

Essex Green Infrastructure Standards

Non-Technical Guidance



Essex County Council

NATURAL
ENGLAND

Acknowledgements

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Building with Nature

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Essex County Council

- Spatial Planning
- Growth and Development
- Environment and Climate Action
 - Energy and Low Carbon
 - Flood and Water Management
 - Green Infrastructure
- New Settlements
- Essex Housing
- Minerals and Waste
- Highways Active Travel
- Place Services
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 - Landscape
 - Arboriculture
 - Ecology

Essex Planning Officer Association representatives from:

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- Braintree District Council
- Brentwood Borough Council
- Castle Point Borough Council
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- Epping Forest District Council
- Harlow Council
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Introduction

Chapter 1



1.1 Purpose of this Guidance

- 1.1.1 This guidance provides a summary of the main Green Infrastructure (GI) standards document, in order to provide an opportunity for the community to understand how the standards will help deliver better GI across the county. There are nine GI standards that have been developed to support policy making and design of new developments, with the aim to create great places for people and wildlife to thrive.
- 1.1.2 The standards will help with; policy and strategy writing, master-planning, design, and the implementation of development. They can be applied to GI schemes and to the management and maintenance of GI.

1.2 Who this document is for?

- 1.2.1 This is a non-technical Essex GI Standards summary document; content is relevant to community groups and people without specialist knowledge of the subject area. For more detailed information on these standards please refer to the technical guidance, including the glossary and case studies.



1.3 Introduction to Green Infrastructure

What is Green Infrastructure?

- 1.3.1 Green Infrastructure (GI) is our diverse network of green and blue spaces that include our natural assets, wildlife habitats and environmental features. GI includes parks and gardens, amenity greenspace, natural and semi-natural urban greenspaces, green corridors, water (coast, rivers, lakes and ponds) and other public spaces as diverse as allotments and city farms.
- 1.3.2 The delivery of multifunctional GI to deliver multiple benefits will help Local Planning Authorities and partners to address several key political challenges. This includes:
- **Climate Emergency** – Several Essex local authorities have made a declaration to achieve Net Zero by 2050 and to take action on climate change. In 2020, an independent commission, Essex Climate Action Commission (ECAC) was set up to advise on and made recommendations about how Essex can improve the environment and the economy through tackling climate change. Good GI will help deliver climate change adaptation and mitigation and contribute to meet our carbon net zero target as set out in the Essex Climate Action Commission report- Net Zero: Making Essex Carbon Neutral
 - **Ecological Emergency** – The need to make space for nature and meet the requirement in national planning policy, helping to create great places.
 - **Public Health / Active Lives Agendas** - Covid19 response to people’s health and wellbeing has highlighted the importance for GI.
 - **Green Growth Agenda** – which aims to make sure natural assets are sustainable and provide economic benefit; ensuring we deliver exemplar developments that people would want to live in now and in the future.

GI Principles and Standards

- 1.3.3 The Essex GI Principles are based on several key policy documents including HM Government’s 25 Year Environment Plan, the Environment Act (2021) and the National Planning Policy Framework (NPPF). For further details on these key policies, please refer to the Essex GI Standards Technical Guidance.
- 1.3.4 The Essex GI standards will help strengthen GI policy and secure GI delivery within new developments to strengthen Essex’s GI. As a result, this will enhance ecological networks and contribute to the national and local (i.e. ECAC) targets for biodiversity net gain.



1.4 Introduction to this Guidance and the Essex GI Strategy

- 1.4.1 The Essex GI Principles and Standards have been developed by planners, policy, decision makers and other practitioners (from both public and third sectors) across Essex and academic experts from University of Northumbria and University of East Anglia. For further information regarding the development of the Essex GI Standard, please see Annex C of the technical Essex GI Standards document.

Document Contents

- 1.4.2 For each principle and standard, this document contains:
- An Introduction to the Principle and Standard
 - Why the principle and standard matters
 - Guidance on meeting the principles
- 1.4.3 ECC's GI team will apply these standards to major developments as outlined in the NPPF. For further information, please see the link on the Technical Essex GI Standards document that outlines our GI checklist for development.
- 1.4.4 ECC's GI team is not a statutory consultee for GI, therefore, the weight of the comments provided will be determined by the corresponding district, borough, or city council.



Essex Green Infrastructure Standards

Chapter 2



2.1.1 The “Making Better Planning for Better Placemaking” and “Place-Keeping” workshops held October – November 2020 identified the following Essex GI Principles:



Mainstreaming and integration



Evidence-led



Multifunctional outcomes



Early collaboration and engagement



Managing different expectations



Health, wellbeing and social equity



Increased connectivity



Commitment to delivery (via strong policy wording)



Stewardship and maintenance



2.1.2 These GI principles will help deliver better greener places across Essex placemaking and place-keeping. There are nine proposed GI standards for Essex as set out in Table 1.

Table 1: The GI Principles and the corresponding GI Standards for Essex

GI Principles		GI Standards
1	Mainstreaming and Integration	Local plans and key strategic documents recognise the significance of delivery GI to create nice places to live.
2	Evidence-Led	The planning, design and delivery of GI is evidence-led using appropriate environmental assessments and mapping to ensure effective GI interventions are being implemented and enhanced to create better places to live.
3	Multifunctionality	GI interventions are designed, planned and delivered to enhance multifunctionality and deliver multiple benefits to people and biodiversity in both rural and urban areas.
4	Early Engagement	There is early collaboration and engagement with all relevant people of interest, partners and communities to support the delivery of effective and connected GI.
5	Managing Different Expectations	Differing views need to be identified early and managed effectively and in a transparent manner to secure both short- and long-term outcomes.
6	Health, Wellbeing and Social Equity	GI is designed to meet different people's needs (including physical and mental health), providing accessibility to GI, green spaces and local amenities, while ensuring GI is inclusive to all.
7	Connectivity	GI interventions connect places across multiple scales; from larger landscape scale networks to smaller local and neighbourhood scale networks. This helps to create green corridors which enhance connectivity for people, wildlife and habitats.
8	Strong Policy Wording and Commitment	Policy for GI is strongly worded in line with statutory plans and industry/local guidance. This is supported by local incentives to support creation of high-quality GI.
9	Stewardship	The long-term management plans are identified at the early stage with the necessary funding and monitoring in place.

Principle 1: Mainstreaming and Integration

Chapter 3

3.1 Standard



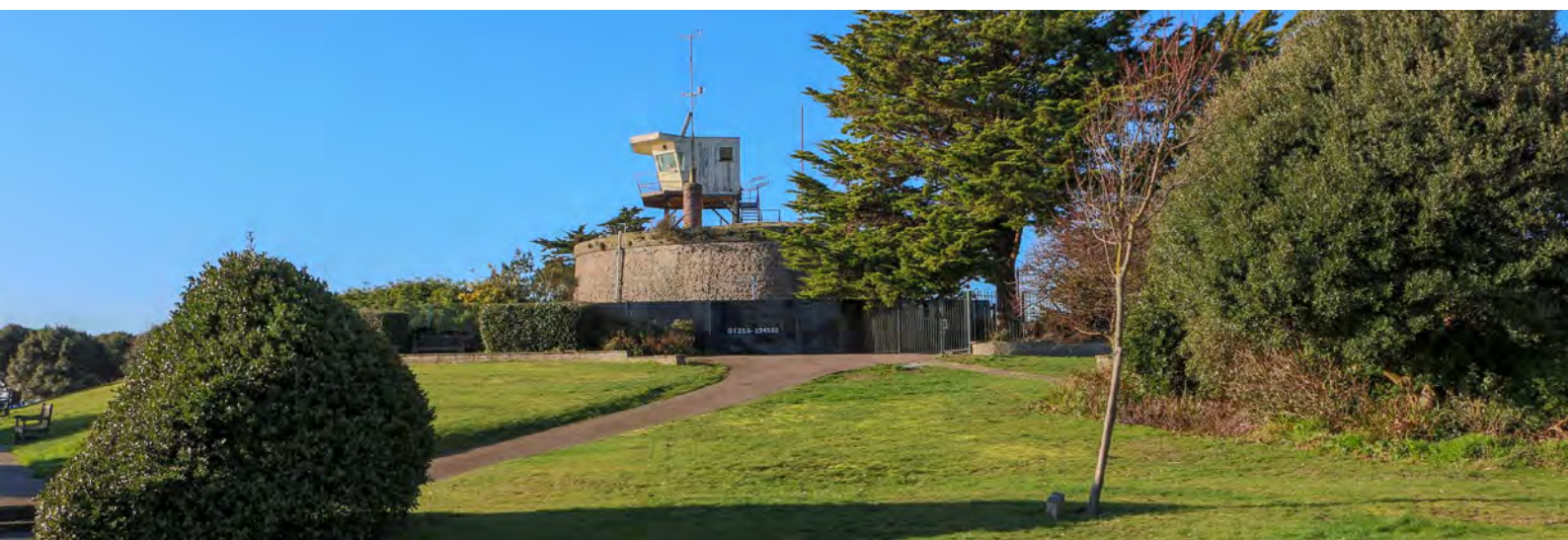
Local plans and key strategic documents recognise the significance of delivery GI to create nice places to live.

3.2 Why does it matter?

- 3.2.1 GI is often only proposed at single locations on planning applications rather than across the whole site and is not always included in key strategic policies.
- 3.2.2 GI needs to be embedded throughout development proposals and projects as well as strategic plans, policies and projects in order to help create prosperous communities.
- 3.2.3 GI helps to tackle the climate emergency, create accessible green spaces that help contribute to health and wellbeing and can contribute to improving biodiversity.

3.3 Meeting the Principle

- 3.3.1 GI should be integrated into policy documents and development plans at the earliest stage of the planning process.
- 3.3.2 Schemes must demonstrate that they are designed to protect the local landscape and heritage from the outset. GI should be connected to the wider landscape to connect habitats therefore increasing biodiversity.
- 3.3.3 A GI survey (or equivalent) needs to be conducted for any site to assess existing site GI, and where possible, existing GI is to be incorporated as part of the design. However, where the removal of high value GI is unavoidable then a suitable location will need to be identified and replaced to equal or enhanced quality.
- 3.3.4 GI needs to be included across a range of strategic documents within planning policy in order to achieve maximum environmental benefits. Transport and Infrastructure documents are an example of where GI can feed into strategic documents as GI can connect places using sustainable transport links.
- 3.3.5 The key points in order to meet this standard are:
 - Integration of GI in planning policies and development design.
 - Ensuring the policy document and development proposals are part of a clear vision for the area.
 - The importance of long-term management and maintenance of GI should be embedded within key documents.
 - Policy documents should be continuously monitored and reviewed to create up to date policies and ensure high quality GI across Essex.



Principle 2: Evidence-Led

Chapter 4

4.1 Standard



The planning, design and delivery of GI is evidence-led using appropriate environmental assessments and mapping to ensure effective GI interventions are being implemented and enhanced to create better places to live.

4.2 Why does it matter?

- 4.2.1 Evidence is essential for understanding the GI that currently exists across Essex and assessing the areas that need to be prioritised to improve GI coverage.
- 4.2.2 An evidence-led approach helps make more informed and therefore better decisions for GI to have maximum impact, informing action that has the desired impact. It also helps create stronger policies that provides clear guidance for GI.
- 4.2.3 Evidence should be based on recent and reliable data to make informed decisions. Evidence can be quantitative (e.g., facts and figures, data, measurements, etc.) and it can be qualitative (e.g., people's survey responses). It should ideally incorporate both quantitative and qualitative data from a broad range of sources.
- 4.2.4 Good quality, relevant and up to date evidence underpins all standards.

4.3 Meeting the Principle

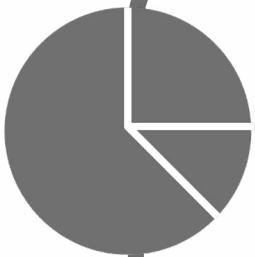
- 4.3.1 A GI audit (or equivalent) needs to be completed to outline and assess the existing site GI. Where possible, existing GI is to be incorporated as part of the design and if the removal of high value GI is unavoidable then a suitable location will need to be identified to replace to equal or enhanced quality.
- 4.3.2 Early engagement with relevant people is expected to provide a strong evidence base to help establish any gaps in GI. A Community GI Needs Assessment can help to deliver GI for specific community needs. For example, by providing opportunities for improved health and well-being and access to nature. The data will need to be reviewed and consolidated to then develop a community action plan, which prioritise needs and can inform GI design and policies.
- 4.3.3 Proposals are expected to be informed by existing data and strategies, such as, the [Essex Green Infrastructure Strategy](#). In addition, some Local Planning Authorities have undertaken green/open space, play, sport and infrastructure assessment/study. A Biodiversity Metric can be used to calculate biodiversity losses and gains for habitats. This evidence-led approach will ensure development proposals result in biodiversity net-gain, looking at both quantity and quality of biodiversity.
- 4.3.4 GI must be considered at key stages throughout the planning process and the relevant level of detail must be submitted as part of an application. The delivery of GI also needs to be considered across the construction phases to protect natural assets on the site. The long-term maintenance and management of GI also needs to be considered. A monitoring and evaluation process is in place to review and update evidence.



Principle 3: Multifunctionality

Chapter 5

5.1 Standard



GI interventions are designed, planned and delivered to enhance multifunctionality and deliver multiple benefits to people and biodiversity in both rural and urban areas.

5.2 Why does it matter?

- 5.2.1 All too often plans, and projects are designed and delivered to address one identified problem despite potential opportunities to deliver multiple benefits and therefore help solve different challenges.
- 5.2.2 A healthy environment is a network that provides multiple benefits to people such as health and wellbeing, cleaner air, active travel and local food production.
- 5.2.3 A well-planned and managed GI strategy can help Essex meet and respond to key challenges faced in the community.

5.3 Meeting the Principle

- 5.3.1 The delivery of multifunctional GI must be considered in development proposals and projects. Below is some of the key points that should be considered for policy documents and development proposals: -
- 5.3.2 **Enhancing biodiversity/environmental net gains** - Biodiverse environments provide multiple benefits. Mandatory Biodiversity Net Gain will be implemented through the planning system. Furthermore, there is an opportunity within strategic planning and development management to capture wider environmental gains that deliver multiple benefits that impact on economic and social health and wellbeing.
- 5.3.3 **Improve local area identity and character** – Good planning requires creating a strong identity for an area and GI is a critical component. The improvement of GI helps to enhance the character, quality and create an identity for an area. It gives people a role in public space, enhancing a sense of ownership and pride. Street trees provide shade for buildings and people, flood and water management and stepping stone/ green corridor for wildlife. It is important GI policies are reflective of the existing character of the place.
- 5.3.4 **Providing recreation for all ages and abilities** - GI provision should improve equality allowing all residents access to quality green space. Often it is economically disadvantaged communities that have poorer health and educational outcomes. These communities also have the lowest levels of access to nature.



- 5.3.5 **Improving Health and wellbeing** - Access to nature-rich environments and green space has a positive impact on health and wellbeing. GI can help tackle the obesity and inactivity crisis and thereby preventing many illnesses including cancer, heart attacks and strokes (these are the 3 biggest killers in the UK).
- 5.3.6 **Integration of flood and water management as part of green space, highways and other provision** - Flooding remains one of the most frequent natural hazards in Essex and is predicted to experience an increase in flooding, extreme weather events and summer droughts through climate change. GI provides significant opportunities to deliver space for water and natural options for flood alleviation and water management. Development should include biodiversity and open space provision, which will provide aesthetic and amenity value, and safe public access as well as managing flood risk.
- 5.3.7 **Climate change adaptation and mitigation** – Majority of the Essex Local Planning Authorities have declared climate emergency or climate action and have made a commitment to meet government targets, moving towards net-zero, including the commitment and ambitious targets set by ECAC outlining how Essex can improve the natural and built environment and the economy through tackling climate change. Policies will need to strengthen their position to meet these targets. As the climate changes, the UK needs to plan for more extreme weather events. Practitioners should design, implement and manage GI to provide natural solutions to climate challenges. Here nature recovery networks and improved connectivity become key to help wildlife move and adapt. GI also reduces urban heat by cooling the air.
- 5.3.8 **Improving Air Quality** - GI also cleans the air we breathe by filtering particulates. Planting of GI to create attractive environments that will incentivise active travel, such as walking, cycling and horse riding.
- 5.3.9 **Commercial and Industry** – High-quality environments with natural green spaces are attractive to people. They attract investment and support businesses.
- 5.3.10 **Education** - GI provides learning opportunities as an ‘outdoor classroom’. It is a valuable educational resource and has the potential to improve educational achievement, through improved concentration and self-esteem.
- 5.3.11 **Providing local access to food production opportunities (i.e., orchards and allotments)** – There is a growing concern around food security and access to orchards and allotments, which can be utilised for food production, whilst providing several therapeutic benefits.



Principle 4: Early Engagement

Chapter 6

6.1 Standard



There is early collaboration and engagement with all relevant people of interest, partners and communities to support the delivery of effective and connected GI.

6.2 Why does it matter?

6.2.1 Early and meaningful engagement with relevant parties will result in:

- The Identification of any issues, challenges, conflicts and opportunities that could be difficult to address if identified later on in a proposal.
- Reduces costs for a project with GI providing nature-based solutions to some of the challenges.
- Reduces cost for GI delivery and maintenance; allowing GI to be budgeted for from the start, rather than at the end as an addition.
- Delivery of a viable, sustainable and attractive proposal for the long-term.
- Ensures policy and planning is joined up.
- Multiple benefits for end users/ residents/ businesses.

6.3 Meeting the Principle

6.3.1 Engagement with partners, experts and local communities for any plans, projects, policies or programmes helps to create a vision for the community and achieve better outcomes. It is important not to just engage on GI alone but also on the wider aspects of the development. Developers are expected to provide and submit evidence of early and/or continued engagement regarding GI on site.

6.3.2 Shifting views and expectations will then need to be managed throughout the delivery of a project, development or the production of policy documents. It is important there is ongoing feedback to participants of decisions taken.

6.3.3 It is really important developers have an engagement strategy to get the right people involved early to discuss and develop plans from the start. Sectors and interests to consider will include:

- Highways, transport, drainage, utilities, public health, education, ecology, heritage, landscape, parks/public space, finance, planning and community liaison authorities.
- Statutory consultees, statutory undertakers and trusts.
- Community representatives, user groups, Local Access Forums, business, education sector, and landowners and agricultural sector.
- Those who benefit from the GI, and those who could benefit in the future.

6.3.4 Demonstrating results by sharing good stories of how early engagement helped the process and examples of where late engagement caused issues for the proposal or project is a good way to bring people on side. By taking steps to proactively improve the stage of engagement it can build better relationships, improve project outcomes and deliver multifunctional GI successfully.



Principle 5: Managing Different Expectations

Chapter 7

7.1 Standard



Differing views need to be identified early and managed effectively and in a transparent manner to secure both short- and long-term outcomes.

7.2 Why does it matter?

- 7.2.1 Expectations need to be carefully managed and negotiated. Conflict is a fact of life and should be welcomed and not feared or neglected. Different requirements need to be considered to help mitigate issues that would otherwise cause delay and extra costs.
- 7.2.2 Managing different expectations is essential and is key to ensuring the successful delivery of healthy and sustainable places. Early engagement is important in order to be able to manage different expectations and resolve any potential issues. Challenges and expectations can be identified and managed using a transparent process recognising that there will always be differences in opinions and views.

7.3 Meeting the Principle

- 7.3.1 Good communication should be established between interested parties and developers to ensure that a feasible agreement is reached and that all participants affected by policy making, development design or construction are informed. The openness and honesty established from the onset should allow for open direct lines of communication for the future. Two-way communication is key to understand different positions and interests throughout the design and construction process for developments.
- 7.3.2 It's important to determine if there are any potential underlying issues that may cause conflict early on, in order to determine the best solution. Conflicts are often caused by different interpretations of development or policy plans and poor communication. It is important different views are listened to and compromise is considered where required to help reach a mutual agreement. It is inevitable that conflicts could occur later in the development design and construction stage. Hence the need to build a strong and resilient stakeholder network with on-going communication.
- 7.3.3 Identify a champion, someone with energy for change or interests, that will help engage and connect with the community. As part of the development an engagement strategy or Statement of Community Involvement should be provided that addresses the needs and concerns of the community. Keep the community engaged throughout the process with timely updates and be clear on their expectations.
- 7.3.4 Engagement should be early, flexible and throughout the policy making or development process. The Statement of Community Involvement and/or an engagement action and management plan should manage expectations, actions, resolutions and accountability.



Principle 6: Health, Wellbeing and Social Equity

Chapter 8

8.1 Standard



GI is designed to meet different people's needs (including physical and mental health), providing accessibility to GI, green spaces and local amenities, while ensuring GI is inclusive to all.

8.2 Why does it matter?

- 8.2.1 Access to nature rich environments and green spaces can have a positive impact on health and wellbeing, encouraging more active lifestyles. There is a clear association between psychological health, mental wellbeing, and physical activity.
- 8.2.2 Recent studies during the Covid-19 pandemic have highlighted the key role that green spaces play for people's health and wellbeing. But the current distribution and access to those spaces are not equitable. New developments might have access to green spaces, but existing developments in many deprived urban areas may not and urgently need reinvestment.

8.3 Meeting the Principle

- 8.3.1 Policy requires connectivity between GI features and where people live and work, to optimise use and enjoyment. Good quality parks and green spaces need to be fully accessible to all and located near to where people live and provided at all scales, which will support a wide range of healthy activities. For example:
- Improving the connectivity to ensure there are good accessible links for all throughout neighbourhoods and urban, rural and coastal areas.
 - Public parks, playing fields, pathways, Public Rights of Way, multi-user routes (including bridleways), cycle paths and jogging tracks that encourage outdoor activity and promote good physical health.
 - Urban vegetation, i.e.
 - allotments, community gardens and orchards promoting healthy eating,
 - trees, green roofs and private gardens that regulate air quality and reduce the 'urban heat island' effect.
 - Wetlands, grassed areas and urban forests reduce the risk of flooding, sewage overflow and clean water contamination.
 - Communal parks, village greens and town squares that enhance community attachment, social cohesion and a sense of environmental responsibility.
 - Green spaces in a residential community attract tourism and investment and improve employment and income potential.



- 8.3.2 Where GI, such as new cycle and pedestrian paths and green spaces are developed, care should be taken to ensure that safety is maintained. This will include amenities such as lighting, play equipment, benches, level paths, good signposting, and clear sightlines to be of good quality and be well maintained, without becoming potential areas for anti-social activity.
- 8.3.3 A Health Impact Assessment (HIA) will help to assess if the GI provision meets the diversity of user groups, whose needs may vary according to age, abilities, interest, or cultural beliefs. Policy supports targeted approaches in new development, or changes to existing settlements, to enhance areas that lack GI, have health inequalities and a high level of deprivation through requiring developments to complete a HIA. This includes access to natural play for younger and older children. You will need to ensure that areas with higher deprivation levels and lower access to green space are given the required attention. Other potential physical barriers for users that have an impact on health will also need addressing, such as vandalism, lighting, dog fouling, fly tipping and graffiti.
- 8.3.4 Policy requires new development to deliver GI features that incorporate existing landscape and historic features, whilst protecting or creating features that enhance views. Policy also requires new developments to provide the provision of and access to good quality parks and green spaces, that is accessible to all and located near to where people live. Policy ensures that provision is made to delivering GI and green spaces at all scales. That is made to support a wide range of healthy activities, such as sensory gardens, safe and attractive green routes, multi-user routes (including bridleways, cycle paths and jogging tracks) and accessible green spaces.
- 8.3.5 For that additional layer of quality assurance for policy and strategic documents Building with Nature could be used, which is a UK wide benchmark for GI, launched in 2018. Building with Nature offer a set of GI Standards, which can be downloaded for free from their website, plus a formal Accreditation scheme to help accredit policy. Building with Nature standards support and give credibility to the commitment to delivering and sustaining a flourishing place for people and wildlife.
- 8.3.6 Development proposals and projects should demonstrate how access and enjoyment of all users are integral to GI at each stage of delivery (design, implementation, management, and maintenance). They should contribute to community cohesion and wellbeing by providing a wide range of GI features that promote community-led activity to enable inclusive use of GI, that will provide health and wellbeing benefits.



Principle 7: Connectivity

Chapter 9

9.1 Standard



GI interventions connect places across multiple scales; from larger landscape scale networks to smaller local and neighbourhood scale networks. This helps to create green corridors which enhance connectivity for people, wildlife and habitats.

9.2 Why does it matter?

- 9.2.1 The pressures of changing land use, development and population growth in Essex will have an impact on our environment and potentially cause habitat fragmentation and biodiversity loss. However, good GI design can demonstrate how developments and retrofitting can provide a positive contribution to mitigate these impacts.
- 9.2.2 Creating GI connectivity through developments proposals and GI Projects will help to reconnect existing and fragmented nature areas; for instance, through green corridors and/or green bridges, as well as improving the general ecological quality of the wider environment.
- 9.2.3 Good GI should make connections between our urban, rural and coastal areas, from our towns and cities to our villages. Good GI connectivity should enable the movement of people and wildlife through green networks and corridors and helps connect people with nature, reducing health inequalities. Good strategic planning can guide infrastructure developments away from sensitive sites, thereby reducing the risk of further habitat fragmentation.
- 9.2.4 The protection, enhancement, creation and connectivity of our GI to the wider GI network will maximise the delivery of the multiple functions and benefits from GI.

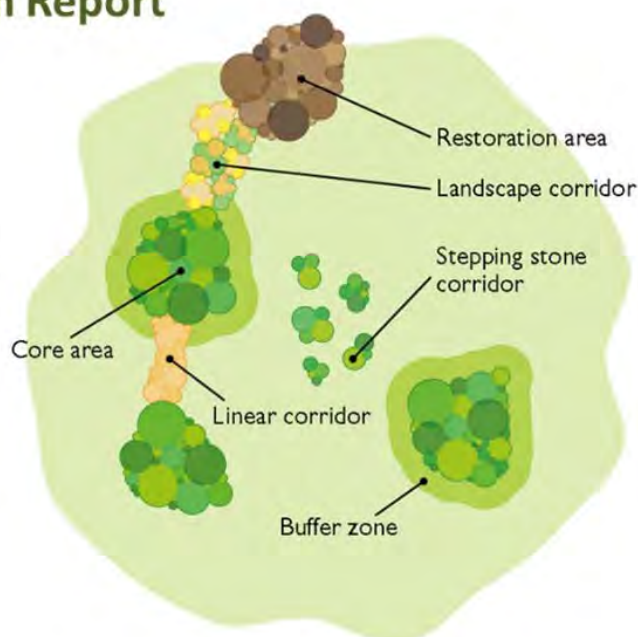
9.3 Meeting the Principle

- 9.3.1 The provision of GI is an important solution to delivering the Lawton principles of more, bigger, better and joined. It advocates a landscape-scale approach to conservation and enhancing connections between sites, either through physical corridors or through ‘stepping stones’.

The Lawton Report

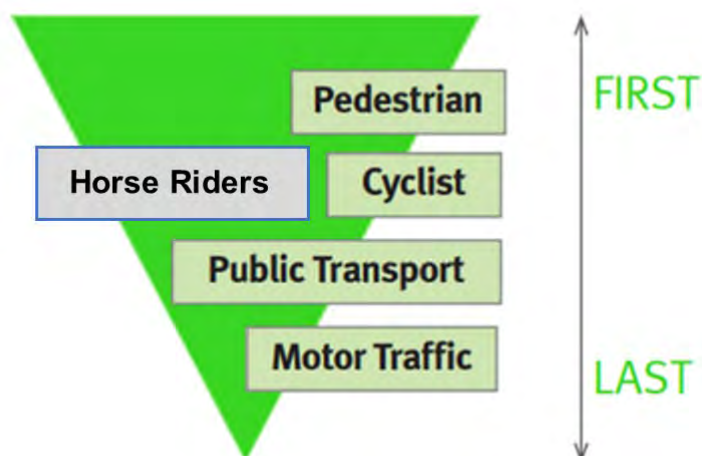
- Bigger
- Better
- Connected

Put the
Right Habitat
in the
Right Place



Making Space for Nature: a review of England's wildlife sites and ecological networks: defra 2010

- 9.3.2 To ensure that access to green spaces is as easy as possible for all, enhances biodiversity and to improve the character and sense of place, it is essential that greater connection with public realm, developments and transport planning is established. Therefore, GI is best achieved through an integrated approach to land management, prioritising key strategic areas. A GI strategy will provide the foundation for good planning and design for GI, offering a consistent approach by focusing on different spatial aspects from regional, to county to local district to neighbourhood level.
- 9.3.3 Dissection of the linear network of cycleways, public rights of way, bridleways and ecological corridors such as ancient woodlands, hedgerows, ditches and water environments are avoided, where possible. Every effort needs to be made to ensure that connections between green spaces and developments are achieved to ensure that routes make sustainable connections. People will therefore hopefully choose to use these routes for local trips, over the car, with a move towards a user hierarchy as promoted through the Essex Walking Strategy as shown below:



- 9.3.4 In line with Principle 4: Early Engagement, opportunities and local needs should inform GI planning and design. Local need includes outcomes such as better health, improved air quality or addressing identified deficits in local GI supply. Create connectivity to ensure there are good accessible links for all between urban, rural and coastal areas and GI, widening the GI network to help prevent fragmentation. It's important to identify multifunctional areas where multiple functions can all operate together in the same space, delivering multiple benefits. Natural landscape features such as small water courses, forest patches and hedgerows can act as green corridors for wildlife.
- 9.3.5 New developments should be located where they can be linked to services and facilities through establishing green active travel routes (walking, cycling and bridleways) that are accessible for all and would minimise the need for motor vehicle movements.

Principle 8: Strong Wording Policy and Commitment

Chapter 10

10.1 Standard



Policy for GI is strongly worded in line with statutory plans and industry/local guidance. This is supported by local incentives to support creation of high quality GI.

10.2 Why does it matter?

- 10.2.1 Development proposals and policy wording need to make strongly worded commitments to the protection and provision of GI on site, recognising GI as a positive economic, social, and environmental asset, serving as critical infrastructure.
- 10.2.2 The Natural Capital Committee, an independent advisory committee to the UK Government, has stated that: “Building GI into long-term development plans will not only ensure its benefits from the outset, but will also avoid costly retrofitting in the future.”
- 10.2.3 In terms of policy, wording should cover all of the standards identified here but research has shown that whilst coverage may be good the strength of policy wording (must, should, where appropriate, where possible) often falls into the weaker categories and is often therefore viewed as less of a priority.

10.3 Meeting the Principle

- 10.3.1 The type and strength of wording used when referring to GI provision, protection, management, and maintenance is critical. GI commitments made using terms such as ‘should’ ‘consider’ or ‘might’ are considered weak as they can potentially be voided or trumped by commitments for the delivery of other infrastructure and/or services. Strongly worded GI commitments will be supported when design and provision is informed by effective engagement via participatory processes.
- 10.3.2 A GI audit (or equivalent) needs to be completed to outline and access the sites existing GI. Where possible, existing GI is to be incorporated as part of the design with strongly worded commitments for this made. Where the removal of high value GI is unavoidable then suitable locations will need to be identified and replaced to equal or enhanced quality. Again, strongly worded commitments for the mitigation of GI loss are expected. Where possible, there should be no variation between what is proposed and what is physically delivered on site. GI must align with statutory plans, planning policy and local guidance.
- 10.3.3 Make the context of your plan, policy, project or programme clear at the outset. Development comments may carry less weight unless if there is not clear policy wording within guidance documents such as local plans. By not having strong policy wording within strategic documents GI can be overlooked due to other competing policy priorities.
- 10.3.4 Early Engagement can help strengthen the narrative and maximize the opportunities to secure the best outcomes through planning and design. It is helpful here to identify the key political hooks such as climate emergency, biodiversity net-gain and duty to cooperate across the key criteria from the NPPF will aid discussions. For further information regarding early engagement, please see [Principle 4: Early Engagement](#).
- 10.3.5 It is important for the GI designs in development proposals to be supported with the commitment to deliver on the ground. Site GI principles and standards should be embedded and referenced across application documents to ensure its multifunctionality and multiple benefits are not overlooked. This integration will clearly demonstrate the contributions of GI to natural capital, ecosystem services, biodiversity net-gain, climate change, flooding, health and wellbeing, sustainable transport and placemaking.

Principle 9: Stewardship and Maintenance

Chapter 11

11.1 Standard



The long-term management and stewardship plans are identified at the early stage with the necessary funding and monitoring components in place.

11.2 Why does it matter?

- 11.2.1 The stewardship and maintenance of an asset simply means to ensure that it is properly looked after in perpetuity. Stewardship for the management and maintenance of GI is vital to ensure the functions and benefits of individual GI features are delivered and sustained for the long term. This includes sustaining their funding, monitoring and evaluation.
- 11.2.2 People are more likely to use green spaces if they are well maintained. If sites are easier to access, more visible and better used, they will contribute to local people's sense of civic pride, encourage ongoing involvement (i.e., volunteering and formation of 'Friends Of' groups).
- 11.2.3 In line with Principle 4: Early Engagement, it is important that management and maintenance provisions for development proposals are considered during the early engagement with stakeholders. This could create opportunities for community participation and volunteering regarding GI management and maintenance, creating a sense of ownership ensuring that GI is looked after in the long term. It needs both early engagement and collaboration liaising with, for example, the Country Parks teams, Outdoor Pursuits Centres, landowners, Parishes, the community, and Wildlife Trusts. Long-term management and maintenance often take a community effort.
- 11.2.4 Future GI investment decisions should be built on the value that GI creates, as part of place making and not just on how much GI assets cost to maintain. Every £1 spent on parks in England generates an estimated £7 in additional value for health and wellbeing and the environment (The Parks Alliance, 2020).

11.3 Meeting the Principle

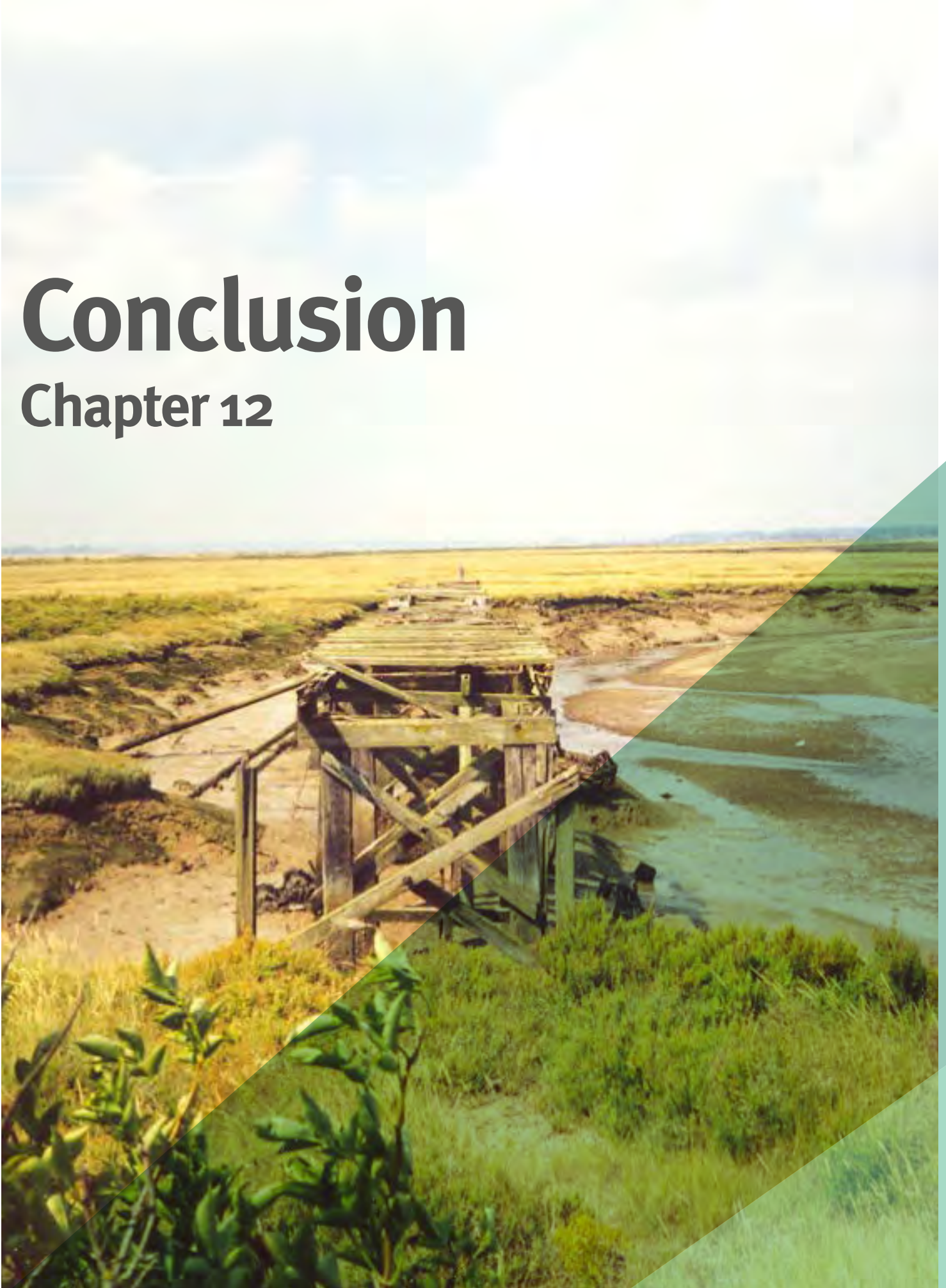
- 11.3.1 GI must be designed to be appropriate to the local character and needs of the community and a wide range of users. It should be accessible to all and usable all year round. Stewardship/governance bodies should ensure relevant stakeholders, representatives of local communities, users and other beneficiaries are able to get involved in the management of their GI and green spaces. As the end-users are tremendously important and should be engaged and represented not only in the planning for GI, but its stewardship, so their needs are integrated, and this creates a sense of ownership. This will ensure that the GI caters to local needs and is looked after in the long-term.
- 11.3.2 Long-term management and maintenance of GI need to be considered at an early stage in planning for developments to ensure it is considered in the viability assessment of the site. This includes consideration by the Local Planning Authority and the developers during the planning process on how the GI will be funded, managed and maintained in perpetuity. It is important through masterplanning that the design for specific spaces within a site incorporates multifunctional GI and the likely management and maintenance costs to be identified at the outset. This will potentially provide an opportunity to identify designing solutions to suit the budget early on. This will include ensuring landscapes, planting and species are selected as part of the GI design to allow for effective long-term low-cost management and maintenance. As well as delivering other GI multiple functions and benefits. For example:
 - In public green spaces use low growing grasses, wildflower strips/meadows which can support biodiversity.
 - Street trees are of a suitable species and specification. Enough space to grow or planted in tree pits to avoid future conflicts with services and hard surfaces in the long-term.

- 11.3.3 It is important to identify the long-term management and maintenance within planning policy. Different ways of using revenue funding to secure long-term maintenance need to be considered to diversify income streams and maximise resilience.
- 11.3.4 Ensure sound legal and financial arrangements are in place. This will enable collaboration with communities, landowners, land managers, trusts, foundations, and others in local governance. This will secure the long-term management and maintenance of GI. It will also future proof for changes, such as to land ownership.
- 11.3.5 Explore opportunities for income generation through innovative approaches. These include crowd funding, contactless donation technology, energy generation (e.g., biomass or other renewables), habitat and carbon banking, prescribed health activities.
- 11.3.6 It is important to make GI essential infrastructure within strategic policy. GI Plans include funding, governance, ongoing management, monitoring and action plan. It is important to gather local and national evidence on the benefits and economic returns of investing in GI to make a business case for investing in GI across a broad range of sectors.
- 11.3.7 Development proposals are expected to outline how retained GI, such as existing trees, hedges and vegetation will be protected during construction via documentation such as a Construction Environment Management Plan (CEMP).



Conclusion

Chapter 12



12.1 What does good GI look like?

- 12.1.1 It is the intention of the Essex GI Standards Framework to embed GI within new developments, retrofitting into our towns, cities and villages and for GI to become an integral part of the day-to-day considerations and decision making in other key sectors and services (i.e., health and wellbeing, highways etc.) to ensure that future planning, design, management and maintenance is clear, structured and focused. We need to move away from looking at GI in isolation, but towards a more joined-up, partnership approach which uses the resources we have to secure the greatest gains for the environment and the sustainable economy, as well as the health and wellbeing of its communities. In delivering the nine principles and standards together will ensure the delivery of high-quality multifunctional GI and the multiple benefits they provide. The order of nine principles and standards reflect the sequence and timescales for successfully planning, delivering and maintaining GI. The strategic decisions we make over the long-term will advance the case for GI investment and its importance in placemaking and place-keeping across Essex.

Case Study: Temple Farm, Chelmsford

What is this case study about?

The Temple Farm development is situated on 34 hectares of land which was previously a large scrapyard. It has been remediated and developed to become the Watch Tower Bible and Tract Society of Britain's new headquarters for Jehovah's Witness Organisation. The live/work campus complements its rural surroundings through attractive and sustainable building and landscape design. A core belief of Watch Tower is to respect and care for the environment. Incorporating sustainable design measures that are 'beyond' normal industry practice publicly demonstrates this to visitors, residents and the community.



What is the value of this approach?

Temple Farm was a hybrid application. This means it included an outline application and a detailed application, which both was approved in 2015. The detailed application for the Temple Farm development related to all infrastructure works, including a power supply and access. A number of reserved matter applications, which confirm the specifications of different aspects of the development was submitted. These improved the quality of the final design, making the development a better place for residents and visitors. There are many innovative features that make this development an exceptionally dynamic and pioneering one in all aspects of sustainability.

Case Study: Temple Farm, Chelmsford (continued)

What has happened?

Activity/Outcomes	How does it demonstrate the principle?	What are the lessons learned?
<p>The access road alone was awarded the Susdrain New Build Small Scale award in 2018. The development has been awarded first ever BREEAM Communities innovation credit is claimed by Temple Farm Development. It is also the second BREEAM Communities project to have received an Outstanding rating.</p>	<p>The development consists of a myriad of different features that demonstrates all the principles through to its early engagement, evidence, design and commitment - integrating many aspects of sustainability. The landscaping and built environment design actively promote Biodiversity Net Gain, amenity, health and wellbeing connectivity and a range of other multifunctional benefits. Through the improvements to local pedestrian and cycle routes, nature-based solutions SuDs, planting of trees, native hedgerow and woodland. The inclusive design and operation strategy developed at the outset ensures that the needs of all users are met. Before construction work even started, the long-term maintenance and operation of the development including GI was in place.</p>	<p>The process of incorporating standards like BREEAM raises the awareness of the project design team in matters of sustainability when it comes to building layouts and material specification. As a result of using BREEAM, consideration was given to issues of ecology, energy, water, waste and pollution much earlier in the design process.</p>

Principles Met



12.2 Assessment and Evaluation

- 12.2.1 Details on the assessment and evaluation approach will be governed by the feedback from the consultation. There are four possible options for assessing and evaluating whether the principles and standards have been adequately achieved.
- Option 1: The framework becomes a supporting guidance only.
 - Option 2: A self-assessment, through using an Essex adapted version of the GI planning Policy Assessment matrix tool to assess.
 - Option 3: Full assessment via external assessors, or potential external verification through Building with Nature where appropriate.
 - Option 4: A combination all three, to be applied where appropriate.

12.3 Further Guidance and Information

- 12.3.1 Building with Nature User Guide for Developments and Policy Makers, 2017 (Will need to request a free copy via info@buildingwithnature.org.uk): <https://www.buildingwithnature.org.uk/>
- 12.3.2 Understanding our growing environmental vocabulary in England Connecting Green Infrastructure, Natural Capital, Ecosystem Services and Net Gains within the English Planning System, Natural Environment Research Council, 2020: <https://mainstreaminggreeninfrastructure.com/project-page.php?understanding-our-growing-environmental-vocabulary-in-england>
- 12.3.3 National Green Infrastructure Framework Portal, 2021 - <https://designatedsites.naturalengland.org.uk/GreenInfrastructure/Home.aspx>

This information is issued by

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