

Adopted Torfaen Local Development Plan (to 2021)

Green Infrastructure Supplementary Planning Guidance

February 2024

Executive Summary

This document is available in Welsh
Mae'r ddogfen hon ar gael yn Gymraeg

Introduction, Purpose and Status of SPG

This Supplementary Planning Guidance (SPG) sets out the Council's approach to the consideration of green infrastructure (GI) in relation to new developments. It provides guidance to the interpretation and implementation of adopted Local Development Plan (LDP) Strategic Policies S3 (Climate Change) and S7 (Conservation of the Natural and Historic Environment). The SPG consists of an overarching Green Infrastructure section supplemented by topic based Technical Annexes on the following specific issues:

1. Trees and Woodlands within Development
2. Open Space and Recreation
3. Public Rights of Way within Development
4. Landscape Design and Assessment

Biodiversity and Ecosystem Resilience is covered in a separate SPG published alongside this one and which should be read in conjunction with this GI SPG.

Green infrastructure is defined in Planning Policy Wales Edition 12 (PPW12) as “the network of natural and semi-natural features, green spaces, rivers and lakes that intersperse and connect places”. Green Infrastructure, which includes blue infrastructure, can function at a range of different scales; from entire ecosystems such as wetlands and rivers to parks, fields and gardens. Street trees, hedgerows, roadside verges, and green roofs and walls can all contribute to green infrastructure networks. These features are termed Green Infrastructure Assets and have a role to play in supporting biodiversity and delivering health, social, economic and cultural benefits.

Examples of Green Infrastructure Assets are as follows:



The Green Infrastructure approach to design of development schemes ensures that these benefits are maximised and helps increase our resilience to the impacts of climate change. Green infrastructure also has a vitally important role to play in placemaking, helping to create distinctive, biodiverse and resilient site design which will also contribute to our health and wellbeing outcomes.

A draft of this SPG was consulted upon for a six week period with comments received being taken into account in this final version which was approved for adoption by Council decision on 27th February 2024. It has been prepared in accordance with the policies contained within:

- Future Wales (February 2021)
 - the adopted Torfaen Local Development Plan (December 2013)
- and guidance set out in:
- Building Better Places (July 2020)
 - Planning Policy Wales 12th Edition (February 2024)
 - Technical Advice Note 5: Nature Conservation and Planning (2009)

Legislation and Policy Context

The Well-being of Future Generations (Wales) Act 2015 requires public bodies in Wales to carry out sustainable development. The Green Infrastructure approach can specifically help deliver a number of the associated goals to enable

- maintenance and enhancement of a biodiverse natural environment with healthy functioning ecosystems that support social, economic and ecological resilience and the capacity to adapt to change (for example climate change).
- the delivery of healthy, interconnected ecosystems that provide the hidden benefits upon which human society relies.
- people's physical and mental well-being to be maximised with choices and behaviours that benefit future health being understood.
- space for physical exercise and improved wellbeing by creating attractive environments in which to live and work. They can help people (especially children) to reconnect with nature which has proved to be a valuable aid to physical and mental wellbeing.
- Attractive, viable, safe and well-connected communities.

- inward investment, reduction of crime, provision of safe transport routes and opportunities for community and social cohesion through community growing schemes and providing places to meet and socialise.

The Green Infrastructure approach uses the concept of ecosystem services as a way of looking at our natural resource management which is also aligned to the requirements of the Environment (Wales) Act 2016.

Future Wales: the National Plan (2021) is the highest tier of development plan and is focused on solutions to issues and challenges that the Welsh Government consider to be of national priority. Policy 9 (Resilient Ecological Networks and Green Infrastructure) seeks to ensure the enhancement of biodiversity, the resilience of ecosystems and the provision of green infrastructure which must be demonstrated as part of development proposals through innovative, nature based approaches to site planning and the design of the built environment.

PPW12 (2024) also emphasises the importance of integrating green infrastructure into new development and provides a set of National Sustainable Placemaking Outcomes two of which refer specifically to the role green infrastructure can make within successful placemaking.

The main policies within the Adopted Torfaen Local Development Plan (2013) are Policy S3 (Climate Change) and S7 (Conservation of the Natural and Historic Environment) which require that proposals for all new development must have full regard to the context of the local natural and built environment and its special features. Other relevant policies are S2, S4, BW1, SAA2, SAA5, SAA7, H5, EET4, EET6, RLT2, T3, CF2, CF4, CF5, CF6, and HE2 which can be viewed in full via <https://www.torfaen.gov.uk/en/Related-Documents/Forward-Planning/Adopted-Torfaen-LDP-Written-Statement.pdf>

Green Infrastructure in New Development

Applicants need to show that they have considered the existing green infrastructure in preparing their plan for a site and identified any opportunities for connectivity and enhancement of the existing resource through the design proposals. To achieve this, developers should follow the key steps below:

1: identify and map existing GI assets in and around the site through production of a GI Context Plan.

2: identify local GI needs / site requirements and consider how the development can contribute to these needs. Explore opportunities to fulfil these needs through the production of a GI Opportunities Plan.

3: incorporate proposals into the design that maintain, conserve and enhance GI, ensuring connectivity with the surrounding GI network through the production of a GI Concept Plan.

Existing GI assets in and around the development site should be identified and mapped. Torfaen County Borough Council has produced a number of public facing GIS layers which can be used as the basis for the mapping of GI across the borough. Key elements of green infrastructure along with other site design constraints and opportunities are provided on the interactive Masterplanning Map available at

<https://torfaen.opus4.co.uk/planning/localplan/maps/torfaen-masterplanning-map#/center/51.694,-3.0414/zoom/13/baselayer/b:31/layers/>

More specifically, the following link to the TCBC Green Spaces Map presents data on the location of natural green space, amenity green space, parks and formal gardens, allotments, orchards, play areas, sports pitches and institutional grounds such as hospitals, schools and churchyards. Each layer can be turned on and off using the check box to the right hand side of the screen.

http://gis.torfaen.gov.uk:8010/connect/analyst/mobile/#/main?mapcfg=Public%20View&lang=en_GB&overlays=Gritting%20Routes%20%E2%80%93%20Llwybrau%20Graeanu

In both cases, the information provided is indicative only and should be checked on the ground prior to being included in any submission.

The functions (or ecosystem services) provided by existing GI assets should be appraised through site visits, and by reference to relevant data and information including assessment of the connectivity of existing GI assets for people and wildlife within the site and around the surrounding neighbourhood. The condition of each asset should be included in this assessment wherever possible. The appraisal should be proportional to the scale of the development proposal. Reference to Appendix 1 (Definition of Functions) and the Torfaen Green Infrastructure Assessment published alongside this SPG will assist the identification of GI functions. The Technical Annexes to this SPG give guidance on how certain GI assets, namely, trees, woodlands and open space provision should be assessed.

Opportunities for providing GI should also be informed by the survey and analysis of existing GI assets in and around the development site. The GI Design Checklist in Section 4.0 provides a useful list of considerations to help developers to identify opportunities that may be appropriate to the site and its context. The provision, character and distribution of GI opportunities depends on the nature of the location, the type of development and the contribution it can make to connectivity and the provision of ecosystem services.

Opportunities for GI provision in and around the development site should be recorded on a GI Opportunities Plan which can inform and shape site layout design options and be a useful aid for initial pre-application discussions with Council planning officers and statutory consultees.

A GI Concept Plan should then consider how proposals for maintaining, protecting and enhancing GI, and ensuring connectivity with the surrounding GI network, can be incorporated into the site layout design for the development by:

- Retaining and integrating existing GI assets into the development
 - Providing mitigation and compensatory measures where harm to/loss of existing GI assets is unavoidable
 - Incorporating new and enhanced GI provision of an appropriate type, standard and size.
- The proposals should be informed by the GI Context Plan (step 1) and respond to the GI Opportunities Plan (step 2).

Development proposals which harm the GI network will need to provide comprehensive mitigation and compensatory measures to ensure that the overall functionality and connectivity of the GI network is maintained. Such measures could be delivered off-site

where on-site provision is not possible though this would be seen as a last resort. Reference should also be made to the separate Biodiversity, Ecosystem Resilience and Development SPG.

Identification of appropriate types of GI should be informed by the process and principles for embedding GI into development outlined in this section of the SPG. In line with accepted practice, the SPG does not include quantitative standards for all types of GI (e.g. green corridors, cemeteries and functional green space). Proposals for new and enhanced GI must meet the adopted minimum standards for provision set out in adopted LDP Policy CF5 (Protection of Allotments and Recreation and Amenity Open Space), Policy H5 (Provision for Recreation, Open Space, Leisure Facilities and Allotments), Policy S8 (Planning Obligations) and the Revised Planning Obligations SPG (Feb 2023).

Green Infrastructure Statement

As required by PPW12, a Green Infrastructure Statement should be submitted with all planning applications. GI Plans and Statements can form part of the Design and Access Statement and should be proportionate to the nature and scale of the proposal. They should set out how the Step Wise approach has been applied (reference TAN 5 and the Council's Biodiversity, Ecological Resilience and Development SPG), any survey data / site assessment results, and how green infrastructure has been incorporated into the proposal.

The Green Infrastructure Statement is the culmination of the above analysis and should show how all the elements of the proposed GI (both new and retained) have a clear role and purpose within the development. Conclusions drawn should be expressed in the development plans / drawings and should explain how this is achieving good design. The Statement should include illustrations, drawings and plans to show how reports and technical data have been interpreted and conclusions drawn which have informed the designed layout. The Statement should explain how the proposed GI assets in the development scheme link to the wider GI network.

Technical Annexe 1: Trees and Woodlands within Development

Trees and woodland are granted degrees of protection by legislation, national planning policy and policy guidance. Trees within and/or adjoining a development site should be assessed in accordance with BS 5837 (Rev 7) or updated standard. This requires the production of the following by a qualified Arboriculturalist:

- a) Tree Survey (TS)
- b) Tree Constraints Plan (TCP)
- c) Arboricultural Impact Assessment (AIA)
- d) Arboricultural Method Statement (AMS)
- e) Tree Protection Plan (TPP)

The Technical Annexe provides for the protection of existing mature and high quality trees, with buffer zones for woodland (15 metres) and hedgerows (5 metres).

Trees and woodland should be considered at the outset of the planning and design process for any development site. The default position should be to retain all trees and woodland on site unless there are sound reasons to the contrary. Mature trees, hedgerows

and woodland blocks can bring an immediate sense of maturity to a development site and studies have shown that a treed environment will increase property values. Having a view of nature, even if only a single tree, has been shown to have a significant impact on well-being.

Buildings should be placed outside the root protection zone (RPZ) of existing trees, current and likely branch spread to give living space for trees to grow into. The root protection zone of a tree is the distance which is twelve times the girth of the tree measured at 1.5m trunk height. The canopy of a tree is rarely circular and the tree survey should accurately plot the polygonal shape of the canopy. The RPZ will need to be adjusted to take account of the asymmetrical nature of the canopy.

Technical Annexe 2: Open Space and Recreational Provision within Development

This Technical Annexe refers to the following types of open space:

Public Open Space	Publicly owned and fully accessible to public
Amenity Greenspace	Incidental Verges Informal Recreation Areas Landscaped Verges
Play Areas	Local Areas of Play (LAP) Locally Equipped Areas of Play (LEAP) Neighbourhood Equipped Areas of Play (NEAP)
Youth Provision	Multi Use Games Areas (MUGA) Youth Shelters Skateparks Parkour
Allotments	Statutory Temporary
Community Growing	Community Gardens Traditional Orchards Community Orchards
Sports and Recreation	Football Rugby Tennis Hockey Bowls Golf Athletica

The adopted LDP policies provide protection for many of the above open space typologies and also make provision for new facilities in association with development. An assessment to determine what local provision serves a site should be undertaken by the developer. This process uses a set of straight line distances for different categories of open space to achieve local catchment areas. Requirements for the amount of open space to be sought in relation to a specific type of development can be found in the Revised Planning Obligations SPG: Annexe 6 Recreation and Open Space (Feb 2023).

The open space element of the GI provision for the site should be fully integrated into the design process prior to determining the building layout. Integrating the existing natural features on the site, such as trees, hedges and meadow areas can add character and

maturity to a new space. The outcome of the GI Context and Opportunities Plans and the landscape appraisal should be used to inform the design. The design should contribute positively to biodiversity enhancement of the site.

Play space should be of high quality and good design to attract children, young people and families. Areas for children's play should be:

- Sited where subject to natural surveillance from overlooking properties
- Separated from major vehicle movements and accessible from hard surfaced paths
- Respect FIT standard buffer zones to ensure minimal disturbance to neighbouring residences
- Be of good play value as defined by Play Wales Guidelines
- Be of robust and durable construction
- Be accessible to all and as inclusive as possible.
- Provide for children with physical disabilities and learning and sensory difficulties

Full size pitches should be provided in line with the requirements of the Governing Body for which ever sport is to be provided for. Details of full drainage scheme including herringbone and sand slit drainage and maintenance and ongoing management regime are required to ensure sustainability of the scheme. On larger schemes changing rooms and other ancillary facilities may be required.

Design considerations for new allotment provision are provided to support the requirement in Annexe 6 of the Revised Planning Obligations SPG (Feb 2023).

A management plan should be submitted showing

- 5 year establishment period of softworks.
- Ongoing maintenance of soft and hard works.
- Arrangements for inspections of play equipment and maintenance budget for repair and replacement of equipment over time.
- Arrangements for maintenance of pitch surfaces and drainage systems and ancillary facilities
- Arrangements for establishment of any continuing governance of Management Company

Technical Annexe 3: Public Rights of Way within Development

Public rights of way are an important element within the green infrastructure network providing green corridors through which people and often wildlife can move through the borough. These routes historically ran across open countryside but are gradually being absorbed into the expanding urban areas. It is important that the significance of such routes are recognised as they often offer a direct way of accessing the local countryside and neighbouring communities. They also provide an alternative to road transportation, which is of increasing importance as communities try to rely less on the car and move towards more sustainable methods of transport.

It is important for designers and developers to realise that the granting of planning permission does not entitle developers to obstruct a PROW, nor should it be assumed that a Public Path Order will invariably be made or confirmed.

The Definitive Map of Public Rights of Way shows the following types of path:-

- Public Footpaths (FP)
- Bridleways (BR)
- Restricted Byways (RB) (shown as CRB's or CRF's on the Definitive map)
- Byways Open to all Traffic (BOAT)

If it is necessary to incorporate an existing ProW within a development, realign an existing PRow or create a new path the following considerations should be observed:

- New or diverted public rights of way should preferably run through landscaped open spaces created within the development to create well used, aesthetically pleasing routes
- paths should run alongside other routes such as cycleways or highways for maximum surveillance.
- surfacing should relate to the type and expected level of usage.
- lighting schemes should cast lighting down onto the paths to reduce the impact of urban light pollution.
- consideration must also be given to the needs of persons using pushchairs, wheelchairs and mobility scooters.
- Landscaping should comprise low shrubs, wildflower planting or where urban paths pass between buildings. An appropriate management regime should be provided.

Technical Annexe 4: Landscape Design and Assessment

Landscape design solutions for each site will depend upon the scale and type of development in relation to its landscape context. The design of the development, therefore, must be considered in terms of the landscape. This is achieved through the assessment and appraisal of the existing landscape features, identification of constraints and solutions and the potential use of mitigation measures to ensure that the development is compatible with the local landscape character. Applicants should not only consider how the site will function within itself but also how it relates to the surrounding landscape or townscape.

A landscape appraisal of the site should be undertaken which takes account of the topography, on site ecological features, ground conditions, soils, existing vegetation, vehicular, pedestrian and cycling access, existing footpaths and public rights of way, existing site infrastructure including walls, paving, structures as well as any archaeological and heritage features present. The following surveys may need to be commissioned to assess the condition and potential value of these elements

- Topographic survey
- Soil Survey
- Tree Survey
- Preliminary Ecological Appraisal including Phase 1 Habitat Survey
- Archaeological Survey
- Analysis of views into and outwards from the site including quality of views. Specific landscape features e.g. historic monuments or scenic views could present a focus for any new scheme.

Where a site is likely to have a visual and/ or landscape impact on the surrounding environment a Landscape and Visual Impact Assessment may be required. This assessment should be carried out by a suitably qualified consultant using the Landscape Institute 'Guidelines for Landscape and Visual Impact Assessment (GLVIA3) April 2013 or most recent revision. For larger scale development proposals a strategic landscape assessment may also be required. This is an assessment of the character of the site and its setting and should be used to identify opportunities for integrating development into the surrounding landscape/townscape. This ensures the scheme is at an appropriate scale and in keeping with the locality, reinforcing or enhancing the local sense of place. Existing national and local landscape character assessments including LANDMAP can be used to make this assessment.

At outline planning permission a structural landscape plan should be submitted showing the principal areas of open space, SUDS provision, indicative tree planting including species, play area and sports pitch size and location. A fully detailed planting plan giving exact species, numbers, sizes and densities will be required to be approved at the Reserved Matters application stage.

At full application stage the landscape scheme and planting plan as below should be submitted with the application including details of any play area and sports pitch design. Where required, a detailed play area layout including exact equipment, free space areas, critical fall heights, gates and fencing and surfacing details must be submitted for approval. If seeking adoption by the local authority the design must be sufficiently robust and of good play value. Further details including procedure for adoption are available within the Technical Annexe 2: Open Space and Recreational Facilities of this SPG and the Revised Planning Obligations SPG Annexe 6: Recreation and Open Space (Feb 2023).

Contact Details

If you have any queries regarding this SPG, please see free to contact us.

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