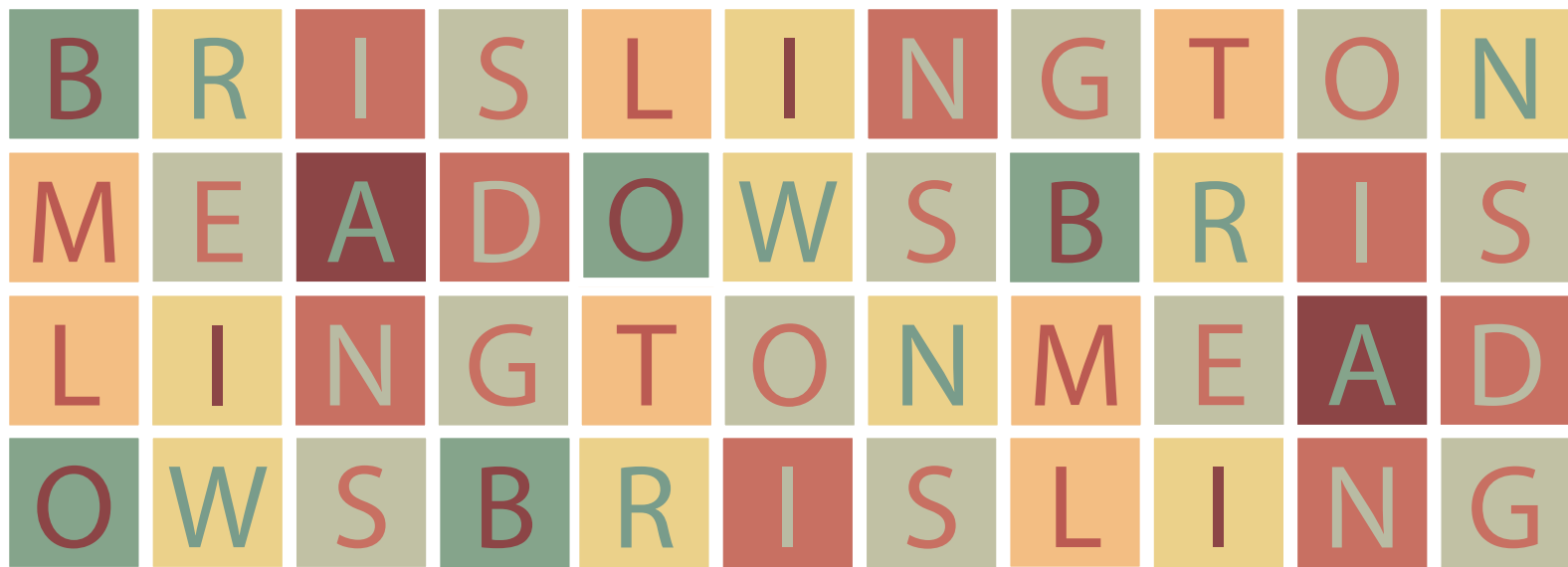




Outline

Biodiversity Net Gain

Assessment



Homes
England



Brislington Meadows, Bristol

OUTLINE BIODIVERSITY NET GAIN ASSESSMENT

7507.20.070

April 2022

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1.0 Introduction

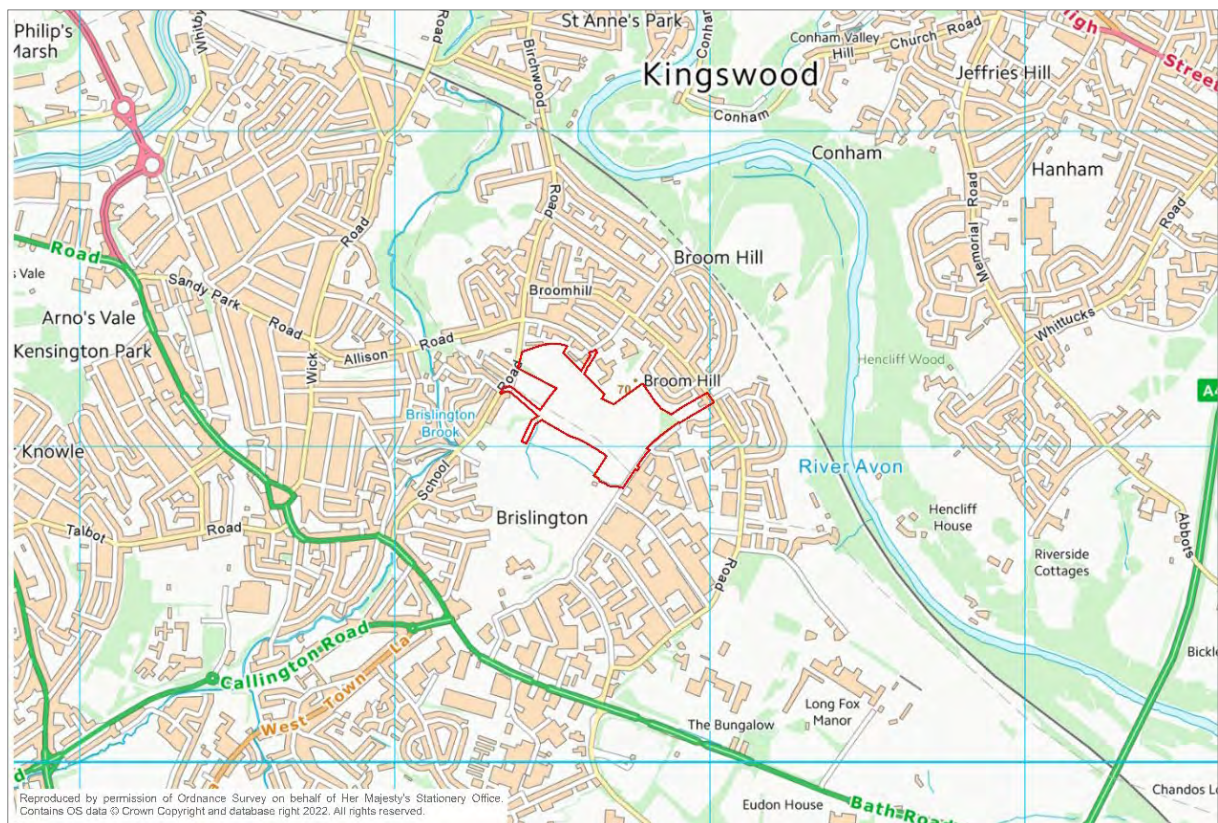
Background

- 1.1 The Environment Partnership (TEP) was commissioned by Campbell Reith on behalf of Homes England to undertake a Biodiversity Net Gain (BNG) design stage assessment for Brislington Meadows, located at Broomhill Road, Bristol; hereafter referred to as the "site".
- 1.2 The purpose of this BNG assessment report is to provide details of the assessment method and outcomes for BNG delivered for the proposed development in support of an Outline Planning Application (OPA).
- 1.3 The Biodiversity Metric 3.0 Calculation Tool has been used to calculate the net gain baseline and post-development biodiversity scores and assessment biodiversity change.
- 1.4 This BNG Assessment should be read in conjunction with the following supporting information:
 - Ecological Technical Appendix A: Ecological Desk Study (TEP Ref 7507.20.039)
 - Ecological Technical Appendix B: Target Notes (TEP Ref 7507.20.063)
 - Ecological Technical Appendix C: Hedgerow Assessment (TEP Ref 7507.20.057)
 - Ecological Technical Appendix D: Grassland Assessment (TEP Ref 7507.20.059)
 - Ecological Technical Appendix E: Habitat Condition Assessment (TEP Ref 7507.20.011)

Site description

- 1.5 The site is located in Brislington in the southeast of Bristol within the administrative boundary of Bristol City Council (BCC) and the Ward of Brislington East. The central grid reference of the site is approximately ST 626 711. The site measures 9.6 hectare (ha) and comprises an irregular shaped parcel of land illustrated in Figure 1.

Figure 1: Site Location



- 1.6 The site is bordered to the northeast by Broomhill Road and residential properties in Condoval Road. To the north the site is bound by residential dwellings on Belroyal Avenue and an associated rear access lane, Broomhill Junior School and Mama Bear's Day Nursery, and residences accessed off Allison Road. The site is bordered to the east by Bonville Road and the protected employment area comprising the Bonville Trading Estate. To the west of the site is School Road and allotments. To the south lie Victory Park and tenanted horse grazing land which together comprise part of the wider protected open space and the Brislington Meadows Site of Nature Conservation Interest (SNCI).
- 1.7 The site is characterised by a steeply sloping topography from the northern boundary down to the southern boundary, with the gradient reducing towards the east. There are overhead electricity cables and a pylon on the lower slopes towards the southern boundary of the Site. A telecommunications mast towards the northeast of the site will be relocated following the grant of planning consent for the proposed development.
- 1.8 There is no public vehicular access into the site at present. There are two public rights of way across the site. One runs east-west along the southern boundary connecting Bonville Road and School Road and other runs north-south between Belroyal Avenue and Bonville Road. In addition, a network of informal trodden paths crosses the site.

Proposed Development

- 1.9 The application is submitted in outline, with all matters reserved apart from access for which we are applying in detail. A series of Parameter Plans have been prepared by LDA

Design which define the proposed extents of development across the site. The outline development parameters include:

- 5.12ha residential development (footprint to include new dwellings, gardens, community spaces, infrastructure)
- 4.48ha open and green spaces (footprint to include sustainable drainage systems, play spaces, green infrastructure, existing and new trees and hedgerows);
- Indicative route of Primary Street, accessing off Broomhill Road;
- Pedestrian and cycle links to Allison Road in the north and School Road in the northwest; and
- Underground drainage connection to an existing pipe below Victory Park.

1.10 The Landscape Parameter Plan (LDA Design Dwg. No. 7456_102 version 9.0) sets the layout and (minimum) extent of green space within the development. It fixes areas of tree retention and presents an indicative layout for the Primary Street and play locations. The Landscape Parameter Plan is the primary layout used to inform this BNG Assessment regarding habitat losses and is presented at Figure 2.

1.11 The Landscape Parameter Plan does not include locations for sustainable drainage systems. Two sustainable drainage basins are required which will be situated within the green space in the south of the site. A below ground attenuation tank is also anticipated to be required in land adjacent to the proposed access off Broomhill Road.

Figure 2: Landscape Parameter Plan (LDA Design DWG. NO 7456_102 version 9.0)



- 1.12 The Landscape Parameter Plan does not present proposed post-development habitats. An Illustrative Masterplan has been prepared by LDA Design which shows one way in which the development could come forward within the parameters, including indicative locations of the sustainable drainage basins and other reserved matters of the development such as footpath / cycle routes. While illustrative, this masterplan has been developed during a highly iterative process accounting for geotechnical, ecological, arboricultural, historic and drainage considerations. The Illustrative Masterplan has undergone stringent capacity testing and has been subject to independent review by Design West and confirmed to be a positive response to the combined constraints and development drivers.
- 1.13 It is therefore considered the Illustrative Masterplan is representative and appropriate to inform this BNG Assessment. The Illustrative masterplan is presented at Figure 3.

Figure 3: Illustrative Masterplan (LDA Design Dwg. No. 7456_039)



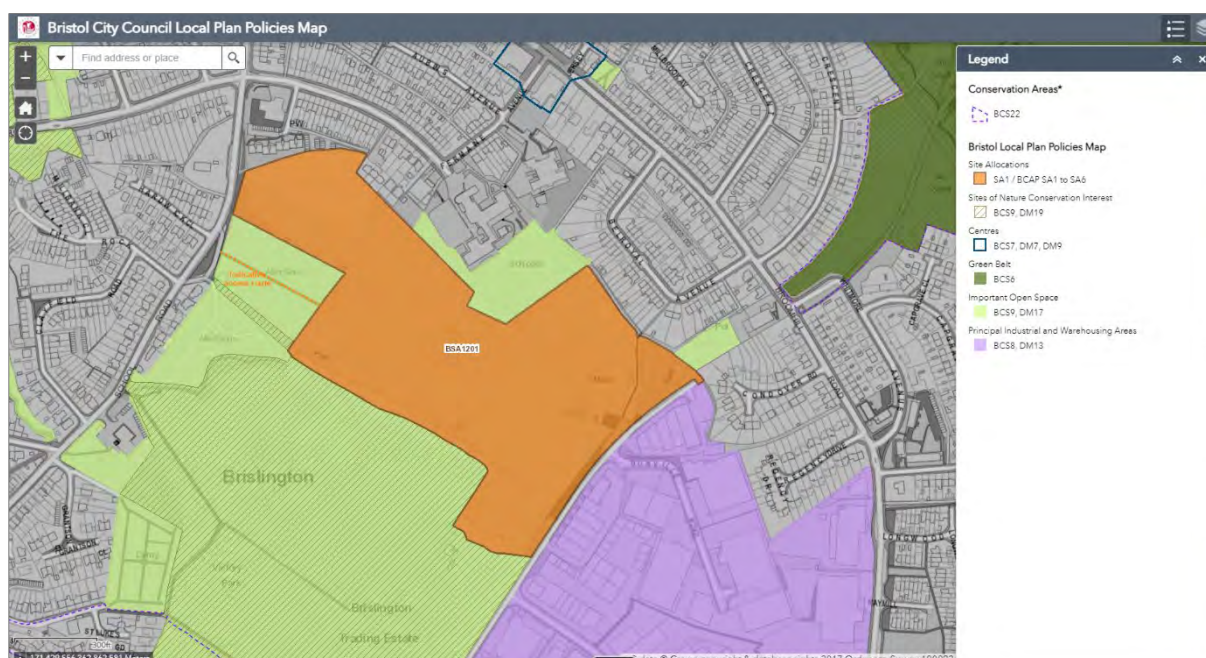
Relevant Policy and Legislation

- 1.14 The Ecological Desk Study (Ecological Technical Appendix A TEP Ref 7507.20.039) presents details of relevant planning policy, legislation and outcomes from pre-application consultation with Bristol City Council (BCC).

Planning Background

- 1.15 The site has an allocation for housing development under BCC's Local Plan¹: Site Allocations and Development Management Policies, adopted July 2014, as Allocation BSA1201 (Land at Broom Hill, Brislington). An extract from BCC's Local Plan Policies Map illustrating the site allocation is presented at Figure 4.
- 1.16 Prior to allocation in 2014, the site was part of the SNCI known as Brislington Meadows. The allocation part was deregistered as an SNCI to enable allocation for residential development as part of the Local Plan housing review. This was confirmed with BCC's Nature Conservation Officer (Dr. Nick Michael) in August 2020.

Figure 4: Extract from Bristol City Council Local Plan Policies Map²



National Policies

- 1.17 Paragraph 174(d) of the revised NPPF (2021) states that "*Planning policies and decisions should contribute to and enhance the natural and local environment by [...] minimising impacts on and providing net gains for biodiversity [...]*" The Government 25-year Environment Plan states that government will "*[...] embed environmental net gain principle for development*".
- 1.18 In July 2019, the government issued revised planning practice guidance (NPPG) with details on how planners can implement "*net environmental gain*" requirements when assessing development proposals, including new advice on protecting wildlife.
- 1.19 Revised guidance recently published by the government says that net gain in planning describes an approach to development that leaves the natural environment in a

¹ Bristol Local Plan *Site Allocations and Development Management Policies Local Plan Adopted July 2014*

² <https://maps.bristol.gov.uk/policies/>

measurably better state than it was beforehand. Net gain is an umbrella term for both biodiversity net gain and wider environmental net gain. It states: *"Planning conditions or obligations can, in appropriate circumstances, be used to require that a planning permission provides for works that will measurably increase biodiversity"*.

- 1.20 In terms of measuring net gain, the guidance states that using a metric is a pragmatic way to calculate the impact of a development and the net gain that can be achieved. It goes on to state that *"[...] tools such as the Defra biodiversity metric can be used to assess whether a biodiversity net gain outcome is expected to be achieved"*.
- 1.21 This report details the ecological surveys undertaken to establish a baseline position, and what the anticipated impacts are. Biodiversity Metric 3.0 Metric has been used to inform this biodiversity net gain assessment.
- 1.22 The Environment Act 2021 received Royal Assent on 9th November 2021 and includes a mandatory 10% biodiversity net gain on all Town and Country Planning Act 1990 developments. The 10% requirement will not become mandated across England until statutory instruments and regulations have been agreed and the Town and Country Planning Act 1990 has been amended. Mandatory 10% net gain is currently anticipated to become law in Autumn 2023.

Local Policies

- 1.23 BCC does not yet have local policy in place relating to BNG. BCC is undertaking a review of the Bristol Local Plan. The draft Local Plan was subject to consultation in March 2019 and additional consultation is currently planned for spring/summer 2022. Publication is anticipated in autumn 2022 with examination in early 2023 and adoption by early 2024.
- 1.24 The site currently remains allocated in the Bristol Local Plan Review³. The Allocation Policy for BSA1201 does not include specific reference to BNG but does include a requirement for *"[...] compensation for the loss of semi-improved neutral grassland and damp grassland (the site currently has city-wide importance for nature conservation due to the presence and condition of particular species, habitats and / or features)"*.
- 1.25 Policy BCS9 - Green Infrastructure set out in the Core Strategy⁴ is of greatest relevance to biodiversity and nature conservation, which includes the following requirements regarding biodiversity loss, mitigation and compensation:
 - *"Individual green assets should be retained wherever possible and integrated into new development. Loss of green infrastructure will only be acceptable where it is allowed for as part of an adopted Development Plan Document or is necessary, on balance, to achieve the policy aims of the Core Strategy. Appropriate mitigation of the lost green infrastructure assets will be required;*
 - *Development should incorporate new and/or enhanced green infrastructure of an appropriate type, standard and size. Where on-site provision of green infrastructure*

³ Bristol Local Plan Review *Draft Development Allocations Consultation – March 2019*

⁴ Bristol Development Framework *Core Strategy – Adopted June 2011*

is not possible, contributions will be sought to make appropriate provision for green infrastructure off site...”.

- 1.26 The Bristol Biodiversity Action Plan⁵ (BBAP) should be used to guide decisions on green infrastructure in addition to biological and geological conservation. The BBAP lists 22 Habitats of Principal Importance (HPI) across 15 broad habitat types within the Bristol region. The following habitats are identified with local habitat action plans within the BBAP:
- Species rich grassland;
 - Woodland;
 - Ponds and open water;
 - Reedbeds and sedgebeds;
 - Estuarine habitats;
 - Scrub;
 - Open mosaic habitat; and
 - Rivers and rhines.
- 1.27 Policies set out in the Site Allocations and Development Management Policies document are also of relevance, including:
- Policy DM17 (Development involving existing green infrastructure) includes a requirement that where some loss of trees cannot be avoided, requires their replacement, generally in greater numbers
 - Policy DM19 (Development and Nature Conservation) includes a requirement that development which would be likely to have any impact upon habitat, species or features which contribute to nature conservation in Bristol will be expected to:
 - o be informed by an appropriate survey and assessment of impacts; and
 - o be designed and sited, in so far as practicably and viably possible, to avoid any harm to identified habitats, species and features of importance; and
 - o take opportunities to connect any identified on-site habitats, species or features to nearby corridors in the Wildlife Network.
 - Policy DM19 (Development and Nature Conservation) also includes a requirement that, where loss of nature conservation value would arise, development will be expected to provide mitigation on-site and where this is not possible provide mitigation off-site.
- 1.28 Bristol City declared an ecological emergency in February 2020, in response to the decline in wildlife in Bristol. The Ecological Emergency Strategy for the city was developed in September 2020 and sets out four goals, one of these being for 30% of land in Bristol to be managed for the benefit of wildlife.
- 1.29 TEP consulted with BCC Nature Conservation Officer (Dr Nick Michael) in August 2020 to confirm the ecological scope of the pre-application submission. Correspondence is

5 Bristol City Council [Bristol Biodiversity Action Plan](#)

copied at Ecological Technical Appendix A Desk Study. This consultation confirmed that Biodiversity Net Gain (BNG) assessment is required and that this should employ Biodiversity Metric 2.0 (the current metric available at the time). It was also confirmed that the BNG assessment “*should be used to devise mitigation proposals and is expected to show a positive figure.*”

- 1.30 Subsequent pre-application consultation with BCC in November 2020 also confirmed that: “*a policy compliant scheme would be one that delivers “a positive outcome” for biodiversity applying the BNG metric Version 2 (or the latest version, at the time of application). However, as BNG is anticipated to be mandated soon [under the Environment Act, when in force] it is advised to aim to achieve the 10% as a minimum*”.
- 1.31 This pre-application consultation also confirmed the de-designation of that part of Brislington Meadows SNCI covered by the allocation, that there was an assumption of the requirement for offsetting and that financial contribution alone would not be satisfactory as this approach would no longer be compliant with NPPF in being able to deliver ‘measurable’ net gain.

Aims

- 1.32 The aims of this report are to:
- Set out the methods used to assess the habitat baseline of the site;
 - Set out the methods and assumptions used to assess the post development habitat scoring of the site;
 - Assess the BNG that is delivered as a result of the site design and offsetting required;
 - Demonstrate how the BNG good practice principals for development have been addressed; and
 - Set out the requirement for a 30-year management and monitoring plan.
- 1.33 A long-term (minimum 30 years) nature conservation and landscape management plan will be required to support any future Reserved Matters application(s). It is anticipated that this document will be conditioned.

2.0 Methods

2.1 The existing habitat information was gathered for the site by TEP from July 2020 to January 2022. Supplementary habitat survey information was gathered by WSP in June 2020. Full details are provided within the following technical reports:

- Ecological Technical Appendix A: Ecological Desk Study (TEP Ref 7507.20.039)
- Ecological Technical Appendix B: Target Notes (TEP Ref 7507.20.063)
- Ecological Technical Appendix C: Hedgerow Assessment (TEP Ref 7507.20.057)
- Ecological Technical Appendix D: Grassland Assessment (TEP Ref 7507.20.059)
- Ecological Technical Appendix E: Habitat Condition Assessment (TEP Ref 7507.20.011)
- Outline Arboricultural Impact Assessment (TEP Ref 7507.21.001).

2.2 This Outline BNG Assessment should also be read in conjunction with the Outline Ecological Impact Assessment report (TEP Ref 7507.20.066).

Desk Study

2.3 A search of existing information relating to protected species, habitats of conservation priority and designated sites was undertaken in month/year. Sources included Bristol Environmental Records Centre (BRERC), Natural England and MAGIC Map websites. Information regarding statutory protected sites within the wider area (up to 10km) was collected. The search extended 2km from the site boundary for non-statutory designated sites, protected species and priority species and habitats. Relevant local planning policies were also identified to inform the assessment.

UK Habitat Classification Survey

2.4 UK Habitat Classification Survey was undertaken by TEP ecologists Dr Rachel Roberts CEnv MCIEEM (FISC Level 4), Graham Roberts MCIEEM (FISC Level 4) and Val Gateley MCIEEM (FISC Level 5) over the months of July to October 2020, May and July 2021 and January 2022. The survey was carried out in accordance with the UK Habitat Classification User Manual (2020)⁶, and the Guidelines for Preliminary Ecological Appraisal (CIEEM, 2017)⁷. Habitat types were mapped, and dominant vegetation species noted. Any invasive species were also recorded.

Condition Assessment

2.5 Condition assessment surveys of the area-based and linear habitats present pre-development were undertaken by a suitably experienced ecologists Dr Rachel Roberts CEnv MCIEEM (FISC Level 4), Graham Roberts MCIEEM (FISC Level 4) and Val Gateley

⁶ Butcher, B., Carey, P., Edmonds, R., Norton, L. and Treweek, J. (2020). The UK Habitat Classification User Manual Version 1.1 at <http://www.ukhab.org/>

⁷ CIEEM 2017. Guidelines for Preliminary Ecological Appraisal.

MCIEEM (FISC Level 5) over the months of July to October 2020, May and July 2021 and January 2022. The condition assessments were undertaken using guidance presented in the Biodiversity Metric 3.0 - Technical Supplement.

Arboriculture Survey

- 2.6 An arboricultural survey of the site was carried out by TEP in July and August 2020. The survey was by means of inspection from ground level in accordance with BS 5837:2012 *"Trees in relation to design, demolition and construction – Recommendations (Ref 7-20"*. The Standard provides a categorisation method to *"identify the quality and value (in a non-fiscal sense) of the existing tree stock, to allow informed decisions to be made concerning which trees should be removed or retained in the event of development occurring"*. The method places trees and groups of trees into one of four quality categories and provides guidance on the integration and protection of trees during construction.
- 2.7 The presence of Tree Preservation Orders, Conservation Areas, Ancient Woodland and Veteran Trees has also been ascertained.

BNG Assessment

- 2.8 The site was assessed using Biodiversity Metric 3.0 in line with the user guide⁸ and associated technical supplement. This was undertaken by TEP ecologist Dr Rachel Roberts CEnv in March 2022.
- 2.9 Biodiversity Metric 3.0 is a tool designed to enable developers to measure the change in biodiversity across their site. It determines if there will be net gain, net loss or no net loss of biodiversity following completion of their development and any subsequent management regime.
- 2.10 To calculate the change in biodiversity across the site, a site survey is undertaken by a suitably qualified ecologist to determine the habitats present on site, their location, size, and condition. This information is then digitised and the resulting information fed into Biodiversity Metric 3.0.
- 2.11 The principles of biodiversity net gain as set out in the Biodiversity Net Gain Good Practice Guidelines⁹ have been considered throughout this process, as discussed in Section 7.0.

Determining Habitat Impacts

- 2.12 Completion of Biodiversity Metric 3.0 requires all habitats within the site to be attributed with a habitat impact of 'retained', 'enhanced', or 'lost'.
- 2.13 The habitat impacts are based on the combination of development parcels identified in the Landscape Parameter Plan (Figure 2) and estimated maximum additional construction

⁸ STEPHEN PANKS A, NICK WHITE A, AMANDA NEWSOME A, JACK POTTER A, MATT HEYDON A, EDWARD MAYHEW A, MARIA ALVAREZ A, TRUDY RUSSELL A, SARAH J. SCOTT B, MAX HEAVER C, SARAH H. SCOTT C, JO TREWEEK D, BILL BUTCHER E and DAVE STONE A 2021. Biodiversity metric 3.0: Auditing and accounting for biodiversity – User Guide. Natural England.

⁹ CIEEM, IEMA & CIRIA (2019). Biodiversity Net Gain. Good Practice Principles for Development. A Practical Guide.

footprints likely to be required for sustainable drainage, footpaths and cycle routes and establishment of levels within open spaces as indicated by the Illustrative Masterplan (Figure 3).

2.14 Habitats were attributed impacts based on the criteria below:

- Retained: Habitats identified in areas to be retained and where the current condition is such that enhancement is not possible or the proposed post-development land-use is not appropriate for enhancement;
- Enhanced: Habitats identified in areas to be retained, where enhancement to a higher condition or distinctiveness habitat is possible; or
- Lost: All habitats in areas identified to be lost during construction.

Determining Strategic Significance

2.15 Strategic significance was determined through a thorough desktop review of local planning policy and other relevant documentation. The Ecological Desk Study (Ecological Technical Appendix A TEP Ref 7507.20.039) provides full details of local policy and legislation covering the site. These include, but are not limited to

- Bristol Local Plan;
- BBAP;
- West of England Nature Partnership (WENP) Nature Recovery Network (NRN).

2.16 Strategic significance was assigned as follows:

- Any habitat located within the current Brislington Meadows SNCI (BCS9, DM19) was assigned high strategic significance;
- Any habitat located within the site that was contained within the former SNCI designation (prior to allocation BSA1201) was assigned medium strategic significance, in recognition of its former placement within the local sites network;
- Any habitat located within land allocated for or identified within green infrastructure strategies (important open space BCS9, DM17) was assigned medium strategic significance.

2.17 The above combination of assignments for significance covers all habitats within the site. No habitats were therefore assigned low strategic significance.

Post-Development Calculations

2.18 The outline application area currently has no confirmed landscaping proposals and therefore the biodiversity impact on the wider site was assessed based on a reasonable worst-case scenario. Post development calculations have been based on the Landscape Parameter Plan and Illustrated Masterplan in combination.

2.19 Drawing G7507.20.061 illustrates the proposed habitats and hedgerows post-development. The most appropriate UK Habitat Classification types were assigned to the broad proposed landscaping categories illustrated on the Illustrated Masterplan,

determined by objectives for the spatial position, habitat function for wildlife and landscape function and further guided by proposed land-use.

- 2.20 Drawing G7507.29.062 illustrates proposed target conditions for habitats and hedgerows post-development. Justification for target conditions for these habitats is provided within Biodiversity Metric at Appendix A of this report.
- 2.21 Drawing G7507.20.063 shows resulting predicted impacts (loss (temporary and permanent), retention or enhancement) upon habitats and hedgerows within the site.

Habitat Creation

- 2.22 Habitat creation proposals will be subject to detailed design as the BNG Strategy develops. To ensure that habitat creation in construction areas can deliver the objectives and targets of the Biodiversity Metric (Appendix A), the requirement to deliver the units specified within the Metric (on and offsite) will be included within the Design Code.
- 2.23 The habitat creation proposals have been identified based upon LDA Design Illustrative Masterplan (Figure 3). Future conditions of habitats that will be newly created are based on technical guidance issued by Natural England, including consideration of advice contained in the Biodiversity Metric 3.0 technical Supplement.
- 2.24 It is assumed that a minimum 30-year nature conservation and landscape management plan will be produced to include management, maintenance and monitoring to achieve the target condition prescribed in the Biodiversity Metric (Appendix A).

Habitat Enhancement

- 2.25 Where habitats within the baseline have been identified as capable of being enhanced, the proposed UK Habitat Classification type and target condition for each habitat have been included within the Biodiversity Metric calculation along with justification that the target habitat type and condition can be delivered.
- 2.26 A "one-step" approach to habitat enhancement has generally been used whereby it is considered reasonable to assume that a habitat currently in moderate condition can be enhanced to good condition over 30 years.
- 2.27 The exceptions to this approach include relatively small areas of:
 - poor condition neutral grasslands (comprising nettle patches or stands of Japanese knotweed, for example) proposed for enhancement to species rich grassland – these patches of neutral grassland are considered to have become degraded as a consequence of localised land use pressures and lack of management and are considered to have equal potential to reach good condition like larger swathes of adjacent retained grasslands under appropriate management regimes, including control of invasive and undesirable species;
 - modified grassland proposed for enhancement to other neutral grassland – as most of these areas are contiguous with other neutral grassland and their assignment as modified is largely a consequence of long-term degradation due to lack of

management, it is anticipated soils and nutrient levels will be suitable to achieve target habitat type and condition;

- bramble (automatically assigned poor condition) which have been identified for enhancement to good distinctiveness habitats mixed scrub or woodland habitats - the latter comprising open canopy areas of woodland dominated by bramble, where woodland canopy will be promoted through wider woodland enhancement measures; or
- W3 plantation woodland, located on the north boundary– key reasons for assigning poor condition were physical damage and degradation of habitat structure and ground flora diversity resulting from previous grazing pressures that were clear at the time of the condition assessment. This grazing regime has been ceased since Homes England's acquisition of the site and arboricultural assessment of the tree group forming W3 (G41, TEP Ref 7507.21.001) identifies the condition to be 'good' in arboricultural terms.

- 2.28 The ability to enhance these relatively small habitat features by 'two-steps' is considered reasonable, considering the maximum time to establishment of any target habitat types at an elevated target condition is 20 years (for W3 enhancement), which will be within the minimum 30-year management plan period (discussed further in section 5.0).

Strategic Significance

- 2.29 Strategic Significance of habitats that will be retained, enhanced or created within the site is assessed as follows:
- Any habitat located within the current Brislington Meadows SNCI (BCS9, DM19) was assigned high strategic significance;
 - Habitats created within the greenspaces and green infrastructure corridors as defined by the Landscape and Land Use Parameter Plans are assigned medium strategic significance;
 - Habitats to be created within the development parcels defined by the Landscape and Land Use Parameter Plans are assigned low strategic significance;
 - All other 'urban' type habitats to be created outside the development parcels defined by the Landscape and Land Use Parameter Plans (e.g., surfaced cycle track and footpaths crossing through greenspaces and GI corridors) are also assigned low strategic significance.

Population of the Metric

- 2.30 Baseline and post-development habitats, conditions and spatial significance were digitised using Arc GIS 10.6. Baseline and post-development habitats were overlaid to create a 'union' layer which enables the assessor to assign the predicted habitat impact (loss, retention or enhancement) for each habitat parcel (or partial parcel, subject to the overlay between baseline and post-development habitats) resulting from the union.
- 2.31 A spatial mapping process was used to generate pivot tables that enable the user to quantify the baseline for each habitat parcel according to habitat type, condition, strategic significance and predicted impact.

- 2.32 The same process was used to generate pivot tables to quantify habitats created in place of habitats lost and habitats enhanced according to habitat type, proposed condition at 30 years and strategic significance.

Limitations

- 2.33 Metric 3.1 is anticipated to be published by Natural England shortly. Known errors in the calculator tool for Metric 3.0 have been avoided, however there are potentially further errors not yet identified.
- 2.34 The biodiversity net gain calculations are based on field survey of habitats and their condition and mapping of habitat parcels in GIS. Habitat areas have been calculated in GIS and rounded to two decimal places to accord with the Metric decimal limitations. This results in a minimum mappable unit measuring 0.01ha or 100m². Where habitat features occur below 100m² and are of the same baseline type and condition, these may be grouped within the Metric 3.0 to ensure habitats are captured in the calculations rather than omitted.
- 2.35 Detailed layout and construction methods are currently unknown, given that all matters are reserved except access for this OPA. Consequently, this Outline BNG Assessment has been completed prior to agreement and approval of specific construction programmes and methods. However, where specifics of habitat loss, retention, enhancement or creation are uncertain, this assessment has been completed on the basis of a reasonable worst-case. A precautionary approach has been adopted with regards to construction zones and habitat losses as follows:
- all habitats within development parcels as identified on the Parameter Plans are presumed lost, except where existing trees/wooded areas are to be retained within root protection areas as indicated by the Landscape Parameter Plan;
 - all habitats within the indicative footprints of the sustainable drainage basins, other drainage features and footpath/cycle path networks are presumed lost;
 - where habitats are identified within the green spaces of the Landscape Parameter Plan that are associated with indicative areas of play, these habitats are also presumed lost, except where existing trees/wooded areas are to be retained within root protection areas as indicated by the Landscape Parameter Plan;
 - within field F6, it is presumed that habitats south of the development parcel identified on Parameter Plans would be lost to achieve safe gradients. The exception to this is retention of the linear woodland on the north boundary (School Road) and the boundary vegetation in the south corner containing trees where existing trees/wooded areas are to be retained within root protection areas as indicated by the Landscape Parameter Plan.
- 2.36 The target habitat types and condition for proposed development have been assigned based upon an Illustrative Masterplan (in combination with the Landscape Parameter Plan).
- 2.37 While this is considered an appropriate basis to determine a reasonable worst case for the Outline BNG Assessment, further work will be required to develop the detailed

landscape design and, subsequently, a long-term nature conservation and landscape management plan to detail how these enhancements will be delivered. Given this management plan will run for a minimum 30-year period and the maximum standard time to target condition for any of these habitats (created or enhanced) is 20 years, these enhancements are achievable.

- 2.38 Habitats proposed include diverse wildflower meadow planting, hedgerows, scrub and tree planting with combinations of species rich flowering lawns and more formal 'amenity' grassland incorporated into the main development parcels for informal and formal recreation uses. Habitat creation within the site is constrained by the overhead electricity lines running east-west along the south of the site; this limits the capacity for new tree planting within this part of the site.
- 2.39 Where tree planting is proposed (indicatively as depicted by the Illustrative Masterplan), the area of the habitats beneath the tree canopy has been counted within the Metric calculator and the trees included under the 'Urban Tree' habitat type. However, the 'Urban tree helper' within the Metric calculator was not used to calculate the estimated tree canopy extent, as this was found to be substantially above the canopy extent as mapped on the Illustrated Masterplan. Instead, the canopy areas were calculated (in GIS) from the extents as mapped.
- 2.40 This biodiversity net gain report only addresses impacts on habitats. Other ecological impacts, such as those to protected species or designated sites are not covered by this report. Reference should be made to the Outline Ecological Impact Assessment (TEP Ref 7507.20.066).

3.0 Baseline Habitats

Important Ecological Features

- 3.1 There are no statutory designated wildlife sites located within or adjacent to or within potential influence of the site.
- 3.2 There is one 'irreplaceable' habitat feature within the site – tree T6, a pedunculate oak assessed to be a veteran, is located on the south boundary of the site, near the southwest corner of field F4. Further information is provided in the Outline Arboricultural Impact Assessment (TEP Ref 7507.21.001) and Outline Ecological Impact Assessment (TEP Ref 7507.20.066).
- 3.3 Two areas of the site lie within the current boundary of the Brislington Meadows SNCI:
 - the 'Cycle Link' is a linear corridor carrying an existing public right of way from the southwest corner of the site to School Road in the west. The public right of way is proposed to be upgraded to include a 3m cycle path and, immediately adjacent, a 2m footpath (variable as required to avoid impact upon occasional small trees); and
 - the 'Drainage Link' is a linear corridor within which a drainage connection is anticipated to be made between the western sustainable drainage basin and the existing underground water pipe that travels through the SNCI. The drainage connection is proposed to be constructed using underground methods to avoid impacts upon trees and reduce habitat impacts within the SNCI. A small temporary excavation is anticipated to be required, located within modified grassland, to facilitate the connection.
- 3.4 No high distinctiveness habitats are present within the areas of the Brislington Meadows SNCI that fall within the site. Except for mixed scrub along the Cycle Link assessed to be in poor condition, all other habitats to be directly affected by the proposals are of low or very low distinctiveness.
- 3.5 Native hedgerows comprise the only HPI within the site. Habitat condition assessment and NVC survey of the grasslands in 2020 and 2021 have confirmed that none of the grasslands within the site qualify as HPI lowland meadow, nor any other grassland HPI.

On-Site Baseline

- 3.6 Habitat descriptions, photographic records and species lists are presented in the Target Notes report (Ecological Technical Appendix A TEP Ref 7507.20.039). Results of the hedgerow and grassland assessments are presented in Ecological Technical Appendices B and C, respectively (TEP Refs 7507.20.057 and 7507.20.059). The habitat condition assessment is reported in Ecological Technical Appendix E (TEP Ref 7507.20.011).
- 3.7 Baseline habitats are illustrated in Drawing G7507.20.011 and baseline habitat conditions are illustrated in Drawing G7507.20.012. Target note, field and hedge references and habitat parcel locations are identified on Drawing G7507.20.058. Field and hedge

references and habitat parcels are cross-referenced within the Biodiversity Metric (Appendix A), where appropriate (baseline habitats and enhanced habitats).

3.8 The site measures 9.6ha and, in brief, comprises the following habitat types:

- g3 grassland - ruderal/ephemeral;
- g3 grassland - tall herb (mixed);
- g3c grassland - other neutral grassland;
- g3c5 grassland - other neutral grassland (*Arrhenatherum* neutral grassland);
- g3c6 grassland - other neutral grassland (*Lolium-Cynosurus* neutral grassland);
- g3c8 grassland - other neutral grassland (*Holcus-Juncus* neutral grassland);
- g4 grassland - modified grassland;
- g4 grassland - non-native (Japanese knotweed);
- g4 grassland - tall herb (nettles);
- h2a hedgerow (priority habitat) - native hedgerow
- h2a hedgerow (priority habitat) - line of trees (ecologically valuable)
- h3a6 heathland and shrub - blackthorn scrub;
- h3d heathland and shrub - bramble scrub;
- h3h heathland and shrub - mixed scrub;
- u1b urban - developed land; sealed surface;
- u1b5 urban - developed land; sealed surface;
- u1c urban – artificial unvegetated unsealed surface;
- w1g woodland and forest - other woodland; broadleaved.

3.9 Baseline habitat distinctiveness ranges from very low to medium. Baseline habitat conditions (where condition assessment is appropriate) are either poor or moderate. Strategic significance of baseline habitats is either high (for those habitats found within the Cycle Link or Drainage Link (within Brislington Meadows SNCI) or, for all other habitats, medium.

4.0 Post-Development Habitats

Design Iteration

4.1 During the course of the masterplanning process, several design iterations have been accommodated to address the combination of site constraints and comments received during pre-application consultation with BCC officers (including in relation to landscape design, landscape and visual impacts, highways and public rights of way, public safety, drainage and flood risk, accessibility, ecology and trees), statutory consultees (including Environment Agency and Highways Authority) and non-statutory stakeholders (including Avon Wildlife Trust and Brislington Meadows Advisory Group, formed by Homes England comprising a combination of neighbours, local business, local MPs and other interested parties):

- Realignment of public right of way from point of entry into the site in the southwest corner to avoid impact upon veteran tree T6 (as well as avoiding other tree and scrub loss);
- Realignment of main street access off Broomhill Road, including removal of TPO oak tree within W1 to accommodate more desirable sense of arrival and speed controls along road;
- Realignment of residential units and gardens to north of the new access road off Broomhill Road, with corresponding increased opportunity for planting north of the access to strengthen connectivity with habitats in Eastwood Farm Open Space on the;
- Removal of H4 and H5 to accommodate more desirable arrangement of residential units, access and gardens;
- Increase from three to four apartment blocks in the east with corresponding replacement of apartment block in F6 with private units and rearrangements to apartment blocks, access, parking in addition to adjustment of the adjacent transition with the GI corridor along Bonville Road;
- Creation of a small pocket woodland in the GI corridor along Bonville Road;
- Removal of remainder of H6b and associated scrub and 'downgrading' grassland types to be delivered within the open space retaining the TPO trees along the former line of H6 to accommodate desired POS use;
- Separation of southern access road into two sections east and west of H1, reducing loss and fragmentation of hedgerow;
- Inclusion of new species rich hedgerow planting along Bonville Road, the south edge of field F6, north of the western drainage basin, along the south boundary between W2 and Broomhill Road and between W2 and retained sections of hedgerow H3 to maintain integrity of ecological corridors within the site;
- Inclusion of additional new species rich hedgerow and tree planting around the apartment parking areas, open spaces and along the Primary Street to aid screening of GI corridor along Bonville Road from visual, noise and light disturbance effects;

- Inclusion of 5m wide pedestrian/cycle route around the Wetland Meadows and additional pathways through the grassland;
- Extension of 2m wide hard-surfaced pedestrian route along the majority length of the GI corridor along Bonville Road; and
- Retention of peripheral scrub and plantation woodland at north end of F6 in addition to creation of new hedgerow along boundary between F6 and the allotments.

On-Site Proposed Design

- 4.2 Post-development habitats, as proposed for the purposes of informing this Outline BNG Assessment (and the accompanying Outline Ecological Impact Assessment), are based on a combination of the LDA Design Landscape Parameter (LDA Design Dwg. No. 7456_102 version 7.0) and LDA Design Illustrative Masterplan (LDA Design Dwg. No. 7456_039).
- 4.3 Post-development habitats, converted to the most appropriate UK Habitat Classification habitat types, are illustrated at Drawing G7507.20.061. Post-development habitat conditions are illustrated at Drawing G7507.20.062. Habitat impacts, including losses (temporary and permanent), retention and enhancement, are illustrated at Drawing G7507.20.063.
- 4.4 In addition to the habitats illustrated on the above drawings, the following commitments to habitat creation and landscaping within the site have been made, and are accounted for in the Biodiversity Metric (Appendix A):
- A minimum 540m species rich hedgerow achieving good condition will be created in key ecological corridors to maintain east-west and north-south connectivity;
 - An additional 515m species rich hedgerow, achieving at least moderate condition, will ideally be created to provide supporting functionality to the ecological corridors (supplementary habitat for wildlife, stepping-stone connectivity, light or visual screening); and
 - Approximately 401 trees will be planted which will achieve at least moderate condition and will deliver a total canopy area of approximately 0.62ha (assumed to average between 7m² and 30m² per tree) on establishment (27 years).
- 4.5 Whilst the Outline BNG Assessment quantifies areas of tree, scrub, shrub and grassland within the proposed development, the exact specifications for these habitats will be determined during the detailed design stage and not as part of the Outline planning application.
- 4.6 The extent and location of habitat loss or retention has considered a reasonable worst case based on the extents of developable footprints and line of the Primary Street depicted by the Landscape and Land Use Parameter Plans in combination with the likely size and layouts of additional construction elements such as sustainable drainage basins and surfaced paths to be located within greenspaces. The final extents of habitat losses and retention may alter from this outline stage of the planning application, but it is anticipated that detailed design would not exceed habitat losses estimated for this Outline BNG Assessment and would, ideally, seek to reduce footprints of habitat loss.

- 4.7 Habitats to be retained, enhanced or created within the proposed development are anticipated to include:
- g3c grassland - other neutral grassland;
 - g3c8 grassland - other neutral grassland (Holcus-Juncus neutral grassland);
 - g4 grassland - modified grassland;
 - h2a hedgerow (priority habitat) – species rich native hedgerow;
 - h2a hedgerow (priority habitat) - native hedgerow;
 - h2a hedgerow (priority habitat) - line of trees (ecologically valuable);
 - h3h heathland and shrub - mixed scrub;
 - u1b urban - developed land; sealed surface;
 - u1b5 urban - developed land; sealed surface;
 - u1b5,1113 urban - developed land; sealed surface (building with brown roof);
 - u1c urban – artificial unvegetated unsealed surface;
 - w1g woodland and forest - other woodland; broadleaved;
 - 'urban trees'.

Off-Site Proposed Design

- 4.8 The Outline BNG Assessment does not, for the OPA, include details for proposed off-site habitats.
- 4.9 Anticipated offsetting requirements for the proposed development to achieve targets of 10% BNG are discussed in Section 5.0.
- 4.10 It is anticipated a detailed offsetting package will be devised and agreed with BCC during the detailed design stage, once detailed designs have been reassessed and final offsetting requirements are confirmed. The offsetting measures will be incorporated into a Project Implementation Plan and a long-term nature conservation and landscape management plan, which are anticipated to be secured by condition. These documents are discussed further in Section 6.0.

5.0 BNG Metric

- 5.1 A biodiversity assessment has been undertaken, using the Biodiversity Metric 3.0 calculator to quantify the change in biodiversity units for the planning application area between the pre-development baseline and post-development retained, enhanced and created habitats.

Summary of Biodiversity Impact

- 5.2 Detailed results of the assessment are provided in the Biodiversity Metric 3.0 in Appendix A. The headline results, taken from the metric, are provided in Figure 5.

Figure 5: BNG results (excluding offsetting) extracted from Biodiversity Metric Headline Results

On-site baseline	Habitat units	59.02
	Hedgerow units	4.42
	River units	0.00
On-site post-intervention (Including habitat retention, creation & enhancement)	Habitat units	44.78
	Hedgerow units	10.26
	River units	0.00
On-site net % change (Including habitat retention, creation & enhancement)	Habitat units	-24.12%
	Hedgerow units	132.12%
	River units	0.00%
Total net unit change (including all on-site & off-site habitat retention, creation & enhancement)	Habitat units	-14.23
	Hedgerow units	5.84
	River units	0.00
Total on-site net % change plus off-site surplus (including all on-site & off-site habitat retention, creation & enhancement)	Habitat units	-24.12%
	Hedgerow units	132.12%
	River units	0.00%
Trading rules Satisfied?	No - Check Trading Summary	

- 5.3 The baseline habitat unit value is calculated to be 59.02 habitat units. To achieve 10% net gain in habitat units, the proposed development would need to deliver a total of 64.92 habitat units (on and/or offsite). The post-development habitat unit value is calculated to be 44.78 habitat units, based on opportunities presented by the Illustrative Masterplan, assuming habitat impacts depicted in Drawing G7507.20.03 and including the estimated net canopy area for additional tree planting (urban trees). This represents a **net loss of - 24.12% in habitat unit value** (a net loss of -14.23 habitat units), meaning a **deficit of 20.14 habitat units** compared to a 10% net gain position.

- 5.4 The trading summary indicates that trading rules are not satisfied for medium or low distinctiveness habitats. This is representative of the net losses within the proposed development site for:

- other neutral grassland (-6.84 habitat units medium distinctiveness);

- modified grassland (-10.16 habitat units low distinctiveness, although overall the low distinctiveness habitat group deficit is -5.94 habitat units); and
 - bramble and blackthorn scrub (-2.47 habitat units medium distinctiveness) although it is noted that these latter 'losses are exacerbated by proposals to diversify retained areas of bramble and blackthorn scrub into mixed scrub (same distinctiveness)).
- 5.5 Offsetting will therefore be required to deliver the target 10% biodiversity net gain in habitat unit value. Offsetting delivery options are discussed later in this Section.
- 5.6 The baseline hedgerow unit value is calculated to be 4.42 hedgerow units. A 10% net gain in hedgerow units would require post-development delivery of at least 4.86 hedgerow units in total. The Outline BNG assessment (Figure 5) calculates that 10.26 hedgerow units could be delivered through a combination of enhancement and new hedgerow creation, based on the opportunities presented in the Illustrative Masterplan. This would represent a **net gain of +132.12% in hedgerow unit value** (an estimated gain of 5.84 hedgerow units).
- 5.7 As noted at paragraph 4.4, the Outline BNG Metric results presented at Figure 5 assume 0.62ha of tree new (0.22ha within the greenspaces and an additional 0.4ha within the development areas, as defined by the Landscape and Land Use Parameter Plans) and 1.05km hedgerow (540m species rich of good condition and 510m species rich of moderate condition) planting within the site. This is considered to be a reasonable assumption in respect of aspirations for new planting within the completed development.
- 5.8 However, for additional transparency, Figure 6 presents the BNG Metric results without inclusion of the urban trees with only the minimum hedgerow planting recommended for strategic ecological connectivity measures (540m species rich of good condition).

Figure 6: BNG results (excluding offsetting), omitting tree and additional hedgerow planting

On-site baseline	Habitat units	59.02
	Hedgerow units	4.42
	River units	0.00
On-site post-intervention (Including habitat retention, creation & enhancement)	Habitat units	42.82
	Hedgerow units	6.71
	River units	0.00
On-site net % change (Including habitat retention, creation & enhancement)	Habitat units	-27.44%
	Hedgerow units	51.73%
	River units	0.00%
Total net unit change (including all on-site & off-site habitat retention, creation & enhancement)	Habitat units	-16.20
	Hedgerow units	2.29
	River units	0.00
Total on-site net % change plus off-site surplus (including all on-site & off-site habitat retention, creation & enhancement)	Habitat units	-27.44%
	Hedgerow units	51.73%
	River units	0.00%
Trading rules Satisfied?	No - Check Trading Summary	

- 5.9 In this unlikely scenario, the post-development habitat unit value decreases to 42.82 habitat units, which increases the net loss to -27.44% habitat unit value (an estimated loss of 16.20 habitat units, meaning a deficit of 22.1 habitat units to achieve 10% net gain).
- 5.10 In the event only the ecologically strategic hedgerow planting (good condition native species rich hedgerows totalling 540m, Drawing G7507.20.062) was to be implemented, the net gain reduces to a net gain in +51.73% hedgerow unit value (an estimated gain of 2.29 hedgerow units). This still exceeds the minimum 10% net gain target for hedgerows and should be applied as the minimum net gain threshold to be secured through detailed design, to also ensure other objectives of ecological mitigation for wildlife are delivered, as reported by the Outline Ecological Impact Assessment (TEP Ref 7507.20.066).

Opportunities to Maximise BNG Onsite

Mitigation hierarchy

- 5.11 As noted at paragraphs 4.5 and 4.6 this Outline BNG Assessment presumes a reasonable worst case for predicting calculating habitat losses, retention and enhancement. The extents of habitat loss, retention, enhancement and creation will be confirmed during the detailed design stage. Reducing losses of existing habitats during detailed design will be the preferred solution to maximising BNG delivery onsite. Enhancement of existing retained habitats is far preferable to creating new replacement habitats and this is reflected by the habitat unit gains delivered through habitat creation, compared to 'equivalent' habitat enhancement.

Advance habitat creation

- 5.12 In the absence of detailed information on phasing and timings, it has been assumed that habitats will be created in year zero (i.e., the same year as losses to construction occur). The Metric rewards advance habitat creation, so the more habitats that can be created or enhanced before the impacts occur, the quicker the target condition is realised. A significant proportion of the scheme's BNG delivery is associated with habitat creation and enhancement in the south and east of the site, delivering strategic ecological corridors. If these habitats can be created and enhanced at the beginning of the scheme's lifespan, the overall number of post-development on-site biodiversity units is likely to increase.

Offsetting Requirements

- 5.13 Offsetting is required to deliver the habitat unit deficit of 20.14 habitat units calculated on the basis of worst case assumptions informed by the Outline Parameter Plan and Illustrative Masterplan. Offsetting provisions should ideally comprise a minimum 61% habitat units delivered as medium distinctiveness (or higher) habitat types and at least 84% habitat units delivered as grassland habitat types with the remainder being scrub habitats, to be proportionally representative of the trading deficits identified by the Biodiversity Metric (Appendix A).

- 5.14 There are generally two accepted mechanisms for offsetting, which may be delivered alone or in-combination as appropriate to the project and circumstances:
 - A. The use of off-site land under control of the applicant (or a Biodiversity Delivery Partner to the applicant) to directly deliver the Biodiversity Units required; or
 - B. The calculation of a Biodiversity Credit based on the Biodiversity Units required, with the resulting net gain biodiversity sum paid to an Offsetting Partner (a third party such as the local planning authority (LPA) or another third-party partner or a Habitat Bank to be approved by the LPA) to take on responsibility to deliver the Net gain for biodiversity.
- 5.15 Both offsetting mechanisms would require a S106 Agreement or similar unilateral undertaking.
- 5.16 Pre-application consultation (Ecological Desk Study, Ecological Technical Appendix A TEP Ref 7507.20.039) has indicated that financial contribution towards habitat enhancement is unlikely to be considered an acceptable approach, at least in isolation, as this would no longer be compliant with NPPF which requires development to deliver 'measurable' net gain. Habitat creation in suitable location(s) offsite will be required.
- 5.17 BCC does not yet have an offsetting or habitat bank process to support developments requiring offsetting. A bespoke offsetting delivery package would therefore be required.
- 5.18 The final solution may potentially apply a 'hybrid' approach between these two options. The two options and key technical considerations are discussed further in subsequent sections.
- 5.19 Offsetting requirements will be subject to further discussion and agreement with BCC and relevant stakeholders. Homes England has started conversations in principle with Avon Wildlife Trust and Bristol Parks Department. Preliminary investigations have identified an area of grassland within the northern extent of the Brislington Meadows SNCI which presents capacity and potential opportunity which would contribute at least in part towards grassland offset requirements. Enhancement in this location would also contribute towards the conservation objectives for the SNCI by increasing the extent of one of the primary habitat types for which the SNCI is designated. The detailed offsetting package will, however, be resolved post-consent of the outline planning permission.
- 5.20 Detailed design stages for subsequent Reserved Matters application(s) would be required to design in the measures and parameters set out in the Outline BNG Assessment (and Outline Ecological Impact Assessment, as a holistic approach between the two will be required). A final detailed BNG impact assessment would be required once detailed designs are fixed. This would be produced to support any future Reserved Matters application. It is anticipated this would be secured by condition.
- 5.21 Each of the options considered would also require implementation of a post-completion biodiversity impact assessment to establish that the measures and outcomes delivered by the proposals conform with the BNG impact assessment submitted at the planning application stage. Any shortfalls would then need to be identified with additional

biodiversity compensation provided in an appropriate form that would be agreed with BCC. This would be expected to include production of a 30-year management and monitoring plan, for which the mechanism for funding and delivery would need to be determined and agreed with BCC at least by the Reserved Matters application stage(s).

A. Direct Delivery on Off-site Land

Baseline habitats

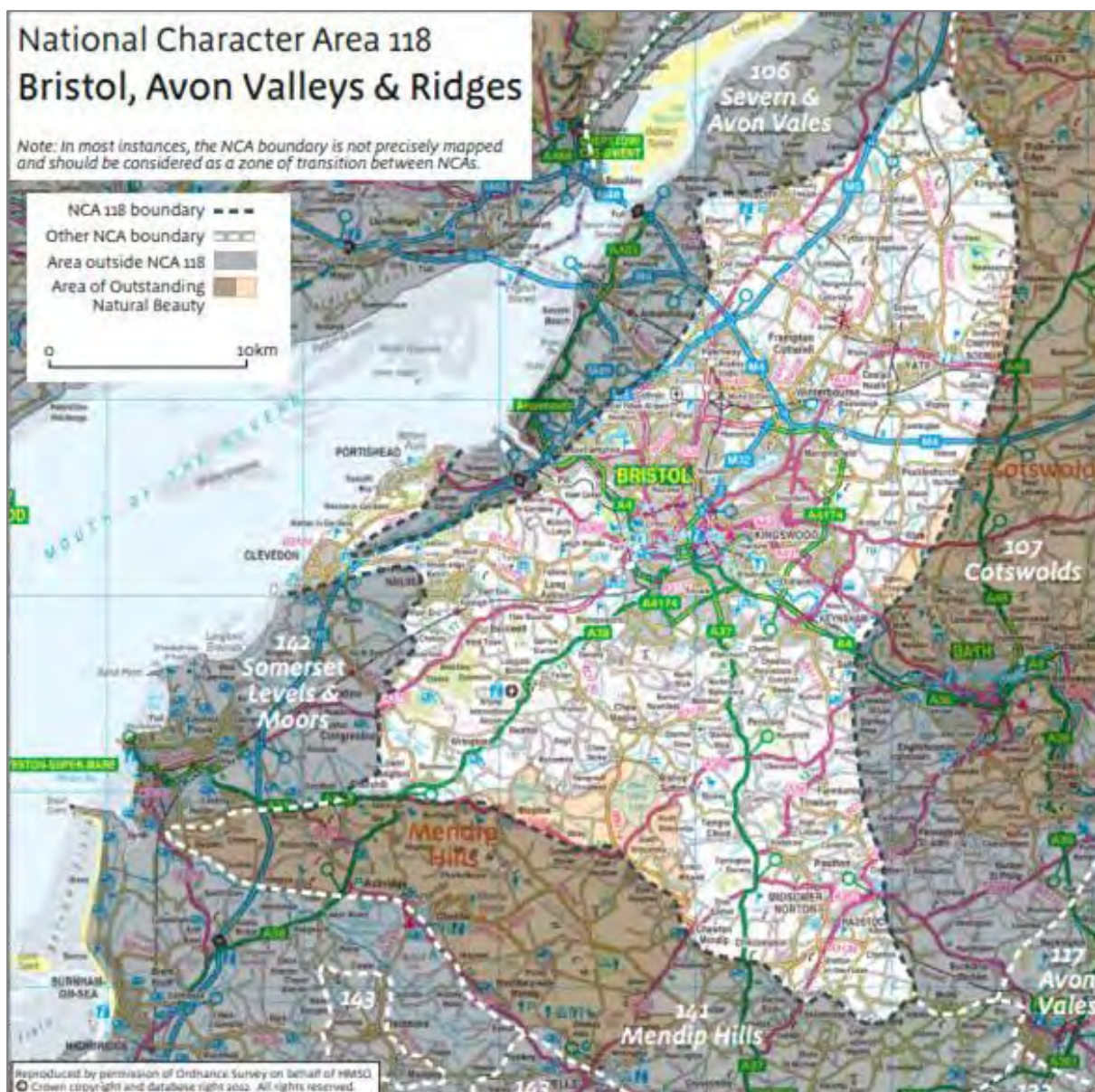
- 5.22 Offsite land within the applicant's (or Biodiversity Delivery Partner's) control that is identified as potentially suitable for delivering offsetting requirements would ideally be some form of poor quality amenity, unmanaged or agricultural grassland. This will deliver the greatest opportunity to achieve net gain through the enhancement actions undertaken to achieve a species-rich and well managed grassland for BNG and also for slow worm.
- 5.23 Small amounts of scattered scrub would be acceptable as this habitat type also requires offsetting (and would also provide good habitat for slow worm, in the event offsite translocation may be required; refer to the Outline Ecological Impact Assessment for further information).
- 5.24 Sites supporting majority woodland, scrub or post-industrial wasteland as well as sites with high quality grasslands should be excluded as these habitats are likely to score highly in Natural England's Biodiversity Metric. Apart from deviating from the mitigation hierarchy to avoid habitats of higher biodiversity value (distinctiveness) and the increased difficulty of clearing woodland, scrub and post-industrial features to create suitable conditions for achieving high quality grassland in their place, there would be no achievable net gain with these originating habitat types.
- 5.25 Land statutorily designated for wildlife conservation would not normally be appropriate, but discussion with Natural England may indicate an appropriate scheme is possible.
- 5.26 Land subject to High Level Stewardship Schemes may potentially be acceptable but this would be dependent upon the modules implemented in the Stewardship Scheme. Any potential risk of overlap in biodiversity objectives must be avoided.
- 5.27 Arable land is a possibility. Conversion of arable to high quality grassland would continue to support farmland wildlife (farmland birds in particular) provided appropriate mitigation is implemented during the conversion process and appropriate management implemented post-conversion to maintain existing populations. However, due to complications in conversion (primarily relating to soil conditions and particularly nutrient levels), establishment time would likely be increased. This risk factor would reduce units gained per hectare so that a greater area of land may potentially be needed to deliver the required Biodiversity Units. (Additionally, if the on-site slow worm population requires offsite translocation and if the receptor site is to be combined with the BNG offsetting site, the extended establishment period may also extend the delay in reptile translocation. Translocation can only be implemented once suitable habitats are created that can sustain the population.)

Location

- 5.28 To comply with BNG best practice principles, the offsite land should be as close as possible to the site of the habitat loss. In the Natural England Biodiversity Metric 3.0, this is classed as being '*Compensation inside LPA or NCA, or deemed to be sufficiently local, to site of biodiversity loss*'.
- 5.29 Pre-application consultation with BCC confirmed that offsetting should be delivered within the BCC authority boundary. This may mean seeking offsetting opportunities in the north, around Avonmouth, as the site is very close to the BCC boundary in the south.
- 5.30 However, the National Character Area (NCA) in which the site is located (118 Bristol, Avon Valleys and Ridges)¹⁰ extends further to the north, east and south of the site (Figure 6) and may therefore provide additional scope to identify an offsetting site further afield that would not be penalised by distance in the Biodiversity Metric.

¹⁰ NE400: NCA Profile:118: Bristol, Avon Valleys and Ridges
<http://publications.naturalengland.org.uk/publication/4646942?category=587130>

Figure 7: NCA 118 Bristol, Avon Valleys and Ridges



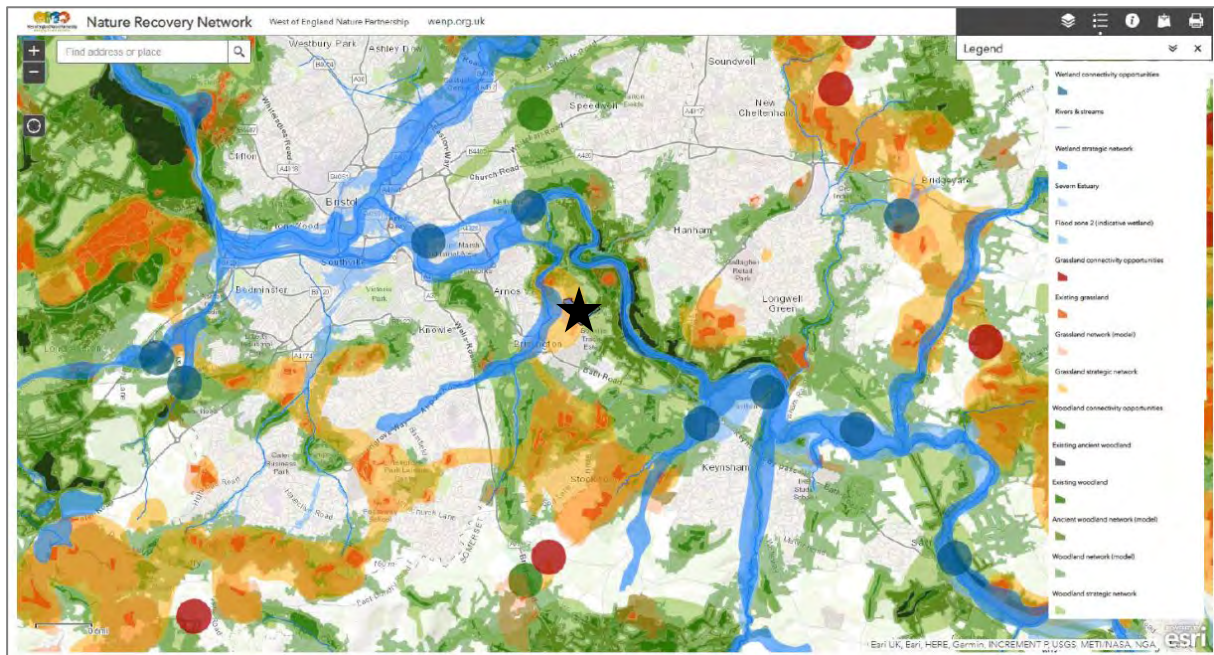
5.31 LPAs may also apply different criteria when accepting offsetting land. For example, offsetting land may be acceptable if located:

- in an area of deficiency as per Natural England's "Nature Nearby" Accessible Natural Greenspace Standards;
- within (or potentially adjacent to, if connected with) the Nature Recovery Network (providing target habitats to be delivered in line with BNG best practice principles align with the objectives of the NRN in the identified location);
- adjacent to / connected with Local Habitat Networks / Local Site Networks.

5.32 In considering the predicted BNG deficit for the site, the primary target habitat should ideally be a high quality grassland type such as 'lowland meadows'. Orange shading in

Figure 7 (extract from of the West of England NRN map¹¹) around the site indicates areas in which such target habitat would likely be encouraged. This includes areas within the adjacent Brislington Meadows SNCI, located to the south of the site. Other ecologically spatially relevant opportunities are generally identified within the adjacent LPAs to the east.

Figure 8: Extract from West of England NRN map (black star annotation depicts approximately site location)



Size

- 5.33 The size of the required offsetting land will be dependent on the existing habitats present and the Biodiversity Units that need to be delivered. With greater distance (or less suitable habitat delivered or less capacity for habitat unit gains) a larger area would be needed.

B. Biodiversity Credits

- 5.34 Biodiversity Credits are calculated on a price per Biodiversity Unit. Biodiversity Unit prices are not pre-set and would be calculated by the Offsetting Partner based the costs that would be required by the developer to re-create habitat, in addition to carrying out management for a minimum required period of 30 years.
- 5.35 The Offsetting Partner may include the LPA and/or a local wildlife organisation. In these cases, a local site, enhancement scheme or conservation strategy would ordinarily be identified and bespoke habitat enhancement, restoration and/or creation measures agreed as part of the offsetting strategy.
- 5.36 Alternatively, the Offsetting Partner may be a 'habitat broker', sometimes also referred to as a 'biodiversity broker' or 'conservation broker'. A fee is paid by the developer to the

¹¹ <https://awt.maps.arcgis.com/apps/webappviewer/index.html?id=5cc11efcac3e448aa7e9ef2067b571a1>

broker to secure the necessary Biodiversity Credits required to secure BNG at the target level (agreed with the LPA). The broker discharges the developer of liability and uses the payment to secure biodiversity improvement elsewhere. This is usually achieved by paying a landowner a capital sum for initial habitat creation or enhancement measures followed by annual payments for management.

- 5.37 In addition to the per unit cost payment, offsetting using Biodiversity Credits may also incur additional fees such as administration costs (lump sum or per unit cost) and 'set up' fees (usually a lump sum).
- 5.38 If a Biodiversity Credit system were ultimately determined to be the only viable offsetting option for any reason, Biodiversity Units should be guaranteed to be delivered as close as possible to the site, applying the same considerations as for identifying offsetting land.

6.0 Implementation, Management and Monitoring

- 6.1 This BNG assessment has been undertaken for an outline planning application and as discussed in the previous sections, the specific detail of the landscape design and POS provision is currently unknown.
- 6.2 The detail of the implementation of habitat enhancement and creation actions will be delivered during reserved matters applications. A Project Implementation Plan will be required to take the design concepts into a position to be deliverable on the ground. The Project Implementation Plan will be produced when there is more certainty over development phasing, construction methods. The plan will include detailed landscape planting schedules with specific species mixes and soil preparation methods, a timetable for implementation and roles and responsibilities.
- 6.3 A long-term nature conservation and landscape management plan will also be produced to inform the Reserved Matters application. This management plan will include on and offsite habitats which addresses:
- features of interest within the site / offsetting site(s);
 - management objectives, which will aim to achieve the minimum extents of habitat types prescribed by the Biodiversity Metric to deliver the required BNG target(s);
 - management compartments and prescriptions which will aim to achieve the specific target type and condition for each habitat area, based on the Biodiversity Metric 3.0 condition criteria;
 - a work schedule including a thirty-year annual work plan;
 - resourcing including a financial budget, roles and responsibilities;
 - legal requirements;
 - a programme of ecological monitoring, including methods and reporting processes to be used for monitoring the success of habitat enhancement and creation;
 - options for remedial intervention, where needed, if a habitat is not 'achieving' its targeted condition; and
 - accompany maps and drawings, provided as spatially accurate digital drawings, e.g., using GIS to allow accurate monitoring.
- 6.4 This management plan should cover a 30-year period and should be subject to at least five yearly reviews.
- 6.5 It is anticipated the Project Implementation Plan and the long-term nature conservation and landscape management plan are anticipated to be secured by condition.

7.0 BNG Good Practice Principles for Development

7.1 An appraisal of the scheme against the ten good practice principles is set out in Table 1 below.

Table 1: Appraisal against Good Practice Principles

Principle	Commentary
1. Apply the mitigation hierarchy <i>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.</i>	The Outline Parameter Plans and the Illustrative Masterplan have been drawn together applying an iterative approach and accounting for the multiple constraints influencing the site, including housing need and viability, the environment and sustainability. The findings of extensive habitat, tree and wildlife surveys have been applied to the development design. While it is not possible to retain all hedgerows within the site (the only HPI present), design has attempted to prioritise retention of those hedgerows with (a) higher ecological condition, (b) higher arboricultural condition and (c) higher ecological function (e.g., use by foraging and commuting bats for which hot-spot spatial analysis has been used to identify the most important routes). Hedgerow losses would be addressed through new species rich hedgerow planting. Hedgerow planting would target strategical ecological corridors to maintain habitat connectivity and wildlife permeability through the site and with the surrounding landscape. A net gain of at least 51.7% hedgerow units is anticipated within the proposed development applying this approach to hedgerow planting, with opportunity to deliver substantially greater gains with additional hedgerow planting (possibly achieving lower target condition but maintaining species richness) incorporated elsewhere around the proposed development. Pedestrian and cycle accesses have been sited at existing access points through retained hedgerows as far as practical. It is not possible to avoid woodland losses as there is only one appropriate vehicle site access off Broomhill Road, which needs to pass through W2 to serve the site. Losses will be minimised through detailed design of the road construction and tree protection measures applied during construction. Enhancement of the retained woodland W2 (in addition to enhancement of retained woodland plantation W3) and new woodland, scrub and tree planting to provide connectivity between W2 and W1, located further south, will be implemented to address the woodland losses incurred within W2. Below ground construction methods would be utilised for the drainage connection to the south of the site, which will minimise habitat impacts within the adjacent Brislington Meadows SNCI. Habitat offsetting will be required to deliver the 10% BNG targets. Offsetting will focus upon delivery of species rich grassland and scrub habitats, accounting the Trading Results Summary of the Outline BNG Metric. Selection of offsetting sites and development of an offsetting package will also apply the mitigation hierarchy.
2. Avoid losing biodiversity that cannot be offset by gains elsewhere <i>Avoid impacts on irreplaceable biodiversity – these impacts cannot be offset to achieve No Net Loss or Net Gain</i>	The veteran tree T6 has been protected within its current setting by the design process. This includes formally rerouting the public right of way that used to follow the line of the south boundary on which T6 is located. Initial consultation with BCC identified a desire to reinstate the original route of the public right of way but the combined ecological and arboricultural effects of this proposal, especially impacts that would result on the veteran T6, were deemed to outweigh the routing of the public right of way. Consequently, the public right of way will be amended to

Principle	Commentary
	broadly follow the route of the desire line that now runs through the south of the site, reconnecting to the original route in the east of the site. Avoidance of impacts on T6 has also included the proposal to utilise underground construction methods for the drainage connection between the sustainable drainage basin that would be constructed in the west of the site, which would need to connect into the existing underground pipe network located south of the site. This requires the drainage connection to cross the south boundary near T6. The route has been designed to avoid T6 root protection zone to the fullest extent possible and construction would use underground methods to avoid impacts upon T6 (and adjacent Category A trees). There are no other irreplaceable habitats within the site and no habitats with very high or high distinctiveness.
3. Be inclusive and equitable <i>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</i>	Pre-application consultation with BCC in November 2020 included sharing a preliminary draft of the BNG Metric completed for the Baseline environment as part of the feasibility assessment, supported by draft plans mapping baseline habitats and baseline habitat conditions. While this initially used version 2.0 of the Metric (current at the time of consultation), the metric calculations for the baseline habitats and hedgerows confirmed strategic significance for habitats within the site in addition to habitat types and conditions. Pre-application with BCC was also held in July 2021 to discuss the application of the BNG assessment and principles for offsetting. Pre-application consultation has also been had in principle without prejudice with BCC Parks and Avon Wildlife Trust with regards potential opportunities for identifying suitable offsetting sites. Local community consultation was held in November and December 2021 to seek views on habitats of particular value currently encountered on and near site.
4. Address risks <i>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.</i>	Habitat losses, including permanent and temporary losses, have been based on a reasonable worst case combining the full extent of the development parcels as defined by the outline Landscape and Land Use Parameters in addition to adopting worst-case assumptions for additional construction footprints for the sustainable drainage basins, footpath and cycle tracks and earthworks to establish required levels in areas that lie beyond the defined development parcels. This results in an assumed loss of 81% habitats across the site. Detailed design stages are expected to reduce this estimated loss as far as practical. No high distinctiveness habitats have been selected for creation within the site. Detailed design may determine that high distinctiveness habitats may be appropriate and achievable within the final landscape setting of the proposed development. The standard difficulty and timings have been used for habitat creation and enhancements. In the absence of information on development phasing and any lag between the losses occurring and gains being fully realised, it has been assumed that habitat creation will take place in the same year as losses. For construction areas, this is unlikely to be the case, however significant areas of the scheme can be enhanced early in the scheme to provide up front units. The likely timings will be updated when the BNG Strategy is produced.
5. Make a measurable Net Gain contribution <i>Achieve a measurable, overall gain for biodiversity and the services ecosystems provide</i>	Homes England is committed to delivering at least 10% net gains for biodiversity. At least 51.7% net gain is hedgerow units would be accommodated within the site. Detailed design will aim to reduce net loss of habitats within the site as far as possible, but offsetting will be delivered to make up the shortfall of habitat units required to achieve the 10% net gain.

Principle	Commentary
<i>while directly contributing towards nature conservation priorities.</i>	Based on the Outline BNG Assessment, a further 20.14 habitat units will need to be delivered through a combination of on and offsite additional measures. Offsetting will focus upon delivery of species rich grassland and scrub habitats, accounting the Trading Results Summary of the Outline BNG Metric. Selection of offsetting sites and development of an offsetting package will apply the ecological principles of 'bigger, better and more joined-up' sites and will seek to ensure offsetting contributes to local, regional or national nature recovery initiatives. Offsets will also be designed to provide further habitats for the range of species likely to be affected by the development (namely, invertebrates, bats, reptiles, birds and small mammals).
6. Achieve the best outcomes for biodiversity <i>Achieve the best outcomes for biodiversity by using robust, credible evidence and local knowledge to make clearly justified choices when:</i> <i>Delivering compensation that is ecologically equivalent in type, amount and condition, and that accounts for the location and timing of biodiversity losses;</i> <i>Compensating for losses of one type of biodiversity by providing a different type that delivers greater benefits for nature conservation;</i> <i>Achieving Net Gain locally to the development while also contributing towards nature conservation priorities at local, regional and national levels; and,</i> <i>Enhancing existing or creating new habitat. Enhancing ecological connectivity by creating more, bigger, better and joined areas for biodiversity.</i>	Except for the hedgerows (HPI) and scrub (BBAP), none of the other habitats within the site qualify as national or local priority habitats. The greatest inherent value of the habitats on the site is their function in supporting wildlife within the site and using the site to move through the local landscape. The suite of baseline ecology surveys completed at the site revealed that the greatest value of the site is its invertebrate assemblage, assessed to be of vice-county significance. The invertebrate assemblage included nine species of conservation significance and two further species of local interest. The assemblage is dependant upon the mix of grassland, hedgerow and scrub habitats present in the site. Some species recorded are more dependant upon single habitat types or even single plant species (specific trees, grasses or wildflowers). Bats were valued at local or city level, with the commuting function of the site appearing to be more significant than foraging. Birds, reptiles and other wildlife species or assemblages were evaluated at local or below local significance. The Outline design stages have focussed substantially upon maximising opportunities to retain invertebrates and particularly pollinators within the site, in addition to maintaining the site's strategic corridor function within the local network of wildlife sites. Southern and eastern corridors have been designed to maintain strategic corridor functionality around the site (maintaining connectivity between the three most relevant local wildlife sites at St. Annes Valley, Brislington Meadows and Eastwood Farm Open Space). Ecological corridors through the site are delivered by retention of hedgerows within greenspace corridors. Mitigation measures, including light mitigation will be required in the detailed design to ensure these corridors are delivered accordingly and retain appropriate ecological function. Habitat diversification would be introduced for the benefit of invertebrates by design of the sustainable drainage basins as 'green' rather than 'blue' feature. While standing water is of benefit to a range of wildlife, the basins are present greater opportunity through the creation of new 'wet meadows' with a draw-down zone designed into the basin floors that creates a series of small pools which would retain shallow water for longer periods following inundation as well as hummocks and other varied slopes and profiles that would create habitat interest for invertebrates. Other measures such as the use of species rich flowering lawns would be accommodated within the development site, rather than species poor commercial amenity mixes, where lower intensity recreational uses would allow. Brown roofs would be accommodated on the apartment blocks and the addition of brown or other types of living roofs on other buildings within the site (e.g., pumping stations, substations and bus stops, where required within the site) would also be considered during the detailed design stage. These approaches to maximising benefits for invertebrates and pollinators not only recognise the value of the site currently for invertebrates but would also contribute towards maintaining pollinator

Principle	Commentary
	services for offsite environments, including the allotments located west of the site, private gardens to the north and Victory Park to the south. Offsetting will be required to deliver the 10% net gains in habitat units. It is not possible to determine the appropriate offsetting approach at this outline stage, but offsetting will focus on delivery of species rich grasslands and scrub. This will contribute towards local nature recovery objectives, accords with BBAP habitat conservation action priorities and would also deliver habitat benefits for invertebrates, bats, birds, reptiles and small mammals. A bespoke offsetting package, including long-term management and monitoring, will be developed at the detailed design stage, once detailed design is fixed and the final Design Stage BNG assessment has been completed.
7. Be additional <i>Achieve nature conservation outcomes that demonstrably exceed existing obligations (i.e., do not deliver something that would occur anyway).</i>	Commitment to 10% biodiversity net gains currently exceeds existing policy obligations. Offsetting options, focussing on delivering new species rich grasslands, will aim to contribute to local nature recovery networks. Within the site, an estimated 46% of the land will be delivered as greenspace which will be designed, managed and monitored with biodiversity benefit at the fore, and especially benefit for pollinators. This exceeds the current objective in the Bristol Ecology Emergency Strategy for 30% of land in Bristol to be managed for wildlife. The approach also supports ecosystems services by maintaining pollinator services within the site. As noted under Principle 9, Homes England has committed the proposed development to a number of voluntary standards including Building with Nature and Building for a Healthier Life. These commitments will deliver outcomes for nature, sustainability and health that will be additional to existing obligations. Furthermore, as Homes England stays involved throughout the development process (as noted at Policy 8), these commitments are guaranteed to be delivered through the detailed design stages to implementation.
8. Create a Net Gain legacy <i>Ensure Net Gain generates long-term benefits by:</i> <i>Engaging stakeholders and jointly agreeing practical solutions that secure Net Gain in perpetuity;</i> <i>Planning for adaptive management and securing dedicated funding for long-term management;</i> <i>Designing Net Gain for biodiversity to be resilient to external factors, especially climate change;</i> <i>Mitigating risks from other land uses;</i> <i>Avoiding displacing harmful activities from one location to another; and</i>	The legacy of Net Gain on the site will be dependent on the final BNG Strategy, the Project Implementation Plan and the nature conservation and landscape management plan which will be produced when there is sufficient certainty on detailed design, landscaping, construction methods and phasing. These documents will evolve during the detailed design stage and would be submitted in support of any future Reserved Matters Application for the proposed development. Unlike a usual landowner, Homes England stays involved throughout the development process to ensure the homes are built to the necessary standards and the integrity and design/management principles of the original masterplan are maintained. The freehold is not released until individual plots are sold or a body is appointed to manage the site.

Principle	Commentary
<i>Supporting local-level management of Net Gain activities.</i>	
9. Optimise sustainability <i>Prioritise Biodiversity Net Gain and, where possible, optimise the wider environmental benefits for a sustainable society and economy.</i>	The Outline development design promotes active travel principles and incorporates public access and engagement with habitat creation areas. Landscape design includes sustainable drainage features which will alleviate flood risks. The plans include measures that will ensure surface water runoff is restricted to greenfield runoff rate. The surface water management proposal is to be designed to allow for a 40% increase in rainfall intensity (to meet the Environment Agency's requirements for a potential '1 in 100-year rainfall event in the next 100 years'). The new habitats are designed to accommodate the additional peaks in rainfall that are anticipated to occur given the changing climate. Detailed planting selections for new woodlands, hedges, and meadow habitats is a matter for future reserved matters applications, although guidance such as that available from the Forestry Commission about sourcing trees and shrubs from provenances that are most likely to be resilient to hotter and drier summers would be considered. A sensitive lighting scheme would be produced under a planning condition, to ensure that lighting was of a type that minimised adverse effects on nocturnal wildlife, whilst providing appropriate levels of security. Alongside the commitment to deliver 10% BNG, Homes England is committed to highest standards of environmental sustainability in the design construction process, aspiring to the following: ● The scheme is registered with Building with Nature (BwN), a voluntary scheme that sets out standards for high quality green infrastructure at each stage of the development process, from planning and design to long-term management and maintenance. The BwN standards enable nature friendly features to be integrated throughout a development and cover areas including biodiversity, water management and green infrastructure. ● All the homes will be built to Future Homes Standard which ensures new homes built from 2025 will produce 75-80% less carbon emissions than homes delivered under current regulations. This will be looked at in detail as part of the reserved matters application. ● As part of the tender process for purchasing land, prospective developers must commit to Building for a Healthy Life standards, which encourages healthier lifestyles to be planned into new housing developments. The scheme has been internally assessed during the iterative design process to ensure that the scheme would not preclude high levels of ambition in relation to sustainability. Reserved matter planning applications must subsequently reflect the above proposals and standards.
10. Be transparent <i>Communicate all Net Gain activities in a transparent and timely manner, sharing the learning with all stakeholders.</i>	This Outline BNG Assessment report, metric and associated figures present the information in a clear and transparent manner. All future BNG actions, including final BNG Design Stage Assessment, compilation of the BNG Strategy (including offsetting), Project Implementation Plan and long-term nature conservation and landscape management plan will be drawn up in consultation with BCC and relevant stakeholders. Local Partners will be secured to assist with offsetting delivery if possible.

Appendix A:

Brislington Meadows Biodiversity Metric 3.0

[The following pages present the relevant page extracts from the Biodiversity Metric 3.0 completed to inform this BNG Assessment.]

The Biodiversity Metric 3.0 - Calculation Tool

Start page

Project details	
Planning authority:	Bristol City Council
Project name:	Brislington Meadows
Applicant:	Homes England
Application type:	Outline (all matters except access reserved) - residential
Planning application reference:	
Assessor:	Dr Rachel Roberts MCIEEM Cenv
Reviewer:	Francis Hesketh MCIEEM Cenv CMLI
Metric version:	3
Assessment date:	07/03/2022
Planning authority reviewer:	

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Brislington Meadows

Headline Results

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On-site baseline	Habitat units	59.02
	Hedgerow units	4.42
	River units	0.00
On-site post-intervention (including habitat retention, creation & enhancement)	Habitat units	44.78
	Hedgerow units	10.26
	River units	0.00
On-site net % change (including habitat retention, creation & enhancement)	Habitat units	-24.12%
	Hedgerow units	132.12%
	River units	0.00%
Off-site baseline	Habitat units	0.00
	Hedgerow units	0.00
	River units	0.00
Off-site post-intervention (including habitat retention, creation & enhancement)	Habitat units	0.00
	Hedgerow units	0.00
	River units	0.00
Total net unit change (including all on-site & off-site habitat retention, creation & enhancement)	Habitat units	-14.23
	Hedgerow units	5.84
	River units	0.00
Total on-site net % change plus off-site surplus (including all on-site & off-site habitat retention, creation & enhancement)	Habitat units	-24.12%
	Hedgerow units	132.12%
	River units	0.00%
Trading rules Satisfied?	No - Check Trading Summary	

Trading Summary					
Distinctiveness Group		Trading Rule		Trading Satisfied?	
Very High		Bespoke compensation likely to be required		Yes	
High		Same habitat required		Yes	
Medium		Same broad habitat or a higher distinctiveness habitat required		No	
Low		Same distinctiveness or better habitat required		No	

Very High Distinctiveness					
Habitat group	Group	On Site Unit Change	Off Site Unit Change	Project wide Unit	Unit Losses
Grassland - Lowland dry acid grassland	Grassland	0.00	0.00	0.00	
	Grassland	0.00	0.00	0.00	
Grassland - Lowland meadows	Grassland	0.00	0.00	0.00	
	Grassland	0.00	0.00	0.00	
Grassland - Upland hay meadows	Grassland	0.00	0.00	0.00	
	Grassland	0.00	0.00	0.00	
Heathland and scrub - Mountain heaths and willow scrub	Heathland and shrub	0.00	0.00	0.00	
	Lakes	0.00	0.00	0.00	
Lakes - Aquifer fed naturally fluctuating water bodies	Sparsely vegetated land	0.00	0.00	0.00	
	Calaminarian grasslands	0.00	0.00	0.00	
Sparsely vegetated land - Calaminarian grasslands	Sparsely vegetated land	0.00	0.00	0.00	
	Sparsely vegetated land	0.00	0.00	0.00	
Sparsely vegetated land - Limestone pavement	Sparsely vegetated land	0.00	0.00	0.00	
	Sparsely vegetated land	0.00	0.00	0.00	
Wetland - Blanket bog	Wetland	0.00	0.00	0.00	
	Wetland	0.00	0.00	0.00	
Wetland - Depressions on Peat substrates (HT150)	Wetland	0.00	0.00	0.00	
	Wetland	0.00	0.00	0.00	
Wetland - Fens (upland and lowland)	Wetland	0.00	0.00	0.00	
	Wetland	0.00	0.00	0.00	
Wetland - Lowland raised bog	Wetland	0.00	0.00	0.00	
	Wetland	0.00	0.00	0.00	
Wetland - Oceanic Valley Mire[1] (D2.1)	Wetland	0.00	0.00	0.00	
	Wetland	0.00	0.00	0.00	
Wetland - Purple moor grass and rush pastures	Wetland	0.00	0.00	0.00	
	Wetland	0.00	0.00	0.00	
Wetland - Transition mires and quaking bogs (HT140)	Wetland	0.00	0.00	0.00	
	Wetland	0.00	0.00	0.00	
Woodland and forest - Wood-pasture and parkland	Woodland and forest	0.00	0.00	0.00	
	Rocky shore	0.00	0.00	0.00	
Rocky shore - High energy littoral rock - on peat, clay or chalk	Rocky shore	0.00	0.00	0.00	
	Rocky shore	0.00	0.00	0.00	
Rocky shore - Moderate energy littoral rock - on peat, clay or chalk	Rocky shore	0.00	0.00	0.00	
	Rocky shore	0.00	0.00	0.00	
Rocky shore - Low energy littoral rock - on peat, clay or chalk	Rocky shore	0.00	0.00	0.00	
	Rocky shore	0.00	0.00	0.00	
Rocky shore - Features of littoral rock - on peat, clay or chalk	Rocky shore	0.00	0.00	0.00	
	Rocky shore	0.00	0.00	0.00	
Intertidal sediment - Littoral seagrass on peat, clay or chalk	Intertidal sediment	0.00	0.00	0.00	
	Intertidal sediment	0.00	0.00	0.00	
		0.00	0.00	0.00	0.00

Very High Distinctiveness Summary	
Very High Distinctiveness Units available to offset lower distinctiveness deficit	0.00

High Distinctiveness					
Habitat group	Group	On Site Unit Change	Off Site Unit Change	Project wide Unit	Losses not yet accounted for
Grassland - Traditional orchards	Grassland	0.00	0.00	0.00	
Grassland - Floodplain Wetland Mosaic (FQGL)	Grassland	0.00	0.00	0.00	
Grassland - Lowland calcareous grassland	Grassland	0.00	0.00	0.00	
Grassland - Tall herb communities	Grassland	0.00	0.00	0.00	
Grassland - Upland calcareous grassland	Grassland	0.00	0.00	0.00	
Heathland and shrub - Lowland Heathland	Grassland	0.00	0.00	0.00	
Heathland and shrub - Sea buckthorn scrub (Annex 1)	Heathland and shrub	0.00	0.00	0.00	
Heathland and shrub - Upland Heathland	Heathland and shrub	0.00	0.00	0.00	
Lakes - High alkalinity lakes	Lakes	0.00	0.00	0.00	
Lakes - Low alkalinity lakes	Lakes	0.00	0.00	0.00	
Lakes - Marl Lakes	Lakes	0.00	0.00	0.00	
Lakes - Moderate alkalinity lakes	Lakes	0.00	0.00	0.00	
Lakes - Peat Lakes	Lakes	0.00	0.00	0.00	
Lakes - Ponds (Priority Habitat)	Lakes	0.00	0.00	0.00	
Lakes - Temporary lakes, ponds and pools	Lakes	0.00	0.00	0.00	
Sparsely vegetated land - Coastal sand dunes	Sparsely vegetated land	0.00	0.00	0.00	
Sparsely vegetated land - Coastal vegetated shingle	Sparsely vegetated land	0.00	0.00	0.00	
Sparsely vegetated land - Inland rock outcrop and scree habitats	Sparsely vegetated land	0.00	0.00	0.00	
Sparsely vegetated land - Maritime cliff and slopes	Sparsely vegetated land	0.00	0.00	0.00	
Urban - Open Mosaic Habitats on Previously Developed Land	Urban	0.00	0.00	0.00	
Wetland - Reedbeds	Wetland	0.00	0.00	0.00	
Woodland and forest - Felled	Woodland and forest	0.00	0.00	0.00	
Woodland and forest - Lowland beech and yew woodland	Woodland and forest	0.00	0.00	0.00	
Woodland and forest - Lowland mixed deciduous woodland	Woodland and forest	0.00	0.00	0.00	
Woodland and forest - Native pine woodlands	Woodland and forest	0.00	0.00	0.00	
Woodland and forest - Upland birchwoods	Woodland and forest	0.00	0.00	0.00	
Woodland and forest - Upland mixed ashwoods	Woodland and forest	0.00	0.00	0.00	
Woodland and forest - Upland oakwood	Woodland and forest	0.00	0.00	0.00	
Woodland and forest - Wet woodland	Woodland and forest	0.00	0.00	0.00	
Coastal lagoons - Coastal lagoons	Coastal lagoons	0.00	0.00	0.00	
Rocky shore - High energy littoral rock	Rocky shore	0.00	0.00	0.00	
Rocky shore - Moderate energy littoral rock	Rocky shore	0.00	0.00	0.00	
Rocky shore - Low energy littoral rock	Rocky shore	0.00	0.00	0.00	
Rocky shore - Features of littoral rock	Rocky shore	0.00	0.00	0.00	
Intertidal sediment - Littoral mud	Intertidal sediment	0.00	0.00	0.00	
Intertidal sediment - Littoral mixed sediments	Intertidal sediment	0.00	0.00	0.00	
Coastal saltmarsh - Saltmarshes and saline reedbeds	Coastal Saltmarsh	0.00	0.00	0.00	
Intertidal sediment - Littoral biogenic reefs - Mussels	Intertidal sediment	0.00	0.00	0.00	
Intertidal sediment - Littoral biogenic reefs - Sibelaria	Intertidal sediment	0.00	0.00	0.00	
Intertidal sediment - Features of littoral sediment	Intertidal sediment	0.00	0.00	0.00	
Intertidal sediment - Littoral muddy sand	Intertidal sediment	0.00	0.00	0.00	
		0.00	0.00	0.00	0.00

High Distinctiveness Summary

High Distinctiveness Units available to offset lower distinctiveness deficit	0.00
Unit Defect: Like for like not satisfied	0.00

Medium Distinctiveness						Medium Distinctiveness Summary	
Habitat Group	Group	On site unit change	Off Site Unit Change	Project wide unit	Cumulative Broad Habitat Change	Medium Distinctiveness Units available to offset lower distinctiveness deficit	1.02
Cropland - Arable field margins cultivated annually	Cropland	0.00	0.00	0.00		Medium Distinctiveness Broad Habitat Deficit to be offset by trading up	-9.32
Cropland - Arable field margins game bird mix	Cropland	0.00	0.00	0.00	0.00	Higher distinctiveness surplus units minus Medium Distinctiveness Broad Habitat Deficit	0.00
Cropland - Arable field margins pollen & nectar	Cropland	0.00	0.00	0.00		Cumulative surplus of units	1.02
Cropland - Arable field margins tussocky	Cropland	0.00	0.00	0.00			
Cropland - Cereal crops winter stubble	Cropland	0.00	0.00	0.00			
Cropland - Other lowland acid grassland	Cropland	0.00	0.00	0.00			
Grassland - Other neutral grassland	Grassland	-6.84	0.00	-6.84	-6.84		
Grassland - Upland acid grassland	Grassland	0.00	0.00	0.00			
Heathland and shrub - Blackthorn scrub	Heathland and shrub	-2.82	0.00	-2.82			
Heathland and shrub - Bramble scrub	Heathland and shrub	-7.48	0.00	-7.48	-2.47		
Heathland and shrub - Gorse scrub	Heathland and shrub	0.00	0.00	0.00			
Heathland and shrub - Hawthorn scrub	Heathland and shrub	0.00	0.00	0.00			
Heathland and shrub - Hazel scrub	Heathland and shrub	0.00	0.00	0.00			
Heathland and shrub - Mixed scrub	Heathland and shrub	7.82	0.00	7.82			
Lakes - Ponds (Non-Priority Habitat)	Lakes	0.00	0.00	0.00	0.00		
Lakes - Reservoirs	Lakes	0.00	0.00	0.00	0.00		
Sparsely vegetated land - Other inland rock and scree	Sparsely vegetated land	0.00	0.00	0.00	0.00		
Urban - Brown roof	Urban	0.96	0.00	0.96	0.96		
Urban - Cemeteries and churchyards	Urban	0.00	0.00	0.00			
Urban - Intensive green roof	Urban	0.00	0.00	0.00			
Woodland and forest - Other Scott's Pine woodland	Woodland and forest	0.00	0.00	0.00			
Woodland and forest - Other woodland, broadleaved	Woodland and forest	0.06	0.00	0.06	0.06		
Woodland and forest - Other woodland, mixed	Woodland and forest	0.00	0.00	0.00			
Intertidal sediment - Littoral coarse sediment	Intertidal sediment	0.00	0.00	0.00			
Intertidal sediment - Littoral sand	Intertidal sediment	0.00	0.00	0.00	0.00		
Intertidal Hard Structures - Artificial hard structures with Integrated Greening of Grey Infrastructure (IGGI)	Intertidal	0.00	0.00	0.00	0.00		
		-8.30	0.00	-8.30			

Low Distinctiveness

Habitat group	Group	On site unit change	Off Site Unit Change	Project wide unit
Cropland - Cereal crops	Cropland	0.00	0.00	0.00
Cropland - Cereal crops other	Cropland	0.00	0.00	0.00
Cropland - Horticulture	Cropland	0.00	0.00	0.00
Cropland - Intensive orchards	Cropland	0.00	0.00	0.00
Cropland - Non-cereal crops	Cropland	0.00	0.00	0.00
Cropland - Temporary grass and clover/leys	Cropland	0.00	0.00	0.00
Grassland - Modified grassland	Grassland	-10.16	0.00	-10.16
Grassland - Bracken	Grassland	0.00	0.00	0.00
Heathland and shrub - Rhododendron scrub	Heathland and shrub	0.00	0.00	0.00
Lakes - Ornamental lake or pond	Lakes	0.00	0.00	0.00
Sparsely vegetated land - Ruderal/Ephemeral	Sparsely vegetated land	0.00	0.00	0.00
Urban - Bioswale	Sparsely vegetated land	0.00	0.00	0.00
Urban - Allotments	Urban	0.00	0.00	0.00
Urban - Facade-bound green wall	Urban	0.00	0.00	0.00
Urban - Ground based green wall	Urban	0.00	0.00	0.00
Urban - Ground level planters	Urban	0.00	0.00	0.00
Urban - Extensive green roof	Urban	0.00	0.00	0.00
Urban - Introduced shrub	Urban	0.00	0.00	0.00
Urban - Rain garden	Urban	0.00	0.00	0.00
Urban - Sand pit quarry or open cast mine	Urban	0.00	0.00	0.00
Urban - Urban Tree	Urban	1.86	0.00	1.86
Urban - Sustainable urban drainage feature	Urban	0.00	0.00	0.00
Urban - Vacant/derelict land/ bareground	Urban	0.00	0.00	0.00
Urban - Vegetated garden	Urban	2.26	0.00	2.26
Woodland and forest - Other coniferous woodland	Woodland and forest	0.00	0.00	0.00
Coastal saltmarsh - Artificial saltmarshes and saline reedbeds	Coastal saltmarsh	0.00	0.00	0.00
Intertidal sediment - Artificial littoral coarse sediment	Intertidal sediment	0.00	0.00	0.00
Intertidal sediment - Artificial littoral mud	Intertidal sediment	0.00	0.00	0.00
Intertidal sediment - Artificial littoral sand	Intertidal sediment	0.00	0.00	0.00
Intertidal sediment - Artificial littoral muddy sand	Intertidal sediment	0.00	0.00	0.00
Intertidal sediment - Artificial littoral mixed sediments	Intertidal sediment	0.00	0.00	0.00
Intertidal sediment - Artificial littoral seagrass	Intertidal sediment	0.00	0.00	0.00
Intertidal sediment - Artificial littoral biogenic reefs	Intertidal sediment	0.00	0.00	0.00
Intertidal Hard Structures - Artificial hard structures	Intertidal	0.00	0.00	0.00
Intertidal Hard Structures - Artificial features of hard structures	Intertidal	0.00	0.00	0.00
Heathland and shrub - Sea buckthorn scrub (other)	Heathland and shrub	0.00	0.00	0.00
		-5.94	0.00	-5.94

Low Distinctiveness Summary

Low Distinctiveness Net Change in Units	-5.94
Cumulative surplus of units	-4.82



Brislington Meadows										
A-1 Site Habitat Baseline										
Condense / Show Columns			Condense / Show Rows							
Main Menu			Instructions							
Habitats and areas				Distinctiveness		Condition		Strategic significance		
Ref	Broad habitat	Habitat type	Area (hectares)	Distinctiveness	Score	Condition	Score	Strategic significance	Strategic significance	Strategic significance multiplier
1	Grassland	Other neutral grassland	0.07	Medium	4	Moderate	2	Location ecologically desirable but not in local strategy	Medium strategic significance	1.1
2	Grassland	Other neutral grassland	0.05	Medium	4	Poor	1	Location ecologically desirable but not in local strategy	Medium strategic significance	1.1
3	Grassland	Other neutral grassland	0.02	Medium	4	Poor	1	Location ecologically desirable but not in local strategy	Medium strategic significance	1.1
4	Grassland	Other neutral grassland	0.01	Medium	4	Moderate	2	Within area formally identified in local strategy	High strategic significance	1.15
5	Grassland	Other neutral grassland	0.01	Medium	4	Moderate	2	Location ecologically desirable but not in local strategy	Medium strategic significance	1.1
6	Grassland	Other neutral grassland	0.14	Medium	4	Moderate	2	Location ecologically desirable but not in local strategy	Medium strategic significance	1.1
7	Grassland	Other neutral grassland	2.1	Medium	4	Moderate	2	Location ecologically desirable but not in local strategy	Medium strategic significance	1.1
8	Grassland	Other neutral grassland	0.69	Medium	4	Moderate	2	Location ecologically desirable but not in local strategy	Medium strategic significance	1.1
9	Grassland	Other neutral grassland	0.07	Medium	4	Moderate	2	Location ecologically desirable but not in local strategy	Medium strategic significance	1.1
10	Grassland	Modified grassland	0.06	Low	2	Moderate	2	Within area formally identified in local strategy	High strategic significance	1.15
11	Grassland	Modified grassland	0.01	Low	2	Moderate	2	Location ecologically desirable but not in local strategy	Medium strategic significance	1.1

Less natural resources required									corridors	
Less habitat or a higher quality habitat required	0.09		0.01		0.09	0.00	0.00	0.00	Within Brislington Meadows SNCI (drainage link footprint - parcels 92/93). Habitat loss avoided by underground construction methods.	
Less habitat or a higher quality habitat required	0.09		0.01		0.09	0.00	0.00	0.00	F1-F4 g3c5 Parcels 14/15	
Less habitat or a higher quality habitat required	1.23			0.14	0.00	1.23	0.00	0.00	F1-F4 g3c5 Parcels 14/15/16/18	
Less habitat or a higher quality habitat required	18.48				0.00	0.00	2.10	18.48	F1-F4 g3c5 Parcels 13/14/15/16/18	
Less habitat or a higher quality habitat required	6.07				0.00	0.00	0.69	6.07	F6 g3c6 Parcel 19	
Less habitat or a higher quality habitat required	0.62				0.00	0.00	0.07	0.62	F3a g3c8 Parcel 17	
Distinctiveness or better habitat required	0.28		0.06		0.28	0.00	0.00	0.00	Within Brislington Meadows SNCI (drainage link footprint - parcel 94). Habitat loss avoided by underground construction methods. Minor temporary impact for connection pit - loss avoided by turf retention & replacement	

Brislington Meadows										
A-1 Site Habitat Baseline										
Condense / Show Columns				Condense / Show Rows						
Main Menu				Instructions						
Habitats and areas				Distinctiveness		Condition		Strategic significance		
Ref	Broad habitat	Habitat type	Area (hectares)	Distinctiveness	Score	Condition	Score	Strategic significance	Strategic significance	Strategic Significance multiplier
12	Grassland	Modified grassland	0.08	Low	2	Moderate	2	Location ecologically desirable but not in local strategy	Medium strategic significance	1.1
13	Grassland	Modified grassland	2.4	Low	2	Moderate	2	Location ecologically desirable but not in local strategy	Medium strategic significance	1.1
14	Grassland	Modified grassland	0.04	Low	2	Poor	1	Location ecologically desirable but not in local strategy	Medium strategic significance	1.1
15	Grassland	Modified grassland	0.41	Low	2	Poor	1	Location ecologically desirable but not in local strategy	Medium strategic significance	1.1
16	Heathland and shrub	Blackthorn scrub	0.02	Medium	4	Moderate	2	Location ecologically desirable but not in local strategy	Medium strategic significance	1.1
17	Heathland and shrub	Blackthorn scrub	0.09	Medium	4	Moderate	2	Location ecologically desirable but not in local strategy	Medium strategic significance	1.1
18	Heathland and shrub	Blackthorn scrub	0.17	Medium	4	Moderate	2	Location ecologically desirable but not in local strategy	Medium strategic significance	1.1
19	Heathland and shrub	Blackthorn scrub	0.02	Medium	4	Poor	1	Within area formally identified in local strategy	High strategic significance	1.15
20	Heathland and shrub	Blackthorn scrub	0.12	Medium	4	Poor	1	Location ecologically desirable but not in local strategy	Medium strategic significance	1.1
21	Heathland and shrub	Bramble scrub	0.02	Medium	4	Poor	1	Location ecologically desirable but not in local strategy	Medium strategic significance	1.1
22	Heathland and shrub	Bramble scrub	1.2	Medium	4	Poor	1	Location ecologically desirable but not in local strategy	Medium strategic significance	1.1

Suggested action to address habitat losses	Ecological baseline	Retention category biodiversity value						Bespoke compensation agreed for unacceptable losses	Comments	
	Total habitat units	Area retained	Area enhanced	Baseline units retained	Baseline units enhanced	Area lost	Units lost		Assessor comments	Reviewer comments
Same distinctiveness or better habitat required	0.35		0.08	0.00	0.35	0.00	0.00		F2, F3 g4 parcels 8/11	
Same distinctiveness or better habitat required	10.56			0.00	0.00	2.40	10.56		F1, F2, F3, F5 g4 parcels 4/9/10/11/12	
Same distinctiveness or better habitat required	0.09		0.04	0.00	0.09	0.00	0.00		F1, F2, F3, F5, FT g4 Parcels 2/3/5/6/80/61	
Same distinctiveness or better habitat required	0.90			0.00	0.00	0.41	0.90		F1, F2, F3, F5, FT g4 Parcels 1/2/3/5/6/7/8/60/65	
Same broad habitat or a higher distinctiveness habitat required	0.15	0.02		0.18	0.00	0.00	0.00		F1 Parcel 22	
Same broad habitat or a higher distinctiveness habitat required	0.79		0.09	0.00	0.79	0.00	0.00		F1, F4 Parcels 22/23/24	
Same broad habitat or a higher distinctiveness habitat required	1.50			0.00	0.00	0.12	1.50		F1, F4 Parcels 22/23/24	
Same broad habitat or a higher distinctiveness habitat required	0.08	0.02		0.08	0.00	0.00	0.00		Within Brislington Meadows SNCI (drainage link footprint - parcel 91). Habitat loss avoided by underground construction methods	
Same broad habitat or a higher distinctiveness habitat required	0.53			0.00	0.00	0.12	0.53		F5 Parcels 23/24	
Same broad habitat or a higher distinctiveness habitat required	0.09	0.02		0.09	0.00	0.00	0.00		F3 Parcels 34/50	
Same broad habitat or a higher distinctiveness habitat required	5.28			0.00	0.00	1.20	5.28		F3-F7 Parcels 25-32, 34-47, 49, 59	

Brislington Meadows

A-1 Site Habitat Baseline

Condense / Show Columns

Condense / Show Rows

Main Menu

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Habitats and areas				Distinctiveness		Condition		Strategic significance		
Ref	Broad habitat	Habitat type	Area (hectares)	Distinctiveness	Score	Condition	Score	Strategic significance	Strategic significance	Strategic Significance multiplier
23	Heathland and shrub	Bramble scrub	0.36	Medium	4	Poor	1	Location ecologically desirable but not in local strategy	Medium strategic significance	1.1
24	Heathland and shrub	Bramble scrub	0.12	Medium	4	Poor	1	Location ecologically desirable but not in local strategy	Medium strategic significance	1.1
25	Heathland and shrub	Bramble scrub	0.01	Medium	4	Poor	1	Location ecologically desirable but not in local strategy	Medium strategic significance	1.1
26	Heathland and shrub	Bramble scrub	0.01	Medium	4	Poor	1	Location ecologically desirable but not in local strategy	Medium strategic significance	1.1
27	Heathland and shrub	Mixed scrub	0.32	Medium	4	Moderate	2	Location ecologically desirable but not in local strategy	Medium strategic significance	1.1
28	Heathland and shrub	Mixed scrub	0.13	Medium	4	Moderate	2	Location ecologically desirable but not in local strategy	Medium strategic significance	1.1
29	Heathland and shrub	Mixed scrub	0.05	Medium	4	Poor	1	Within area formally identified in local strategy	High strategic significance	1.15
30	Heathland and shrub	Mixed scrub	0.03	Medium	4	Poor	1	Within area formally identified in local strategy	High strategic significance	1.15
31	Heathland and shrub	Mixed scrub	0.01	Medium	4	Poor	1	Location ecologically desirable but not in local strategy	Medium strategic significance	1.1
32	Woodland and forest	Other woodland, broadleaved	0.08	Medium	4	Moderate	2	Location ecologically desirable but not in local strategy	Medium strategic significance	1.1

Suggested action to address habitat losses	Ecological baseline	Retention category biodiversity value						Bespoke compensation agreed for unacceptable losses	Comments	
	Total habitat units	Area retained	Area enhanced	Baseline units retained	Baseline units enhanced	Area lost	Units lost		Assessor comments	Reviewer comments
Same broad habitat or a higher distinctiveness habitat required	1.58	0.26	0.00	1.58	0.00	0.00	0.00		F3-F7 Parcels 25-26 29,35,36-39,41,45	
Same broad habitat or a higher distinctiveness habitat required	0.53	0.12	0.00	0.53	0.00	0.00	0.00		F3-F7 Parcels 28-28,32,36-37,46-47	
Same broad habitat or a higher distinctiveness habitat required	0.04	0.01	0.00	0.04	0.00	0.00	0.00		F3 - parcel 33. To be enhanced & incorporated within woodland copse within southern/eastern GI corridors	
Same broad habitat or a higher distinctiveness habitat required	0.04	0.01	0.00	0.04	0.00	0.00	0.00		W2 - parcels 48/48. Canopy gaps within W2 to be restored as part of surrounding woodland canopy/ground flora/shrub layer	
Same broad habitat or a higher distinctiveness habitat required	2.82	0.32	0.00	2.82	0.00	0.00	0.00		F3, F4 - parcels 50,53,98	
Same broad habitat or a higher distinctiveness habitat required	1.14		0.00	0.00	0.12	1.14			F3, F6 - parcels 52,53,54,55	
Same broad habitat or a higher distinctiveness habitat required	0.23	0.05	0.00	0.23	0.00	0.00	0.00		Within Brislington Meadows SNCG (parcel 86) proposed cycle link to School Road. Retained belt of scrub down corridor to be enhanced (introduction ground flora layer, removal undesirable species)	
Same broad habitat or a higher distinctiveness habitat required	0.14		0.00	0.00	0.03	0.14			Within Brislington Meadows SNCG (parcel 81) proposed cycle link to School Road. Widening of existing path to accommodate surfaced cycle and pedestrian route	
Same broad habitat or a higher distinctiveness habitat required	0.04		0.00	0.00	0.01	0.04			Field F5 parcel 51	
Same broad habitat or a higher distinctiveness habitat required	0.70	0.08	0.00	0.00	0.00	0.00	0.00		W1 - parcel 81	

Brislington Meadows										
A-1 Site Habitat Baseline										
Condense / Show Columns				Condense / Show Rows						
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Habitats and areas				Distinctiveness		Condition		Strategic significance		
Ref	Broad habitat	Habitat type	Area (hectares)	Distinctiveness	Score	Condition	Score	Strategic significance	Strategic significance	Strategic significance multiplier
33	Woodland and forest	Other woodland, broadleaved	0.03	Medium	4	Moderate	2	Location ecologically desirable but not in local strategy	Medium strategic significance	1.1
34	Woodland and forest	Other woodland, broadleaved	0.13	Medium	4	Moderate	2	Location ecologically desirable but not in local strategy	Medium strategic significance	1.1
35	Woodland and forest	Other woodland, broadleaved	0.23	Medium	4	Moderate	2	Location ecologically desirable but not in local strategy	Medium strategic significance	1.1
36	Woodland and forest	Other woodland, broadleaved	0.03	Medium	4	Poor	1	Location ecologically desirable but not in local strategy	Medium strategic significance	1.1
37	Urban	Artificial unvegetated, unsealed surface	0.05	V.Low	0	N/A - Other	0	Location ecologically desirable but not in local strategy	Medium strategic significance	1.1
38	Urban	Artificial unvegetated, unsealed surface	0.02	V.Low	0	N/A - Other	0	Within area formally identified in local strategy	High strategic significance	1.15
39	Urban	Developed land, sealed surface	0.02	V.Low	0	N/A - Other	0	Within area formally identified in local strategy	High strategic significance	1.15
40	Urban	Developed land, sealed surface	0.17	V.Low	0	N/A - Other	0	Location ecologically desirable but not in local strategy	Medium strategic significance	1.1
41										
42										

habitat or a higher s habitat required	2.02		0.23	0.00	2.02	0.00	0.00	undesirables & invasives, diversify age and vertical structure, promote recognisable woodland ground flora community, implement dead wood management)	
habitat or a higher s habitat required	0.13		0.03	0.00	0.13	0.00	0.00	W3 - parcel 82. Woodland enhancement (grazing has already been ceased in this area, removal undesirables, diversify age and vertical structure, promote recognisable woodland ground flora community, implement dead wood management)	
on Not Required	0.00			0.00	0.00	0.05	0.00	Parcels 70-78. Existing desire lines previously worn to bare earth now laid with woodchip to reduce further erosion and improve wet weather condition. Also PROW through W2 - combination of stone chip and compacted bare earth track	
on Not Required	0.00			0.00	0.00	0.02	0.00	Within Brislington Meadows SNCI (parcel 83) proposed cycle link to School Road. Existing track is eroded to bare (muddy) earth	
on Not Required	0.00			0.00	0.00	0.02	0.00	Parcel 85 - Area of metalled track near School Road shared with allotment access/exit off School Road at north end of PROW link through Brislington Meadows SNCI	
								F6 (parcels 62,63, 87, 88), F7/W1 (parcels 65-69),	



Brislington Meadows										
A-2 Site Habitat Creation										
Condense / Show Columns			Condense / Show Rows							
Main Menu			Instructions							
Broad Habitat	Proposed habitat	Area (hectares)	Distinctiveness		Condition		Strategic significance			Post develop
			Distinctiveness	Score	Condition	Score	Strategic significance	Strategic significance	Strategic position multiplier	Standard time to target condition/years
Grassland	Other neutral grassland	0.93	Medium	4	Good	3	Location ecologically desirable but not in local strategy	Medium strategic significance	1.7	10
Grassland	Other neutral grassland	0.62	Medium	4	Moderate	2	Location ecologically desirable but not in local strategy	Medium strategic significance	1.1	5
Grassland	Other neutral grassland	0.44	Medium	4	Good	3	Location ecologically desirable but not in local strategy	Medium strategic significance	1.6	10
Grassland	Modified grassland	0.49	Low	2	Moderate	2	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	4

Data									
Temporal multiplier		Difficulty multipliers					Comments		
Standard or adjusted time to target condition	Final time to target condition/years	Final time to target multiplier	Standard difficulty of creation	Applied difficulty multiplier	Final difficulty of creation	Difficulty multiplier applied	Habitat units delivered	Assessor comments	Reviewer comments
Standard time to target condition applied	10	0.700	Low	Standard difficulty applied	Low	1	8.60	g3c species rich 'meadow' grasslands on SUDS slopes, around SUDS and through ecological GI corridors - managed for biodiversity interest (most especially, mow/strategies also applied)	
Standard time to target condition applied	5	0.837	Low	Standard difficulty applied	Low	1	4.57	g3c, areas of more formalised access. Grasslands to maintain species richness but mowing regime anticipated to be more regular and frequent (predicted failure of condition criteria relating to sward structure)	
Standard time to target condition applied	10	0.700	Low	Standard difficulty applied	Low	1	4.07	g3e8 SUDS basin floors established as species rich 'wet meadows'. Basin floors to be designed with varied microtopography to create hummocks and pools (averaging approx 2m2 and 10cm depth) which retain standing water for longer periods	
Standard time to target condition applied	4	0.667	Low	Standard difficulty applied	Low	1	1.70	Small, more formal spaces within development parcels identified in Landscape Parameter Plan. May include private front gardens. Presumed low significance due to placement within development parcels. Detailed design will maximise biodiversity interest where possible and management will maintain at least moderate condition (failed condition criteria assumed to include varied sward structure, as it is likely these areas would be mown reasonably homogeneously. Management could potentially improve biodiversity value site wide by implementing rotational management measures from parcel to parcel each year, where appropriate to	



Bristolington Meadows										
A-2 Site Habitat Creation										
Condense / Show Columns			Condense / Show Rows							
Main Menu			Instructions							
Broad Habitat	Proposed habitat	Area (hectares)	Distinctiveness		Condition		Strategic significance			Standard time to target condition/years
			Distinctiveness	Score	Condition	Score	Strategic significance	Strategic significance	Strategic position multiplier	
Grassland	Modified grassland	0.08	Low	2	Poor	1	Location ecologically desirable but not in local strategy	Medium strategic significance	1.1	1
Heathland and shrub	Mixed scrub	0.08	Medium	4	Good	3	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	10
Heathland and shrub	Mixed scrub	0.12	Medium	4	Good	3	Location ecologically desirable but not in local strategy	Medium strategic significance	1.1	10
Heathland and shrub	Mixed scrub	0.01	Medium	4	Moderate	2	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	5
Woodland and forest	Other woodland; broadleaved	0.04	Medium	4	Moderate	2	Location ecologically desirable but not in local strategy	Medium strategic significance	1.1	15

Temporal multiplier			Difficulty multipliers				Habitat units delivered	Comments	
Standard or adjusted time to target condition	Final time to target condition/years	Final time to target multiplier	Standard difficulty of creation	Applied difficulty multiplier	Final difficulty of creation	Difficulty multiplier applied		Assessor comments	Reviewer comments
Standard time to target condition applied	1	0.965	Low	Standard difficulty applied	Low	1	0.04	ad (known paths) within green spaces	
Standard time to target condition applied	10	0.700	Low	Standard difficulty applied	Low	1	0.17	Located within development parcels set out in the Landscape / Land Use Parameter Plans. Retained scrub around peripheries and associated with retained ecological corridors (green space areas on Parameter Plans) would ideally improve strategic significance at detailed design stage (stepping stone / buffer habitats supporting corridor functions), outline RNV assigns low significance	
Standard time to target condition applied	10	0.700	Low	Standard difficulty applied	Low	1	1.11	Mixed scrub planting across green spaces, particularly bolstering existing scrub and to strengthen ecological corridors	
Standard time to target condition applied	5	0.837	Low	Standard difficulty applied	Low	1	0.07	Mixed scrub planting, mainly in locations on north boundaries. Screening likely to be main function, but would still provide stepping stone habitat/minor linkages between gardens to north and gardens/green space within site	
Standard time to target condition applied	15	0.586	Low	Standard difficulty applied	Low	1	0.21	Woodland planting (coppes and stands with more open canopy) planted along eastern corridor to provide canopy connectivity and strengthen links between W1 and W2 as well as providing screening function to habitats in southeast of site	

Brislington Meadows A-2 Site Habitat Creation										
Condense / Show Columns			Condense / Show Rows							
Main Menu			Instructions							
Broad Habitat	Proposed habitat	Area (hectares)	Distinctiveness		Condition		Strategic significance			Standard time to target condition/years
			Distinctiveness	Score	Condition	Score	Strategic significance	Strategic significance	Strategic position multiplier	
Urban	Brown roof	0.17	Medium	4	Good	3	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	10
Urban	Vegetated garden	1.17	Low	2	Poor	1	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	17
Urban	Developed land; sealed surface	3.78	V Low	0	N/A - Other	0	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	0

Brislington Meadows A-2 Site Habitat Creation										
Condense / Show Columns			Condense / Show Rows							
Main Menu			Instructions							
Broad Habitat	Proposed habitat	Area (hectares)	Distinctiveness		Condition		Strategic significance			Standard time to target condition/years
			Distinctiveness	Score	Condition	Score	Strategic significance	Strategic significance	Strategic position multiplier	
Urban	Urban Tree	0.22	Medium	4	Moderate	2	Location ecologically desirable but not in local strategy	Medium strategic significance	1.1	27
Urban	Urban Tree	0.4	Medium	4	Moderate	2	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	27

Brislington Meadows A-2 Site Habitat Creation										
Condense / Show Columns			Condense / Show Rows							
Main Menu			Instructions							
Broad Habitat	Proposed habitat	Area (hectares)	Distinctiveness		Condition		Strategic significance			Standard time to target condition/years
			Distinctiveness	Score	Condition	Score	Strategic significance	Strategic significance	Strategic position multiplier	
Urban	Urban Tree	0.22	Medium	4	Moderate	2	Location ecologically desirable but not in local strategy	Medium strategic significance	1.1	27
Urban	Urban Tree	0.4	Medium	4	Moderate	2	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	27

Brislington Meadows A-2 Site Habitat Creation										
Condense / Show Columns			Condense / Show Rows							
Main Menu			Instructions							
Broad Habitat	Proposed habitat	Area (hectares)	Distinctiveness		Condition		Strategic significance			Standard time to target condition/years
			Distinctiveness	Score	Condition	Score	Strategic significance	Strategic significance	Strategic position multiplier	
Urban	Urban Tree	0.22	Medium	4	Moderate	2	Location ecologically desirable but not in local strategy	Medium strategic significance	1.1	27
Urban	Urban Tree	0.4	Medium	4	Moderate	2	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	27

Brislington Meadows A-2 Site Habitat Creation										
Condense / Show Columns			Condense / Show Rows							
Main Menu			Instructions							
Broad Habitat	Proposed habitat	Area (hectares)	Distinctiveness		Condition		Strategic significance			Standard time to target condition/years
			Distinctiveness	Score	Condition	Score	Strategic significance	Strategic significance	Strategic position multiplier	
Urban	Urban Tree	0.22	Medium	4	Moderate	2	Location ecologically desirable but not in local strategy	Medium strategic significance	1.1	27
Urban	Urban Tree	0.4	Medium	4	Moderate	2	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	27



Brislington Meadows						
A-3 Site Habitat Enhancement						
Condense / Show Columns		Condense / Show Rows				
Main Menu		Instructions				
Baseline habitats			Post development/ post intervention habitats			
Baseline ref	Baseline habitat	Proposed Habitat (Pre-Populated but can be overridden)		Change in distinctiveness and condition		Area (hectares)
		Proposed Broad Habitat	Proposed habitat	Distinctiveness change	Condition change	
2	Grassland - Other neutral grassland	Grassland	Other neutral grassland	Medium - Medium	Poor - Good	0.05
6	Grassland - Other neutral grassland	Grassland	Other neutral grassland	Medium - Medium	Moderate - Good	0.14
12	Grassland - Modified grassland	Grassland	Other neutral grassland	Low - Medium	Lower Distinctiveness Habitat - Good	0.08
14	Grassland - Modified grassland	Grassland	Other neutral grassland	Low - Medium	Lower Distinctiveness Habitat - Good	0.04
17	Heathland and shrub - Blackthorn scrub	Heathland and shrub	Mixed scrub	Medium - Medium	Moderate - Good	0.09
23	Heathland and shrub - Bramble scrub	Heathland and shrub	Mixed scrub	Medium - Medium	Poor - Good	0.06
24	Heathland and shrub - Bramble scrub	Heathland and shrub	Mixed scrub	Medium - Medium	Poor - Good	0.18
25	Heathland and shrub - Bramble scrub	Woodland and forest	Other woodland; broadleaved	Medium - Medium	Poor - Moderate	0.01
26	Heathland and shrub - Bramble scrub	Woodland and forest	Other woodland; broadleaved	Medium - Medium	Poor - Good	0.01
27	Heathland and shrub - Mixed scrub	Heathland and shrub	Mixed scrub	Medium - Medium	Moderate - Good	0.02

5								
Distinctiveness	Condition	Strategic significance	Temporal risk multiplier		Difficulty risk multipliers	Habitat units delivered	Comments	
		Strategic significance	Standard or adjusted time to target condition	Final time to target condition/years	Final difficulty of enhancement		Assessor comments	Reviewer comments
Medium	Good	Location ecologically desirable but not in local strategy	Standard time to target condition applied	15	Low	0.48	F3 (road verge, g3 ruderals/settles) Parcels 57/58. To be enhanced within southern/eastern GI corridors	
Medium	Good	Location ecologically desirable but not in local strategy	Standard time to target condition applied	10	Low	1.66	F1-F4 g3c5 Parcels 14/15/16/18	
Medium	Good	Location ecologically desirable but not in local strategy	Standard time to target condition applied	15	Low	0.76	F2, F3 g4 parcels 9/11	
Medium	Good	Location ecologically desirable but not in local strategy	Standard time to target condition applied	15	Low	0.35	F1, F2, F3, F5, FT g4 Parcels 2/3/5/8/60/61	
Medium	Good	Location ecologically desirable but not in local strategy	Standard time to target condition applied	3	Low	1.15	F1, F4 Parcels 22/23/24	
Medium	Good	Location ecologically desirable but not in local strategy	Standard time to target condition applied	10	Low	3.80	F3-F7 Parcels 25-26 29 35, 38-39, 41, 45, 48-49	
Medium	Good	Location ecologically desirable but not in local strategy	Standard time to target condition applied	10	Low	1.27	F3-F7 Parcels 26-28, 32-33, 36-37, 46-47	
Medium	Moderate	Location ecologically desirable but not in local strategy	Standard time to target condition applied	10	Low	0.07	F3 parcel 33. To be enhanced & incorporated within woodland copse within eastern GI corridor	
Medium	Good	Location ecologically desirable but not in local strategy	Standard time to target condition applied	20	Low	0.09	W2 parcels 48/49 within W2 to be restored as part of surrounding woodland canopy/ground flora/shrub layer	
Medium	Good	Location ecologically desirable but not in local strategy	Standard time to target condition applied	3	Low	4.08	F3, F4 Parcels 52, 53, 98	



Brislington Meadows								
A-3 Site Habitat Enhancement								
Condense / Show Columns		Condense / Show Rows						
Main Menu		Instructions						
		Post development/ post intervention habitat						
Baseline habitats		Proposed Habitat (Pre-Populated but can be overridden)		Change in distinctiveness and condition		Area (hectare)		
Baseline ref	Baseline habitat	Proposed Broad Habitat	Proposed habitat	Distinctiveness change	Condition change			
27	Heathland and shrub - Mixed scrub	Heathland and shrub	Mixed scrub	Medium - Medium	Moderate - Good	0.32		
28	Heathland and shrub - Mixed scrub	Heathland and shrub	Mixed scrub	Medium - Medium	Poor - Good	0.05		
35	Woodland and forest - Other woodland, broadleaved	Woodland and forest	Other woodland; broadleaved	Medium - Medium	Moderate - Good	0.23		
36	Woodland and forest - Other woodland, broadleaved	Woodland and forest	Other woodland; broadleaved	Medium - Medium	Poor - Good	0.03		
s								
Distinctiveness	Condition	Strategic significance	Temporal risk multiplier		Difficulty risk multipliers	Habitat units delivered	Comments	
		Strategic significance	Standard or adjusted time to target condition	Final time to target condition/years	Final difficulty of enhancement		Assessor comments	Reviewer comments
Medium	Good	Location ecologically desirable but not in local strategy	Standard time to target condition applied	3	Low	4.08	F3 F4 Parcels 52,53,98	
Medium	Good	Within area formally identified in local strategy	Standard time to target condition applied	10	Low	0.55	Within Brislington Meadows SNCG (parcel 86) proposed cycle link to School Road. Retained belt of scrub down corridor to be enhanced (introduction ground flora layer, removal undesirable species)	
Medium	Good	Location ecologically desirable but not in local strategy	Standard time to target condition applied	10	Low	2.73	W2 - parcel 79. Woodland enhancement (removal undesirables & invasives, diversify age and vertical structure, promote recognisable woodland ground flora community, implement dead wood management)	
Medium	Good	Location ecologically desirable but not in local strategy	Standard time to target condition applied	20	Low	0.26	W3 - parcel 82. Woodland enhancement (grazing has already been ceased in this area, removal undesirables, diversify age and vertical structure, promote recognisable woodland ground flora community, implement dead wood management)	

B-1 Site Hedge Baseline

Condense / Show Columns

Condense / Show Rows

Main Menu

Instructions

Baseline ref	UK Habitats – existing habitats			Habitat distinctiveness		Habitat condition		Strategic significance			Suggested action to address habitat losses	Ecological baseline Total hedgerow units
	Hedge number	Hedgerow type	Length KM	Distinctiveness	Score	Condition	Score	Strategic significance	Strategic position multiplier			
1	1	Native Hedgerow with trees	0.13	Medium	4	Good	3	Location ecologically desirable but not in local strategy	Medium strategic significance	1.1	Live for life or better	1.72
2	2	Native Hedgerow with trees	0.13	Medium	4	Moderate	2	Location ecologically desirable but not in local strategy	Medium strategic significance	1.1	Live for life or better	1.14
3	3	Native Hedgerow with trees	0.14	Medium	4	Poor	1	Location ecologically desirable but not in local strategy	Medium strategic significance	1.1	Live for life or better	0.82
4	4	Native Hedgerow	0.21	Low	2	Poor	1	Location ecologically desirable but not in local strategy	Medium strategic significance	1.1	Same distinctiveness band or better	0.48
5	5	Native Hedgerow	0.1	Low	2	Moderate	2	Location ecologically desirable but not in local strategy	Medium strategic significance	1.1	Same distinctiveness band or better	0.44
6	6	Native Hedgerow	0.02	Low	2	Poor	1	Location ecologically desirable but not in local strategy	Medium strategic significance	1.1	Same distinctiveness band or better	0.04

Ecological baseline		Retention category biodiversity value					Comments	
Total hedgerow units	Length retained	Length enhanced	Units retained	Units enhanced	Length lost	Units lost	Assessor comments	Reviewer comments
1.72	0.11		1.45	0.00	0.02	0.26		
1.14	0.01		0.09	0.00	0.12	1.06		
0.62		0.06	0.00	0.28	0.08	0.35		
0.46	0.02		0.04	0.00	0.19	0.42		
0.44	0		0.00	0.00	0.10	0.44		
0.04	0		0.00	0.00	0.02	0.04		

B-2 Site Hedge Creation																						
Condense / Show Columns					Condense / Show Rows					Main Menu												
										Instructions												
Baseline ref			New hedge number		Proposed habitats			Habitat distinctiveness			Habitat condition		Strategic significance									
			Habitat type		Length km		Distinctiveness		Score		Condition		Score		Strategic significance		Strategic position multiplier		Standard Time to target condition/years			
1			Native Species Rich Hedgerow		0.54		Medium		4		Good		3		Location ecologically desirable but not in local strategy		Medium strategic significance		1.1		12	
2			Native Species Rich Hedgerow		0.21		Medium		4		Moderate		2		Location ecologically desirable but not in local strategy		Medium strategic significance		1.1		5	
3			Native Species Rich Hedgerow		0.3		Medium		4		Moderate		2		Area compensation not in local strategy/ no local strategy		Low Strategic Significance		1		5	
4																						

Temporal multiplier												Difficulty risk multipliers				Hedge units delivered		Comments	
Standard Time to target condition/years	Habitat created in advance/years	Delay in starting habitat creation/years	Standard or adjusted time to target condition	Final time to target condition/years	Final Time to target multiplier	Standard difficulty of creation	Applied difficulty of multiplier	Final difficulty of creation	Difficulty of multiplier applied	Assessor comments	Reviewer comments								
12			Standard time to target condition applied	12	0.652	Low	Standard difficulty applied	Low	1	Species rich hedgerows in ecological corridors									
5			Standard time to target condition applied	5	0.837	Low	Standard difficulty applied	Low	1	Species rich hedgerows in ecological corridors, potentially constrained location e.g. where more formalised/lower hedgerow form may be desired									
5			Standard time to target condition applied	5	0.837	Low	Standard difficulty applied	Low	1	Species rich hedgerows located within development parcels as identified by Landscape / Land Use parameter plans. Would provide supporting ecological functions (stepping stone habitats, screening of car parks, wildlife permeability measures and habitat provision etc)									

Brislington Meadows															
B-3 Site Hedge Enhancement															
Condense / Show Columns		Condense / Show Rows		Instructions											
Main Menu															
Baseline Habitats		Post development/ post intervention habitats													
Baseline e ref	Baseline habitat	Change in distinctiveness and condition			Length KM	Distinctiveness		Condition	Strategic significance						
		Distinctiveness movement	Condition movement	Distinctiveness		Condition									
3	Native Hedgerow with trees	Medium - Medium	Poor - Moderate	0.06	Medium	Moderate		Location ecologically desirable but not in local strategy							

Strategic significance		Temporal multiplier			Difficulty risk multipliers		Hedge units delivered	Comments	
Strategic significance		Standard or adjusted time to target condition	Final time to target condition/years	Final difficulty of enhancement	Assessor comments			Reviewer comments	
Location ecologically desirable but not in local strategy		Standard time to target condition applied	6	Low	H3 Gap planting through core of hedgerow to diversify species & structure, maintaining a scrub base (but introducing management to prevent further cultural losses)				

Drawings

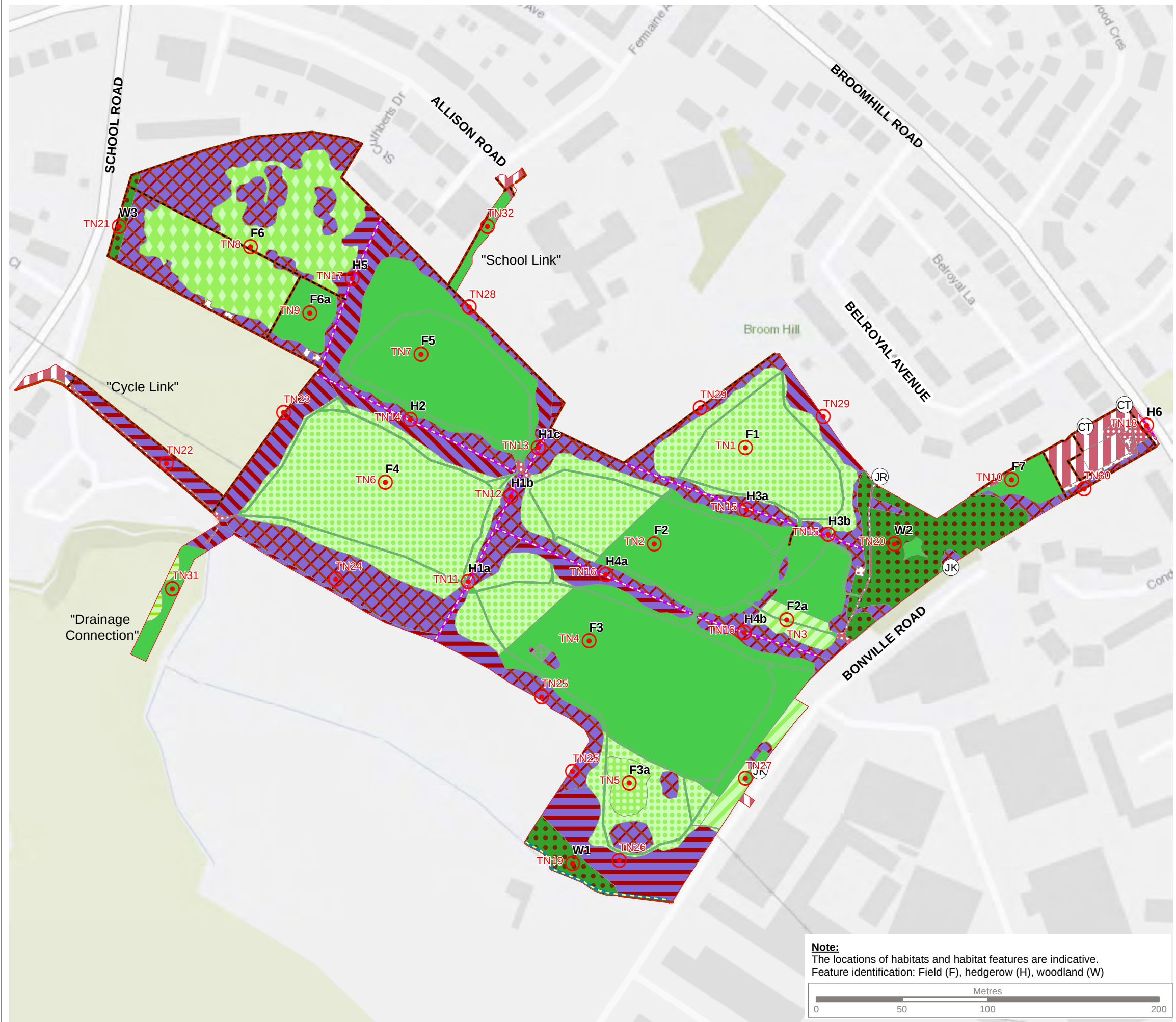
Drawing G7507.20.011 Baseline Habitats

Drawing G7507.20.012 Baseline Habitat Condition

Drawing G7507.20.063 Habitat Impacts

Drawing G7507.20.061 Proposed Habitats

Drawing G7507.20.062 Proposed Habitat Condition



KEY

- Site boundary
- Target Note (TN)
- Schedule 9 Non-native Invasive Plants**
 - Cotoneaster (C. horizontalis)
 - Japanese knotweed (Fallopia japonica)
 - Japanese rose (Rosa rugosa)
- Habitat Survey (UKHab)**
 - h2a - Hedgerow (priority habitat)
 - r2b - Other rivers and streams
 - u1e(68) - Urban linear feature - wall
 - u1e(69) - Urban linear feature - fence
 - g3 - neutral grassland
 - g3c - Other neutral grassland
 - g3c5 - Arrhenatherum neutral
 - g3c6 - Lolium-Cynosurus neutral grassland
 - g3c8 - Holcus-Juncus neutral grassland
 - g4 - Modified grassland
 - h3a6 - Other blackthorn scrub
 - h3d - Bramble scrub
 - h3h - Mixed scrub
 - u1b - Developed land, sealed surface
 - u1b5 - Buildings
 - u1c - Artificial unvegetated unsealed
 - w1g - Other woodland, broadleaved

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Rev	Description	Drawn	Approved	Date



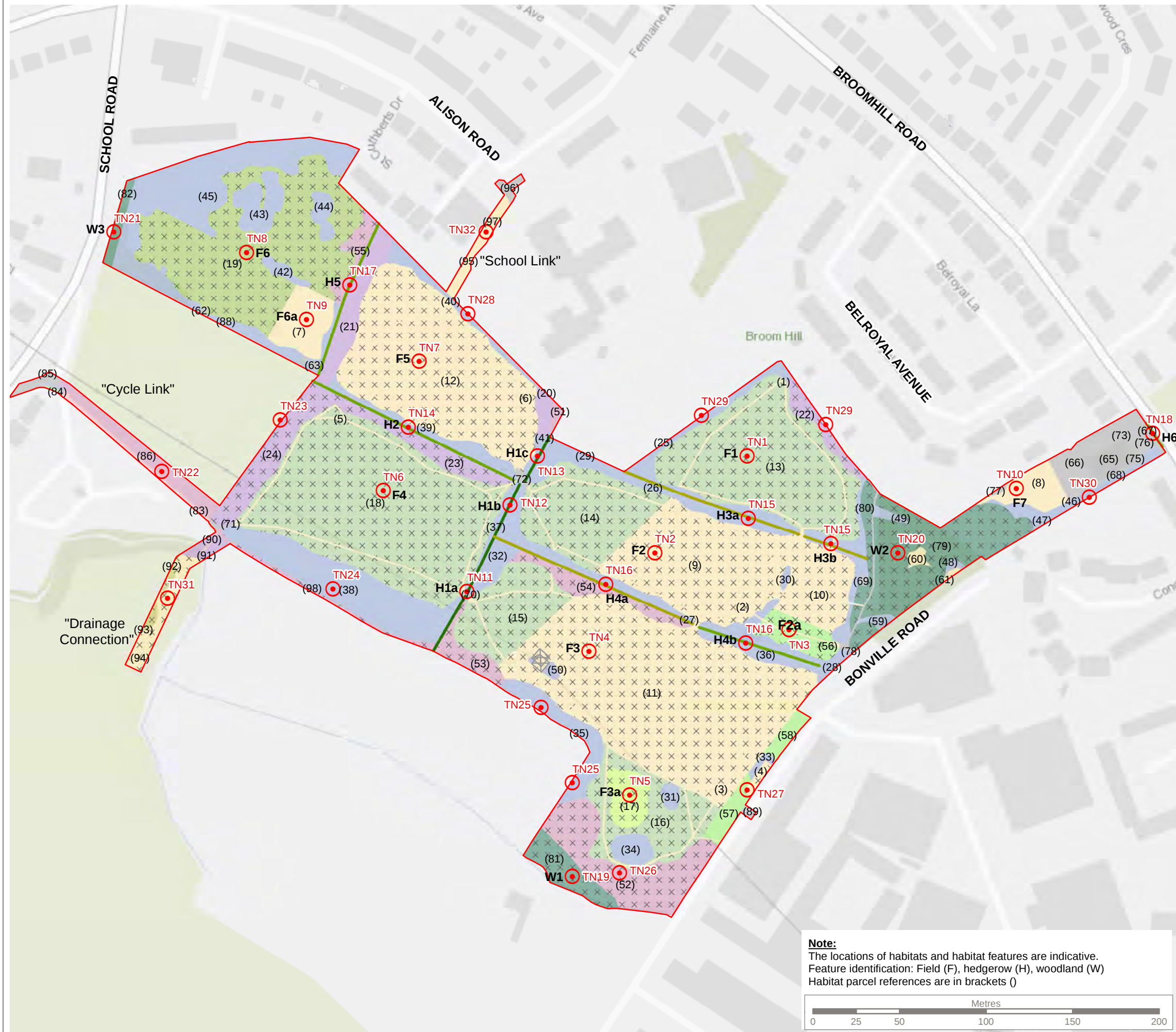
Genesis Centre, Birchwood Science Park, Warrington WA3 7BH
Tel 01925 844004 e-mail tep@tep.uk.com www.tep.uk.com

Project
Brislington Meadows

Title
Habitats Baseline

Drawing Number
G7507.20.011

Drawn	Checked	Approved	Scale	Date
RR	CB	VG	1:2,250 @ A3	22/02/2022



KEY

- Site boundary

Target Note (TN)

h2a - Hedgerow (priority habitat)

Good condition

Moderate condition

Poor condition

g3 Grassland - neutral grassland (ephemeral, tall ruderal, non-native)

Moderate condition

Poor condition

g3c Grassland - other neutral grassland

Moderate condition

g3c5 Grassland - Arrhenatherum neutral grassland

Moderate condition

g3c6 Grassland - Lolium-Cynosurus neutral grassland

Moderate condition

g3c8 Grassland - Holcus - Juncus neutral grassland

Moderate condition
- g4 Grassland - modified grassland**

Moderate condition

Poor condition

h3a6 Heathland and scrub - other blackthorn scrub

Moderate condition

Poor condition

h3d Heathland and scrub - bramble scrub

Poor condition

h3h Heathland and scrub - mixed scrub

Moderate condition

Poor condition

w1g Woodland and forest - other broadleaved woodland

Moderate condition

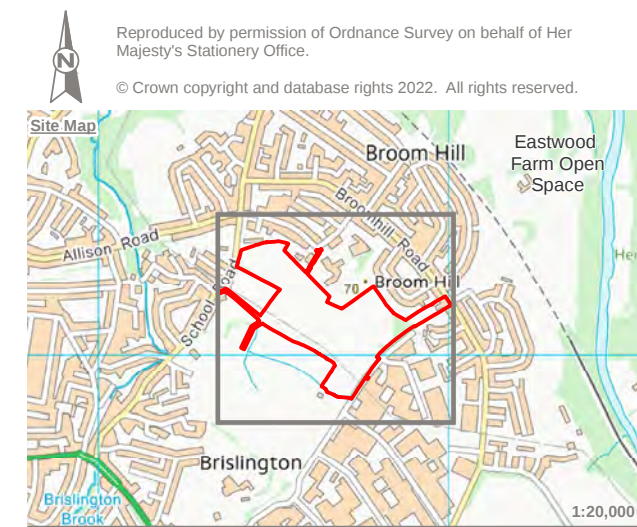
Poor condition

u1c Urban - artificial unvegetated unsealed surface

Poor condition

u Urban (other types)

no assessment required



Rev	Description	Drawn	Approved	Date

TEP

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Project
Brislington Meadows

Title
Habitat Condition Assessment (applying Natural England Biodiversity Metric 3.0 Technical Guidance)

Drawing Number
G7507.20.012

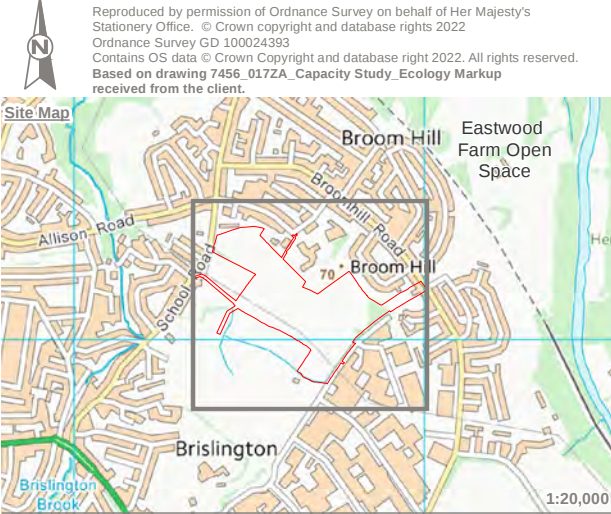
Drawn RR	Checked CB	Approved VG	Scale 1:2,250 @ A3	Date 22/02/2022
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KEY

- Site boundary
- Extent of residential development (circa 5.12ha) and indicative routes for primary street (from Land Use Parameter Plan LDA Dwg No 7456_103 v7)
- Predicated Habitat Impact**
 - Temporary & Permanent Loss - 7.8ha (81%)
 - Habitats retained - 0.28ha (3%)
 - Retained habitats enhanced - 1.53ha (16%)
- Native hedgerow to be removed - 525m (74%)
- Native hedgerow to be retained/enhanced - 185m (26%)

Note:
The locations of habitats and habitat features are indicative. Individual tree retention is not identified on this plan - refer to Outline Arboricultural Impact Assessment (TEP Ref 7507.21.001) and Landscape Parameter Plan (LDA Design Dwg No 7456_102v7)



Rev	Description	Drawn	Approved	Date



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Project
Brislington Meadows

Title
Proposed Development (7456_017ZA_Capacity Study_Ecology Markup ZA) - Predicted Temporary and Permanent Habitat Loss

Drawing Number
G7507.20.063

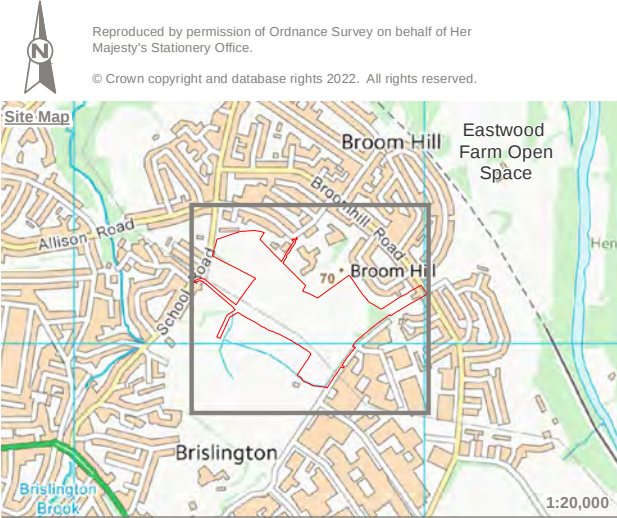
Drawn	Checked	Approved	Scale	Date
RAR	CB	FBH	1:2,250 @ A3	02/03/2022



KEY

- Site boundary
- Extent of residential development (circa 5.12ha) and indicative routes for primary street (from Land Use Parameter Plan LDA Dwg No 7456_103 v7)
- Proposed Habitats (UKHab)**
 - g3c - Other neutral grassland
 - g3c8 - Holcus-Juncus neutral grassland (boardwalk oversailing)
 - g3c8 - Holcus-Juncus neutral grassland
 - g4 - Modified grassland
 - h3h - Mixed scrub
 - u1 - built-up areas and gardens
 - u1b - Developed land, sealed surface
 - u1b5 - Buildings
 - u1b5 - Buildings with brown roofs
 - u1c - Artificial unvegetated unsealed surface
 - w1g - Other woodland, broadleaved
 - h2a - Native hedgerow (priority habitat)
 - Indicative new tree planting (urban trees)

Note:
The locations of habitats and habitat features are indicative. Individual tree retention is not identified on this plan - refer to Outline Arboricultural Impact Assessment (TEP Ref 7507.21.001) and Landscape Parameter Plan (LDA Design Dwg No 7456_102v7)



Rev	Description	Drawn	Approved	Date

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Project
Brislington Meadows

Title
Proposed Development (7456_017ZA_Capacity Study_Ecology Markup ZA) - Proposed Habitats

Drawing Number
G7507.20.061

Drawn	Checked	Approved	Scale	Date
SA	RAR	FBH	1:2,250 @ A3	02/03/22



KEY

- Site boundary

g3c Grassland - other neutral grassland

Good condition

Moderate condition

g3c8 Grassland - Holcus - Juncus neutral grassland

Good condition

g4 Grassland - modified grassland

Moderate condition

Poor condition

h3h Heathland and scrub - mixed scrub

Good condition

Moderate condition

Poor condition

w1g Woodland and forest - other broadleaved woodland

Good condition

Moderate condition
- Extent of residential development (circa 5.12ha) and indicative routes for primary street (from Land Use Parameter Plan LDA Dwg No 7456_103 v7)

u Urban (other types)

Artificial surfaces (sealed / unsealed)

Vegetated garden (poor condition)

u1b Urban - buildings

Brown roof (moderate condition)

Other buildings

h2 Hedgerows

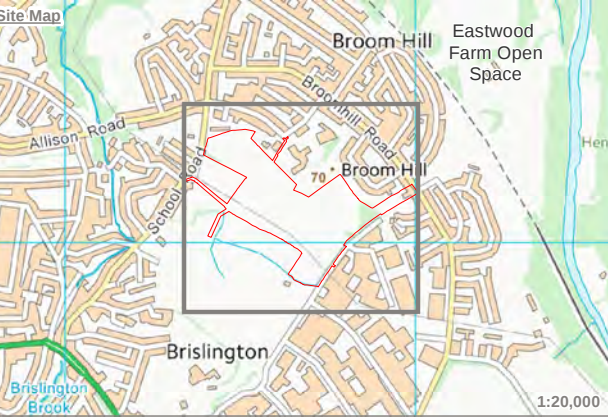
Good condition (retained and proposed)

Moderate condition (retained, enhanced and proposed)

Poor condition (retained)

Note:
The locations of habitats and habitat features are indicative. Individual tree retention is not identified on this plan - refer to Outline Arboricultural Impact Assessment (TEP Ref 7507.21.001) and Landscape Parameter Plan (LDA Design Dwg No 7456_102v7)

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Rev	Description	Drawn	Approved	Date

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Project
Brislington Meadows

Title
Proposed Development (7456_017ZA_Capacity Study_Ecology Markup ZA) - Predicted Habitat Condition

Drawing Number
G7507.20.062

Drawn	Checked	Approved	Scale	Date
RAR	CB	FBH	1:2,250 @ A3	02/03/2022



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