



London Borough of Haringey

STANHOPE ROAD BRIDGE

Biodiversity Net Gain Assessment





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EXECUTIVE SUMMARY

WSP UK Ltd. was commissioned by Haringey Council to undertake a Biodiversity Net Gain (BNG) assessment for improvements to Stanhope Road Bridge ('The Proposed Development').

BNG is the desired result of a process applied to development so that, overall, there is a positive outcome for biodiversity. The process itself follows the mitigation hierarchy, which sets out everything possible that must be done to firstly avoid, secondly minimise, and thirdly compensate for unavoidable impacts on or off-site. The process should adhere to the good practice principles (Appendix A).

The Natural England Biodiversity Metric 2.0 (hereafter referred to as "the Metric") (Natural England, 2019) has been used to quantify the biodiversity value of existing habitats present on-site and those proposed under the current design of the post-development landscape design (Appendix B, Figure 1, Figure 2).

Overall, the Proposed Development is categorised as achieving a quantitative net gain in biodiversity value. It will result in a 13.04% net gain in Area-based Habitat Units (HU).

Biodiversity Units	Baseline Value	Post-development Value	Change in Units	Quantitative Outcome
Area-based Habitat Units (HU)	5.37	6.07	0.70	13.04 % net gain

The Proposed Development as assessed has the potential to achieve a qualitative biodiversity net gain as it has the potential to prove compliance with all 10 good practice principles.

These results will be achieved through the creation of new habitats and the enhancement of retained woodland. The enhancement of retained woodland is critical to achieving a net gain for the Proposed Development. Without the enhancement the Proposed Development would achieve a -2.82 % loss in HU.

Recommendations to ensure the safeguarding of the proposed net gain include the creation of a Landscape Ecological Management and Maintenance Plan, and specific habitat management aimed at enhancing the retained woodland.

1 INTRODUCTION

1.1 PROJECT BACKGROUND

- 1.1.1. WSP UK Ltd. (WSP) was commissioned by Haringey Council (the 'Client' to undertake a Biodiversity Net Gain (BNG) assessment in support of a detailed Planning Application for the "Construction of a new footbridge with associated ramp access and steps, and landscaping, involving demolition of the existing bridge and abutments ("the Proposed Development") located on Stanhope Road, Highgate in the London Borough of Haringey.
- 1.1.2. Assessments of Stanhope Bridge have revealed that this bridge and its abutments are no longer fit for purpose. In particular, the abutments failed their structural assessment and are under a movement monitoring regime, and there are bearing failures at the east abutment, requiring the bridge to be propped. Given the extensive structural defects, the Client has concluded that it would not be financially viable to repair the bridge as the lifespan of the works would be unknown and no guarantee given. Therefore, replacement is the most appropriate option as this would provide a 120 year lifespan for the bridge, as required by the LPA.
- 1.1.3. This report details the BNG assessment for the construction of a new footbridge and associated ramp and steps. The red line boundary for the Proposed Development, (hereafter referred to as 'the Site'), measures 0.78ha. It is located in Highgate, north London (central grid reference: TQ 29347 87831).
- 1.1.4. The Site is within Parkland Walk, a Local Nature Reserve (LNR) which runs along a disused railway line between Finsbury Park and Highgate. It is in a vegetated corridor, in an otherwise a heavily urbanised area of north London, surrounded by residential and commercial areas of Highgate to the south and west, Crouch End to the north, and Stroud Green to the east. Small pockets of woodland are present in the wider area, to the north-west and south-west of the Site, as well as several public green spaces, and sports pitches associated with private clubs or schools. The location of the Site is shown on the baseline and post-development maps provided in Appendix B.

1.2 BIODIVERSITY NET GAIN

- 1.2.1. BNG is the end result of a process applied to development so that, overall, there is a positive outcome for biodiversity. The process itself follows the mitigation hierarchy, which states that everything possible must be done to firstly avoid, secondly minimise, and thirdly restore/rehabilitate losses of biodiversity on-site. Only as a last resort, residual losses are compensated for using biodiversity offsets, which are distinguished from other forms of mitigation in that they are off the development site. BNG assessment reports are intended to provide detailed insight into the adherence of a Proposed Development to the BNG good practice principles provided in Appendix A.
- 1.2.2. Adopting a BNG approach can account for biodiversity losses which were previously not fully assessed and mitigated for, via legal and planning systems. Whilst some species are extensively protected, many are not; with the consequence that development can be 'legally compliant' but still result in biodiversity loss. The BNG approach guards against this, enabling development to contribute towards the national and global target of halting biodiversity loss by 2020 (DEFRA, 2011), and towards local and national strategies (listed below; detail provided in Appendix C) for conserving and

enhancing wildlife. BNG assessments allow stakeholders to demonstrate adherence to national legislation and local policy concerning biodiversity.

- 1.2.3. Details of the legislation, policy and strategic documents relevant to the Proposed Development are provided in Appendix C, and are listed below:

1.3 RELEVANT LEGISLATION AND POLICY

- 1.3.1. This BNG assessment has been compiled with reference to the following relevant nature conservation legislation, planning policy, and the UK Biodiversity Framework from which the protection of sites, habitats, and species is derived in England including:

- UK Government's 25 Year Environmental Plan (DEFRA, 2018);
- Biodiversity 2020: A Strategy for England's Wildlife and Ecosystem Services (DEFRA, 2011);
- National Planning Policy Framework (NPPF) (MHCLG, 2019);
- National Policy Statement for National Networks (NPSNN) (Department for Transport, 2014);
- The Natural Environment and Rural Communities (NERC) Act (HMSO, 2006);
- London Borough of Haringey Local Plan Strategic Policies 2013-2026 (2013);
- London Borough of Haringey Development Management DPD (2017);
- London Borough of Haringey New Local Plan First Steps Engagement (2020); and
- The London Plan (Greater London Authority, 2021).

2 METHODS

- 2.1.1. A summary of the BNG assessment methods and details of project-specific data sources, assessment limitations, and assumptions are provided in the following section.

2.2 DATA SOURCES

- 2.2.1. The BNG assessment is informed by:

1. A Phase 1 habitat survey of the Proposed Development undertaken in October 2020 (WSP, 2021a). The habitat survey was completed by an experienced WSP ecologist following best practice guidelines (Joint Nature Conservation Committee (JNCC, 2010)). This survey provided a baseline habitat database which details the habitat types present on Site, their area (in hectares (ha)), and their geographic distribution (Appendix B, Figure 1).
2. A retrospective condition assessment of semi-natural habitats was undertaken using information provided during the October 2020 habitat survey. The habitat condition assessment was carried out by the experienced habitat surveyor who undertook the Phase 1 habitat surveys in October 2020. The condition assessment followed Farm Environment Plan (FEP) guidelines (Natural England, 2010) and details of the condition assessment are included within Appendix E.
3. Publicly available Open Source Natural England datasets for Habitats of Principal Importance (HPI)¹, ancient woodland (classed as irreplaceable habitat), and statutory designated sites for nature conservation.
4. A post-development landscape plan designed as of the 2 June 2021 (WSP, 2021b). The post-development landscape habitats were translated into UK Habitat Classification (UKHab, 2018) habitat types for use in the assessment, and further converted to Phase 1 habitats to allow for comparable mapping (Appendix B, Figure 2). Habitat types for use in the BNG assessment are detailed in Appendix D.

2.3 BNG ASSESSMENT

- 2.3.1. This BNG assessment uses the following industry recognised best practice methodologies:

- **CIEEM, IEMA & CIRIA** (2016). Biodiversity Net Gain: Good Practice Principles for Development;
- **CIEEM, IEMA & CIRIA** (2019). Biodiversity Net Gain: Good Practice Principles for Development. A Practical Guide;
- **Natural England** (2010). Higher Stewardship, Farm Environment Plan (FEP) Manual, 3rd Edition; and

¹ Statutory lists of priority habitats in England as required under Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006, available at <http://www.legislation.gov.uk/ukpga/2006/16/contents>

- **Natural England** (2019). The Biodiversity Metric 2.0: auditing and accounting for biodiversity user guide (Beta Version).

2.3.2. BNG assessment calculations are separated into four key sections which are used to produce the quantitative outcomes of the assessment. The key sections are:

1. Separating out irreplaceable baseline habitats and any mitigation proposed for impacts to irreplaceable habitats, from the main data set;
2. Quantification of baseline biodiversity units using Phase 1 habitat data and habitat condition assessment data;
3. Quantification of post-development biodiversity units using Phase 1 habitat data translated from the post-development landscape design; and
4. Assessing the net change in biodiversity value as a result of the Proposed Development.

2.3.3. Collectively these elements of the BNG assessment are used in conjunction with qualitative information relating to the BNG good practice principles to produce a BNG assessment outcome. Further detail can be found on the Natural England website (Natural England, 2019).

2.3.4. It is important to recognise that the quantification of biodiversity is one of a number of factors to be considered when assessing the impact of the Proposed Development on biodiversity. Please note that this BNG assessment report does not cover potential impacts of the Proposed Development on protected species and designated sites. These are covered within the Preliminary Ecological Appraisal (WSP, 2020) report.

2.3.5. The London Borough of Haringey and the Greater London Authority have set no percentage (%) target for net gain (Appendix C). In the absence of regulation or policy setting national or local definitions for a target level of net gain, a minimum of a percentage change in biodiversity units of 101% or greater could be assumed (i.e. a BNG of 1% or more). However, in the absence of evidence of the Metric's accuracy, good practice (CIEEM, IEMA & CIRIA, 2019) recommends drawing on guidance from credible industry bodies. To this end, this assessment takes the biodiversity outcome thresholds from BREEAM, CEEQUAL, HQA, (2018) whereby the percentage change thresholds for net loss, no net loss, and net gain are detailed below:

- Minimising loss – 75-94% (i.e. -25% to -6% decrease in units)
- No net loss (NNL) for the habitats assessed – 95-104% (i.e. -5% decrease to 4% increase in units)
- Net gain for the habitats assessed – 105-109% (i.e. 5 - 9% increase in units)
- Significant net gain – 110% or above (i.e. >10% increase in units)

2.4 LIMITATIONS AND ASSUMPTIONS

2.4.1. The following limitations and assumptions have been applied when using the above methodologies.

- The Site boundary as of 1 June 2021 has been used for the assessment (Appendix B).
- JNCC Phase 1 habitat types determined in the habitat survey were translated to UKHab habitat types using the habitat translation information provided in the Metric toolkit, to allow use in the Metric calculations (Appendix D).

- The Phase 1 habitat survey of the Site was undertaken in October 2020 which is outside the optimal season for Phase 1 Habitat surveys. As such, seasonal variations could not be observed and only a selection of all plant species that occur within the survey area will have been noted. However, given the type of habitat recorded on the Site, it is considered that sufficient survey effort was employed to inform an accurate assessment.
- The post-development landscape plan does not include proposed landscaped habitats for all areas of habitat within the Site. Where landscaped habitat has not been included within the post-development plan, it is assumed that the baseline habitat is retained within these areas.
- Habitat connectivity values were assigned according to the metric's default assumptions of medium (1.1 multiplier score) connectivity assigned to high distinctiveness habitats, and low (1 multiplier score) for all other habitats.
- Strategic significance values were assigned a value of high as the habitat is within an area formally identified in local strategy, as the Site is within Parkland Walk Local Nature Reserve (London Borough of Haringey, 2020) (1.15 multiplier score).
- The PEA report identified that the broadleaved deciduous woodland within the Site qualified as deciduous woodland HPI, which is described as "woodland growing on the full range of soil conditions, from very acidic to base-rich, and takes in most semi-natural woodland in southern and eastern England" (JNCC, 2008). Due the conditions of the habitat, its history, and location, it is not considered that this habitat is classed as irreplaceable habitat and does not require separating out for bespoke mitigation as per Section 1 outlined above.
- It is assumed that the habitats detailed within the landscape plan will be established as habitats of moderate condition. The management requirements to achieve this condition are detailed in Appendix D.
- During the interval between the original BNG assessment and this update, a new Biodiversity Metric 3.0 has been released by Defra. In-line with guidance around the release of the new Metric however, Metric 2.0 has been used for this update to allow comparison with the original assessment, and to allow consistency between the methods.

3 RESULTS

3.1 BASELINE BIODIVERSITY

- 3.1.1. The biodiversity baseline for the Site is based on habitat types and areas, their distinctiveness and condition scores, and the number of biodiversity units each type of habitat generated (as detailed within the completed Metric accompanying this report). The baseline biodiversity map showing the habitats within the Site is included in Appendix B (Figure 1).
- 3.1.2. There were no hedgerows or watercourses present within the baseline or proposed on Site, therefore hedgerow and watercourse units were not assessed and are not discussed further within this report.
- 3.1.3. Within the Site, area-based habitats generated 5.37 Area-based Habitat Units (HU).

3.2 POST-DEVELOPMENT BIODIVERSITY

- 3.2.1. The post-development habitats expected on Site after construction are based on the landscape design and the plans also show areas of retained habitat (Appendix B, Figure 2). Where feasible, the conditions of these retained habitats have been enhanced in the post-development calculations.
- 3.2.2. Post-development, the area-based habitats generated a total of 6.07 HU. Retained habitat generated 0.14 HU, created habitat generated 0.68 HU and enhanced habitats generated 5.25 HU (as detailed within the completed Metric accompanying this report).

3.3 SUMMARY OF OVERALL BIODIVERSITY CHANGE

- 3.3.1. Table 1 summarises the changes in HU generated for the broad habitat categories present on Site during the baseline and post-development mapping.
- 3.3.2. The construction of the Proposed Development will result in net gain of 13.04% in area-based HU.

Table 1 - Summary of Results

Biodiversity Units	Baseline Value	Post-development Value	Change in Units	Percentage Outcome
Area-based Habitat Units (HU)	5.37	6.07	0.70	13.04% net gain

3.4 SUMMARY OF QUALITATIVE BNG ASSESSMENT

- 3.4.1. Table 2 discusses adherence of the Proposed Development to each of the BNG good practice principles. Adherence of the Proposed Development to these principles is based on the current stage in the BNG process; it does not necessarily rule out future adherence.

Table 2 - Evidence of Project Compliance with BNG Good Practice Principles

Principle	Description	Evidence	Current Outcome
1. Apply the mitigation hierarchy	Do everything possible to first avoid and then minimise impacts on biodiversity. Only as a last resort, and in agreement with external decision-makers where possible, compensate for losses that cannot be avoided. If compensating for losses within the development footprint is not possible or does not generate the most benefits for nature conservation, then offset biodiversity losses by gains elsewhere.	The area of habitat lost to facilitate the Proposed Development is small in relation to ecological functionality (0.15ha) and has been minimised through sensitive design and cross referencing the various tree and habitat reports with the emerging design. It is proposed that the post-development plan will achieve a net gain via on-site habitat compensation and habitat enhancement. The landscape design for the Proposed Development intends to compensate for habitat loss by creating new, biologically valuable habitats. These will be achieved by monitoring techniques set out in a Landscape Ecological Management and Maintenance Plan (LEMMP) or similar document.	Achievable
2. Avoid losing biodiversity that cannot be offset by gains elsewhere	Avoid impacts on irreplaceable biodiversity – these impacts cannot be offset to achieve No Net Loss or Net Gain.	No irreplaceable habitats are impacted by the Proposed Development.	Achieved
3. Be inclusive and equitable	Engage stakeholders early, and involve them in designing, implementing, monitoring and evaluating the approach to Net Gain. Achieve Net Gain in partnership with stakeholders where possible and share the benefits fairly among stakeholders.	The proposed landscape design has been informed by public consultation and more detailed workshops with key stakeholders such as conservation and resident groups and the Friends of Parkland Walk. The Site is publicly accessible and, within a highly urbanised context, it plays an important recreational role for local residents. The net gain provided by the Proposed Development will benefit all those using the Site.	Achievable

Principle	Description	Evidence	Current Outcome
4. Address risks	Mitigate difficulty, uncertainty and other risks to achieving Net Gain. Apply well-accepted ways to add contingency when calculating biodiversity losses and gains, in order to account for any remaining risks, as well as to compensate for the time between the losses occurring and the gains being fully realised.	The BNG assessment used industry-recognised risk multipliers from the Metric. Management prescriptions secured via a LEMMP or similar document will identify a suitable time frame in which habitat establishment and management should be undertaken and will additionally allocate responsibilities.	Achievable
5. Make a measurable Net Gain contribution	Achieve a measurable, overall gain for biodiversity and the services ecosystems provide whilst directly contributing towards nature conservation priorities.	The BNG assessment determined a quantitative Net gain for HU (+13.04% HU). Protected and notable species survey work, in conjunction with required mitigation and enhancement for species within the Site should be completed and established.	Achievable
6. Achieve the best outcomes for biodiversity	Achieve the best outcomes for biodiversity by using robust, credible evidence and local knowledge to make clearly-justified choices when: Delivering compensation that is ecologically equivalent in type, amount and condition, and which accounts for the location and timing of biodiversity losses; Compensating for losses of one type of biodiversity by providing a different type that delivers greater benefits for nature conservation; Achieving Net Gain locally to the development whilst also contributing towards nature conservation priorities at local, regional and national levels;	At the time of writing, this BNG assessment used the most recent data and followed a rigorous method and QA process. The area of habitat lost to facilitate the Proposed Development is small in relation to ecological functionality (0.15ha) and has been minimised through sensitive design. The woodland habitat lost from the Site will be compensated for via the enhancement of retained woodland within the Site. Net gain will be achieved using on-site habitat compensation and habitat enhancement. The enhancement of retained woodland within the Site ensures the most appropriate outcome from a local, regional, and national level by enhancing existing habitat -resulting in better quality habitat. It will	Achievable

Principle	Description	Evidence	Current Outcome
	Enhancing existing or creating new habitat; Enhancing ecological connectivity by creating more, bigger, better and joined areas for biodiversity.	facilitate ecological connectivity as it enhances the habitat within a linear habitat feature of a disused railway line. Appendix D details management requirements aimed at achieving the required conditions of post development habitats to ensure a net gain to biodiversity as a result of the Proposed Development.	
7. Achieve additional nature conservation outcomes	Achieve nature conservation outcomes that demonstrably exceed existing obligations (i.e. do not deliver something that would occur anyway).	The nature conservation outcomes within the legislation and policy (Appendix C) have been met and exceeded for habitats.	Achieved
8. Create a Net Gain legacy	Ensure that Net Gain generates long-term benefits by: Engaging stakeholders and jointly agreeing practical solutions that secure Net Gain in perpetuity; Planning for adaptive management and securing dedicated funding for long-term management; Designing Net Gain for biodiversity to be resilient to external factors, especially climate change; Mitigating risks from other land uses; Avoiding displacement of harmful activities from one location to another; Supporting local-level management of Net Gain activities.	A LEMMP or similar document, associated with the Proposed Development will include measures to maintain the created habitat. The LEMMP should detail timings for review of the plan to ensure the BNG provisions are being achieved and provide future resilience.	Achievable
9. Optimise sustainability	Prioritise Biodiversity Net Gain and, where possible, optimise the wider environmental benefits for	Sustainability has been achieved by collaboration with the design and landscape team to ensure the post-development habitats can feasibly be	Achievable

Principle	Description	Evidence	Current Outcome
	a sustainable society and economy.	managed and maintained for at least 30 years at their target condition. Enhancement of retained woodland enables the provisioning of ecosystem services, including carbon captured and urban cooling.	
10. Be transparent	Communicate all Net Gain activities in a transparent and timely manner, sharing the learning with all stakeholders.	The BNG outcome is to be shared with relevant stakeholders through the public accessibility of this report on the local planning portal.	Achievable

DISCUSSION AND RECOMMENDATIONS

- 3.4.2. The Proposed Development will result in 13.04% net gain in HU. In conclusion, the Proposed Development as assessed, achieves a quantitative biodiversity net gain. The Proposed Development also has the potential to achieve a qualitative biodiversity net gain with the potential compliance in respect of all 10 good practice principles. No major limitations have been identified that would compromise achieving these results.
- 3.4.3. These targets will be met through the creation of new habitats which reach a moderate condition, and the enhancement of retained woodland within the Site from a condition of poor to moderate. The enhancement of existing woodland is critical to achieving a net gain for the Proposed Development. For a scenario with habitat creation only and no enhancement based on the landscaping plan (WSP, 2021b), the Proposed Development would achieve a -2.82% NNL.
- 3.4.4. The key enhancement measure required relates to prevention of damage to the woodland by adjacent activities (in this case, the public). The following intervention will achieve this:
- Unsanctioned path creation and excursions into the woodland habitat within the Site will be discouraged through the guarding of specific areas using log piles, dead hedging or similar to create a natural barrier. In addition, information signs should be displayed explaining the need to reduce potential damage to the woodland within the Site.
- 3.4.5. An optional, additional (and easily achievable) measure to safeguard the moderate condition of the enhanced woodland would be deadwood retention (standing and lying).
- This can be achieved by retaining the trunks of large, felled trees resulting from the construction of the Proposed Development, which are then moved into woodland areas adjacent and lain flat or 'planted' vertically in the ground to provide lying and standing deadwood respectively (benefiting a wider range of invertebrates).
- 3.4.6. Net gain will be secured through the creation of a LEMMP or similar document. This document should detail the specifications on how to achieve the proposed habitats and condition, including the species composition and management requirement. In addition, it should specify time frames by which management targets should be reached and identify those responsible for achieving these. The document should provide opportunities for continued review and enable adjustment to account for the climate change resilience of the proposed habitats.
- 3.4.7. Full details of these recommended enhancement activities and how they relate to habitat condition are detailed in Appendix D.

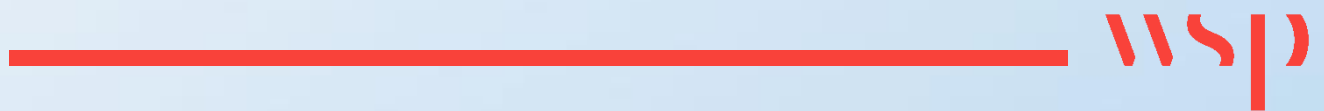
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Appendix A

CIEEM, CIRIA AND IEMA GOOD PRACTICE PRINCIPLES



Biodiversity Net Gain

Good practice principles for development

Biodiversity Net Gain is development that leaves biodiversity in a better state than before. It is also an approach where developers work with local governments, wildlife groups, land owners and other stakeholders in order to support their priorities for nature conservation. These ten principles set out good practice for achieving Biodiversity Net Gain and must be applied all together, as one approach.

Principle 1. Apply the Mitigation Hierarchy

Do everything possible to first avoid and then minimise impacts on biodiversity. Only as a last resort, and in agreement with external decision-makers where possible, compensate for losses that cannot be avoided. If compensating for losses within the development footprint is not possible or does not generate the most benefits for nature conservation, then offset biodiversity losses by gains elsewhere.

Principle 2. Avoid losing biodiversity that cannot be offset by gains elsewhere

Avoid impacts on irreplaceable biodiversity - these impacts cannot be offset to achieve No Net Loss or Net Gain.

Principle 3. Be inclusive and equitable

Engage stakeholders early, and involve them in designing, implementing, monitoring and evaluating the approach to Net Gain. Achieve Net Gain in partnership with stakeholders where possible, and share the benefits fairly among stakeholders.

Principle 4. Address risks

Mitigate difficulty, uncertainty and other risks to achieving Net Gain. Apply well-accepted ways to add contingency when calculating biodiversity losses and gains in order to account for any remaining risks, as well as to compensate for the time between the losses occurring and the gains being fully realised.

Principle 5. Make a measurable Net Gain contribution

Achieve a measurable, overall gain¹ for biodiversity and the services ecosystems provide while directly contributing towards nature conservation priorities.

¹ Net Gain has been described as a measurable target for development projects where impacts on biodiversity are outweighed by a clear mitigation hierarchy approach to first avoid and then minimise impacts, including through restoration and / or compensation. Adhering to these Net Gain principles (i.e. pursuing all principles together) will help in under-pinning good practice for achieving and sustaining Net Gain.

Principle 6. Achieve the best outcomes for biodiversity

Achieve the best outcomes for biodiversity by using robust, credible evidence and local knowledge to make clearly-justified choices when:

- Delivering compensation that is ecologically equivalent in type, amount and condition, and that accounts for the location and timing of biodiversity losses
- Compensating for losses of one type of biodiversity by providing a different type that delivers greater benefits for nature conservation
- Achieving Net Gain locally to the development while also contributing towards nature conservation priorities at local, regional and national levels
- Enhancing existing or creating new habitat
- Enhancing ecological connectivity by creating more, bigger, better and joined areas for biodiversity

Principle 7. Be additional

Achieve nature conservation outcomes that demonstrably exceed existing obligations (i.e. do not deliver something that would occur anyway).

Principle 8. Create a Net Gain legacy

Ensure Net Gain generates long-term benefits by:

- Engaging stakeholders and jointly agreeing practical solutions that secure Net Gain in perpetuity²
- Planning for adaptive management and securing dedicated funding for long-term management
- Designing Net Gain for biodiversity to be resilient to external factors, especially climate change
- Mitigating risks from other land uses
- Avoiding displacing harmful activities from one location to another
- Supporting local-level management of Net Gain activities

Principle 9. Optimise sustainability

Prioritise Biodiversity Net Gain and, where possible, optimise the wider environmental benefits for a sustainable society and economy.

Principle 10. Be transparent

Communicate all Net Gain activities in a transparent and timely manner, sharing the learning with all stakeholders.

² Biodiversity compensation should be planned for a sustained Net Gain over the longest possible timeframe. For development in the UK, the expectation is that compensation sites will be secured for at least the lifetime of the development (e.g. often 25-30 years) with the objective of Net Gain management continuing in the future.

Appendix B

BASELINE AND POST- DEVELOPMENT HABITAT MAPS



N

Key

Site Boundary

Phase 1 Habitat - Baseline

Bare ground

Broadleaved woodland - semi-natural

Buildings

00.0150.030.0450.06

km

wsp

Client:

Haringey Council

Project:

Stanhope Road Bridge

Title

Phase 1 Habitats - Baseline

Drawing No: Figure 1

Date: August 2021

Scale: 1,000 @ A3

Drawn: JR

Checked: RP

Approved: VD

Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



N

Key

Site Boundary

Phase 1 Habitat - Post Development

Broadleaved woodland - semi-natural

Scrub - dense/continuous

Neutral grassland - semi-improved

Buildings

Bare ground

Woodland to be Enhanced

00.010.020.030.04

km

wsp

Client:

Haringey Council

Project:

Stanhope Road Bridge

Title

Phase 1 Habitats - Post Development

Drawing No: Figure 2

Date: August 2021

Scale: 750 @ A3

Drawn: JR

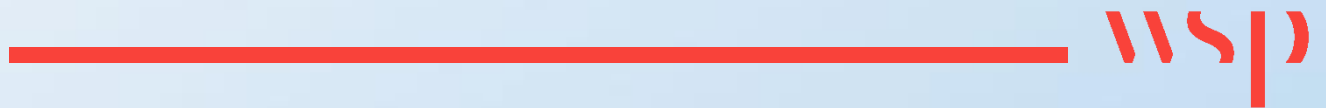
Checked: RP

Approved: VD

Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Appendix C

BIODIVERSITY NET GAIN POLICY AND LEGISLATION



BIODIVERSITY NET GAIN POLICY AND LEGISLATION

NATIONAL LEGISLATION

UK Government's 25 Year Environment Plan

The UK Government's 25 Year Environment Plan (DEFRA, 2018) states a desire to '*embed a 'net environmental gain' principle for development to deliver environmental improvements locally and nationally*' and plans to consult on making Biodiversity Net Gain a mandatory requirement.

On 14th March 2019, Her Majesty's Treasury confirmed that following consultation, the Government will use the forthcoming Environment Bill to mandate BNG for development in England, ensuring that the delivery of much-needed infrastructure and housing is not at the expense of vital biodiversity.

Biodiversity 2020: A strategy for England's wildlife and Ecosystem Services

Biodiversity 2020: A strategy for England's wildlife and ecosystem services (DEFRA, 2011) is the national strategy for biodiversity. This sets out an ambition to halt the loss of biodiversity and see an increase in the area of priority habitats by 200,000 ha by 2020. Biodiversity 2020 sets in policy the objectives to improve our wildlife sites, make them bigger, develop more of them and join them up (summarised as 'Bigger, Better, More and Joined').

National Planning Policy Framework

The revised National Planning Policy Framework (NPPF) (MHCLG, 2021) refers to conserving and enhancing the natural environment. This requires Local Authorities in England to take measures to:

- Conserve and enhance biodiversity;
- Protect the habitats of these species from further decline;
- Protect the species from the adverse effect of development; and
- Refuse planning permission for development, if significant harm resulting from a development cannot be avoided, adequately mitigated, or, as a last resort, compensated for.

Although not currently a legal obligation, the revised NPPF refers to biodiversity and environmental net gains in the following paragraphs:

Transport Infrastructure

- Paragraph 102. "*Transport issues should be considered from the earliest stages of plan-making and development proposals, so that:*
*d) the environmental impacts of traffic and transport infrastructure can be identified assessed and taken into account – including appropriate opportunities for avoiding and mitigating any adverse effects, and for **net environmental gains**.*"

Planning decisions

- Paragraph 118. "*Planning decisions and planning policy should a) encourage multiple benefits from both urban and rural land ... and taking opportunities to **achieve net environmental gains - such as developments that would enable new habitat creation**.*"
- Paragraph 170. "*Planning policies and decisions should contribute to and enhance the natural and local environment by: ... d) minimising impacts on and **providing net gains** for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures.*"

- Paragraph 174. *“To protect and enhance biodiversity and geodiversity plans should b) promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing **measurable net gains for biodiversity**.”*
- Paragraph 175. *“When determining planning applications, local planning authorities should apply the following principles: a) if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts) adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused; ... and d) ... opportunities to incorporate biodiversity improvements in and around developments, especially where this can secure **measurable net gains for biodiversity**.”*

Natural Environment and Rural Countryside Act

The Natural Environment and Rural Countryside (NERC) Act (HMSO, 2006) requires public bodies, including local authorities, *‘to have regard to the conservation of biodiversity in England when carrying out their normal functions’*.

Section 40 sets out that:

Paragraph 1. *“Every public authority must, in exercising its functions, have regard, so far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity”;* and that

Paragraph 3. *“Conserving biodiversity includes, in relation to a living organism or type of habitat, restoring or enhancing a population or habitat”*.

Section 41 sets out that:

Paragraph 1. *“The Secretary of State must... publish a list of the living organisms and types of habitat ... of principal importance for the purpose of conserving biodiversity”* based on consultation with Natural England; and that

Paragraph 3a. Every planning authority must *“a) take such steps... to further the conservation of the living organisms and types of habitat included in any list published under this section, or (b) promote the taking by others of such steps”*.

LOCAL POLICY

This report has been compiled with reference to relevant planning policy and an overview and context of those considered relevant is provided:

London Borough of Haringey Local Plan

Current local planning policy in Haringey is guided by the adopted Haringey’s Local Plan Strategic Policies 2013-2026 document, including Policy SP13, and the Haringey Development Management DPD (Adopted July 2017), including Policy DM19.

Policy SP13 relates to open space and biodiversity, and states the following:

“All development shall protect and improve sites of biodiversity and nature conservation, including private gardens through its:

- *Contribution to wildlife and ecological habitats, and, wherever possible, including green and brown roofs, rainwater harvesting, green walls, bird and bat nesting/roosting opportunities;*

- *Protection, management and maintenance of existing trees and the planting of new trees where appropriate; and*
- *Protection, enhancement and creation of Sites of Importance for Nature Conservation (SINCs) and Local Nature Reserves (LNR)."*

Policy DM19 relates to nature conservation and states the following:

"(A) Development proposals on sites which are, or are adjacent to, internationally designated sites, Sites of Special Scientific Interest, Local Nature Reserves, Sites of Importance for Nature Conservation or Ecological Corridors, should protect and enhance the nature conservation value of the Site."

(B) Development that has a direct or indirect adverse impact upon important ecological assets, either individually or in combination with other development, will only be permitted where: (a) the harm cannot be reasonably avoided; and (b) it has been suitably demonstrated that appropriate mitigation can address the harm caused."

London Borough of Haringey New Local Plan

Future local planning policy in Haringey may be directed by the New Local Plan, which is currently in the first steps of community engagement. Outline aims and proposals are set out in the New Local Plan First Steps Engagement Document released for public consultation in November 2020. With regard to biodiversity and nature conservation, the document states the following (see page 116):

"The existing Local Plan seeks to protect and enhance biodiversity at designated and non-designated sites. This approach will be continued with an emphasis on achieving net gains. There is scope to link and enhance habitats and wildlife corridors which could be made possible by new development in the vicinity of these."

The London Plan 2021

Local planning policies at the borough level are also directed by the wider London Plan, including the following policies relating to biodiversity:

Policy GG2 Making the best use of land

To create successful sustainable mixed-use places that make the best use of land, those involved in planning and development must:

- F. Protect and enhance London's open spaces, including the Green Belt, Metropolitan Open Land, designated nature conservation sites and local spaces, and promote the creation of new green infrastructure and urban greening, including aiming to secure net biodiversity gains where possible

Policy SD2 Collaboration in the Wider South East

- E. The Mayor will work with WSE partners to find solutions to shared strategic concerns such as: barriers to housing and infrastructure delivery (including 'smart' solutions – see also paragraph 9.6.9); factors that influence economic prosperity; the need to tackle climate change (including water management and flood risk); improvements to the environment (including air quality, biodiversity and green infrastructure), waste management, and the promotion of Circular Economies; wider needs for freight, logistics and port facilities; and scope for the substitution of business and industrial capacity where mutual benefits can be achieved.

Policy D8 Public realm

Development Plans and development proposals should:

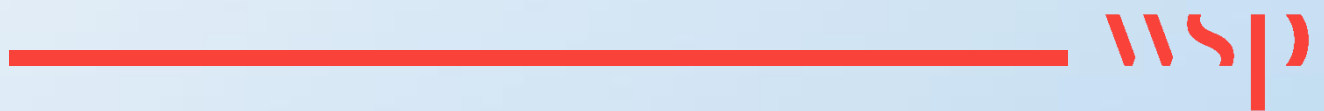
- I. Incorporate green infrastructure such as street trees and other vegetation into the public realm to support rainwater management through sustainable drainage, reduce exposure to air pollution, moderate surface and air temperature and increase biodiversity.

Policy G6 Biodiversity and access to nature

- A. Sites of Importance for Nature Conservation (SINCs) should be protected.
- B. Boroughs, in developing Development Plans, should:
 - 1) use up-to-date information about the natural environment and the relevant procedures to identify SINCs and ecological corridors to identify coherent ecological networks;
 - 2) identify areas of deficiency in access to nature (i.e. areas that are more than 1km walking distance from an accessible Metropolitan or Borough SINC) and seek opportunities to address them;
 - 3) support the protection and conservation of priority species and habitats that sit outside the SINC network, and promote opportunities for enhancing them using Biodiversity Action Plans;
 - 4) seek opportunities to create other habitats, or features such as artificial nest sites, that are of particular relevance and benefit in an urban context;
 - 5) ensure designated sites of European or national nature conservation importance are clearly identified and impacts assessed in accordance with legislative requirements.
- C. Where harm to a SINC is unavoidable, and where the benefits of the development proposal clearly outweigh the impacts on biodiversity, the following mitigation hierarchy should be applied to minimise development impacts:
 - 1) avoid damaging the significant ecological features of the site;
 - 2) minimise the overall spatial impact and mitigate it by improving the quality or management of the rest of the site;
 - 3) deliver off-site compensation of better biodiversity value.
- D. Development proposals should manage impact on biodiversity and aim to secure net biodiversity gain. This should be informed by the best available ecological information and addressed from the start of the development process.
- E. Proposals which reduce deficiencies in access to nature should be considered positively.

Appendix D

HABITAT TRANSLATIONS AND CONDITION ASSESSMENTS





BASELINE

Data Sources:

- WSP (2021) Stanhope Road Bridge - Preliminary Ecological Appraisal

Method Sources:

- Natural England (2010). Higher Level Stewardship Farm Environment Plan (FEP) Manual, Third Edition
- Natural England (2019). The Biodiversity Metric 2.0
- The UK Habitat Classification Working Group (2018) The UK Habitat Classification, Habitat Definitions Version 1.0
- WSP Internal Guidance (2019) Habitat Condition Assessment Tables, For Use on Phase 1 Habitat Surveys

Table D-1 - Baseline UKHab Translations and Condition Assessments

JNCC	UKHab	UKHab Note	Condition	Condition Note
Semi-natural broadleaved woodland	Woodland and forest - Lowland mixed deciduous woodland	The most suitable woodland class	Poor	This habitat failed two criteria within T08. Criterion 2 (A diversity of age and size) and criterion 5 (damage from adjacent activities)

All other habitats are low or very low value and are automatically assigned poor condition (bare ground) or do not require a condition (building), as per the FEP guidance.

POST-DEVELOPMENT

Data Sources:

- Landscape Layout Plan Ref. 70077287-WSP-ELS-B-DR-LS-0001.
- Conversations with WSP Landscape architect Sue Lowenthal

Method Sources:



- Natural England (2010). Higher Level Stewardship Farm Environment Plan (FEP) Manual, Third Edition
- Natural England (2019). The Biodiversity Metric 2.0
- The UK Habitat Classification Working Group (2018) The UK Habitat Classification, Habitat Definitions Version 1.0
- WSP Internal Guidance (2019) Habitat Condition Assessment Tables, For Use on Phase 1 Habitat Surveys

Table D-2 - Post-Development Created Habitats - UKHab Translations and Condition Assessments

Landscape Classification	JNCC	UKHab	UKHab Note	Target Condition	Condition Note
Climbers and thorny plants	Dense Scrub	Heathland and shrub - Mixed scrub	The most suitable habitat classification upon consultation with Landscape architect.	Moderate	Using V05, conservatively assuming the scrub may fail criterion 5 as may not develop 'glades' as planted densely.
Hedgerow mix	Dense Scrub	Heathland and shrub - Mixed scrub	The most suitable habitat classification upon consultation with Landscape architect.		
Woodland edge	Dense Scrub	Heathland and shrub - Mixed scrub	The most suitable habitat classification upon consultation with Landscape architect.		
Grassland type II - e.g. shade mix	Semi-improved neutral grassland	Grassland - Other neutral grassland	Located in smaller patches throughout the Site	Moderate	Using G06, the parcels are limited in extent, they realistically would not achieve 'good' status, so moderate is assigned conservatively (assuming bare ground/ pernicious weeds criteria may be failed on occasion).
Grassland type I - e.g. rich species	Semi-improved neutral grassland	Grassland - Other neutral grassland	Located in smaller patches throughout the Site so not considered likely to achieve lowland meadow HPI status due to edge effects.		

Table D-3 - Post-Development Enhanced Habitats - UKHab Translations and Condition Assessments

JNCC	UKHab	UKHab Note	Condition	Condition Note
Semi-natural broadleaved woodland	Woodland and forest - Lowland mixed deciduous woodland	The most suitable woodland class	Moderate	This habitat baseline failed two criteria within T08. Criterion 2 (A diversity of age and size) and criterion 5 (damage from adjacent activities). To achieve a moderate condition score it is required that that actions be taken to achieve a pass score for criterion 5. Unsanctioned path creation and excursions into the woodland habitat within the Site will be discouraged through the guarding of specific areas using log piles, dead hedging or similar to create a natural barrier. In addition, information signs should be displayed explaining the need to reduce potential damage to the woodland within the Site. In addition, criterion 4 (presence of standing or dead wood over 20cm in diameter) can be bolstered to safeguard the BNG outcome. To enhance this criterion the following actions are recommended: Retention of the trunks of larger, felled trees, resulting from the construction of the Proposed Development, and moved into woodland areas to be enhanced. Erection of free standing, dead trunks within woodland to be enhanced.



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