourse BNG Specialist will be required. In addition to the criteria above, this will also include someone who is:

- Is competent* in and has a good working knowledge and experience of Modular River survey (MoRPh) and condition assessment.

*A competent person is someone who can demonstrate they have acquired through training, qualifications or experience, or a combination of these, the knowledge and skills enabling that person to perform specified tasks in completing and reviewing metric calculations.

5. REPORTING REQUIREMENTS

The section below sets out the reporting requirements at each PACE Stage. A set of tasks have been assigned to each deliverable. Responsibilities have been assigned to each task, which are defined as follows:

- R – Responsible: the individual(s) who perform an activity – responsible for action/implementation – although usually only one 'R' can be shared
- A – Accountable: the individual who is ultimately accountable including yes/no decision and power of veto – only one 'A' can be assigned
- C – Consulted: the individual(s) to be consulted prior to a final decision being made or action taken – two-way communication.
- I – Informed: the individual(s) who need to be informed after a decision is made or action is taken – one-way communication.

Appendix A provides a summary of the requirements and Table 5.1 provides a table of the BNG requirements across the project life cycle.

The reporting requirements has been informed by British Standard Institute (BSI) BS 8683:2021 - Process for designing and implementing Biodiversity Net Gain — Specification, Ciria's Biodiversity net gain. Good practice principles for development. A practical guide and CIEEM's Biodiversity Net Gain Report & Audit Templates guidance. The British Standard specifies a process to design, implement, maintain and monitor BNG outcomes from a development project. Network Rail were part of the technical committee that helped develop this standard. The Ciria guide provides various checklists on how the good practice principles maybe applied at each stage of the design, construction and operation. The CIEEM guidance has developed templates for BNG Feasibility Report, Biodiversity Gain Plan (BNG Design Stage Report) and BNG Audit Report.

If significant impacts on biodiversity can be avoided from the outset, the BNG process can be less involved. Where impacts are relatively small, it is likely that BNG can be achieved by simply putting back better and/or creation and enhancement on the Network Rail estate. In this instance BNG costs will be lower, the pool of BNG stakeholders will be smaller and the work required to reduce impacts further and identify and secure BNG opportunities will be reduced.

Where the impacts are relatively large and/or high or very high distinctiveness habitats, hedgerows and/or watercourses are impacted, more input will be required to secure BNG. More work will be required to avoid and reduce impacts, identify and secure the BNG opportunities and accurately cost for BNG requirements.

The Delivery Partners should implement a proportionate approach to BNG for each project, which should be discussed and agreed with the TRU Biodiversity Manager.

Table 5.1 BNG REQUIREMENTS ACROSS THE PROJECT LIFE CYCLE

BNG Deliverables	Initiate PACE 1/2	Option Selection PACE 3	Single Option Development PACE 4	Detailed Design PACE 5	Project Delivery PACE 6	Project Close/ Handover PACE 7/8
BNG Input into an Optioneering Report	Produced (desk-based)					
BNG Cost Estimates	Produced (Outline)	Refined	Refined	Refined	Reviewed	Reviewed
Habitat Survey with Condition Assessment	Produced (desk-based)	Produced	Refined	Refined		
Hedgerow survey with Condition Assessment	Produced (desk-based)	Produced	Refined	Refined		
Morph Survey with Condition Assessment	Produced (desk-based)	Produced	Refined	Refined		
Habitat, Hedgerow and Watercourse Value Plan	Produced (desk-based)	Produced	Refined	Refined		
BNG Opportunity Register (On-site, NR Land, Stations and Offsite)	Produced (desk-based)	Produced	Refined	Refined		
BNG Feasibility Assessment		Produced	Refined	Refined		
Habitat and Landscape Drawings		Produced (Outline)	Produced	Refined	Reviewed	
BNG Design Stage Report			Produced (For Planning)	Refined	Refined	Reviewed
BNG Creation, Management and Monitoring Plan			Produced (Outline – For Planning)	Produced	Refined	Reviewed
Biodiversity Gain Plan				Produced		
Environmental and Social Management Plan			Produced (Outline)	Produced	Reviewed	

Network Rail Asset Plan					Added	
BNG Audit Report					Produced	Produced

	Indicates if deemed required by project (to be agreed with TRU Biodiversity Manager) or if requested by the local planning authority.

5.1 Optioneering Report - Ecology Input

PACE Stages 1 and 2 define the need and identify the full range of options to address the need. As part of this process the project team should consider the opportunities to deliver multiple benefits, including environmental benefits. Impacts that are detrimental to the environment should also be described. The environmental assessment should define any environmental legal obligations, issues or opportunities and natural resources that are important to protect and enhance, within or adjacent to the site.

The minimum requirement for the ecology input to the optioneering report is detailed in the table below. The ecology input could be supported by an initial desk study assessment and BNG calculations. This is recommended where there are significant differences in the ecological impacts of each option, as this will enable better decision making and allow for more accurate costings to be produced (see Section 5.2).

Deliverable and PACE Stage	Aims and Objectives	Tasks	Responsibility
Optioneering Report - Ecology Input Produced PACE Stages 1/2	Identify significant ecological impacts of each option (qualitatively). Identify potential BNG opportunities for each option. Indicate likely preferred option from an ecology perspective.	BNG ecologist to attend project start up meeting with design team to discuss options and any ecological constraints and opportunities. A geomorphologist maybe required if impacts to watercourses are anticipated.	R: Delivery Partner Project Manager A: Delivery Partner Sustainability Manager C:TRU Biodiversity Manager
		Provide Ecology input to Optioneering Report. The assessment should be based on a qualitative description and may not require a quantitative BNG calculation. As detailed above the project may benefit from a quantitative BNG calculation if BNG potentially adds significant costs to the project or there are significant differences between the ecological impacts of each option. In such instances, this should include indicative cost estimates for BNG (see Section 5.2).	

5.2 BNG Cost Assessment

The implications of habitat loss and degradation as a result of development and the financial requirements for BNG, needs to be considered for each design option. This allows for the correct resources and budget to be secured for implementing, maintaining and monitoring BNG for the design life of the scheme. It can also highlight the most sustainable option and where costs can be saved by selecting options with reduce impacts on biodiversity. The cost of BNG shall be reported within project documentation, such as a project's investment and/or viability assessment.

In order to have the certainty that BNG can be delivered, the financial and legal mechanisms need to be in place to secure BNG sites. All habitat creation, management and monitoring should be fully costed for and funded for a minimum of 30 years. Financial mechanisms to deliver BNG need to be correctly set up and secured.

A cost assessment is required at each PACE Stage and should inform the Optioneering Report (see Section 5.1), Feasibility Assessment (see Section 5.5), Biodiversity Gain Plan (see Section 5.7) and Habitat Creation, Management and Monitoring Plan (see Section 5.8).

Cost savings can be reported at each PACE stage, which will help demonstrate that the project has applied best practice and avoided or minimised impacts on biodiversity. Cost saving should also be achieved through identifying cost-effective measures as part of the BNG Opportunities Register (see Section 5.4).

More detailed costings are likely to be required where high or very high distinctiveness habitats and/or other rivers and streams are impacted, as there are likely to be additional challenges and costs with the creation or enhancement of these habitats and/or watercourses.

Network Rail needs to develop a detailed costing model for BNG on the Network Rail estate. The cost is likely to vary depending on the type of habitat, management and monitoring requirements including how the area is accessed. Currently indicative costs for certain activities are provided within the Railway Sustainability Design Guide. Please be aware of the caveats associated with these figures – but they will give an indication of the variations between activities that may help in decision making.

The delivery partners can also obtain costs for BNG units, if they need to contact habitat banks (see Section 5.5).

5.2.1 Advance and Delay in Creation/Enhancement

The Biodiversity Metric rewards habitat creation/enhancement in advance of works and penalises any delays (e.g. creation/enhancement after construction). The Biodiversity Metric automatically allocates time to target condition for each habitat parcel. The longer the time it takes to reach the target condition the greater the risk and therefore the lower the unit value.

Delivery Partners shall therefore progress BNG opportunities (See Section 5.4) in advance of construction and reduce any delays, in order to minimise the cost of delivering BNG. Failure to maximise these opportunities may add significant costs to the projects.

Deliverable and PACE Stage	Aims and Objectives	Tasks	Responsibility
BNG Cost Assessment Produced PACE Stages 1/2 Refined PACE Stages 3, 4 and 5 Reviewed PACE Stages 6 and 7	Identify correct resources and budget to be secured for implementing, maintaining and monitoring BNG throughout all project stages	Estimate approximate biodiversity unit losses compared to baseline (Project Manager and Project Environmental Manager to liaise with TRU Biodiversity Manager to agree estimate of units lost). Make adequate allowance in project cost plan for delivery of BNG target (based on estimate of units necessary to deliver 10% BNG and an agreed unit cost estimate – to be agreed by TRU Biodiversity Manager).	R: Delivery Partner Project Manager A: Delivery Partner Commercial Manager C:TRU Biodiversity Manager
		Revise BNG cost estimate when a preferred option is selected, and the design is developed (based on updated calculation of units lost and agreed offset strategy.) Where offsite units are required to deliver 10% BNG, quotes from offset actual (or potential) providers shall be sought and obtained and used to inform the updated cost estimate.	
		Revise and update BNG cost estimate at each subsequent PACE Stage up to and including PACE 7	

5.3 BNG Baseline Report and Database

The BNG Baseline Report includes the habitat, hedgerow and watercourse baseline for the project, which will be used for BNG calculations on the project. The BNG baseline will be refined as the project develops and in accordance with the requirements for defining the project area

(see Section 3.4). Any areas excluded from the BNG Baseline Area would be detailed in the report with a justification and a list of assumptions (see Section 3.4).

The BNG baseline assessment may form part of the Preliminary Ecological Appraisal (PEA) or can be a standalone report. The watercourse assessment is typically a separate report, given the geomorphological inputs.

The data should be captured as a georeferenced layer to allow for any iterations of BNG calculations to be run accurately and efficiently. The Delivery Partners shall ensure that the BNG baseline data is georeferenced and available as a layer on TRU ProjectMapper.

This assessment would typically be carried out during PACE Stage 3, however it may be beneficial to carry out a remote sensed data assessment at an earlier option selection stage, especially where biodiversity impacts are likely to be high and impacts differ significantly between options (see section 5.1 Optioneering Report - Ecology Input). It is important that habitat, hedgerow and watercourse data is captured early in the design process, as key decisions about a project (e.g. location) are often made during the early stages. If this data is captured too late then opportunities to avoid or minimise impacts are likely to have been missed.

Deliverable and PACE Stage	Aims and Objectives	Tasks	Responsibility
BNG Baseline Report <u>Produced</u> PACE Stage 3 or early PACE 4 (within 12 weeks of PACE 4 start). <u>Refined</u> PACE Stage 5 and 6 (If required)	Establish the habitats, hedgerow and watercourse baseline for the project; Assess strategic significance of habitats, hedgerows and watercourses within the study area; and identify high conservation value habitats, hedgerows and watercourses to avoid and protect.	Undertake ecology desk study. To identify protected sites and notable habitats, hedgerows and watercourses within the Study Area (Desk Study).	R: Delivery Partner Terrestrial BNG Lead R: Delivery Partner Watercourse BNG Lead A: Delivery Partner Sustainability Manager C:TRU Biodiversity Manager
		Assess wildlife corridors and barriers to movement. Review the Local Nature Recovery Strategy for the region (Landscape Scale Study).	
		Undertake onsite UKHab Survey (Site Study). To record habitat type, location and extent within the Study Area. Justify the habitat type by referring to the UKHab descriptions for each habitat.	
		Undertake Habitat Condition Survey. Justify why each criteria has been selected when determining the overall condition score.	
		Where required undertake onsite UKHab survey (Site Study), to record hedgerow type, location and extent within the Study Area. Justify the hedgerow type by referring to the UKHab descriptions for each hedgerow.	
		Where required undertake Hedgerow Condition Survey. Justify why each criteria has been selected when determining the overall condition score.	
		Where required undertake onsite MoPRh survey (Site Study). To record watercourse type, location and extent within the Study Area. Justify the watercourse type.	
		Where required undertake Watercourse Condition Survey. Justify why each criteria has been selected when determining the overall condition score.	
		Add data to geo-referenced database.	

		Produce BNG Baseline report and plan which include details from the tasks above. Where required add hedgerow details to BNG Baseline report and plan.	
		Where required produce MoPRh report and plan, which includes the required details on watercourses.	

5.3.1 Habitat, Hedgerow and Watercourse Value Plan

A habitat, hedgerow and watercourse value plan uses units per area or units per length scores and then colour codes to provide a visual representation of each feature depending on its value. The Value Plan will also be supplemented with species specific habitat suitability models and presence/absence data, as low value habitats in the metric do not always fully correspond with the location and extent of protected species which also need to be included in decision making. This Value Plan provides a traffic light system, which helps the design team with decision making, by highlighting valuable and important features for biodiversity.

This is not a requirement but, in some instances, maybe a useful tool for option selection and design development. Its use is encouraged where they can add value to decision making. This plan is not required where the impacts are likely be low or where there are negligible differences between the habitat impacts of each option. It is often useful when identifying and selecting site compound and site access locations. Where biodiversity impacts are likely to be high and impacts differ significantly between options this plan would typically be produced during PACE Stage 3, however it may be beneficial to carry out a desk-based assessment at an earlier stage of the option selection stage (see section 5.1 Optioneering Report - Ecology Input).

Deliverable and PACE Stage	Aims and Objectives	Tasks	Responsibility
Habitat Hedgerow and Watercourse Value Plan Produced PACE Stage 3 or early PACE 4 (within 12 weeks of PACE 4 start).	Identify high conservation value habitats, hedgerows and watercourses to avoid and protect.	Produce a habitat, hedgerow and watercourse value plan. This builds on the baseline data by applying a unit per area or unit per length score for each habitat, hedgerow and watercourse polygon.	R: Delivery Partner Terrestrial BNG Lead R: Delivery Partner Watercourse BNG Lead A: Delivery Partner Sustainability Manager C:TRU Biodiversity Manager

5.4 BNG Opportunities Register

Network Rail Environment and Social Standard (NR/L2/ENV/015) guidance note requires that the Designer will identify opportunities to deliver a Net Gain of biodiversity either on site (i.e. enhancements on NR land) or near the site (i.e. offsetting on 3rd party land). Delivery Partners shall therefore record such opportunities in the TRU BNG Opportunities Register (or equivalent) and consult with the TRU Biodiversity Manager.

There are six separate elements to BNG opportunities. These include what can be: -

1. Avoid and minimise impacts on high value habitats.
2. Created at the permanent and temporary impact areas.
3. Created or enhanced on Network Rail land.
4. Created or enhanced at Stations (e.g. existing hard standing areas, partnerships with TOCs etc).
5. Created or enhanced on off-site areas – Stakeholder Engagement.
6. Created or enhanced on off-site Habitat Banks.

Delivery Partners should continually explore opportunities to avoid or minimise impacts on high value habitats. Firstly, during optioneering (see Section 5.1) and then throughout design development. The decision making may result in cost savings for the project (see Section 5.2). The Delivery Partner should produce best practice case studies where positive environmental behaviours have been demonstrated on projects.

The Feasibility Assessment (see Section 5.5) will identify, maximise and secure the BNG opportunities within the permanent and temporary impact areas. The feasibility assessment will also determine whether units are likely to be required on the wider Network Rail estate or offsite and determine how many and the type of units which are likely to be required.

Most developments will need to identify BNG opportunities on the wider NR land. There are likely to be many opportunities on NR land in close proximity to the development (i.e. the same Local Planning Authority or Natural Character area). An assessment should be carried out so that the best opportunities can be selected to 1. Achieve the best outcomes for biodiversity and 2. Identify the most cost-effective options. The Delivery Partners shall ensure opportunities on the wider NR land are identified at PACE Stage 3 or earlier. These opportunities or areas where habitat creation or enhancement is not possible shall be discussed with the TRU Biodiversity Manager and added to Network Rail asset register - This will then benefit other projects and avoid repeated work. Network Rail are currently developing a new integrated and data-driven approach to managing vegetation assets.

The majority of existing stations and associated infrastructure will be hardstanding and a separate assessment will be required to identify the BNG opportunities in these locations. There will typically be opportunities for urban infrastructure such as Sustainable Drainages Systems (SuDs), green roofs, green walls, ground level planters and urban trees. These habitats are generally low scoring in the metric calculations but help to provide wider benefits such as social benefits, air and water quality improvement and enhanced aesthetic value.

The Principals of Biodiversity Net Gain support equitable stakeholder engagement and therefore encourages developers to work with local governments, wildlife groups, landowners and other stakeholders to support their priorities for nature conservation. BNG opportunities may be presented through the wider stakeholder engagement on the project. It is important that a BNG representative should be present at any TRU organised stakeholder engagement, and that stakeholders are aware that TRU has the potential to support them with their own nature conservation and wider environmental and social targets. If opportunities are identified, these should be supported where they represent value for money on the project.

If the project can’t or is unlikely to deliver the minimum BNG requirements on site, or through off-site stakeholder projects, then off-site BNG providers (Habitat Banks) shall be contacted. An emerging private market for BNG units is currently being developed and new providers are entering the market. This creates a competitive market, which will dictate the price of units. Therefore the Delivery Partner shall contact a minimum of 3 providers (unless otherwise agreed with the TRU Biodiversity Manager) for prices to ensure the best value for money is achieved. The BNG providers will need to be identified in each. The various providers can then be

contacted for any required units and the best option can be selected. All proposed off-site BNG shall be discussed and agreed with the TRU Biodiversity Manager and approved by the TRU Head of Sustainability and Social Value.

Deliverable and PACE Stage	Aims and Objectives	Tasks	Responsibility
BNG Opportunities Register <u>Produced</u> PACE Stage 3 or early PACE 4 (within 12 weeks of PACE 4 start). <u>Refined</u> PACE Stages 4 and 5	Identify BNG Opportunities On-site, on Network Rail Land, Stations and Offsite; Identify the best options for BNG	Identify opportunities for BNG along the TRU route. This shall focus on Network Rail unused land parcels.	R: Delivery Partner Terrestrial BNG Lead R: Delivery Partner Watercourse BNG Lead A: Delivery Partner Sustainability Manager C:TRU Biodiversity Manager
		Obtain agreements from the Network Rail operation and maintenance teams to carry out habitat creation or enhancements on the Network Rail land.	
		Identify opportunities for BNG at Stations (where present in or near the project area) in consultation with relevant station management organisation (e.g. TOC).	
		Obtain agreements from the Network Rail operation and maintenance and/or TOC teams (as required) to carry out habitat creation or enhancements at the Stations.	
		Identify lineside neighbours and wider stakeholders for the project and make them aware that TRU may be able to support them with their own nature conservation and wider environmental and social targets.	
		If offsite opportunities are presented through the stakeholder engagement, these shall be supported where they represent value for money on the project.	
		If required identify BNG providers for each region and request quotes from the offsite BNG providers to deliver the BNG requirements.	
		Produce a BNG Opportunities Register, which documents the tasks detailed above.	

5.5 BNG Feasibility Assessment

Purpose of this report is to inform the design team and TRU Biodiversity Manger of the feasibility of delivering a net gain. The calculations will be based on the BNG Baseline Report and Database (see Section 5.3) and the latest version of the Habitat and Landscape Drawings (see Section 5.6). It should help inform the cost assessment (see Section 5.2), determine the level of work required for the BNG opportunities register (see Section 5.4) and most importantly influence the design development.

The project should aim to firstly avoid or minimise impacts on biodiversity. Any previous decisions that have been made, where avoidance has been achieved, should be documented within the BNG Feasibility Assessment. This report should then explain the likelihood of being able to deliver the minimum 10% target for habitats, hedgerows and watercourses on-site and what is required in order to meet this target.

Opportunities should firstly be explored to deliver BNG within the development footprint, as this follows the mitigation hierarchy and deliver mitigation, compensation and enhancements, which are local to the impacts of the development. The project will then look to deliver net gain on Network Rail land, as this will help Network Rail achieve its own strategic targets on BNG. Finally, off-site areas including BNG markets will only be used once all on-site opportunities have been exhausted.

If the minimum 10% net gain is not feasible on-site, this report shall then state whether off-site areas are likely to be required (and set out where these off-site areas will/ could be). Any off-site delivery of BNG shall contribute towards local, regional and national plans and strategies for nature recovery.

It may not be possible at the early stages of the design to accurately quantify the area or length of habitats, hedgerows and watercourses that may be required. The feasibility assessment shall therefore state the assumptions and any limitations when predicting any losses and gains. This shall be an iterative process where the design will be refined and improved at each stage to help achieve BNG alongside other environmental requirements for the scheme.

If high or very high distinctiveness habitats or any rivers or streams are impacted by the project, the same habitat or watercourse shall be created or enhanced elsewhere. Suitable sites shall be identified. This may require additional works to ensure it is feasible to create or enhance these features in these locations. For instance, the site may require the correct soil chemistry, hydrology, elevation etc.

Deliverable and PACE Stage	Aims and Objectives	Tasks	Responsibility
BNG Feasibility Assessment Produced PACE Stage 3 or early PACE 4 (within 12 weeks of PACE 4 start). Refined PACE Stages 4 and 5	Inform the design team and TRU Biodiversity Manger of the feasibility of delivering a net gain and how net gain will be delivered on the project.	Explain the likelihood of being able to deliver the minimum 10% net gain target for habitats, hedgerows and watercourses on site	R: Delivery Partner Terrestrial BNG Lead R: Delivery Partner Watercourse BNG Lead A: Delivery Partner Sustainability Manager C:TRU Biodiversity Manager
		Explain what is required in the design in order to meet these targets	
		Set actions to identify, secure and exceed the requirements – This should help focus scheme design conversations	
		If 10% net gain is not feasible on site then define what (location, type and extent) is required on Network Rail estate	
		Set actions to identify, secure the Network Rail estate requirements – This should help focus Network Rail Estate conversations	
		If 10% net gain is not feasible on site and within the Network Rail estate then define what (location, type and extent) is required offsite	
		Set actions to identify, secure the off-site requirements – This should help focus off-site BNG conversations	
		If high or very high distinctiveness habitats or any rivers or streams are impacted by the project, identify a suitable site for creation or enhancement of these features.	
		Produce a BNG Feasibility Assessment, which documents the tasks detailed above.	

5.5.1 BNG Trading Rules

To satisfy trading rules for Biodiversity Units with the Metric, “trading down” of habitats for those of lower habitat distinctiveness is not allowed. For medium and low distinctiveness habitats the same broad habitat or a higher distinctiveness habitat is required. For High distinctiveness habitats the same habitat is required and for very high distinctiveness habitats a bespoke compensation is likely to be required. For the watercourse metric, in addition to the trading rules, compensation for losses needs to be on watercourses with similar habitat features and be of a

similar size, function and stream order. Therefore, loss of ditch habitat can't be mitigated by creation of river habitat and vice versa.

Delivery Partners shall therefore apply the BNG trading rules and watercourse metric rules set out above when delivering the required 10% BNG.

5.5.2 Delayed or Advanced Creation

Another important factor to consider on TRU is the long construction phase, which is in the region of seven to nine years at the programme level. This potentially creates a significant delay in habitat creation, which is penalised in the Metric. Conversely it could create significant opportunities to create habitats in advance of the works or alongside construction which would be rewarded by the Metric. Delivery Partners shall therefore develop and implement a programme for minimising the period between habitat losses and creation and shall actively seek and implement all feasible opportunities for advance habitat creation.

Where the impacts are temporary i.e., restored in both habitat type and condition within two years of the initial impact, this would be counted as retained habitat in the metric calculation tool.

5.6 Habitat and Landscape Specification Drawings

The landscape and habitat plans are a critical part of the design alongside the engineering elements. It is important that BNG and wider environmental benefit opportunities are maximised within the design. The habitat and landscape design will support the BNG Feasibility Assessment (see Section 5.5), Biodiversity Gain Plan (see Section 5.7) and BNG Creation, Management and Monitoring Plan (see Section 5.8).

Initially this may identify the likely land available for habitat creation or enhancement. The BNG Feasibility Assessment (see Section 5.5) will help inform what habitats should be created or enhanced in these areas, based on what is likely to be achievable and local targets.

Deliverable and PACE Stage	Aims and Objectives	Tasks	Responsibility
Habitat and Landscape Drawings <u>Produced</u> PACE Stage 3 or early PACE 4 (within 12 weeks of PACE 4 start). <u>Refined</u> PACE Stages 4 and 5	Illustrate and detail the habitats, hedgerows and watercourses which are created or enhanced as part of the project	Carry out workshops at each PACE stage to review emerging design. To include ecologists, landscape architects, engineers.	R: Delivery Partner Landscape Lead R: Delivery Partner Terrestrial BNG Lead R: Delivery Partner Watercourse BNG Lead A: Delivery Partner Designer / Principal Designer C:TRU Biodiversity Manager
		Detail the planting specifications for each habitat type.	
		Produce habitat and landscape drawings which are designed in collaboration with ecologists, landscape architects, engineers and the TRU Biodiversity Manager. For Network Rail land include Network Rail's operations and maintenance team. For off-site areas where designs are required, include landowners and managers.	
		Spatially referenced data on the project's biodiversity baseline and BNG design measures should be submitted in digital format to all organizations involved with the practical implementation and monitoring of BNG. The data shall also be submitted to relevant stakeholders.	

		Habitat data should be provided in a standard classification system, e.g. The UK Habitat Classification. Habitat condition assessment data should also be provided in full for each land parcel assessed, with any deviations from standard methods fully justified.	

5.6.1 Practical and Logistical Risks

Consideration needs to be given when designing habitats on how the habitats will be managed and monitored in the long term. For instance, safe access and practicalities for getting machinery or grazing animals on to habitats needs to be considered.

5.6.2 Ecological Function and Habitat Design

There are additional benefits of creating larger areas of habitat. Any proposed habitat parcels should be of sufficient size for ecological function. For instance, a fully functioning woodland habitat needs woodland edge and interior woodland. This creates a greater range of habitat niches compared to a narrow block of woodland which only supports woodland edge. Similar principles apply to wetland habitats, the larger the site the greater range of water depths and hydrological regimes can be created. It can also help create a resilient nature network which manages anthropogenic disturbance and increases the space for nature.

5.6.3 Locally Source Seeds, Plants and Trees

It is important where possible to use natural colonisation or native locally source seeds, plants and trees, as this allows natural selection to build adaptation to site conditions. These plants will be better adapted to site conditions and more resilient to current and future stresses. This is also an important measure to help improve biosecurity and prevent the introduction of pests and diseases which can arrive with imported plant or tree stock. The project will work with local nurseries to ensure the provenance of the plant stocks used on the project.

Design and Management Guidance notes for various habitat types are provided within the Railway Sustainability Design Guide.

5.6.4 Regional or Route Habitat Management Plans

Following the Varley Review Network Rail have a requirement to produce Biodiversity Action Plans and Habitat Management Plans covering all areas within each Region. These will be a reference tool that TRU can use when drawing up Habitat Management Plans for Network Rails lineside habitats.

5.7 BNG Design Stage Report and Biodiversity Gain Plan

The BNG Design Stage Report should explain how the project will deliver BNG based on the planning design and should then be updated following the development of the detailed design and as built design. This report should summarise the results of the feasibility assessment (see Section 5.5) and BNG opportunities register (see Section 5.4).

This is a report that would be typically aimed at decision-makers, e.g., a local planning authority, at the design consent stage of a project (i.e., to form part of a planning application submission alongside an Ecological Impact Assessment Report). It is also required for Network Rails BNG assurance.

CIEEM have produced a BNG Design Stage Report Template.

The Environment Act sets out that development subject to mandatory BNG will be required to submit a Biodiversity Gain Plan for planning authority approval and the planning authority required to approve it prior to commencement. This is required under the 'General condition of planning permission' added as Schedule 7A to the Town and Country Planning Act 1990 (under Schedule 14 of the Environment Act). The purpose of the Biodiversity Gain Plan is to provide a clear and consistent document with which an applicant can demonstrate that they have met the BNG requirements.

The Biodiversity Gain Plan is a document which summaries how a development will deliver biodiversity net gain and allows the planning authority to check whether the proposals meet the biodiversity gain objective. The production of this document will be made a pre-commencement condition of planning. It is not required unless requested by the local planning authority.

Defra have produced a Biodiversity Gain Plan Template.

Deliverable and PACE Stage	Aims and Objectives	Tasks	Responsibility
BNG Design Stage Report Produced PACE Stage 4 Refined PACE Stage 5 and 6 Reviewed PACE Stage 7/8 Biodiversity Gain Plan Produced PACE Stage 5 (where required)	Explain how BNG will be achieved on the project; Explain how the BNG Good Practice Principles has been applied.	Details of the pre-development biodiversity value of the site. This should include a plan showing the different habitat parcels present on site by type and a key and schedule showing the size of each parcel (in area or length as appropriate).	R: Delivery Partner Terrestrial BNG Lead R: Delivery Partner Watercourse BNG Lead A: Delivery Partner Sustainability Manager C:TRU Biodiversity Manager
		Evidence of steps taken to minimise adverse biodiversity impacts through design of site layout and how the mitigation hierarchy has been followed.	
		Proposed approach to enhancing biodiversity on-site. This should include a plan of the proposed site layout showing habitats to be maintained, enhanced and created by type and a key and schedule showing the size of each parcel (area or length as appropriate).	
		Explain the habitat and landscape design and how it ties in with the conservation objectives, strategic significance and wider environmental benefits.	
		If sufficient biodiversity enhancement cannot be achieved on site, details and evidence of proposed off-site biodiversity enhancements (including the use of credits) that have been planned or arranged for the development.	
		Provide justification of how each of the BNG Good Practice Principles has been applied as part of the net gain assessment.	
		Summarise stakeholder engagement and agreements for on-site and off-site areas. Confirm dedicated funding and legal agreements are secured for the 30 year management, monitoring and reporting.	
		The completed metric spreadsheet, including the full calculations that lead to the final biodiversity unit scores should be provided alongside this document.	

		Produce a BNG Design Stage Report to include details from the tasks listed above.	
		Produce a Biodiversity Gain Plan if required by Local Planning Authority.	

5.8 BNG Creation, Management and Monitoring Plan

The developer, BNG partners and other stakeholders including the planning authority need to have certainty that BNG will be delivered and properly implemented. In order to have the certainty that BNG can be properly implemented, a BNG Creation, Management and Monitoring Plan is required.

This plan would typically be produced at PACE Stage 5. An outline version of the plan maybe produced to support the Biodiversity Statement and a detailed plan is required to support the Biodiversity Gain Plan (see Section 5.7). This will need to be reviewed and updated throughout operation to ensure the most effective management and monitoring is being applied.

Detailed justifications for the choice of habitat, hedgerow and watercourse types, distinctiveness and condition should be provided in this plan. This will be based on what management is proposed for each location. For instance, the habitat type or condition may be limited if there are access constraints to a certain area.

Activities shall be documented and costed when planning management arrangements and handing over responsibilities to third parties (see Section 5.2). Provision shall be made to allow the smooth transition of a change of and/or in responsibilities in situations where owner of the management plan changes during the life of the project. Records of monitoring reports, survey records and management interventions shall be retained and passed on with any change in ownership/management.

At handover, Network Rail (or their agents) will take responsibility for the BNG Management and Monitoring Plan and subsequent periodic reporting (See Section 5.10) on Network Rail owner land and 3rd party land where Network Rail (or their agents) have agreed to carry out the management and monitoring.

Where Network Rail purchase units from a habitat bank provider, the Habitat Bank will take responsibility for the BNG Management and Monitoring Plan and subsequent periodic reporting (See Section 5.10)

Network Rail Management of Biodiversity Standard (NR/L2/ENV/122) contains the key principles for the management and enhancement of biodiversity and prescribes requirements for producing Habitat Management Plans (HMP) for the rail network. For BNG on Network Rail land, the Habitat Management and Monitoring Plan should be based on the Network Rail template and where necessary, updated to capture any additional requirements specified in the Natural England and Defra Habitat Management and Monitoring Plan Template.

Deliverable and PACE Stage	Aims and Objectives	Tasks	Responsibility
BNG Creation, Management and Monitoring Plan Produced (Outline)	Detail the required Habitat creation, management practices and the monitoring requirements to	Detail and set management objectives.	R: Delivery Partner Landscape Lead R: Delivery Partner
		Detail and set habitat creation/enhancement methods. Justify why the target habitat type/condition is achievable.	
		Detail and set management methods and timings. Justify why the frequency and type of management is appropriate.	

PACE Stage 4 <u>Produced</u> PACE Stage 5 <u>Refined</u> PACE Stage 6 <u>Reviewed</u> PACE Stages 7 and 8	ensure the conservation objectives are achieved and roles and responsibilities for each task.	Detail and set the indicators of success and the monitoring methods and timings, as well as setting out the reporting procedures and options for remedial works, if needed. Justify why the type and frequency of monitoring is appropriate.	Terrestrial BNG Lead R: Delivery Partner Watercourse BNG Lead A: Delivery Partner Designer / Principal Designer C:TRU Biodiversity Manager
		Detail and set roles, responsibilities and required competencies of those involved with implementing these tasks.	
		Produce a table that illustrates the timings for each management and monitoring task, including the number of visits per year, the management years and who is responsible for each task. Separate tables should be provided for 1. habitat creation/establishment and 2. operation.	
		Maps and drawings of created or enhanced features should be provided in spatially accurate digital drawings, e.g., using GIS to allow accurate monitoring.	
		Produce a BNG Creation, Management and Monitoring Plan, which documents the tasks detailed above.	

5.9 Environmental and Social Management Plan

An Environmental and Social Management Plan (ESMP) sets out how potentially adverse impacts associated with development and construction sites will be managed.

This document should include the development site layout and measures to protect existing biodiversity features, such as the use of appropriate buffer zones, fencing and signage and measures to avoid and manage pollution incidents. The site personal responsible for compliance, should be named within the ESMP.

Environment and Social Minimum Requirements NR/L2/ENV/015 specifies the ESMP requirements on projects. Network Rail have produced an ESMP Template.

5.10 BNG Audit Report

An audit is required to verify that BNG has been delivered in accordance with the Biodiversity Gain Plan (see Section 5.7) and BNG Management and Monitoring Plan (see Section 5.8). The planning authority may request this as a planning condition. Network Rail require this for their own biodiversity accounting.

The BNG Audit Report shall be produced to record that the work has been carried out in accordance with the BNG Creation, Management and Monitoring Plan and is on target to deliver or has achieved the planned biodiversity outcomes.

Reporting requirements shall be agreed at the outset of a project and shall be undertaken at least until all obligations to BNG are fulfilled. The required frequency of reporting will vary between each site depending on the habitat type, target condition and the trajectory towards target type and condition. If remedial actions are required, the frequency of audits may need to increase, which will need to be determined on a case-by-case basis. The BNG Creation, Management and Monitoring Plan (see Section 5.8) shall specify the reporting frequency.

This will need to be carried out at the end of construction to confirm the location and extent of habitats, hedgerows and watercourses are in accordance with the as built design plans and at Project Handover to confirm the habitat, hedgerow and watercourse target conditions have been met or are on the right trajectory in order to achieve the target conditions.

If management has not been successful, changes in the management regime shall be implemented to deliver a successful outcome and the BNG Creation, Management and Monitoring Plan will be updated accordingly. Any changes to management and survey methods, frequency and timing, etc. from those envisaged in the original BNG Creation, Management and Monitoring Plan shall be recorded and justified.

Survey records shall be retained and handed over to any parties undertaking subsequent management and monitoring. Monitoring information shall be made available to relevant third parties for the purpose of reporting on progress made towards attaining the BNG outcomes.

At handover, Network Rail (or their agents) will take responsibility for the BNG Audit Report. Network Rail retains responsibility for habitats being managed to meet targeted condition over the 30 year management and monitoring period. There are ongoing discussions within Network Rail regarding hand back, management, monitoring and auditing of BNG.

CIEEM have produced a BNG Audit Template.

Deliverable and PACE Stages	Aims and Objectives	Tasks	Responsibility
BNG Audit Report Produced End of PACE Stage 6 Produced PACE Stages 7/8	Produce a BNG audit, confirming the delivery of BNG as detailed in the Biodiversity Gain Plan.	Review the design stage metric with 'as built' calculations.	R: TRU Biodiversity Manager A: TRU Sustainability and Social Value Lead C: Delivery Partner Sustainability Manager
		Review delivery and success of BNG, as detailed in the management and monitoring plan.	
		Review delivery and success of other biodiversity commitments, including those undertaken for protected species.	
		Produce a clear statement to confirm final biodiversity units delivered and whether this meets the projected units.	
		Where delivery is not on track or has not been met, produce a clear statement to whether any remedial measures are required to deliver on BNG commitments and how these will be implemented and reported.	
		For onsite locations, Network Rails Asset Plan should be updated if there are any change to the habitat, hedgerow and watercourse location, extent and target conditions.	
		For offsite locations, Natural England's BNG Register should be updated if there are any change to the habitat, hedgerow and watercourse location, extent and target conditions.	
		Where delivery is not on track or has not been met, the BNG Management and Monitoring Plan should be updated accordingly, as per the recommendation in the Audit Report.	

APPENDIX A – SUMMARY OF DELIVERY PARTNER TRU BIODIVERSITY NET GAIN RESORCING AND DELIVERY REQUIREMENTS

TRU has an overall target to achieve a minimum 10 % BNG (using an approved Natural England Biodiversity Metric). In order to meet this overall target, Delivery Partners shall:

1) Deliver and demonstrate 10% BNG for each TRU Project. Through progressive assurance the Delivery Partners and Programme Team will periodically review BNG data to assess the progress towards the TRU target.

2) Use Natural England Biodiversity Metric (version 3.0) for all biodiversity baselines, calculations and BNG reporting.

3) Ensure that all required biodiversity deliverables are prepared, reviewed and approved by a suitably qualified BNG Specialist (See Section 4)

4) Provide all resourcing identified in this document in accordance with the TRU resourcing requirements (See Section 4).

5) Provide all deliverables identified in this document in accordance with the TRU reporting requirements (See Section 5).

6) Fully comply with any other biodiversity requirements where applicable, e.g., as required to obtain necessary consents and permissions.

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