

Green Infrastructure and Biodiversity in Craven Supplementary Planning Document

This SPD provides formal guidance on Craven Local Plan Policy ENV5: Green Infrastructure, ENV4: Biodiversity and other associated policies. Downloads are available at the bottom of the page.

Adopted by Craven District Council 13th December 2022

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PART ONE: CONTEXT

1.1.0 Introduction

1.1.1 Supplementary Planning Documents (SPDs) are described in the glossary of the **National Planning Policy Framework (NPPF)** (<https://www.gov.uk/government/publications/national-planning-policy-framework--2>) as:

“Documents which add further detail to the policies in the development plan. They can be used to provide further guidance for development on specific sites, or on particular issues, such as design. Supplementary planning documents are capable of being a material consideration in planning decisions but are not part of the development plan.”

1.1.2 This SPD provides further guidance on the delivery of green infrastructure and biodiversity protection and enhancement in the Craven Local Plan area. It cannot and does not introduce any new policy requirements. Rather, in accordance with the legal and **NPPF** (<https://www.gov.uk/government/publications/national-planning-policy-framework--2>) definitions of SPDs, it adds further detail to help explain the objectives relating to the relevant policies of the **Craven Local Plan (/planning/craven-local-plan/)** and provides information to assist applicants meet the requirements of each relevant policy criteria. This information is set out in Part 2 of this SPD. Part 3 provides guidance for applicants in preparing planning applications involving green infrastructure and biodiversity.

1.1.3 The plan policies referred to in this SPD are:

- Policy ENV4: Biodiversity
- Policy ENV5: Green Infrastructure
- Policy SD1: Presumption in favour of sustainable development
- Policy SD2: Meeting the challenge of climate change

Policies ENV4 and ENV5 are the focus of this SPD. The aim of these policies is to ensure that development in Craven is accompanied by positive change in green infrastructure and biodiversity, which in turn improves quality of life, including health and well-being. The full text of policies ENV4 & ENV5 are set out in Appendix A. Policies SD1 and SD2 can be read in the **Craven Local Plan (/planning/craven-local-plan/)**. Once made or adopted, neighbourhood plans form part of the development plan. It will therefore be necessary for development proposals to comply with any biodiversity and green infrastructure policies in made neighbourhood plans where they exist and cover the location where development is proposed.

1.1.4 Planning applications proposing the delivery of green infrastructure and biodiversity enhancement measures should take account of all relevant local plan policies. The Council has adopted other SPDs, which provide further guidance to specific adopted local plan policies. Applicants are encouraged to refer to these SPDs, when preparing and submitting an application to the Council (see **Craven Local Plan (/planning/spatial-planning/spds-and-information/)** webpage for details of all SPDs).

1.2.0 Preparing, submitting and front loading of planning applications

1.2.1 In accordance with Policy SD1 of the Craven Local Plan and paragraphs 11 and 39-46 of the **NPPF** (<https://www.gov.uk/government/publications/national-planning-policy-framework--2>), the Council will take a proactive approach and will work cooperatively with people and organisations wishing to carry out development and applying for planning permission. This is to find solutions to secure sustainable development that meets the relevant plan policies and be approved wherever possible. Solutions to secure sustainable development for Craven, including contributing to the implementation of the Council's Climate Emergency Strategic Plan 2020 to 2030 through the policies of the local plan, and the efficient processing of planning applications, can be achieved through early pre-application engagement with the Council. This is called the process of 'front loading' and is strongly encouraged by the **NPPF** (<https://www.gov.uk/government/publications/national-planning-policy-framework--2>) at paragraphs 39 to 46. Further guidance on this process set out in Part 3.

1.3.0 Public consultation and adoption

1.3.1 This supplementary planning document has been the subject of two public consultations. Representations received during these consultations have informed this adopted document. As required by regulation 12(a) of the Town and Country (Local Planning) (England) Regulations 2012, a Consultation Statement was prepared which set out details of the consultations that have taken place and how issues have been addressed in the supplementary planning document.

1.3.2 In accordance with the provisions of the Strategic Environmental Assessment (SEA) Directive and the Environmental Assessment of Plans and Programmes Regulations (2004) (Regulation 9(1)), the local authority must determine whether a SEA is required under Regulation 9(3) for a supplementary planning document. A SEA screening report has been published alongside this supplementary planning document and this concludes there is no need for a full SEA.

1.3.3 A Habitats Regulations Assessment (HRA) is required to determine whether a plan or project would have significant adverse effects upon the integrity of internationally designated sites of nature conservation importance (also known as Natura 2000 sites). The requirement for HRA is set out within the Habitats Directive 92/43/EEC, and transposed into British law by Regulation 102 of the Conservation of Habitats and Species Regulations, 2010. A screening report can determine if a full HRA is required (i.e. an Appropriate Assessment or further report, as necessary). A HRA screening report has been published alongside this supplementary planning document and concludes there is no need for a full HRA.

1.3.4 This document was formally adopted by the Council on 13th December 2022.

1.4.0 The relationship between the Craven Local Plan, the National Planning Policy Framework (NPPF), and the Craven Climate Emergency Strategic Plan

1.4.1 The **Craven Local Plan (/planning/craven-local-plan/)** (hereafter referred to as 'the plan') was adopted on 12 November 2019.

1.4.2 The preparation of the plan, and its examination, has been based on the provisions of the 2012 NPPF, and the accompanying planning practice guidance (**PPG** (<https://www.gov.uk/government/collections/planning-practice-guidance>)). Therefore, Policies ENV4 and ENV5 reflects these provisions.

1.4.3 The mostly recent updated **2021 NPPF** (<https://www.gov.uk/government/publications/national-planning-policy-framework--2>) (paragraphs 174 – 182) retain the same main policy approach to contribute to and enhance the natural and local environment, and to protect and enhance biodiversity within it. Indeed, the 2021 NPPF now specifically requires planning decisions to provide net gains for biodiversity (paragraph 174 d). Policy ENV4 of the plan requires that, wherever possible, development will make a positive contribution towards achieving a net gain in biodiversity. Hence, notwithstanding changes to the NPPF since the plan was prepared, Policy ENV4 (and Policy ENV5) remain consistent with the latest version of the NPPF.

1.4.4 The Environment Bill that was re-introduced by the Government in January 2020 received Royal Assent on 9 November 2021, meaning it is now an Act of Parliament. The Act aims to improve air and water quality, tackle waste, increase recycling, halt the decline of species, and improve our natural environment. There are a number of elements within the Act which are relevant to biodiversity and green infrastructure, including the introduction of a mandatory requirement for biodiversity net gain for built development and a healthier freshwater environment, requiring developments to deliver at least 10% increase in biodiversity. However, at present biodiversity net gain in England is not mandatory and will only become mandatory by amending the Town & Country Planning Act (TCPA) 1990, which is anticipated by the Government to become law in Winter 2023. The Environment Act sits alongside adopted Craven Local Plan policy requirements and is legally binding. The Environment Act strengthens the Natural Environment and Rural Communities (NERC) Act s40 which extends biodiversity duty on all public bodies, with implications for Craven District Council and all other public bodies in the exercise of their planning and other functions.

1.4.5 In January 2020, the Council approved the Craven Climate Emergency Strategic Plan (CESP) 2020 to 2030, which seeks to act upon the Council's Climate Change Emergency Declaration adopted in August 2019 for the district to be carbon neutral by 2030. The CESP can be viewed at: <https://www.cravenc.gov.uk/media/9460/cdc-climate-emergency-strategic-plan-february-2020.pdf> and reinforces the existing policies of the local plan which address climate change and carbon reduction measures. It is capable of being a material consideration in determining relevant planning applications and supports adopted local plan policies ENV4, ENV5, SD1, and SD2 (as well as policies ENV6, ENV7, ENV8 and ENV9) to reduce energy use, water use and carbon emissions, maximise the energy efficiency of development, and reduce the environmental impact of materials used in construction.

PART TWO: CONFORMING WITH RELEVANT POLICIES OF THE CRAVEN LOCAL PLAN

2.0.0 Introduction

2.0.1 Biodiversity is a term used to describe the variety of life on the planet. It can be used more specifically to refer to all of the species in one region or ecosystem. Biodiversity refers to every living thing, including plants, bacteria, animals, and humans. Biodiversity provides functioning ecosystems that supply oxygen, clean air and water, pollination of plants, pest control, wastewater treatment and many ecosystem services.

2.0.2 Green Infrastructure (GI) is a network of multi-functional green and blue spaces and other natural features, urban and rural, which is capable of delivering a wide range of environmental, economic, health and well-being benefits for nature, climate, local and wider communities and prosperity. It is a broad concept, and includes natural features, such as parks, forest reserves, hedgerows, restored and intact wetlands and marine areas, as well as man-made features, such as eco-ducts and cycle paths. The aims of GI are to promote ecosystem health and resilience, contribute to biodiversity conservation and enhance ecosystem services. Green infrastructure in this context also refers to blue spaces such as lakes, rivers, streams and canals.

2.1.0 The Protection of Areas, Sites, Habitats, Species, Trees and Hedgerows

Internationally Designated Sites [Policy ENV4 (a)(i)]

2.1.1 There are a number of internationally designated sites of importance to the district of Craven, namely Special Areas of Conservation (SACs), Special Protection Areas (SPAs), and Ramsar sites. The internationally designated sites are discussed in paragraphs 5.42 to 5.45 in the local plan and displayed in its **policies map** (<http://www.cravencd.gov.uk/planning/accessible-craven-local-plan/#POLICIESMAP>). The internationally designated sites are listed in Appendix B (in addition to national and local designations of relevance of Craven), including where they are located in relation to the Craven local plan area. They have been referenced and analysed in the local plan's **Habitats Regulation Assessment** (</planning/spatial-planning/evidence-and-monitoring/sustainability-and-habitats/>).

2.1.2 The policies of the Craven Local Plan were written, and the local plan adopted, whilst the UK was a member state of the European Union. In terms of environmental legislation of relevance to spatial planning and this SPD, at the time of writing, the UK is continuing with similar environmental standards to those of current EU States, as agreed with the EU before its departure in January 2021. The changes carry predominately procedural implications for the Government, Natural England, Defra and local authorities, with some technical alterations, and thus they have limited impacts for development proposals and applicants. Criterion (a)(i) of policy ENV4 reflects the requirement of EU environmental legislation that if a proposed plan or project is considered likely to have a significant effect on a protected site (either individually or in combination with other plans or projects), and if the risk of significant effects cannot be excluded at the screening stage, then an appropriate assessment of the implications for the site in view of the site's conservation objectives must be undertaken (see full policy text at Appendix A of this SPD). The following website provides guidance on the appropriate assessment process: <https://www.gov.uk/guidance/appropriate-assessment> (<https://www.gov.uk/guidance/appropriate-assessment>). The main components of the process are explained in the paragraphs below.

2.1.3 Screening: The first step is a screening process to identify any potential designated European sites that may be impacted by the development. A summary of the screening process involves determination of any likely significant effects, consultation with statutory bodies and screening outcome.

2.1.4 Appropriate Assessment: The Appropriate Assessment is a detailed consideration of the impact of the project on that designated site. Criterion (a)(i) of policy ENV4 requires that if the result is a negative assessment of the implications for the designated site and there is no alternative solution, the 'IROPI' test must be satisfied if the proposed development is to be allowed. IROPI stands for Imperative Reasons of Overriding Public Importance. If there are such reasons, then the proposed development can be allowed so long as appropriate compensatory measures are taken to ensure the overall coherence of Natura 2000 sites are protected (Article 6(4) of the Habitats Directive). An example is the re-creation of a comparable habitat.

2.1.5 Measures designed to compensate for known negative effects of a project should not be taken into account for the purposes of the appropriate assessment carried out under Article 6(3) when it is not sufficiently certain that those measures would be effective in avoiding harm to the designated site. A distinction must be drawn between:

2.1.6 Protective measures intended to avoid or reduce any adverse effects that a project may have on a designated European site, which are considered in the appropriate assessment required by Article 6(3);

2.1.7 Measures that are aimed at compensating for the negative effects of the project on the designated site, which are required by Article 6(4).

2.1.8 The appropriate assessment must contain complete and precise findings, and conclusions capable of removing all reasonable scientific doubt as to the effects of the development on the site concerned. For small scale projects, satisfying the IROPI test can be viewed as quite a high hurdle to overcome, and applicants in such cases should carefully review the steps outlined above relating to the proposal.

National and Local Designated Sites [Policy ENV4 (a)(ii)]

2.1.7 National and local designated sites relate to Special Sites of Scientific Interest (SSSIs), Special Protection Areas (SPAs), Special Areas of Conservation (SACs), Local Nature Reserves (LNRs), Sites of Importance for Nature Conservation (SINCs), and ancient woodland/pasture or individual veteran trees. The national or local designated sites of relevance to the Craven local plan area are explained in the following paragraphs.

Figures 1 & 2: Vegetation of the SINC designation either side of Skipton bypass as viewed from White Hills Lane and Gargrave Road, respectively [click images to enlarge]



(/media/11691/sinc-bypass-from-white-hills-lane-bridge-1.jpg)



(/media/11692/sinc-from-gargrave-road-1.jpg)

2.1.8 Sites of Special Scientific Interest (SSSIs) are designated under the Wildlife & Countryside Act 1981, where they support habitats and/or species of national importance. Over half of these SSSIs in England, by area, are also internationally important (i.e. they are also designated as SACs, SPAs and/or Ramsar sites, which are internationally designated sites – see above). Within the Craven local plan area, there are 12 SSSIs. Where development is proposed within or immediately adjacent to a SSSI, an applicant is required to contact Natural England for its consent that permission be granted and confirm that any conditions recommended by Natural England will be complied with. More information can be found under: <https://www.gov.uk/guidance/protected-areas-sites-of-special-scientific-interest> (<https://www.gov.uk/guidance/protected-areas-sites-of-special-scientific-interest>).

2.1.9 Local Nature Reserves (LNRs) are based on a statutory designation made under Section 21 – “Establishment of nature reserves by local authorities” – of the National Parks and Access to the Countryside Act 1949. LNRs are of local importance and can also be of national importance. The LNR may be given protection against damaging operations, and it also can have certain protection against proposed development on and around it. There are no LNRs within the Craven plan area, however they do exist close to the plan area, for example within the part of Embsay that is located within the Yorkshire Dales National Park. The applicant is therefore advised to consult with Craven District Council where proposals may impact on an LNR.

2.1.10 Other important wildlife sites also contribute to the ecological network in Craven. To safeguard these sites, they are designated as Sites of Importance for Nature Conservation (SINCs). They represent a legacy of good management and rely upon continued stewardship by landowners in Craven and nationally. Local Green Space (LGS) designation allows communities to protect green spaces of local importance for reasons including nature conservation and/or their setting. Adopted Craven Local Plan policy ENV10 lists sites that are designated as LGS and aims to protect such sites from incompatible development.

2.1.11 Ancient woodland designations are of key importance in Craven. They represent those woods that have a continuous history of cover since before the period when afforestation became common practice and widespread throughout Britain (approximately from 1600 onwards for England and Wales). These include:

- Ancient semi-natural woods - these are woods that have developed naturally. Most have been used by humans (often managed for timber and other industries over the centuries), but they have woodland cover for over 400 years;
- Plantations on ancient woodland sites - these are ancient woods that have been felled and replanted with non-native species. Typically, these are conifers, but it can also include broadleaved planting such as non-native beech, red oak, and sweet chestnut. Although damaged, they all still have the complex soil of ancient woodland, and all are considered to contain remnants of the woodland specialist species which occurred before;

Ancient woodlands are shown on the Craven **Local Plan policies maps** (</planning/accessible-craven-local-plan/#POLICIESMAP>), and applicants should check this map to establish whether a site contains ancient woodland or is within close proximity to it. There is a requirement to prevent the loss of aged or veteran trees found outside ancient woodland, as per criterion (e) of Policy ENV4.

2.1.12 Existing designated sites and irreplaceable habitats of national and local importance should be protected from development. Criterion a) ii) aims to ensure that development proposals do not have adverse impacts on any national or local designated sites and their settings, unless it has been demonstrated to the satisfaction of the local planning authority that the benefit of, and need for the development clearly outweighs the impact on the importance of the designation (see full policy text at Appendix A of this SPD). Analysing and facilitating climate change adaptation at a local level as part of an application ensures that adverse impacts on designated sites in the long term are reduced as much as possible.

2.1.13 To determine the location of existing SSSIs, SPAs, SACs, LNRs, SINCs, Ancient Woodland sites or individual veteran trees and Local Green Space, the applicant can consult the webpage <https://www.gov.uk/check-your-business-protected-area> (<https://www.gov.uk/check-your-business-protected-area>) or the Council's **Open Spatial Data** (<https://data-cravencd.opendata.arcgis.com/>) Applicants can also check if their site is close / adjacent to these designated sites on the **local plan policies maps (/planning/accessible-craven-local-plan/#POLICIESMAP)**. Such information can allow the assessment of the location of the proposed development in relation to the designated site. If a site of nature conservation importance has 'statutory protection', it means that it receives protection by means of certain legislation in recognition of its biodiversity and/or geological value. Applicants are also encouraged to contact the North and East Yorkshire Ecological Data Centre (NEYEDC) with regards to the current status of SINCs (www.neyedc.org.uk (<http://www.neyedc.org.uk>)). The NEYEDC has a key role in designating and mapping SINCs, and maintaining biodiversity records. The NEYEDC can provide ecological data for the Craven local plan area, including information on SINCs, and is a more up to date source of information than the Council's policies maps for these types of sites.

Ecological networks, habitats and species populations [Policy ENV4 (a)(iii)]

2.1.14 Policy ENV4 criterion (a)(iii) specifically requires development to avoid the loss of and encourage the recovery or enhancement of ecological networks, habitat and species, especially priority habitats and species identified in the Craven BAP, or any subsequent update (see full policy text at Appendix A of this SPD). It should be noted that both the UK BAP and the **Craven BAP (/planning/spatial-planning/evidence-and-monitoring/policy-evidence/)** (which can be accessed via the Council's policy evidence webpage relating to policy ENV4), no longer provide the most up to date information with regards to important habitats and species. **Lists of Habitats and Species of Principal Importance** (<http://publications.naturalengland.org.uk/publication/4958719460769792>) are now set out by Natural England, as required by section 41 of the National Environment and Rural Communities (NERC) Act 2006. Applicants are required to take habitats and species of principal importance that could be potentially affected into consideration during the development process when planning the layout and timing of a development. By avoiding negative impacts at the outset, it is not only wildlife that benefits. Time and financial resources are saved by planning for wildlife early in the development process, and there is also the opportunity to actively demonstrate a commitment to conserve and protect habitats and species of principal importance.

2.1.15 Public bodies, including local authorities, have a legal duty to have regard to conserving biodiversity in the exercise of their normal functions, including ensuring that Biodiversity Surveys & Reports, required as part of the Council's **local validation requirements (/planning/submitting-planning-applications-and-notifications/mandatory-and-local-validation-requirements/local-information-requirements/biodiversity-survey-and-report/)** take account of the presence and impact upon habitats and species of principal importance. A Biodiversity Survey & Report can identify where a habitat or species of principal importance may be present on a proposed development site and set out how these habitats or species can be conserved (Table 1 and paragraph 3.2.6 in Part 3 of this SPD, provide further detail about Biodiversity Surveys & Reports).

2.1.16 **Section 41 NERC lists** (<http://publications.naturalengland.org.uk/publication/4958719460769792>) cover a wide range of semi-natural habitat types. They are identified as being the most threatened in the country and requiring conservation action. If such habitats are present, applicants are advised to apply the mitigation hierarchy (see Figure 3 below). This hierarchy implies that significant adverse impacts on these habitats should be avoided and, if this is not possible, measures which reduce any such negative impact should be explored. Failing that, losses of such habitats should be compensated for as part of the development proposals. The general process for priority species is similar to that for priority habitats. If such species are found on proposed development sites and their habitat is to be damaged or lost, it may be necessary to provide alternative, replacement habitats elsewhere.

2.1.17 There are numerous publications now available in England to assist applicants in terms of advice on managing impacts of development on existing wildlife and their habitats. One such publication is produced by the NHBC Foundation in cooperation with the RSPB, entitled '**Biodiversity in new housing developments – creating wildlife-friendly communities**' (<https://www.nhbcfoundation.org/publication/biodiversity-in-new-housing-developments-creating-wildlife-friendly-communities/>).

Loss of Biodiversity and Green Infrastructure [Policies ENV4(c, d, e) and ENV5 (a)(i) & (c)]

2.1.18 Policies ENV4 and ENV5 both resist significant losses to biodiversity and green infrastructure from a proposed development without any compensatory measures put forward by the applicant which can be deemed suitable by Craven District Council. The focus of criterion (c) in policy ENV4 is on protecting biodiversity within the proposed site, and criterion (d) advises applicants on the practicality of compensation measures. Criteria (a)(i) and (c) of Policy ENV5 target the avoidance of harm or loss of green infrastructure (and hence also biodiversity) on a wider level within and adjacent to the local plan area (see full policy text at Appendix A of this SPD).

2.1.19 Inappropriate and poorly designed development proposals could result in a significant loss or harm to biodiversity on or around the site. No new green infrastructure may be proposed, or the green infrastructure proposed on the site may be inappropriately located, in a way that it does not provide effective linkages to existing areas of green infrastructure, so that wildlife cannot move in the wider landscape.

Figure 3: Sequential steps of the mitigation hierarchy for biodiversity [click on image to enlarge]



(/media/11693/gi-and-biodiversity-spd-figure-3.jpg)

2.1.20 Where compensation is thought to be needed for biodiversity assets, careful consideration needs to be given to what biodiversity assets can be adequately and satisfactorily replaced. It may be impractical or unrealistic to put forward proposals that seek to replace certain types of biodiversity that could be lost. Ancient woods are irreplaceable, in that it is impossible to replace the complex biodiversity of ancient woods which has accumulated over hundreds of years. Many species that thrive in ancient woodland are slow to colonise new areas.

2.1.21 Criterion (e) of Policy ENV4 strongly resists the loss or deterioration of irreplaceable habitats, such as ancient woodland and aged or veteran trees. Such losses are wholly exceptional (see full policy text at Appendix A of this SPD). Applicants must clearly demonstrate that the loss of such irreplaceable habitats is justified by setting out how and why the socio-economic benefits of the project outweigh the socio-economic and/or environmental consequences of the loss or deterioration of irreplaceable habitats. Applicants can show this via an Ecological or Geological Assessment (further details at table 2 and paragraph 3.2.6 in Part Three of this SPD).

Water Framework Directive [Policy ENV4(a)(vi)]

2.1.22 Policy ENV4(a)(vi) aims to ensure that there is no deterioration in the Water Framework Directive (WFD) ecological status of waterbodies as a result of development (see full policy text at Appendix A of this SPD). The WFD is an approach adopted in the UK and many other European countries to protect and improve water resources and aquatic ecosystems across much of the continent. The WFD aims to protect all waters and water-dependent ecosystems: groundwater, rivers, lakes, transitional water (estuaries), coastal waters and wetlands. A primary environmental objective of the WFD for surface waters is that the ecological and chemical status of all water bodies are of 'good' or 'high' status, and that in no case will the status deteriorate below its present condition. Habitats adjacent to and alongside watercourses can have a direct impact on the quality of the water bodies in the vicinity. These habitats should be considered and adequately protected to ensure that the biodiversity of the water spaces and the general corridor effect is maintained and enhanced.

2.1.23 Applicants are required to ensure that a proposed development does not result in a deterioration of water quality in any water body that it may affect. This is to protect local and regional water bodies from pollution, in terms of ensuring safe drinking water provision, biodiversity enhancement, etc. Impacts on water quality can result from a proposed site being adjacent to a water body such as a river or lake, or where there is a recognised flood risk within or adjacent to a site (e.g. via a high groundwater table). In this respect, where there is thought to be any influence on water quality, there is great importance in the applicant consulting with the relevant bodies of Craven District Council, the Environment Agency and Natural England from the outset of the scheme design. Applicants should refer to the Council's **Flood Risk & Water Management SPD (/planning/spatial-planning/spds-and-information/)**, which provides further guidance on policy ENV8 (criteria c) & d), which aims to reduce the risk of pollution and deterioration of water resources in line with the requirements of the WFD.

2.1.24 One of the WFD measures of the quality of water bodies is an assessment of its physical habitats. Development can impact on the quality of the physical habitats in a waterbody by, for example, introducing hard infrastructure, walls, removing vegetation, impacting on the riparian zone. Development also has the opportunity to improve physical habitat quality by removing hard infrastructure such as walls and weirs and the like, and by establishing riparian vegetation and trees. Assessment of the impacts on waterbody WFD status requires an assessment of impacts on the morphology (physical habitats) of the river to ensure that a proposed development does not result in a deterioration, but aims for improvement. Riverine Biodiversity Net Gain, in terms of improving the habitat quality of rivers and streams, and creating new such habitat, can contribute greatly in this regard.

2.1.25 The **Humber River Basin Management Plan (<https://www.gov.uk/government/publications/humber-river-basin-district-river-basin-management-plan>)** requires the restoration and enhancement of water bodies to prevent deterioration and promote recovery of water bodies. This management plan designation is of relevance to Craven District because it is the plan in England which covers North Yorkshire. This document sets out the current state of the water environment, pressures affecting the water environment, environmental objectives for protecting and improving the waters, programme of measures, and actions needed to achieve the objectives.

2.1.26 The overall aim of the Directive is to provide the opportunity to plan and deliver a better water environment, focusing on ecology. Land utilised for Sustainable Drainage Systems (SuDS) provision can greatly assist in achieving this objective. SuDS environments can provide water quality improvement in terms of pollutant reduction and removal, in addition to water quantity control (thus reducing flood risk), and also providing green infrastructure, biodiversity, and recreational opportunities. Figures 4 and 5 provides such an example in Craven. In effect, there can be a multi-functional usage of land when planning for new development.

Figures 4 & 5: Sustainable Drainage Systems (SuDS) provision combined with green infrastructure and recreational space at Wyvern Park, Skipton [click on images to enlarge]



(/media/11694/suds-pond-path-bench-wyvern-park.jpg)



(/media/11695/suds-pond-sluiice-path-wyvern-park.jpg)

2.2.0 Biodiversity net gain

Managing and Promoting Biodiversity and Green Infrastructure [Policy ENV4 (a) & ENV5]

2.2.1 Policy ENV4 (a) requires all developments to provide a net gain in biodiversity, wherever possible. Policy ENV5 requires development to be accompanied by an improved and expanded green infrastructure (GI) network, which, in turn, provides opportunities for net gain in biodiversity (see full policy text at Appendix A of this SPD). Whether it is a small or a large-scale development, it should generally be possible to achieve a net gain in biodiversity, provided this objective is 'built in' to the early planning of the development. Biodiversity Net Gain (BNG) aims to leave biodiversity in a better state after development than before it, using onsite or offsite contributions, or a combination of both. In order to achieve BNG, applicants are encouraged to bring forward schemes that provide an overall increase in natural habitat and ecological features. BNG can be demonstrated by comparing the baseline biodiversity of a site prior to the commencement of any development with the increase of biodiversity that is proposed. Paragraphs 2.2.3 to 2.2.8 below provide relevant information on the suggested suitable metrics to use for BNG calculations.

2.2.2 On sites where size allows, GI should contribute to biodiversity gain by enhancing and creating wildlife habitat, and by integrating biodiversity with the proposed buildings. The built environment of the site should aim to be permeable to wildlife, incorporating design features aimed at sustaining and increasing the population of particular species and also facilitating climate change adaptation. Figures 6 and 7 below show examples of how linkages can be made between residential areas and existing green area designations.

2.2.3 In the planning of proposed development sites, BNG should be encouraged if possible where it is able to contribute to natural flood management techniques, especially when new development sites are located adjacent to existing watercourses, and where there are known water management / flooding problems from any form of flood risk. Any proposals for BNG or wider green infrastructure assets may also need to have regard to the implications for public water supply in liaison with the relevant water undertaker for the area. Applicants should cross refer to the Council's **Flood Risk & Water Management SPD (/planning/spatial-planning/spds-and-information/)** for further information.

2.2.4 Planning for biodiversity and GI requirements should be undertaken from the outset and should consider costs for purchase, design, implementation, monitoring and management of biodiversity and GI. To assist applicants in fulfilling the net gain in biodiversity requirement of Policy ENV4, it is highly recommended that they utilise the **Biodiversity Metric (<http://nepubprod.appspot.com/publication/6049804846366720>)**, which was launched by Natural England in July 2021, or successor versions. This is a biodiversity accounting tool that can be used for the purposes of calculating biodiversity net gain.

2.2.5 This metric is designed to provide applicants, planners, ecologists, and other interested parties with a means of assessing changes in biodiversity value (losses or gains), brought about by development or changes in land management. The metric is a habitat-based approach to determining a proxy biodiversity value, and an applicant is required to utilise an ecologist in working with this metric. The Natural England **Lists of Habitats and Species of Principal Importance (<http://publications.naturalengland.org.uk/publication/4958719460769792>)** (see paragraph 2.1.14) can provide relevant information to applicants on local species of importance to assist such assessments.

2.2.6 A **Small Sites Metric (<http://nepubprod.appspot.com/publication/6047259574927360>)** is also available from Natural England – it is a version designed to simplify the process of calculating biodiversity net gain on smaller development sites. It is not appropriate to use the Small Sites Metric to calculate offsite losses and gains. Unlike the aforementioned Biodiversity Metric, an applicant does not have to source the services of its ecologist when using the Small Sites Metric, unless the proposed site in question is adjacent to, or potentially affects, a nationally designated site (see paragraph 2.1.13).

2.2.7 The small sites metric should be used when a site meets both of the following criteria:

(a) Development sites where:

- For residential developments, the number of dwellings to be provided is between one and nine inclusive on a site having an area of less than one hectare;
- Where the number of dwellings to be provided is not known, the site area is less than 0.5 hectares;
- For all other development types where the site area is less than 0.5 hectares or less than 5,000 square metres.

(b) Where there is no priority habitat present within the development area (excluding hedgerows and arable margins).

2.2.8 The completed metric spreadsheet, including the full calculations that lead to the final biodiversity unit scores should be submitted to the Council. Applicants are advised to submit metric calculations and scores in a separate section of the Biodiversity Survey and Report, which is a local validation requirement (see table 1). Summary results or extracts of any metric calculations would not be sufficient alone. The metric does not change the protection afforded to biodiversity. Existing levels of protection afforded to protected species and habitats are not changed by using this or any other metric. Statutory obligations will still need to be satisfied.

2.2.9 The Chartered Institute of Ecology and Environmental Management (CIEEM) has published a document entitled '**Good Practice Principles for Development** (<https://cieem.net/resource/biodiversity-net-gain-good-practice-principles-for-development/>)' which is focused on BNG.

Applications are encouraged to comply with these good practice principles for development. Applicants are also encouraged to demonstrate that the achievement of BNG calculations have been undertaken in accordance with the document (or any subsequent publications).

2.2.10 CIEEM have also published **Biodiversity Net Gain Report and Audit Templates** (<https://cieem.net/resource/biodiversity-net-gain-report-and-audit-templates/>) that provide a framework for writing reports for projects that are aiming to achieve BNG. Applicants are encouraged to use this framework to demonstrate compliance with Policy ENV4 on delivering net gain in biodiversity. The templates set out a suggested structure and content for reports specifically produced in relation to BNG assessments. Such report templates could be used and included in an Biodiversity Surveys & Reports, which is part of the Council's **local validation requirement** ([/planning/submitting-planning-applications-and-notifications/mandatory-and-local-validation-requirements/local-information-requirements/](#)) for planning applications (see table 1 and para 3.2.6 in Part Three of this SPD). Applicants are advised to consult the **British Standards 8683: Process for designing and implementing Biodiversity Net Gain – Specification** (<https://cieem.net/british-standard-for-biodiversity-net-gain-published/>) (The British Standards Institution 2021).

Applicants are also encouraged to use The Building with Nature voluntary initiative, which sets out standards to provide a benchmark to be used in addition to the Natural England Biodiversity Net Gain metric, to provide a qualitative assessment of a proposed development site. Schemes can be assessed at pre-application, reserved matters and post-construction / in-use stages. Further information can be accessed via the website:

<https://www.buildingwithnature.org.uk> (<https://www.buildingwithnature.org.uk>).

2.2.11 Figures 6 and 7 are examples in Craven of how green infrastructure and recreational provision can be successfully linked to existing ecological and green space designations – in these examples the SINC designation northwest of Skipton, and Aireville Park within the town itself. Similarly, properly planned and designed Biodiversity Net Gain provision can effectively provide ecological corridors and recreational linkages to such designations within and around the boundaries of the Craven local plan area.

Figures 6 & 7: SINC designation and track from White Hills Lane, Skipton and Hayton Way footpath to Aireville Park [click images to enlarge]



(/media/11707/sinc-track-from-white-hills-lane-1.jpg)



(/media/11708/aireville-park-hayton-way-footpath-5.jpg)

The biodiversity and geodiversity of land and buildings [Policy ENV4(a)(iv)]

2.2.12 Paragraph 2.0.1 introduced the concept of biodiversity; it is the term used to refer to all of the living species in one region or ecosystem. Geodiversity is the variety of rocks, minerals, fossils, soils, landforms and the natural processes which form and alter them. Applicants are required under Policy ENV4 (a)(iv) to conserve and manage the biodiversity and/or geodiversity value of land and buildings within a proposed site (see full policy text at Appendix A of this SPD). Applicants are required to show how the requirements of this criterion have been met through an Ecological/Geological Assessment – see Table 2 in Part Three of this SPD and para 3.2.6.

2.2.13 Understanding the natural processes that shape our landscapes and ecosystems has an important role to play in their sustainable management. Accordingly, all new developments must be developed based on a clear understanding of their effects on biodiversity and geodiversity and other environmental interests. In this respect, the relevant publication of Natural England entitled '**Geology and biodiversity – making the links** (<http://publications.naturalengland.org.uk/publication/73047?category=30050>)' is useful in informing and assisting applicants in terms of site management and carrying out surveys.

2.2.14 Where utility assets such as water and wastewater apparatus are included within a site, applicants should consider how landscaping and BNG on a site can be incorporated to ensure access to the asset and refer to United Utilities' publication titled '**Standard Conditions for Works Adjacent to Pipelines**'. (<https://www.unitedutilities.com/standard-conditions>) Applicants are advised to contact the utility company.

Trees, woodlands and hedgerows [Policy ENV4(a)(v)]

2.2.15 Policy ENV4 (a) (v) refers to incorporating appropriate planting into a development, using native tree and plant species where possible (see full policy text at Appendix A of this SPD). Native plants are plants indigenous to a given area in geologic time. This includes plants that have developed, occur naturally, or existed for many years in an area. There are several important advantages to planting and retaining native plants. For example, native plants require less usage of pesticides and fertilisers. Planting native trees and shrubs is an excellent way to support biodiversity. Flowering trees can be particularly important for pollinators in springtime and they also provide food for birds and mammals in the autumn. Paragraph 131 of the **NPPF (2021)** (<https://www.gov.uk/government/publications/national-planning-policy-framework--2>) promotes the planting of trees in all new streets.

2.2.16 Policy ENV4 (a)(v) also refers to incorporating appropriate planting, using locally characteristic tree and plant species, where possible (see full policy text at Appendix A of this SPD). These may not necessarily be native planting but are characteristic to a particular area. There is reference in this policy criterion to retaining and integrating hedgerows, which play an important part in both wildlife protection and contributing to the character, appearance and setting of a local area. Many hedgerows act as ecologically favourable and visually attractive natural boundaries to development sites.

2.2.17 It should be noted that tree planting is also an important element of the Craven Climate Emergency Strategic Plan, in terms of devising methods to reduce carbon in the local plan area. Applicants can contribute to this aim by meeting the policy requirement of ENV4(a)(v) by increasing trees and woodland on development sites, using native and locally characteristic species where possible.

2.2.18 Retaining and integrating existing mature and healthy trees and hedgerows that make a positive contribution to the character and appearance of an area is an aim of criterion (a)(v). Both existing trees and hedgerows provide vital environments for biodiversity as well as corridors for biodiversity across the countryside, and particularly in framed landscapes such as in Craven. Hedgerows provide both food and nesting areas for insects, birds and mammals. Flowering hedgerows that contain willow, blackthorn, and hawthorn provide vital food for bees in spring and for birds and mammals in the autumn. Hedgerows should only be cut every three years to encourage flowering. The bases of hedgerows should not be sprayed so as to allow wildflowers to grow and provide suitable areas for insects (see full policy text at Appendix A of this SPD).

2.3.0 Movement of wildlife, and enhancement, improvement and creation of green infrastructure

Enabling the Movement of Wildlife [Policy ENV4(a)(vii)]

2.3.1 Policy ENV4 (a)(vii) requires development proposals to achieve BNG, where possible by enabling wildlife to move freely throughout the environment (see full policy text at Appendix A of this SPD). Practical ways to enable wildlife to move throughout both the natural and built elements of any proposed scheme include the creations of new habitats - for example through tree planting or the creation of new wetlands, such as lagoons and through the retention and integration of existing habitats on a site, where possible. Lagoons can effectively be designed to maximise their biodiversity value, and also limit the risks they can pose to wildlife, by for example having shallow areas with accessible gradients to allow safe access and egress for mammals. Applicants need to assess what wildlife habitats exist on a site and demonstrate how a proposal enables the free movement of wildlife throughout the local environments, which includes the site itself and the ability of wildlife to move to the wider area.

2.3.2 The site layout of relatively large developments is important in ensuring the easier movement of wildlife. For example, if a site has a body of water such as a stream on its southern boundary, it would usually make sense to concentrate the site's green infrastructure in its southern area. In this example, native and locally characteristic tree and shrub planting can provide additional area and shelter for the biodiversity inhabiting and using the stream. Such planting could provide links to other existing areas of green infrastructure, both within and outside the application site, allowing wildlife to move throughout the local environment. Hence, it is about planning a suitable layout and using green infrastructure for the maximum benefit of wildlife, given the general constraints that the applicant is working under.

2.3.3 In addition to the layout, the design of the buildings can assist wildlife to move more freely and easily throughout the local environment. For example, suitably located bat and bird boxes attached to buildings and farmyard barns can greatly assist such biodiversity in terms of providing a home and allowing easier movement within the site and beyond. Biodiversity net gain provision also enhances the local survival prospects of heavily protected species such as great crested newts. Some appropriate design work close to a proposed development can enable the spread of such protected species. Whilst built features for wildlife can be beneficial, they should be in addition to retained, improved or created habitat networks, which can be demonstrated by Biodiversity Net Gain and a landscape scheme.

Enhancement, Improvement and Creation of Green Infrastructure [ENV5 (a) (ii), (iii) & (b)]

2.3.4 Policy ENV5 (a) (ii) (iii) & (b) require development proposals to avoid loss or harm to existing GI networks, and to enhance or create new links in the existing GI network, where possible (see full policy text at Appendix A of this SPD). GI assets can take many forms, but the main types are:

- Natural and semi-natural urban green spaces;
- Parks and gardens, including urban parks, country parks and formal gardens;
- Green corridors, including river and canal banks and extensive areas of natural habitat;
- Cycleways and rights of way;
- Outdoor sports facilities and provision for children, teenagers and adults;
- Amenity green space and accessible countryside in urban fringe areas;
- Allotments and community gardens, cemeteries and churchyards;
- Green roofs and walls.

2.3.5 For green infrastructure policy and strategies to be successfully implemented, it is necessary to have the mutual support and cooperation of many diverse and separate agencies and individuals working closely together in an open and positive manner. Provision of GI and natural habitats is the key element of enabling movement of wildlife within local and regional environments, as discussed in paragraphs 2.3.1 to 2.3.3. The **Yorkshire & Humber GI Mapping project**

(https://webarchive.nationalarchives.gov.uk/ukgwa/20140605112209/http://www.naturalengland.org.uk/regions/yorkshire_and_the_humber/ourwork) and the GI corridors it identifies, is useful to applicants in ensuring they incorporate means of enhancing, improving and creating new GI. Appendix C of this SPD provides a table listing Green Infrastructure principles, based on information put forward by Natural England. These GI Principles can be used to help applicants achieve the requirements of policy ENV5. They do not introduce any new policy requirement. Craven District Council is currently developing a selection of resource materials, including mapping to identify green and blue infrastructure in the Craven area and promote its multi-functionality. This resource material provides examples of how appropriately sited and designed green and blue infrastructure can provide multifunctional benefits such as biodiversity provision, flood risk reduction, and more attractive areas to live including recreational benefits.

Green, Grey & Blue Infrastructure:

2.3.6 Some elements of green infrastructure may not be 'green' in a traditional sense. Natural areas, parks and recreational systems and open spaces can be considered to be 'green infrastructure', whereas built infrastructure and systems, roads and bridges, water and electrical lines and other community systems can be described as 'grey infrastructure'. Some elements, such as service areas of industrial parks, could be classed as 'grey' but still contribute to the wider functioning of a green infrastructure network. Hence, the potential contribution of roadside verges and amenity areas, for example, will play a role in the Craven's green infrastructure network. Figures 8 and 9 below show examples of how existing areas of green infrastructure can be extended and how simple green corridors can be created adjacent to residential areas.

2.3.7 It follows that green infrastructure can take a variety of forms and fulfil a variety of functions, including:

- Biodiversity – ranging from large designated sites to habitats identified within Biodiversity Action Plans and the Natural England Lists of Habitats and Species of Principal Importance;
- Landscape – designated features and other valuable landscape components;
- Open space – amenity green space in urban and rural areas;
- Rivers, streams and watercourses;
- Public Rights of Way.

Water Environment as part of GI:

2.3.8 The local plan area's rivers, streams and the Leeds & Liverpool canal are key components of the green infrastructure network, as they provide unique habitats and settings for wildlife, acting as linear linkages across the local plan area and beyond that can, in a natural or semi-natural form, facilitate habitat migration. Rivers and watercourses can be enhanced to maximise these functions by, for example, establishing wide, semi-natural margins along at least one bank. River corridors are important rural assets, but are also particularly important in urban areas, where corridors can be constrained by development. In addition to their value as corridors with semi-natural margins, it should be recognised that the quality of the aquatic environment is also important. This includes both the quality of the physical habitats in the river and the quality of the water which is vital for the river's value as a recreational resource as well as for biodiversity and fisheries.

2.3.9 The water environment can also provide an important resource for sport and recreation. This can contribute to the enhanced health of residents, and it adds to the multi-functionality of the water environment as a green infrastructure asset. Streams and watercourses can, however, also be a cause of flooding, which is a recognised problem in some parts of the local plan area. Flooding can also arise as a result of surface water management problems. Green infrastructure has the potential to alleviate some of these forms of flooding through providing flood storage in times of heavy rain, and the increased presence of permeable surfaces within green spaces can play a substantial role in minimising surface water run-off. Paragraph 5.55 of the local plan references **The Green & Blue Infrastructure Strategy (2017 – 2036)** (<https://www.westyorks-ca.gov.uk/growing-the-economy/strategic-economic-framework/policies-and-strategies/green-and-blue-infrastructure/>) developed by the Leeds City Region. It also references the Leeds and Liverpool Canal Towpath Access Development Plan, which is a current project with the aim of capitalising on the value of the Leeds & Liverpool Canal.

2.3.10 The **Green & Blue Infrastructure Strategy** (<https://www.westyorks-ca.gov.uk/growing-the-economy/strategic-economic-framework/policies-and-strategies/green-and-blue-infrastructure/>) is a useful document for applicants to refer to when considering how a proposal can enhance existing GI corridors. Figures 8 and 9 provide Craven examples of how extensions to existing green spaces can be designed and implemented using appropriately planned tree planting, and also how tree infilling can provide simple but effective wildlife corridors.

2.3.11 Proposed developments that are large enough can create a lagoon system for SuDS schemes, which can also be of enormous importance for biodiversity in Craven. A newly created pond or other wetland will be colonised immediately by aquatic insects, and over time this will evolve to serve as a local reservoir of biological diversity. Wetlands of any size are generally favourable for biodiversity. The Council's Flood Risk & Water Management SPD provides more information on SuDS schemes.

2.3.12 Green infrastructure within a development should include attractive, engaging and safe outdoor spaces which meet a variety of social, health and well-being needs for local people, including contact with nature, recreation, education, active travel (including walking and cycling), water management, landscape amenity, and 'climate cooling'. Such spaces may include parks, play areas, community gardens, housing estate landscapes, playing fields, off-road walking and cycling routes, rivers, canals, pocket parks, road verges and structural landscaping, Local Green Space designations and private gardens. Accessibility need not always be direct and physical – it can be visual and/or experienced through hearing. There are numerous good practice documents which the applicant can refer to. Natural England have published **GI Guidance** (<http://publications.naturalengland.org.uk/publication/35033>), and the TCPA and the Wildlife Trusts have released **good practice guidance for GI and biodiversity** (<https://www.tcpa.org.uk/Handlers/Download.ashx?IDMF=34c44ebf-e1be-4147-be7d-89aaf174c3ea>).

2.3.13 The integration and interaction of different GI functions within a single site is sought where appropriate, and across a GI network as a whole. Within the network, some spaces will have primary functions, such as biodiversity within nature reserves or amenity within local parks, but this does not necessarily exclude other functions. Multi-functional GI can also be viewed as the application of an 'ecosystem approach'. The planning and implementation of GI should be based on up-to-date ecological evidence and relevant information about GI assets.

Figures 8 & 9: Supplementary tree planting, Aireville Park and infill trees at White Hills Lane, Skipton [click on images to enlarge]



(/media/11714/supplementary-planting-aireville-park-1.jpg)



(/media/11715/infill-tree-white-hills-lane-higher-raikes-close.jpg)

Development Principles for Allocated Sites [Policies ENV4 (f), ENV5 (d)]

2.3.14 Criterion (f) of Policy ENV4 and criterion (d) of Policy ENV5 list allocated named sites located within the settlements of Skipton, Settle, Bentham, Glusburn & Cross Hills, Gargrave, and Burton in Lonsdale (see full policy text at Appendix A of this SPD). These allocated sites are accompanied by development principles which require the incorporation of areas of green infrastructure where an overall net gain in biodiversity will be expected. Development principles for allocated sites are set out in the **Craven Local Plan (/planning/craven-local-plan/)** policies SP5 – SP11.

2.3.15 These development principles also explain, apart from biodiversity enhancement on site, what the wider landscape purpose(s) of the green infrastructure provision is. These reasons can include the provision of recreation mitigation for a nearby Special Protection Area (SPA) or Special Area of Conservation (SAC), providing a buffer to open woodland close by, helping to provide a new Public Rights of Way connection, or providing a buffer to Flood Risk Zone 2 or 3 areas close or adjacent to the site. Applicants proposing development on allocated sites should pay particular attention to the development principles for that allocated site, and how they interact in order to produce the desired outcomes for the site.

2.3.16 In order to meet the Council's existing local validation requirements, a Biodiversity Survey & Report may be required for some allocated sites. Specific allocated sites require a biodiversity appraisal to be prepared, which would form part of a Biodiversity Survey & Report. See table 1 in Part 3.

2.4.0 Management and maintenance of Biodiversity and Green Infrastructure

Long-term GI management mechanisms in Craven [Policy ENV5 (a)(ii)]

2.4.1 Policy ENV5 (a)(ii) requires that the long-term maintenance and management of existing and newly created green infrastructure (and thereby the biodiversity within them) should be secured where possible (see full policy text at Appendix A of this SPD). Craven District Council will use planning conditions within permissions for small-scale development for ensuring appropriate maintenance and management of sites where biodiversity net gain has been secured. For larger proposals, Section 106 legal agreements would be the primary mechanism for achieving long-term management and maintenance.

2.4.2 Paragraph 1.4.4 of this SPD refers to the Environment Act. The Act sets out that the habitat secured via biodiversity net gain should be secured for at least 30 years via obligations or a conservation covenant. A conservation covenant is an agreement between a landowner and a body such as a local authority to do or not do something on their land for a conservation purpose. This may be, for example, an agreement to maintain woodland and allow public access to it, or to refrain from using pesticides on native vegetation. These agreements are long lasting and can continue after the landowner has parted with the land, ensuring that its conservation value is protected for the public benefit. Within the Environment Act provisions, conservation covenants are legally binding. This means that once these covenants are agreed, they cannot be ignored/avoided/removed, and the rules of the covenant must be abided by indefinitely (or for whatever length of time has been specified).

Conservation covenants are voluntary, which means landowners can choose whether or not to enter into them freely. A 30-year legal obligation or conservation covenant is considered by the Council to meet the requirements of Policies ENV4 and ENV5 for long term maintenance and management of green infrastructure and biodiversity.

2.4.3 Applicants should assess any potential cross boundary issues between local authority plan areas, which may arise from their proposed development. Where such cross boundary issues are identified, applicants should consult Green Infrastructure Strategies of neighbouring authorities where they exist, as they are possible sources of important ecological information.

PART THREE: PREPARING AND SUBMITTING PLANNING APPLICATIONS

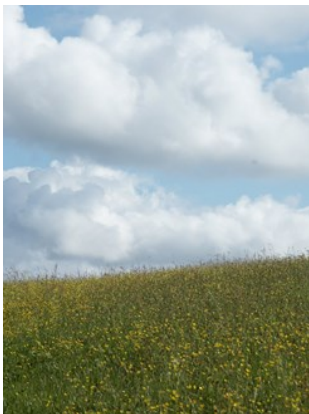
3.1.0 Pre-application discussions

3.1.1 The importance of pre-application engagement between developers and the local planning authority and early resolution of policy issues ('front loading') is highlighted within the **NPPF** (<https://www.gov.uk/government/publications/national-planning-policy-framework--2>), in paragraphs 39 to 46. Also, in light of the Council's Climate Emergency Strategic Plan (CCESP), it is important to reflect one of the actions of the CCESP here. This action (CND03) states that the Council will *"work with developers as new sites across Craven are approved to ensure that opportunities for efficiency and carbon reduction are maximised."*

3.1.2 The key aim of policies ENV4 and ENV5 is that growth in housing, business and other land uses are accompanied by improvements in biodiversity and enhancements and expansion of the green infrastructure network for the benefit of the environment, people and wildlife (see Figures 10 & 11 below). In order to achieve this in proposed developments, and to meet the specific requirements of each policy, an applicant should refer to the relevant policies of the adopted local plan and the further detail provided in Part Two of this SPD. The applicant should then discuss these matters at the earliest opportunity with the Council's Development Management (DM) team. It is the Council's practice to charge for all such engagement. Pre-application enquiry forms and charging rates for the Council can be found **here** ([/planning/information-and-advice/obtaining-pre-application-planning-advice-temporarily-suspended/](#)). Contact details at the time of publication for the Council's Development Management (DM) team: planning@cravenc.gov.uk (<mailto:planning@cravenc.gov.uk>).

3.1.3 Paragraph 174 of the **NPPF** (<https://www.gov.uk/government/publications/national-planning-policy-framework--2>) states that planning policies and decisions should contribute to and enhance the natural and local environment. Early discussions between applicants, Craven District Council and the relevant local community about existing and proposed biodiversity and green infrastructure of an emerging scheme, including links to wider site constraints, is important for clarifying expectations and reconciling local and commercial interests. The opportunity for the Council to inform and influence the green infrastructure design of a proposed development early in the design process and suggest ways in which a net gain in biodiversity can be achieved is a more efficient process than an applicant trying to implement suggested revisions at a later stage, particularly with major proposals. Pre-application discussions can include wider site constraints such as flood risk from all sources and constraints associated with utility assets.

Figures 10 & 11: The provision and maintenance of green infrastructure can have a multitude of benefits for the local Craven environment and its people, with this example of Gawflatt meadow in Skipton [click images to enlarge]



(/media/11716/gawflatt-meadow-3.jpg)



(/media/11717/gawflatt-meadow-walker.jpg)

3.2.0 Documents to Support a Planning Application

3.2.1 The information in Table 1 below lists relevant supporting documents, many of which will be necessary and/or helpful, to accompany an application to show how the requirements of policies ENV4 and ENV5 have been met, both in relation to the Council's validation requirements and other supporting documentation. Table 1 includes the national validation requirement for architectural drawings to accompany any planning application, therefore applicants are encouraged to commission an architect or suitably qualified professional to produce drawings that fully consider the design of any development proposal. Applicants may also need to provide other supporting documents not listed in the table below (such as a **Planning Statement (/planning/submitting-planning-applications-and-notifications/mandatory-and-local-validation-requirements/local-information-requirements/planning-statement/)**) depending on the individual circumstances of a proposal.

3.2.2 Where the supporting documents, necessary to meet the Council's validation requirements are not required, applicants are encouraged to provide supporting documentation setting out similar information, in order to show how the proposal conforms with relevant adopted local plan policy criteria, including policies ENV4 and ENV5.

3.2.3 It should be noted that the Council has a requirement to review local validation lists at least every two years, hence users of this SPD should refer to the most up to date **local validation requirements (/planning/submitting-planning-applications-and-notifications/mandatory-and-local-validation-requirements/local-information-requirements/)** published on the Council's website.

Table 1: Supporting documents which are commonly required to accompany a planning application

Craven Local Plan Policy	Supporting Documents	Purpose	Further Information
SD1, SD2, ENV3, ENV4 & ENV5	Preliminary drawings, site and location plans.	Pre-application discussions relating to overall design of a proposal.	Pre-application enquiry forms and charging rates for the Council can be found here (/planning/information-and-advice/obtaining-pre-application-planning-advice-temporarily-suspended/) .
ENV3, ENV4 & ENV5	Architectural drawings are a national validation requirement and are necessary to accompany the planning application.	To set out the scale, design and layout of a proposal.	CDC website: Craven District Council : Mandatory Validation Requirements (cravencdc.gov.uk) (/planning/submitting-planning-applications-and-notifications/mandatory-and-local-validation-requirements/mandatory-validation-requirements/)
ENV4 & ENV5	Environmental Impact Assessment (EIA) is a national validation requirement and may be necessary to accompany a planning application	To analyse the impact of the proposal on the environment and put forward mitigation effects (see guidance below in paragraphs 3.2.4 and 3.2.5).	CDC website: Craven District Council : Environmental Impact Assessment (subject to screening opinion) (cravencdc.gov.uk) (/planning/submitting-planning-applications-and-notifications/mandatory-and-local-validation-requirements/local-information-requirements/environmental-impact-assessment-subject-to-screening-opinion/) North and North Yorkshire Ecological Data Centre: www.neyedc.org.uk (http://www.neyedc.org.uk) CIEEM (Guidelines for Ecological Impact Assessment – EclA) https://cieem.net/resource/guidelines-for-ecological-impact-assessment-ecia/ (https://cieem.net/resource/guidelines-for-ecological-impact-assessment-ecia/)

ENV4 & ENV5	Biodiversity Survey & Report is on the Council's local validation list and may be necessary to accompany the planning application.	<p>To provide information on:</p> <ul style="list-style-type: none"> · existing biodiversity interests on the land affected by the proposed development; · possible impacts on those biodiversity interests; and · avoidance, mitigation and/or compensation measures. <p>The use of Natural England BNG and Small Sites Metric is recommended. Applicants are advised to include the metric calculations and scores in a separate section of the Biodiversity Survey & Report.</p>	<p>For details of when a Biodiversity Survey & Report is needed and the information the Council expects to be included please see the CDC website:</p> <p>Craven District Council : Biodiversity Survey and Report (cravenc.gov.uk) (/planning/submitting-planning-applications-and-notifications/mandatory-and-local-validation-requirements/local-information-requirements/biodiversity-survey-and-report/)</p>
ENV3 (s) & (t), ENV4 and ENV5	A Sustainable Design and Construction Statement is on the Council's local validation list and is necessary to accompany the planning application.	<p>To explain how a proposal's design and construction will contribute towards the achievement of sustainable development and, in particular, to the mitigation of and adaptation to climate change, in line with relevant policies of the Craven Local Plan and the National Planning Policy Framework (NPPF). (https://www.gov.uk/government/publications/national-planning-policy-framework--2)</p>	<p>Appendix B of the Good Design SPD and CDC website:</p> <p>Craven District Council : Sustainability Design and Construction Statement (SDCS) (cravenc.gov.uk) (/planning/submitting-planning-applications-and-notifications/mandatory-and-local-validation-requirements/local-information-requirements/sustainability-design-and-construction-statement-sdcs/)</p>
ENV4	A biodiversity survey and report is on the Council's local validation list and may be necessary to accompany the planning application.	<p>A biodiversity survey and report will be required for all developments in or adjacent to European Sites, SSSIs, NNRs, SINC, RIGS, LNR, wildlife corridors, priority habitats, development of greenfield sites, redevelopment of disused or redundant buildings and outbuildings in the countryside.</p> <p>A Preliminary Ecological Appraisal (PEA) and a protected species survey/assessment, if required, would form part of a biodiversity assessment.</p>	<p>CDC website:</p> <p>Craven District Council : Biodiversity Survey and Report (cravenc.gov.uk) (/planning/submitting-planning-applications-and-notifications/mandatory-and-local-validation-requirements/local-information-requirements/biodiversity-survey-and-report/)</p>
ENV4	A Tree survey/ Arboricultural Statement is on the Council's local validation list and may be necessary to accompany the planning application.	<p>An arboricultural statement must be submitted where there are trees within a proposed application site, or on land adjacent to an application site.</p>	<p>CDC website:</p> <p>Craven District Council : Tree Survey /Arboricultural Statement (cravenc.gov.uk) (/planning/submitting-planning-applications-and-notifications/mandatory-and-local-validation-requirements/local-information-requirements/tree-survey-arboricultural-statement/)</p>

3.2.4 Certain proposed developments may require an Environmental Impact Assessment (EIA), depending on an analysis of their environmental impact (see Table 1). An EIA is a process of evaluating the likely environmental impacts of a proposed project or development, taking into account inter-related socio-economic, cultural and human-health impacts, both beneficial and adverse. The EIA assists Craven District Council to determine applications which require such environmental impact analysis. An EIA is required for proposed developments listed under the Town and Country Planning (Environmental Impact Assessment) Regulations 2017 (<https://www.gov.uk/guidance/environmental-impact-assessment>) (<https://www.gov.uk/guidance/environmental-impact-assessment>). There are also Screening Report and/or Appropriate Assessment requirements for internationally designated sites, and more information is available at paragraphs 2.1.2. to 2.1.6 above.

3.2.5 If applicants are unsure whether a proposal requires an EIA, they can submit a request for a Screening Opinion to the Council. A site location plan, plus a description of the proposal and its possible effects on the environment, are required to be submitted. The Development Management team can consult with relevant organisations and reply to the request within 21 days. If an applicant is sure that a proposal requires an EIA by virtue of either Schedule 1 or Schedule 2 of the Regulations, or from the results of a screening opinion, then they can request a scoping opinion. Craven District Council can confirm what is considered to be the main effects of the development and the topics that the environmental statement should cover.

3.2.6 A Biodiversity Survey and Report is required for a proposed development where it is likely to affect a designated site of ecological or geological interest, which is an **existing local validation requirement (/planning/submitting-planning-applications-and-notifications/mandatory-and-local-validation-requirements/local-information-requirements/biodiversity-survey-and-report/)**. Such assessments are required for all developments within or immediately adjacent to the protected sites: Sites of Special Scientific Interest (SSSIs), Special Protection Areas (SPAs), and Special Areas of Conservation (SACs). The location of such designations is available to view using the webpage: <https://www.gov.uk/check-your-business-protected-area> (<https://www.gov.uk/check-your-business-protected-area>). Some of these layers are also on the **Open Spatial Data (/data-cravendc.opendata.arcgis.com/)** page on the Craven District Council website. An Biodiversity Survey and Report is required for any application that has the potential to impact upon any designated sites, legally protected species, Habitats of Principal Importance, Species of Principal Importance, irreplaceable habitat (see the Council's local **validation requirement webpage (/planning/submitting-planning-applications-and-notifications/mandatory-and-local-validation-requirements/local-information-requirements/biodiversity-survey-and-report/)**). The requirements are different for each protected site designation, and any survey would be informed by the results of a search for ecological and/or geological data. The survey must be to an appropriate level of scope and detail and must record which habitats and features are present on and around the development site. In addition to an assessment, a protected species survey and report may be required, and this can be established through discussion with the Development Management team.

3.2.7 It should be noted that the list of supporting documents provided in Table 1 above is not an exhaustive list. Applicants are advised to refer to the most up to date **local validation requirements (/planning/submitting-planning-applications-and-notifications/mandatory-and-local-validation-requirements/local-information-requirements/)** published on the Council's website and to discuss which supporting documents would be necessary with the Council's Development Management Team at planning@cravendc.gov.uk (<mailto:planning@cravendc.gov.uk>)

3.3.0 Outline, Reserved Matters and Planning Conditions

3.3.1 The Council may wish to encourage details relating to green infrastructure and biodiversity on a development site to be agreed as part of the initial permission, so that important elements are not deferred for later consideration. It can also be important to ensure that applications to discharge conditions or amend approved schemes do not undermine development quality. A Biodiversity Survey and Report is essential to most outline applications (in particular major applications). Consideration of protected species in particular is a material consideration in the determination of all applications (full or outline) and as such this is requested as part of the Council's **local information requirement (/planning/submitting-planning-applications-and-notifications/mandatory-and-local-validation-requirements/local-information-requirements/biodiversity-survey-and-report/)** and should include key avoidance and mitigation principles. The impacts of proposed development on biodiversity should not be left to condition or reserved matters.

3.3.2 Applications for outline planning permission should seek to establish whether the scale and nature of a proposed development would be acceptable before fully detailed proposals are put forward. Green infrastructure provision and biodiversity enhancements can be considered at this stage in order to assist community engagement, inform a design and access statement (where required), and provide a framework for the preparation and submission of reserved matters proposals. Design quality of green infrastructure proposals and biodiversity improvements cannot be fully achieved through an outline planning application alone. Outline applications can include some details relating to proposals for green infrastructure and biodiversity enhancements on a development site where these are fundamental to decision making, however the Council would expect the reserved matters application to provide full details of GI and biodiversity net gain, where possible, within a proposed scheme.

3.3.3 **Pre-application advice (/planning/information-and-advice/obtaining-pre-application-planning-advice-temporarily-suspended/)** can be used as a stage for applicants and the Council to discuss the use of planning conditions in relation to proposed enhancement, improvement and/or creation of green infrastructure and biodiversity. Hence, this is an opportunity for prospective applicants and the Council to discuss the intended approach to a site and how green infrastructure and biodiversity policies and guidance need to be applied.

3.4.0 Community engagement

3.4.1 Paragraph 174 of the **NPPF (/www.gov.uk/government/publications/national-planning-policy-framework--2)** states that planning policies and decisions should contribute to and enhance the natural and local environment. Green infrastructure and biodiversity should be considered throughout the evolution and assessment of individual proposals. Early community involvement and consultation on a scheme is encouraged by the Council. Applicants should refer to both paragraphs 126 and 132 of the NPPF, which relate to effective engagement between applicants and the community. One of the Council's local validation requirements for major development, development that is judged to be locally significant and when development is classified as a departure from the current development plan is the preparation of a **Community Involvement Statement (/planning/submitting-planning-applications-and-notifications/mandatory-and-local-validation-requirements/local-information-requirements/community-involvement-statement/)**, which sets out the level and nature of consultation that has been undertaken with the community in the formulation of a development proposal prior to the submission of a planning application.

3.5.0 Masterplans

3.5.1 There are a number of allocated sites in the **local plan (/planning/craven-local-plan/)** which require the preparation of a masterplan, as set out within the development principles for the site (within policies SP5 and SP6). Masterplans set the vision and implementation strategy for a development. They are distinct from local design guides as they focus on site specific proposals such as the scale and layout of the development, mix of uses, transport and green infrastructure. Masterplans generally should include details of green infrastructure and biodiversity improvements, in the manner discussed in this SPD.

Appendix A

Policy ENV4: Biodiversity

Growth in housing, business and other land uses on allocated and non-allocated sites will be accompanied by improvements in biodiversity. This means that:

(a) Wherever possible, development will make a positive contribution towards achieving a net gain in biodiversity and in particular will:

- (i) "Ensure that there is no adverse effect on any international designated site's integrity, either alone or in combination with other plans and projects, which is to be demonstrated through Appropriate Assessment. In cases where Appropriate Assessment concludes that adverse effects cannot be avoided or adequately mitigated, development proposals will not be acceptable unless the IROPI test under Article 6(4) of the EU Directive on the Conservation of Natural Habitats and of Wild Flora and Fauna (The Habitats Directive) has been passed and appropriate and suitable compensatory measures are provided."
- (ii) "Ensure that there is no adverse impact on any national or local designated sites and their settings, unless it has been demonstrated to the satisfaction of the local planning authority that the benefit of, and need for the development clearly outweighs the impact on the importance of the designation".
- (iii) "Avoid the loss of, and encourage the recovery or enhancement of ecological networks, habitats and species populations (especially priority habitats and species as identified in the Craven Biodiversity Action Plan, 2008 or any subsequent update) by incorporating beneficial biodiversity features in the design (i.e. through landscaping or SuDS)".
- (iv) Conserve and manage the biodiversity and/or biodiversity value of land and buildings within the site;
- (v) Increase trees and woodlands by incorporating appropriate planting, using native and locally characteristic tree and plant species where possible, and retaining and integrating existing mature and healthy trees and hedgerows that make a positive contribution to the character, appearance and setting of an area;
- (vi) Ensure there is no deterioration in the Water Framework Directive ecological status of surface or ground waterbodies as a result of the development;
- (vii) Enable wildlife to move more freely and easily throughout the local environment, including both the natural and built elements.
- (b) Development proposals should achieve benefits in biodiversity that are equal to, or where possible exceed the biodiversity value of the site prior to development. Where improvements in biodiversity are achievable these should be on site; however if this is not possible or practical, an equivalent improvement should be provided off-site by way of mitigation; ideally, this should be as close to the site as possible.
- (c) Development proposals that result in a significant loss in, or harm to, biodiversity on site, and where no compensatory measures are proposed, will be resisted."
- (d) Would-be developers should be aware that compensation through replacement of biodiversity assets may not be practical or realistic in every case (e.g. recreating ancient woodland or ancient wood pastures) and that any development scheme based on such impractical or unrealistic proposals will not be acceptable."
- (e) The loss or deterioration of irreplaceable habitats, including ancient woodland and the loss of aged or veteran trees found outside ancient woodland would be wholly exceptional;
- (f) The following allocated sites (local plan, page 143) are accompanied by guiding development principles which identify indicative areas of green infrastructure within each site where an overall net gain in biodiversity will be expected.

Policy ENV5: Green Infrastructure

Growth in housing, business and other land uses will be accompanied by an improved and expanded green infrastructure network. This will be achieved in the following ways:

- Wherever possible, development proposals will:
- Avoid the significant loss of, or harm to, existing green infrastructure assets and the disruption or fragmentation of the green infrastructure network;
- Enhance existing or create new green infrastructure and secure its long-term management and maintenance;
- Enhance existing or create new links in the green infrastructure network, including habitat corridors that help wildlife to move more freely through the local environment.
- Development proposals should achieve improvements to the green infrastructure network where possible. Where improvements are viable these should be achieved on site, however if this is not possible or practical, contributions for off-site enhancements should be made for projects as close to the site as possible in order to promote linkages and stepping stones across the green infrastructure network.
- Development proposals that result in a significant fragmentation or loss to the green infrastructure network, and where no compensatory measures are proposed, will be resisted.
- The following allocated sites (local plan, page 149) are accompanied by guiding development principles which set out more specifically how improvements and growth to the green infrastructure network can be achieved on each site.

Appendix B: International, National and Local Designated Sites of relevance to the Craven Local Plan

The designated sites listed below in the following two tables are sites deemed of relevance to the Craven Local Plan because they are either:

- Within or partially within the local plan area;
- Are located on the boundary or sufficiently close to the local plan area;
- Are close to the local plan area and may be affected by means of a connecting water network such as a river.

(a) International Designated Sites of relevance to the Craven Local Plan

SPAs and Location	SACs and Location	Ramsar sites and location
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North Pennine Moors (northeast of district area)	South Pennine Moors (northeast of district area)	Leighton Moss (northwest of district area)
South Pennine Moors Phase 2 (south-eastern boundary, and southeast of district area)	North Pennine Moors (south-eastern boundary, and southeast of district area)	Malham Tarn (north of district area)
Bowland Fells (to west and southwest of district area)	Ingleborough Complex (northeast of district area)	Humber Estuary (east of district area)
Leighton Moss (northwest of district area)	Craven Limestone Complex (north of district area)	
Morecambe Bay (west of district area)	Morecambe Bay Pavements (west of district area)	
	North Pennine Dales Meadows (north of district area)	

See Appendices I and II of the Craven Local Plan's Habitats Regulation Assessment for mapping information for these internationally designated sites. This is available to view at [https://www.cravenc.gov.uk/planning/spatial-planning/evidence-and-monitoring/sustainability-and-habitats/\(planning/spatial-planning/evidence-and-monitoring/sustainability-and-habitats/\)](https://www.cravenc.gov.uk/planning/spatial-planning/evidence-and-monitoring/sustainability-and-habitats/(planning/spatial-planning/evidence-and-monitoring/sustainability-and-habitats/))

(b) National and Local Designated Sites of relevance to the Craven Local Plan

SSSIs	SINCs* (see Figure 12 below as an example)	LNRs
Hambleton Quarry	<i>*Information and mapping regarding SINCs is available from the NEYEDC</i>	Embsay Nature Reserve (within the YDNP)
Haw Crag Quarry		
Hesley Moss		
Holy Well Bridge		
Pan Beck Fen		
River Ribble (Long Preston Deepes)		
Stonehead Beck		
South Pennine Moors		
West Nidderdale, Barden and Blubberhouses Moors		
White Moss		
Austwick & Lawkland Mosses		
Cocket Moss		
Keasden Moor		
Newby Moor		
Giggleswick Scar & Kinsey Cave		

Thornton & Twistleton Glens		
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Figure 12: The SINC designation and Sharphaw Hill, as viewed from Park Wood Drive, Skipton [click image to enlarge]



(/media/11718/sinc-sharphaw-from-park-wood-drive.jpg)

Appendix C: Green Infrastructure Principles

Natural England has developed a set of GI Principles that underpin the GI Framework. The GI Principles are intended to provide a baseline for different organisations to develop stronger green infrastructure policy and delivery. The principles below cover the Why, What and How of providing effective green infrastructure. The reasons behind the selection of principles within the table, and the full table itself, are available to view using the following link:

<https://designatedsites.naturalengland.org.uk/GreenInfrastructure/Principles/GIPrinciples.aspx>
<https://designatedsites.naturalengland.org.uk/GreenInfrastructure/Principles/GIPrinciples.aspx>

Table 2: Green Infrastructure Principles

Principle Why 1	Nature rich beautiful places
	GI supports nature to recover and thrive everywhere, in towns, cities and countryside, conserving and enhancing natural beauty, wildlife and habitats, geology and soils, and our cultural and personal connections with nature.
Principle Why 2	Active and healthy places
	Green neighbourhoods, green / blue spaces and green routes support active lifestyles, community cohesion and nature connections that benefit physical and mental health, wellbeing, and quality of life. GI also helps to mitigate health risks such as urban heat stress, noise pollution, flooding and poor air quality.
Principle Why 3	Thriving and prosperous places
	GI helps to create and support prosperous communities that benefit everyone and adds value by creating high quality environments which are attractive to businesses and investors, create green jobs, support retail and high streets, and to help drive regeneration and prosperity.
Principle Why 4	Improved water management
	GI reduces all forms of flood risk, improves water quality and natural filtration, helps maintain the natural water cycle and sustainable drainage at local and catchment scales, reducing pressures on the water environment and infrastructure, bringing amenity, biodiversity and other benefits.
Principle Why 5	Resilient and climate positive places

	GI makes places more resilient and adaptive to climate change and helps to meet zero carbon and air quality targets. GI itself should be designed to adapt to climate change to ensure long term resilience.
Principle What 1	Multifunctional: GI delivers multiple functions and benefits
	GI should deliver a range of functions and benefits for people, nature and places, address specific issues and to meet their needs. Multifunctionality (delivering multiple functions from the same area of GI) is especially important in areas where provision is poor quality or scarce.
Principle What 2	Varied: GI includes a mix of types and sizes that can provide a range of functions and benefits to address specific issues and needs.
	Varied: GI should comprise a variety of types and sizes of green and blue spaces, green routes and environmental features (as part of a network) that can provide a range of different functions, benefits and solutions to address specific issues and needs.
Principle What 3	Connected: GI connects as a living network at all scales, connecting provision of GI with those who need its benefits.
	Connected: GI should function and connect as a living network at all scales (e.g., within sites; and across regions/ at national scale). It should enhance ecological networks and support ecosystems services, connecting provision of GI with those who need its benefits.
Principle What 4	Accessible: GI creates green, liveable places where everyone has access to good quality green and blue spaces routes and features.
	GI should create and maintain green liveable places that enable people to experience and connect with nature, and that offer everyone, wherever they live, access to good quality parks, greenspaces, recreational walking and cycling routes that are inclusive, safe, welcoming, well-managed and accessible for all.
Principle What 5	GI should respond to an area's character
	GI should respond to an area's character so that it contributes to the conservation, enhancement and/or restoration of landscapes; or, in degraded areas, creates new high-quality landscapes to which local people feel connected.
Principle How 1	Partnership and vision; partnership working, collaboration and stakeholder engagement; create a vision for GI
	Work in partnership, and collaborate with stakeholders from the outset to co-plan, develop and deliver a vision for GI in the area. Engage a diverse and inclusive range of people and organisations including citizens, local authorities, developers, landowners, communities, green space managers, environmental, health, climate, transport and business representatives.
Principle How 2	Evidence; Use evidence, sound science and good land use practices to underpin plans, projects, programmes and policies.
	Use scientific evidence, and good land use practices when planning and enhancing green and blue infrastructure. Understand the evidence for the benefits of current GI assets; and data on environmental, social and economic challenges and needs in the area.
Principle How 3	Plan GI strategically to secure GI as a key asset in policies to create and maintain sustainable places.

	Plan strategically and secure GI as a key asset in local strategy and policy, at all scales. Integrate and mainstream GI into environmental, social, health and economic policy. In order to create and maintain sustainable places for current and future populations and address inequalities in GI provision and its benefits.
Principle How 4	Design GI to create beautiful, well-designed places
	Use an understanding of an area's landscape/townscape and historic character, to create well-designed, beautiful and distinctive places.
Principle How 5	Managed, valued, monitored and evaluated. Establish good governance, funding, management, monitoring, and evaluation of GI
	Plan good governance, funding, management, monitoring, and evaluation of green infrastructure as a key asset from the outset and secure it for the long-term. Make the business case for GI. Engage communities in stewardship where appropriate. Celebrate success and raise awareness of GI benefits.

Appendix D: Glossary

Adaptation: Adjustment in natural or human systems to a new or changing environment.

Baseline study: Work done to collect and interpret information on the condition/trends of the existing environment. This can be used to establish a baseline state against which future change is measured.

Biodiversity: Biological diversity means the variability among living organisms from all sources including, inter alia, terrestrial, marine, and other aquatic ecosystems and the ecological complexes of which they are a part, this includes diversity within species, between species and of ecosystems.

Biodiversity Metric 3.0: this metric was released in July 2021 and it updates and replaces the beta biodiversity metric 2.0, published in 2019. It is a biodiversity accounting tool, produced by Natural England, that can be used for the purposes of calculating biodiversity net gain.

Biodiversity net gain: Additional conservation outcomes that can be achieved for the biodiversity values. Net gains may be achieved through the implementation of programs to enhance habitat, and protect and conserve biodiversity and/or the development of a biodiversity offset.

Biodiversity offsets: Measurable conservation outcomes resulting from actions designed to compensate for significant residual adverse biodiversity impacts arising from development after appropriate prevention and mitigation measures have been taken.

Biodiversity unit: A biodiversity unit is the 'currency' of the biodiversity metric. A unit represents a combined measure of habitat distinctiveness, area, and condition.

Climate change: A change in the state that can be identified (e.g. by using statistical tests) by changes in the mean and/or the variability of its properties, and that persists for an extended period, typically decades or longer.

Conservation covenants: A legally binding, voluntary agreement to conserve the natural or heritage features of the land.

Green infrastructure: An interconnected network of natural areas and open spaces that conserves natural ecosystem values and functions, sustains clean air and water, and provides a wide array of benefits to people and wildlife.

Habitat banking: A market where credits from actions with beneficial biodiversity outcomes can be purchased to offset the debit from environmental damage. Credits can be produced in advance of, and without ex-ante links to, the debits they compensate for, and stored over time.

Habitat fragmentation: The 'breaking apart' of continuous habitat into smaller, distinct patches, which are isolated from each other.

Irreplaceable habitat: Habitats which would be technically very difficult (or take a very significant time) to restore, recreate or replace once destroyed, taking into account their age, uniqueness, species diversity or rarity. They include ancient woodland, ancient and veteran trees, blanket bog, limestone pavement, sand dunes, saltmarsh and lowland fen.

Landscape approach: Dealing with large-scale processes in an integrated and multidisciplinary manner, combining natural resources management with environmental and livelihood considerations.

Landscape connectivity: The degree to which the landscape facilitates or impedes movement among resource patches.

Mitigation: Measures which aim to reduce impacts to the point where they have no adverse effects.

Mitigation hierarchy: The mitigation hierarchy is a widely used tool that guides users towards limiting as far as possible the negative impacts on biodiversity from development projects. It includes a hierarchy of steps: Avoidance, Minimisation, Rehabilitation, Restoration and Offset.

National Planning Policy Framework (NPPF (<https://www.gov.uk/government/publications/national-planning-policy-framework--2>)): This document provides the framework for producing local plans for housing and other development, which in turn provide the background against which applications for planning permission are decided. It was first published in 2012 and it applies only to England.

Priority habitats and species: Species and habitats of Principal Importance included in the England Biodiversity List published by the Secretary of State under section 41 of the Natural Environment and Rural Communities (NERC) Act 2006.

Protected species: Many species of plants and animals in England and often their supporting features and habitats are protected by law.

Resilience: The capacity of a natural system to recover from disturbance.

Restoration: The process of assisting the recovery of an ecosystem that has been degraded, damaged, or destroyed. An ecosystem has recovered when it contains sufficient biotic and abiotic resources to continue its development without further assistance or subsidy it would sustain itself structurally and functionally, demonstrate resilience to normal ranges of environmental stress and disturbance, and interact with contiguous ecosystems in terms of biotic and abiotic flows and cultural interactions.

Small Sites Metric (SSM): A simplified version of biodiversity metric 3.0. It has been specifically designed for use on small development sites where the project chooses to do so.

Species richness: The number of species within a given sample, community, or area.

Sustainability: A characteristic or state whereby the needs of the present and local population can be met without compromising the ability of future generations or populations in other locations to meet their needs.

Viable population: A self-supporting population with sufficient numbers and genetic variety among healthy individuals and breeding pairs that are well enough distributed to ensure a high probability of survival despite the foreseeable effects of demographic, environmental and genetic events, and of natural catastrophes.

Watercourse: Natural or man-made channel through or along which water may flow.